THE REVOLUTION WILL NOT BE TELEVISED ANYMORE: NEW TECHNOLOGY, POLITICAL CHOICE, AND CHANGES IN POLITICAL COMMUNICATION FROM THE NEWSPAPER TO THE INTERNET

by

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A dissertation submitted to the Graduate Faculty in Political Science in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

2011

This manuscript has been read and accepted for the
Graduate Faculty in Political Science in satisfaction of the
dissertation requirement for the degree of Doctor of Philosophy

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Abstract

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The overarching goals of political communication rarely change, yet political communication strategies and activities have evolved a great deal over the course of American history. The changes in political communication have been abrupt, occurring during three periods that I identify as Political Communication Revolutions (PCR). A PCR disrupts long, relatively stable periods that I call Political Communication Orders (PCO). Each of the three successful PCRs in American political history followed similar revolutionary cycles, which suggests that revolutions in political communication take place through a recurring process. I identify this recurring process as the PCR Cycle, which begins when successful new ICTs diffuse rapidly into American homes. It is at this point that political actors must choose if they want to utilize these new tools to innovate their political communication activities. The PCR Cycle can be used to explain repeated patterns in why major political communication change occurs, compare changes occurring throughout history, link ongoing changes during the current revolutionary period, and provide a stable theoretical structure upon which ongoing research on the intersection of the

Internet and politics can be rooted. Through historical research of campaign innovation, and original analysis of 2010 senate campaign websites, I find that those political actors with more resources, those who are positioned as political challengers, and those involved in competitive political contests are more likely to innovate earlier than others. The current PCR is unique in that the interactivity of the Internet dramatically expands the number of people able to create as well as consume political information, producing the potential for a decentralizing and democratizing effect on American politics. My study concludes by evaluating the extent to which this decentralization is taking place, primarily through an original web survey of politically active Internet users. I find that the Internet is decentralizing political communication especially in terms of forwarding information and reading and watching political news, but that a very small number of political actors still dominate the generation of new political information. This research should contribute to literature in political communication, the emerging intersection of information technology and politics, and American political development.

Acknowledgements

A dissertation is in every way a marathon. Thankfully, around every turn I had the support of so many wonderful people. I would like to take this opportunity to thank the many incredible educators that I have had the honor of learning from and working with. Specifically, I need to thank both Prof. Joe Rollins and Prof. Charles Tien for their support throughout my project. They have each been instrumental in my success from my first days in the program, and I truly appreciate all that they have done for me. There is no way for me to properly thank Prof. Andy Polsky, my advisor and mentor, for all that he has done to help shape not only my final project, but also how I conduct research, how I write, and how I mentor students. As I enter into my career as a professor, I aspire to become for my students what you have been for me. That would be my ultimate mark of professional success. Thank you Andy; I will happily treat you to chocolate chip cookies for life, it's the least I can do. I am unbelievably lucky to have the support of my remarkable parents and sister, my caring in-laws, and my wonderful friends. Thank you all for your endless encouragement. Whether or not you all were actually interested in my project, I bought it, so thanks. More than anyone else in the world, I am eternally grateful for my incredible wife Cara, who believed in me, motivated me, and sacrificed in many ways to help me to complete this giant task and keep my sanity. I could not have done this without you. Thank you for running this marathon with me. You are the best partner in the world. Finally, I would like to dedicate this dissertation to my beautiful daughter Eliana. Thank you for sharing your first ten months with your dad while he was hustling to get his work done. This dissertation is about changes in communication over time. I cannot tell you how excited I am to watch you grow up and look forward to solving the world's problems with you, preferably while eating ice cream.

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Chapter 1 - Introduction: What is a Political Communication Revolution and Why Does it Matter?

Ironically, the concept of the revolution has been discussed so much in political science scholarship that it has nearly become blasé. Countless political historians have spent careers dissecting rapid and sweeping changes in political, social, and economic arrangements, debating the role of various elements and actors in these periods of fundamental political change. Yet surprisingly few have focused on the link between political change and the dissemination of information, a fundamental element of American democracy. Those who have hinted at this connection have primarily focused on the use of information in political revolutions, as opposed to revolutions in communication itself.[1]

Alternatively, media and communication historians have documented the dramatic changes in communication, producing a substantial body of literature on the subject. Though much of this literature is both useful and interesting, it documents the central causal role of communication, and specifically communication technologies, in creating social and political change. While there is no doubt as to the profound effect of new information and communication technologies (ICTs) on politics, it appears equally obvious that all ICT innovations are not created equal in terms of their impact on political communication. This literature therefore tells an incomplete story of the dramatic changes in political communication through American history.

This project aims directly at this shortcoming by exploring the few periods in American history that have experienced dramatic and lasting changes in political communication. Why did political communication change dramatically during these revolutionary periods and what role

[1] Bruce Bimber, *Information and American Democracy: Technology in the Evolution of Political Power* (Cambridge: Cambridge University Press, 2003), 15.

did new ICTs play in these changes? How did political actors use new communication tools toward their political communication strategies? In other words, are substantial shifts in political communication, like the one currently occurring across the American political landscape, an inevitable result of technological advance or do they reflect conscious political intervention? The transmission of information is an absolute necessity in a representative democracy and changes in the forms, strategies, and tools used for political communication lie at the very center of the evolving relationship between political elites and citizens in America. I therefore intend to study why, when, and how political communication revolutions occur. In doing so, I aim to explain whether the fundamental American political relationship between political elites and the American public has changed along with the tools of political communication, or whether the new forms of political communication are essentially telling the same old story and maintaining a static relationship between distinct segments of the American polity.

This introduction serves several important goals. First, it lays out both the research objective and theoretical framework in order to place this study on an interdisciplinary foundation combining work from political science, political communication, mass communication, history, and diffusion studies. Next, I advance my theory of political communication revolutions (PCR) and political communication orders (PCO) and place them within the American political context. The central element in this theoretical foundation, and the primary concept that I analyze throughout this dissertation is the PCR cycle, which has repeated through American political history. In short, a PCR comes about through a cycle of events starting with the initial innovative use of new information and communication technologies (ICTs). Eventually, some of these new ICTs are used successfully for political communication followed by widespread copying of these tactics, and eventual regulation and stabilization of new

political communication activities forming a new PCO. Chapter two will be devoted to providing a historical overview of ICT development through the lens of PCOs and PCRs in American political history. This will provide both a more complete description of these two original concepts as well as a historical framework to which the rest of the dissertation will refer. The remaining chapters of the dissertation will focus on the technological and political phases of the PCR cycle.

Chapter three will focus on the technological component of political communication revolutions and address how the cost, rate of diffusion, and perceived benefits of each new ICT affect its political utility. In other words chapter three will evaluate how new ICTs become politically viable. Yet a politically viable ICT does not enter American politics without active choices made on the part of political actors who try to use these new tools in innovative ways. Chapter four will be devoted to examining if and when political actors choose to incorporate these new ICTs into their communication strategies. These political choices are the primary independent variable that link ICT innovations to changes in political communication activity. In chapter four I will look closely at the current development of online campaign communication and, in particular, at senate campaign websites during the 2010 midterm elections. In this chapter I aim to examine the extent to which campaigns copy successful online strategies thus making innovative use of new ICTs more commonplace.

The current PCR, centered on the dramatic increase in the interactivity of political communication emanating from the Internet and its evolving role within American politics will be the main focus of chapter five. This chapter will focus on the decentralization of political activity and the ways that politically engaged Internet users are using new tools to conduct their political communication. Data collected through surveys of political Web users will provide

evidence about how interactive and decentralized American political communication is truly becoming during the current PCR. Of particular interest will be the extent to which political elites, such as politicians and interests groups, are still primarily steering the political ship, or whether citizens, empowered with new tools are shaping political discourse in an increasingly independent fashion. I will sum up my conclusions and areas that need further study in the final chapter.

Theoretical Framework

In this project I will address several bodies of literature, including American Political Development (APD) scholarship on disruption and change, mass communication and historical scholarship on ICT development and implementation, and diffusion scholarship primarily growing out of sociological and economic research. By utilizing the APD approach to analyze the development of ICT innovations and their application to political communication activity within American politics over time, I aim to link the political science, mass communications, history, and diffusion literatures and help explain the dynamic relationship between communication technologies and American politics.

American Political Development

APD scholars seek to identify and account for patterns of change and equilibrium in American political institutions, norms, ideas, and political behavior. The APD framework provides a useful approach to the analysis of the impact of changing ICTs on political activity because it does not presume the traditional periodization of American history favored by

historians.[2] This allows for a broader and often richer approach to historical changes across the American political landscape.

The most sophisticated and comprehensive analysis of APD as an approach was developed by Karen Orren and Stephen Skowronek in *The Search for American Political Development* (2004).[3] One central tenant of APD scholarship is the identification of recurring patterns or historical breakpoints in time. These patterns help delineate political orders, which Orren and Skowronek define as a constellation of practices, ideas, and institutions that hangs together over time, a bundle of patterns exhibiting coherence and predictability even as other aspects of politics undergo change.[4] The identification of specific kinds of political orders allows for the examination of when and why one particular order ends and another begins and how the changes influence other parts of the political system.

According to Orren and Skowronek all political change, including transitions between political orders, proceeds on a site, a prior political ground of practices, rules, leaders, and ideas, which provide boundaries and impediments to political development.[5] This is closely aligned to the related concepts of path dependence and increasing returns.[6] Path dependence suggests that

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[2] Rogan Kersh, "Rethinking Periodization? Apd and the Macro-History of the United States," *Polity* 37, no. 4 (2005).

[3] For the most complete overview of the methods, rationale, and implementation of American Political Development see Karen Orren and Stephen Skowronek, *The Search for American Political Development* (Cambridge University Press, 2004); for additional noteworthy examples of APD analysis of changes in American political institutions, norms, ideas, and political behavior see Stephen Skowronek, *The Politics Presidents Make : Leadership from John Adams to Bill Clinton* (Cambridge, Mass.: The Belknap Press of Harvard University Press, 1997); Jeffrey Tulis, *The Rhetorical Presidency* (Princeton, N.J.: Princeton University Press, 1987); Peter F. Nardulli, *The Constitution and American Political Development: An Institutional Perspective* (University of Illinois Press, 1992); ———, "The Concept of a Critical Realignment, Electoral Behavior, and Political Change," *The American Political Science Review* 89, no. 1 (1995); Theda Skocpol, *Diminished Democracy : From Membership to Management in American Civic Life*, The Julian J. Rothbaum Distinguished Lecture Series V. 8 (Norman: University of Oklahoma Press, 2003).

[4] Orren and Skowronek, *The Search for American Political Development*, 9-16.

[5] Ibid., 20-26.

[6] Both path dependence and increasing returns have grown mainly within the field of economics, yet have regularly been applied to political growth and development. For a clear articulation of these terms within a political context see Paul Pierson, "Increasing Returns, Path Dependence, and the Study of Politics," *American Political Science Review* 94, no. 2 (2000).

change occurs over time largely through incremental adjustments guided by the series of changes that have taken place stretching back through time. Path dependence in turn generates increasing returns: the further along a particular historically evolved path, the more costly it would be to start over. Increasing returns is particularly well suited to the analysis of ICT development as the creation of ICTs have moved society in one direction as communication has become faster, cheaper, and more convenient over time.[7] It would be almost unthinkable to develop a new useful technology and then stop using it unless it no longer serves its purpose or is replaced by a more advanced technology that performs the same function.[8]

Path dependence is often attributed largely to gradual change in political institutions and orders, yet at certain times, elements unite to disrupt the status quo and create transformational change. This is very much the case in the history of political communication in American politics, where ICT development has undoubtedly caused disruptions to political activity by modifying the cost, access, control, and flexibility of political communication. These disruptions do not come about through a passive process within American politics, instead political actors who either want dramatic change choose to utilize these new tools in a politically disruptive manner. As the threat to an existing political order grows, political challengers will likely strive to usher in a new one that benefits their interests if the have the resources necessary to move this process forward. APD methodology can help organize these disruptions into a coherent framework that helps us grasp the process by which some developing ICTs may spark a major shift in political communication.

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[7] For further explanation of the usefulness of applying increasing returns to the development of technologies see chapter two in W. Brian Arthur, *Increasing Returns and Path Dependence in the Economy* (Univ of Michigan Press, 1994).

[8] This is the case even when newer technological developments offer improved functionality, as in the case of the outdated keyboard that we all use. For more see Paul A. David, "Clio and the Economics of Qwerty," *The American Economic Review* 75, no. 2 (1985).

Information and Communications Technologies

Recent debates over information and communication technologies (ICTs) have often focused on the Internet and the ongoing debate about its democratizing potential. Although much of this debate has focused on a global or regional scale, the discussion relevant to this study has centered on the role of the Internet within American politics. Will this new technology, with its relatively low costs, nearly limitless audience, and extremely high level of interactivity, shift political power toward the masses or will it be used by current elites to solidify their position on top of the American political food chain? This question speaks to the growing impact that specific elements of online communication may have on a variety of political activities in the United States.[9]

Yet it is essential to recognize that the debate regarding the influence of new ICTs in American politics is not new. As each successive communication technology emerged, some political observers have argued that it would fundamentally restructure politics in America, while others have doubted the potential scope of the change. Regardless of whether the Internet will create a complete political revolution, it has undoubtedly begun to alter many of the ways that political activity is carried out in America, just as developments in ICTs in the past have created opportunities for innovative political communication activity.

At the same time, there does appear to be continuity over time in the types of political communication goals that political actors pursue.[10] Since the colonial era, American political actors have used ICTs to engage in consistent forms of broad or targeted political communication. Broad political communication is the broadcasting of political messages to large

[9] These issues are analyzed at length in chapter five.
[10] Allan J. Cigler and Burdett A. Loomis, *Interest Group Politics* (Washington, D.C.: CQ Press, 2002).

numbers of people or groups simultaneously. This would include activities aimed at creating and disseminating information and attempting to influence the political agenda. Targeted political communication is the delivery of specialized messages directed at particular individuals or members of groups asking for some type of political action This can include efforts to recruit supporters to join an interest group or campaign, raise money and resources, and/or mobilize political action. This stability in political communication strategies is particularly notable in its apparent contradiction to the seemingly sudden and dramatic changes that have occurred in specific communication activities over the past two centuries of American political development.

Over the past fifteen years there has been an explosion of research regarding ICT development among political science, history, and mass communications scholars. Historically-minded communications, journalism, and media scholars have outlined the cycle involved in the history of communication technology development.[11] Some argue that old and new media are converging today, debunking the common conception that one form of technology simply replaces its predecessor over time.[12] The development of new ICTs often requires a restructuring of policies that govern political communication. For instance, Paul Starr's acclaimed book *The Creation of the Media* (2005) details how the creation of new communication mediums generated a series of contentious political issues that forced the U.S. government into a highly

[11] e.g Irving E. Fang, *A History of Mass Communication: Six Information Revolutions* (Burlington, MA: Focal Press, 1997); Brian Winston, *Media Technology and Society: A History: From the Telegraph to the Internet* (London: Routledge, 1998); Asa Briggs and Peter Burke, *A Social History of the Media: From Gutenberg to the Internet* (Cambridge: Polity Press, 2002); David Demers, *History and Future of Mass Media: An Integrated Perspective* (Cresskill, NJ: Hampton Press, 2007).

[12] for more see Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: NYU Press, 2006).

regulatory role.[13] Scholars have also drawn comparisons between different communication technologies, including a particular affinity for the parallels between the radio and the Internet.[14]

Meanwhile, political scientists and media scholars have focused on how a particular communication technology has or has not changed the American political system. One of the most compelling analyses is Jeffrey Pasley's *The Tyranny of Printers* (2003), which details the development of printing and early newspapers within American politics during the earliest years of the nation by highlighting the very personal and dramatic narratives embedded in this historical process.[15] Similarly rich accounts of the political history of the development of the radio detail the role of political, economic, and social forces on the wireless transformation and eventual regulation of American political communication.[16] Although the television is a more recent innovation, it is likely that more has been written about the political impact of this twentieth century innovation than any other medium.[17] A comprehensive look at the role of television in American politics is presented in *The Media Game* (1993), which provides both an overview of changes that developed as television emerged and specific chapters detailing the numerous ways that television influenced the political behavior of politicians and citizens.[18] A growing body of research has examined the impact of the Internet on various aspects of

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[13] Paul Starr, *The Creation of the Media : Political Origins of Modern Communications* (New York: Basic Books, 2004).

[14] e.g. Martin Spinelli, "Radio Lessons for the Internet," *Postmodern Culture* 6, no. 2 (1996); Eszter Hargittai, "Radio's Lessons for the Internet," *Communications of the ACM* 43, no. 1 (2000).

[15] Jeffrey L. Pasley, *"The Tyranny of Printers": Newspaper Politics in the Early American Republic* (Charlottesville and London: University Press of Virginia, 2003).

[16] For one of the best examples see Douglas B. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940* (Baltimore: Johns Hopkins University Press, 2000).

[17] One of the early eye-opening studies was the experimental study conducted by Shanto Iyengar, Mark Peters, and Donald Kinder in 1982, which used an innovative study of television news to show its large priming effect and the power that television had over the opinions of the public. For more see Shanto Iyengar, Mark D. Peters, and Donald R. Kinder, "Experimental Demonstrations of The" Not-So-Minimal" Consequences of Television News Programs," *The American Political Science Review* 76, no. 4 (1982)..

[18] Stephen Ansolabehere, Roy L. Behr, and Shanto Iyengar, *The Media Game: American Politics in the Television Age*, New Topics in Politics (New York: Maxwell Macmillan Canada, 1993).

American politics.[19] Some of this work has detailed the effect of the Internet on the American democratic system,[20] while other literatures have focused on party politics[21] and participation and citizen empowerment.[22] Still others, such as the widely acclaimed work of Manuel Castells, have explored the role that ICTs play in political and economic discourse on a global scale.[23]

Diffusion of Innovations

Diffusion literature provides the vocabulary and theory necessary to start to bridge the gap between APD scholarship and research on ICT development and its impact on politics over time. A growing number of scholars have contributed to diffusion literature since Bryce Ryan and Neal Gross published their pioneering study of the diffusion of hybrid corn adoption by

[19] e.g. Richard Davis and Diana Marie Owen, *New Media and American Politics* (New York: Oxford University Press, 1998); Gary W. Selnow, *Electronic Whistle-Stops : The Impact of the Internet on American Politics*, Praeger Series in Political Communication, (Westport, Connecticut: Praeger, 1998); Richard Davis, *The Web of Politics: The Internet's Impact on the American Political System* (New York: Oxford University Press, 1999); Bruce Bimber, "The Internet and Citizen Communication with Government: Does the Medium Matter?," *Political Communication* 16, no. 4 (1999); AG Wilhelm, *Democracy in the Digital Age* (Routledge London, 2000); M Castells, *The Information Age* (Blackwell, 2000); Bruce Bimber, "The Study of Information Technology and Civic Engagement," *Political Communication* 17, no. 4 (2000); Bimber, *Information and American Democracy: Technology in the Evolution of Political Power*; Matt Bai, *The Argument : Billionaires, Bloggers, and the Battle to Remake Democratic Politics* (New York: Penguin Press, 2007); C Shirky, *Here Comes Everybody: The Power of Organizing without Organizations* (Penguin Pr, 2008); K Wallsten, "Political Blogs: Transmission Belts, Soapboxes, Mobilizers, or Conversation Starters?," *Journal of Information Technology & Politics* 4, no. 3 (2008); Tim Wu, *The Master Switch: The Rise and Fall of Information Empires*, 1st ed. (New York: Alfred A. Knopf, 2010); Eli Pariser, *The Filter Bubble: What the Internet Is Hiding from You* (New York: Penguin Press, 2011).

[20] Wilhelm, *Democracy in the Digital Age*; Bimber, *Information and American Democracy: Technology in the Evolution of Political Power*.

[21] Bai, *The Argument : Billionaires, Bloggers, and the Battle to Remake Democratic Politics*.

[22] Bimber, "The Internet and Citizen Communication with Government: Does the Medium Matter?."; ———, "The Study of Information Technology and Civic Engagement." see Bruce Bimber, "Information and Political Engagement in America: The Search for Effects of Information Technology at the Individual Level," *Political Research Quarterly* 54, no. 1 (2001); Wallsten, "Political Blogs: Transmission Belts, Soapboxes, Mobilizers, or Conversation Starters?."; for a wonderful example of valuable contributions to the subject eminating from a mass communications and journaism perspective see Shirky, *Here Comes Everybody: The Power of Organizing without Organizations*.

[23] Castells, *The Information Age*; Manuel Castells, *The Power of Identity*, 2nd ed., Information Age, Economy, Society, and Culture (Malden, Mass.: Blackwell Pub., 2004).

farmers Iowa farmers in the 1943.[24] The vast majority of this diffusion research comes from sociology and economics.[25] Everett Rogers, the most widely cited diffusion scholar of the past half century, compiled, organized, and clarified the diverse world of diffusion research in his book *Diffusion of Innovations* (2003).[26] In his book, Rogers defines diffusion as the process by which an innovation is communicated through certain channels over time among the members of a social system.[27] In other words, diffusion takes place through a social process, an understanding of which is needed to help connect the technologically-focused mass communications scholarship to political choices made by actors through periods of stability and disruption elucidated by APD literature.[28]

The most useful scholarship for evaluating how changes in political communication activities occur over time focuses on the characteristics of particular technologies, and of potential adopters which help increase the likelihood that a new ICT will become incorporated into American political communication. Existing research suggests that the characteristics of a particular ICT matter based on primarily on how it is perceived by potential adopters and its accessibility.[29] In terms of the characteristics of potential adopters, several scholars have focused on the importance of when individuals learn about an idea or innovation.[30] Others have paid

[24] For more information on this interesting study and the impact that it had on the future of diffusion research and the development of the S-curve model, describing adoption patterns see chapter three. Bryce Ryan and Neal C. Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities," *Rural Sociology* 8, no. 1 (1943).

[25] Barbara Trish, "The Diffusion of Campaign Technology," in *The 2010 Annual Meeting of the Midwest Political Science Association* (Chicago, IL 2010).

[26] Everett M. Rogers, *Diffusion of Innovations*, 5 ed. (New York: Simon & Schuster, 2003).

[27] Ibid., 5,12.

[28] For more on the characteristics of potential adapters that might help increase the likelihood that they adopt new ICT innovations see chapter four and

[29] Trish, "The Diffusion of Campaign Technology."; Rogers, *Diffusion of Innovations*, 219-66.

[30] Bradley S. Greenberg, "Diffusion of News of the Kennedy Assassination," *The Public Opinion Quarterly* 28, no. 2 (1964); Rogers, *Diffusion of Innovations*.

particular attention to traits of individuals and organizations that are more likely to innovate early or wait for others to try the new idea or product first.[31]

While substantial scholarship investigates the overall development of ICTs and the impact of particular communication technologies on American politics, no scholarship currently exists that offers a coherent framework outlining how and when political communication activity fundamentally changes across a political system and the role of new communication technologies in these revolutions. Diffusion scholarship provides useful theory and terminology that can help to bridge current gap between relevant mass communications and political science scholarship when used in concert with APD theory. Toward this end I offer a theoretical argument about the relationship between eras of relative stability in political communication activity and periods of rapid and fundamental change, phases that can be aptly labeled revolutions.

Political Communication Revolutions and Orders

The concept of revolutions in communication is not new. Irving Fang, a journalism and communications scholar, provided the most definitive exploration of what he calls information revolutions, which described transition periods across the broad expanse of communication history. Fang defines these information revolutions as "profound changes involving new means of communication that permanently affect entire societies, changes that have shaken political

[31] Paul J. Deutschmann and Orlando Fals-Borda, *Communication and Adoption Patterns in an Andean Village* (San José,: Costa Rica, 1962); Lawrence B. Mohr, "Determinants of Innovation in Organizations," *American Political Science Review* 63, no. 1 (1969); Alwin Mahler and Everett M. Rogers, "The Diffustion of Interactive Communication Innovations and the Critical Mass: The Adoption of Telecommunications Services by German Banks," *Telecommunications Policy* 23(1999); Sigi Goode and Kenneth Stevens, "An Analysis of the Business Characteristics of Adopters and Non-Adopters of World Wide Web Technology," *Information Technology and Management* 1, no. 1-2 (2000); Se-Joon Hong and Kar Yan Tam, "Understanding the Adoption of Multipurpose Information Appliances: The Case of Mobile Data Services," *Information Systems Research* 17, no. 2 (2006); Rogers, *Diffusion of Innovations*, 267-302, 407-76.

structures and influenced economic development, communal activity, and personal behavior."[32] Though these information revolutions are broader in both chronological scope and communication type than the political communication revolutions (PCR) I am exploring, Fang's concept serves as a theoretical foundation for this study.

Just as in Fang's definition of information revolutions, PCRs are both profound and permanent. However unlike information revolutions, PCRs specifically describe the major changes in how political communication is conducted. These fundamental changes impact the day-to-day actions taken by elites working for the government and organized political interests as well as the public who potentially interact with these political elites. More than merely a use of a new medium for political communication, PCRs involve the activities that political actors use to communicate. A PCR is, in short, a lasting and fundamental change in political communication activities, which alters the relationship between the sources and audiences of political messages and, in turn, the relationship between political elites and the American public. The revolutions examined in this study will be the most substantial and permanent changes occurring during the history of political communication in the United States.[33]

Bruce Bimber's book *Information and American Democracy* (2003) offers the most comprehensive look into the role of technology and information in the evolution of political power through American history. As the volume that has most influenced my approach, the book creates a framework to link information revolutions within American politics over time and focuses on the consequences for American democracy of the dynamic information age we have been experiencing since the 1990s. Bimber's work consciously avoids an overemphasis on ICTs

[32] Fang, *A History of Mass Communication: Six Information Revolutions*, xvi.

[33] The concept political communication revolution (PCR) could, and I hope will, be applicable to societies and nations around the world as well as a frame through with to compare political communication changes around the world. It is by no means limited to the American political context to which it is applied in this study.

because, in his view, technology is constantly changing and old and new technologies remain interdependent.[34] Instead, Bimber's focus remains fixed on information as opposed to technology. Information revolutions, he argues, have punctuated what he calls information regimes and he developed a useful model to capture the relationship between the two.[35]

Especially important for my work is the link Bimber draws between information and communication. Information, as defined by the *Oxford English Dictionary*, is "knowledge communicated about some fact, subject, or event"; communication is "the imparting or exchanging of information or news." It is clear that these two terms are inherently interwoven, but where Bimber tends to focus on the information itself I will look at the methods and activities associated with the transfer of political information, namely changes in communication activities during PCRs.[36]

Though Bimber is rightly cautious about overemphasizing technology, new and evolving ICTs have undoubtedly played an important roll in these communication revolutions and therefore must be taken into account when studying the patterns of political communication changes. The development and application of new communication technologies is a necessary component of the explanation of the methods of political communication involving all kinds of political actors. However, it is merely variable that helps determine if and when political communication activities change.

The evolution of political communication in America has not been a steady process. PCRs have disrupted extended periods of relatively consistent political communication activity. Over the course of American history, we have witnessed four of these periods, which I identify

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[34] Bimber, *Information and American Democracy: Technology in the Evolution of Political Power*, 8-9.
[35] Ibid., 20-25.
[36] Additional definitions of communication focus on the connections and relationship between people, and element that I believe is lacking in most technologically deterministic histories of media detailing the impact of new ICTs on American politics Ibid., 10-11.

as political communication orders (PCOs).[37] Initially a localized order developed, where the majority of political activity was conducted in person. Political communication that was not conducted face-to-face was done exclusively through print and primarily through newspapers, with political and business insiders, organizations, and newspaper editors controlling nearly all of the information directed at an economically and politically elite audience. As such, I name this initial order the Elite PCO. This PCO was in place at the birth of the United States, which lasted until the 1820s when the first American PCR brought political information to a wide audience.

Following this transition, a second order emerged which I have labeled the Mass PCO. This was the longest PCO in American history, as broad and targeted political communication was conducted in consistent ways nationwide for nearly a century. The Mass PCO emerged in part because of technological innovations and changes in the American postal system and increasing literacy rates. Together these factors caused an increase in the speed and reduction in the cost of political news dissemination leading to a massive increase in readership. This occurred at the same time that suffrage rights expanded dramatically, bringing people from all classes into the American political process and greatly increasing the demand for political information and communication.

The advent of radio eventually led to the second American PCR, followed by a Broadcast PCO, which included more personal and immediate interaction between political elites and the American citizenry and an increasing emphasis on media expertise and public image. This PCO continued through the development of the television, which provided new tools for political activity but did not revolutionize the style and activities of political actors so much as provide them with a new stage and format.

[37] The concept of PCO can be seen as roughly analogous to Bimber's information regimes in his information regime model. They both describe periods of equilibrium and both studies primarily focus on the transitions between these periods.

The most recent PCR has been occurring since the mid 1990s, with the exponential growth of the use of the Internet and related new media for political purposes that have led to a transition into what I term the Information PCO. This new PCO offers more interactive, flexible, and multidimensional tools than any prior order and is currently redefining the boundaries and possibilities of political communication for actors at all levels of the American political landscape. However it is unclear exactly how these new tools will affect political communication because the current PCR has yet to become stabilized.

During these four PCOs, which will be detailed in the next chapter, the ICTs at hand were used in relatively consistent ways and were structured by various institutions, norms, and regulations. However, at particular points in history, elements of emerging ICTs have created the possibility for political actors to transform certain types of political communication activity, instigating a political communication revolution as one PCO is displaced by another. From this historical pattern three research questions emerge: First, under what conditions do changes in communication technology generate new opportunities for political communication activities? Second, why do some political actors utilize these opportunities more than others? And third, to what extent do these changes disrupt political behavior broadly across American politics?

The Political Communication Revolution Cycle: What Causes a PCR?

As a new ICT becomes more widely accepted, it offers new opportunities for political actors to innovate their political communication activity. The transition between PCOs varies in pace, and scope based on elements of the new ICT, as well as on the interests and resources available to political actors. Although overarching broad and targeted political communication

goals have remained relatively stable over time, specific political communications activities and strategies have changed dramatically.

Historically minded mass communications scholars argue that these changes are the end result of a technology-centered process.[38] That is, the changes in the speed, interactivity, and forms of communication available in the new technology serve as the causal forces driving political actors and policies to adapt their behavior. Although I do not disagree that new ICTs can have a substantial impact on political communication, the technology-centered argument minimizes the role of political actors, and therefore is incomplete. Each successful new communication technology requires a societal or commercial need to motivate its widespread acceptance and impact. In the same way, new ICTs do not automatically disrupt political behavior unless there is a supervening political need that will motivate political actors to innovate. This can, in turn, cause dramatic shifts in political communication activities leading to a PCR. Accordingly, I argue that disruptions in political communications activities result from a confluence of technologically and politically driven forces. More specifically, as ICTs develop, they often become less expensive and widely used, making the new medium viable for political actors to use. These actors may choose to exploit the new tools to as they seek better ways to inform, affect political agendas, attract supporters, raise resources, and mobilize.

Disruptions in PCOs, then, occur through a multistage process. First, a new ICT is developed and becomes widely accepted.[39] As access to this medium grows, political actors are motivated to start to experiment with the use of the new technology in political communication

[38] see Fang, *A History of Mass Communication: Six Information Revolutions*; Starr, *The Creation of the Media : Political Origins of Modern Communications*; Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*.

[39] Obviously all ICTs are not successfully disseminated throughout a population. Most in fact are not successful and therefore hold limited potential to impact political communication. For more on roll of ICT development and dissemination in the process of challenging existing political communication and contributing to PCRs see chapter three.

activities. Once some political actors successfully tap the new communication technology to dramatically increase their political power, others quickly follow their lead. Although disruptions in PCOs cannot occur without the development of new ICTs, the new technologies alone cannot create new political activity. In other words, changes in communication technology are a necessary precondition for a PCR, but insufficient on their own to create a revolution. Major ICT innovations can create conditions where PCRs are possible once they become politically viable, but only through the choices and actions of political actors are PCRs achieved, and PCOs substantially disrupted. Therefore the main independent variable I will study will be the choices made by political actors regarding political communication and the dependent variable will be the effect that these choices have on major political communication change.

The Five Claims Central to My Study

In this project, I advance five claims about how technological and political forces disrupt political communications activity and how these disruptions may lead to new PCOs. The first claim focuses on the characteristics of new ICTs that may lead them to become politically viable and therefore capable of being used to disrupt an established PCO. The next three claims stress the role of political choices about new ICTs and political communication strategies, which can lead to PCRs. Finally, the fifth claim focuses on the convergence of technology and political choice when interactivity is greatly enhanced, as is the case with the Internet.

First is my **cost** claim: *As the cost of new ICTs declines, the potential for its incorporation in political communication activity increases.* While each new ICT increases the speed of communication, it also initially costs a great deal. Eventually these new technologies usually become more affordable as more people use them due to a combination of reduced

production costs and an increase in the competition for services. As costs are reduced and technology improves, the ICT becomes more portable and accessible, and therefore more convenient to use. If these ICTs are affordable and available to be used at home then they will be more integrated into the lives of Americans and will impact their daily lives to a much greater degree. Each of these factors helps to integrate the new communication technology into American society, creating a technology-driven opportunity for political actors to use the new ICT in innovative ways, or, in other words, making the new ICT politically viable.

In chapter three I demonstrate this claim by selecting the six most successful ICT innovations during American history: newspapers, telegraph, telephone, radio, television, and the Internet. Each is examined in terms of its changing costs and usage both during its respective developmental period and later on in its life cycle. An important distinction is made between the cost of owning the technological hardware, the physical equipment, which is often a one time high cost item, and the cost of accessing software, or information, using the ICT. In particular, data is used detailing the initial costs of owning or subscribing to these products and creating content for them, and how each of these costs changed over time. Next, the changing prices of the ICTs is linked to the diffusion rates of each ICT to show why they are both very important factors in determining whether a new ICT become politically viable. Data was be gathered from standard histories of media, primary documents such as newspapers, and secondary accounts including mass communication research.

Next is my **resource** claim: *those political actors with greater financial and technological resources are more likely to innovate earlier.* The cost of new ICTs affects both the political viability of the technology and also the choices that political actors make about whether or not to use it. Because the cost of using new ICTs is generally very high, political

actors will only be able to innovate if they have sufficient resources to do so. If these conditions are met and early experimental innovations eventually are used to achieve political success, then they will likely be imitated and lead to a fundamental and widespread shift in how political communication is transmitted and a new relationship between political actors and the American public.

Third is my **challenger** claim: *political challengers or outsiders are more likely to innovate earlier than those in power.* Political insiders and incumbents are likely to support the status quo in terms of political communication because the political risk of innovation could include a reduction in audience size, influence, or control of message. They have relatively few incentives to innovate. By contrast, because political challengers and outsiders lose under the current system, they are motivated to experiment with new approaches. Therefore, when new ICTs become politically viable, challengers and outsiders are more likely to be the first to incorporate these technologies into their political activities.

The political contest in which political actors are competing is also likely to affect their decision making process. Specifically, the more competitive a political contest is, the greater the incentive for political risk taking. This expectation results in a forth **competitiveness** claim: *all political actors are more likely to innovate as political contests become more competitive.* It is important to note that this claim suggests that competitiveness is likely to influence decision making regardless of whether the political actor has a lot of resources or is a political challenger.

The resource, challenger, and competitiveness claims each pertain to how political actors make choices about their political communication activity. Therefore I demonstrate these claims simultaneously by evaluating the choices made by political campaigns about whether or not to innovate their communications strategies. Campaigns provide a great opportunity to evaluate

these claims because it is easy to determine the resources and challenger status of each campaign along with the competitiveness of each election. Furthermore, because national elections take place every two years, they create regular intervals, which can be used to easily measure changes over time. In chapter four, I analyze campaign communication innovation throughout American history by identifying what types of campaigns first used new ICTs and when these innovative strategies were used to mount successful political campaigns. Particular attention is paid to recent innovations in online campaigning and the buildup to the 2008 Obama campaign, the most technologically sophisticated in history. Next I evaluate the extent to which campaigns during the 2010 midterm election imitated Obama's successful online model. The data for this research will come from election records, secondary historical accounts, political science research, and original research of senate campaign websites during the 2010 election.

The fifth and final claim I will demonstrate is my **interactivity** claim: *If a new ICT increases interactivity, the emerging PCO will become increasingly decentralized rather than top-down or hierarchical.* Each new ICT varies in terms of interactivity between one to one, one to many, and many to many forms of communication. If new technologies offer improved interactivity over prior ICTs, the directionality of political communication will shift away from a single source. This will allow the audiences, which traditionally only received political communication messages from political elites, to use the new ICT for their political purposes and to increase their political voices. Ultimately this will have a decentralizing effect on political communication. Prior research indicates that the Internet is dramatically more interactive than any previous ICT. As a result, this increased interactivity at the heart of the current PCR is likely reshaping political communication in America away from the traditional top-down model more than at any point in American history.

This claim is demonstrated in chapter five by showing how the design and structure of the Internet is fostering political communication activity that is increasingly multidirectional. The interactive nature of online communication is compared with previous ICTs, including the radio, which transitioned from an interactive medium in its early experimental years, to a powerful unidirectional broadcasting medium. Each new ICT brings with it a debate about the democratizing potential it has, and I thoroughly review the debate about how democratizing the Internet will or will not be. Next, I use original survey data to evaluate how Internet users currently communicate online. The Web-based survey evaluates the types of online political activities conducted by users, coupled with the sources of information they receive and a wide variety of demographic characteristics from which to analyze group dynamics. This data is used to determine what types of political communication is occurring online, how decentralized online political communication actually is, and what types of Internet users are more likely to be politically active online.

Significance of the Study

Ultimately both ICTs and political actors each play an important role in creating political communication revolutions. In order for a PCR to occur, a new ICT must be introduced that achieves political viability. However, the choices of political actors are more important in terms of creating a successfully transformational PCR. These choices are the key element in creating a political communication revolution. Without active choices on the part of political actors, new ICTs may produce a large social impact, but would not substantially change the way that political information is disseminated or the relationship between political elites and the public.

All told, the PCR cycle includes the development of a new ICT, the growth of its popularity and political viability, early political experimentation, widespread copying of successful political communication innovations, and eventually the stabilization of a new political communication status quo through new policies, norms, and institutions creating a new PCO (discussed in chapter six). Through the course of American political history four PCOs have existed: the Elite, Mass, Broadcast, and Information Political Communication Orders. Each was a lasting period of relatively stable political communication activities aimed at timeless broad and targeted political communication goals. These four PCOs, though not static, maintained stability in the fundamental form and function of political communication, as well as in the relationships created though this structure. Both the PCOs and the PCRs that disrupted them are extremely valuable lenses through which to view the changes in ICT use through American history.

Through this dissertation, I explain how emerging ICTs create the potential to disrupt particular types of political activity as well as when and how political actors choose to use these political opportunities. Hopefully the analyses of how and when PCOs are disrupted and the process which occurs during PCRs will aid scholars searching for a useful way to discuss ongoing changes in political communication as a continual process as opposed to a series of isolated revolutions. At the same time this project seeks to contribute to American political development (APD) literature by investigating the relationship between ICTs and political activity over time.

The potential value-added of this project is dependent on my ability to demonstrate that substantial disruptions in political communication activity result from choices made by political actors only after new ICTs have become politically viable. While it is essential to detail the

characteristics and uses of a new ICT which leads to its political viability, it is even more important to show the key role that political actors play in transforming a politically viable communication tool into a powerful political weapon. These elements come together to form a well-supported model of systemic political communication change that can be used to compare different disruptive periods of revolution over time.

In addition, a more comprehensive understanding of ICT use in American politics today, and particularly online political activity, should contribute to scholarly work that lies at the intersection of American political behavior and mass communications research as well as future research regarding the decentralizing effect of modern political communication activity. In other words, the cycle of political communication revolutions and orders is likely to continue through cyberspace and beyond.

Chapter 2 – ICT Development in the Context of the Political Communication Revolution Cycle

The benefits of improved information communication technologies (ICT for political discourse and democratic society have been trumpeted for decades. And many of the themes of exceptionalism of particular technologies have repeated themselves regularly during various cycles of ICT development. Take for instance, the following quote:

> For the first time in history, the media are making possible mass participation in a social and socialized productive process, the practical means of which are in the hands of the masses themselves. Such a use of them would bring the communications media, which up to now have not deserved the name, into their own. In its present form, equipment like television or film does not serve communication but prevents it. It allows no reciprocal action between transmitter and receiver; technically speaking it reduces feedback to the lowest point compatible with the system.[40]

Which historical media breakthrough is the above quote applauding? It would be natural to assume that this glowing praise was being heaped upon the Internet with its interactivity giving new meaning to the term "communications media." Yet German broadcaster and poet Hans Magnus Enzensberger wrote these words in 1970 describing the radio.[41] It was a different era and a different technological innovation, but the message was the same. The lesson is clear: we are not living in a new information age; at least not in the way most of us have come to accept. A modern sense of progress and rhetoric about the Internet and new media have suggested that technology today has launched today's society so far beyond where it has been that it is truly a new age.[42] While it is true that although the Internet has only been widely accessible for less than 15 years, it has revolutionized many aspects of our social world. However, when we take a step back, placing the Internet into broader historical context, we

[40] Hans Magnus Enzensberger, "Constituents of a Theory of the Media," *New Left Review* 64(1970): 15.
[41] Spinelli, "Radio Lessons for the Internet," 1.
[42] Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 2.

begin to see it as the latest in a dramatic line of technological advances in communication media that can be traced back over the past three centuries. During that time, mass media evolved from print, to wired, to wireless, and now digital technology. Meanwhile political actors from presidents to concerned citizens have experimented with using these new technological tools to aid their political communication strategies. Though many of these trials were unsuccessful, others have led to PCRs that have permanently shifted the way that political communication is conducted in America.

The evolution of communication technologies from the beginning of colonial America up until today has been continuous, though far from gradual. Taken separately, the newspaper, telegraph, telephone, radio, television, Internet, and all of their variations seem to create a story of sudden and nearly revolutionary leaps forward in communication capabilities with nearly limitless social and political ramifications. Although the large social impact is real, it is important to note that a new ICT that makes a dramatic impact on society does not automatically do the same for American politics. The apparently jolting thrusts toward modernity were actually rooted deeply in historical precursors. In fact, historical analysis suggests that clear patterns developed that help determine when and why many of these social changes actually took place.

The beginning of this cycle is ideation, the process of conceiving of a new communication technology. This moves the technology from basic scientific competence to the level of technological performance, meaning that the processes of science can be used to test possible solutions. Ideation may occur years before any real technological breakthrough is apparent. For example, three decades before the first working telegraph, the thought was conceived in Germany. In France the first ideation of the telephone occurred more than 20 years

before Alexander Graham Bell started working on it. And the idea of the television was suggested in 1877, approximately 75 years before it became common household items.[43]

Following ideation are several steps of actually building and reforming machines themselves. The initial devices built toward fulfilling the purpose conceived during ideation are prototypes. Prototypes could blossom or wither depending on a combination of forces that combine to propel or obstruct the development of any such device. Communications professor and media scholar Brian Winston calls this amalgam of forces the supervening social necessities.[44] These social forces transform the circumstances in which the prototypes are developed and at times create fertile ground for innovation. At these times certain prototypes are fostered and become inventions. Because inventions are impacted by the supervening social necessities, they often occur around the same time, as when Bell and his rival Gray filed patents for a speaking electric telephone on the exact same day in 1876.[45]

Inventions move into the marketplace where they are further acted upon by conflicting forces. On one hand, the belief in progress and the supposed need for the new technology presses for the development and dissemination of the new product; on the other, the new invention must conform to current social and commercial patterns.[46] For instance, a cable company today would not create a new version of the Internet that made cable television obsolete, but that same company would embrace an innovation that could enhance its existing services and products. The result is a jerky process of advancement, which can be seen repeating itself over and over throughout communications history. This pattern is theorized by historians such as Fernand Braudel as a conflict between brakes and accelerators being applied to the technological

[43] Ibid., 4-5.
[44] Ibid., 5-6.
[45] Ibid., 9-10.
[46] Ibid., 11.

progress. This process, which includes ideation, prototypes, inventions, social necessities and social or political constraints, moves society forward, at times reaching apparent levels of equilibrium before wrenching itself forward again.[47]

ICT Development through the Lens of Political Communication Revolutions and Orders

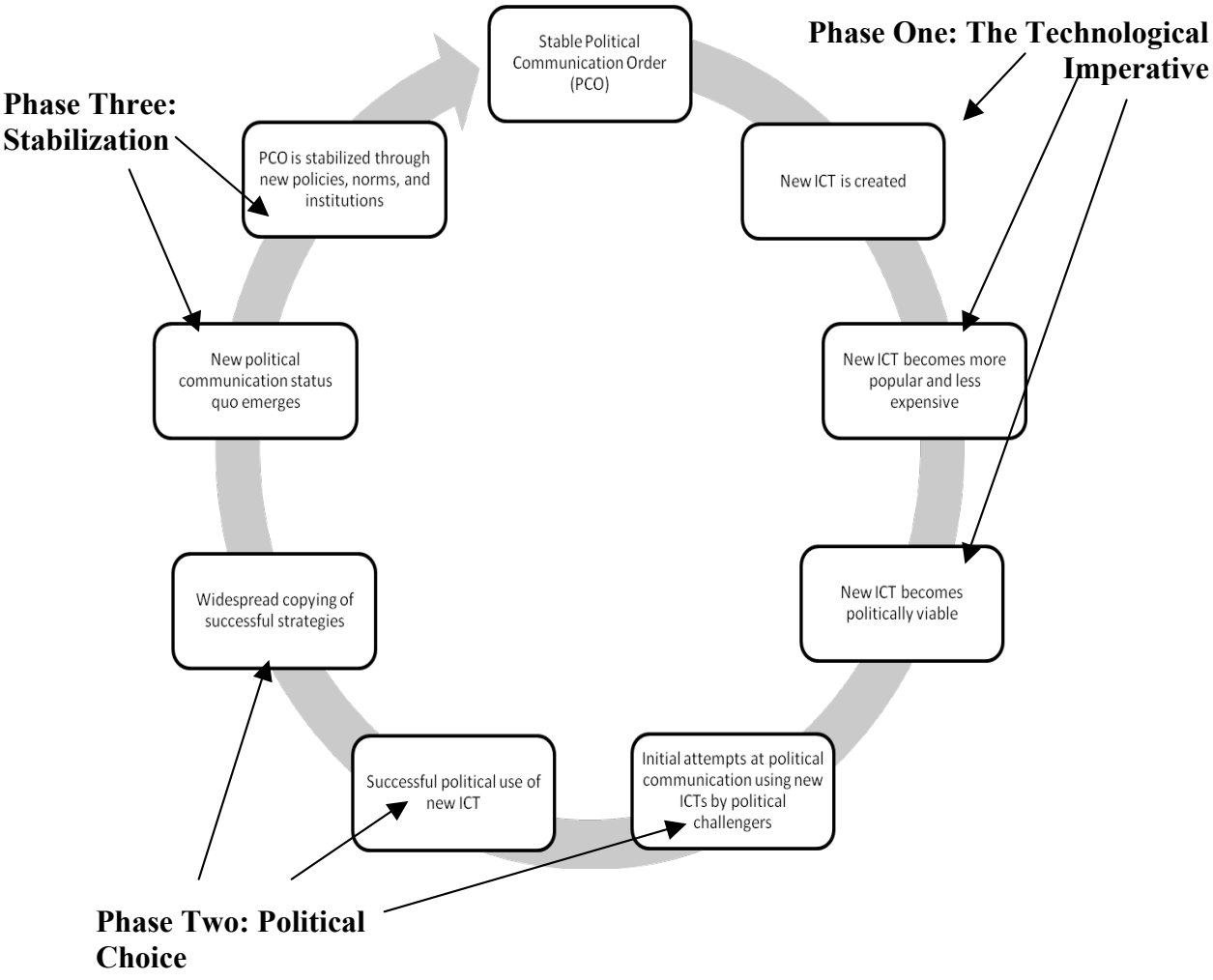
For the purposes of this dissertation it is important to view the process of technological development by analyzing the ways that it has or has not affected broad and targeted political communication. By doing so it becomes apparent that an undulating pattern of progress growing out of ICT innovation can describe political communication advancement. In fact, these periods of equilibrium and sudden forward jolts correspond to the concepts of Political communication orders (PCO) and Political communication revolutions (PCR), respectively. Just as the social impact of new ICTs requires a social or commercial need to develop, there must be a political need that causes political actors to use the new ICT for political purposes in order for a PCR to occur. In this regard not all ICTs are made equal: some have fit political needs and thus have been utilized by political actors to innovate vast swaths of American political communication activities, while others, though pivotal in terms of their social utility, have remained marginal in terms of their political impact. ICT innovations must be reframed and viewed through the lens of PCOs and the revolutions that disrupt them.

A Political communication revolutions (PCR), introduced in the last chapter, is a period of permanent disruptive change in political communication activities, which serve as the transitions between relatively stable periods labeled PCOs. Each PCR has followed a general pattern, together knows as the PCR cycle, which has three main phases: the technological imperative, political choice, and Stabilization phases (see Figure 2.1). The majority of this

[47] Ibid.

dissertation will be dedicated to detailing and analyzing these three phases in terms of how and why they have occurred n order to facilitate the use of this model as a framework to understand past and present political communication changes. First, this chapter will serve to provide a historical narrative, which clearly links the changes in political communication through American history to the four PCOs labeled the Elite, Mass, Broadcast, and Information PCOs, and the three PCRs that disrupted them.

Figure 2.1 The Political Communication Revolution Cycle



Elite *Political Communication Order*

The first political communication order in American history, the Elite PCO, emerged at the same time as the young country. It should not surprise anyone looking at the limitations in transportation and communication technology that most political communication during the colonial era and early years of the new nation was conducted in person. If a politician wanted to connect with the public, he made speeches or participated in local community events. The political news coverage and communication that did not occur face-to-face was printed. Many eager and hardworking printers sought to share news with local business and wealthy citizens. Although most printers printed a wide variety of items, by far their most important business was the newspaper.[48] Colonial newspapers included political news at times, though it was usually international news copied from British papers. The printing of newspapers and number of subscribers grew quickly in the buildup to the American Revolution. It was a fundamental tool stoking anti-British aggression and was used extensively as a propaganda machine throughout the revolutionary era. Thomas Paine's anonymously printed monograph, *Common Sense*, presented a powerful argument against the British that resounded with the Colonists. Published first on January 10, 1776, it became the most widely sold publication in the colonies to date, reportedly selling 120,000 copies in the first three months and over half a million in the first year.[49] David Ramsey, who witnessed the war firsthand and wrote a history of the American Revolution in 1789, aptly stated the importance of printed documents like *Common Sense* and the numerous newspapers that emerged during the era when he wrote, "In establishing American independence, the pen and the press had a merit equal to that of the sword."[50]

[48] Starr, *The Creation of the Media : Political Origins of Modern Communications*, 85.
[49] Thomas Paine, Michael Foot, and Isaac Kramnick, *Thomas Paine Reader* (Penguin Classics, 1987), 8-10.
[50] Arthur M. Schlesinger, *Prelude to Independence; the Newspaper War on Britain, 1764-1776*, [1st ed. (New York,: Knopf, 1958), vii.

Following the American Revolution, printing presses spread throughout the United States to most major towns in America. These early papers were mainly weeklies until the first issue of the first daily, the *Pennsylvania Packet and Daily Advertiser*, was published in 1784. As the title would suggest, commercial interests dominated much of the early newspaper industry. The word "advertiser" was included in the title of five of the eight dailies published in 1790 and 20 of the 24 published in 1800. After 1800 advertising generally filled more than half of the space in American newspapers, regardless of the name of the newspaper. [51] The prevalence of advertising suggests the influence of commercial interests over newspaper content, which remained a constant influence through the first half of the 19th Century.

Unlike later ICTs, the political utility of the newspaper was never in question. Political printing, especially during the revolution, became both powerful and popular and started to emerge as a primary means of political communication. From the 1790s on, any politician who thought about campaigning, launching a new movement, or reaching people in a new geographic region understood that they needed a newspaper to do so. Partisan newspapers grew early in the battle between Alexander Hamilton and Thomas Jefferson, even before the Federalists and Jeffersonian Republicans officially formed. Parties began to control newspapers directly starting in 1828, and relied on them as their means to advocate for policies and gain supporters. Usually the formation of a new party or the breakdown of partisan alliances led directly to the launch of a new newspaper to give voice to the new party.[52] Political communication was embedded into the fabric of early American newspapers, but the newspaper needed to reach a much broader audience in order to gain political viability and precipitate a PCR.

[51] Starr, *The Creation of the Media : Political Origins of Modern Communications*, 86.
[52] Pasley, *"The Tyranny of Printers": Newspaper Politics in the Early American Republic*, 9.

This growth would occur in the decades following the birth of the nation. As the number of newspapers grew, so did the audience size. By the end of the Elite PCO in the 1820s, the newspaper business had grown exponentially both in terms of newspapers published and readership. While there were approximately 30 newspapers publishing in the United States at the time of the signing of the Declaration of Independence in 1776, there were nearly 600 by 1820.[53] And by the mid 1920s there were over 50 newspaper subscriptions for every 100 households, up from 18-19 in the 1780s.[54] Although this does not mean that half of America subscribed to newspapers (many families subscribed to more than one paper), it does suggest that readership might not have been limited to the political and economic elite as most suggest.

The elite status of newspapers that did exist started to crumble on Sept 3, 1833, when Benjamin Day took the gigantic leap of selling his newspaper, *The New York Sun,* to an anonymous and heterogeneous population on street corners for the price of one penny.[55] The "penny press," as the early mass marketed newspapers would come to be known, was a major shift both in the type of news being offered and the audience that read it, and as a result helped to usher in the first PCR in American history. The penny press targeted the newly literate middle and working classes. It was much cheaper than the majority of subscription dailies that existed previously, costing on average one-sixth the price. The low price resulted partly from the increased printing speed and cheaper paper made available by improvements in technology. Other advances, such as home lighting that allowed more people to read in their homes at night, also contributed to the growth of the first mass medium.

Though all of these innovations helped increase the number of people reading newspapers, perhaps the most important development leading to the first PCR was not an

[53] Ibid., 403.
[54] Starr, *The Creation of the Media : Political Origins of Modern Communications*, 86.
[55] Ronald Berkman and Laura W. Kitch, *Politics in the Media Age* (New York: McGraw-Hill, 1986), 20.

advance in technology but in infrastructure. Both the dramatic increase in the capabilities and size of the U.S. Post Office and the preferential treatment given to newspapers played a central roll in the expansion of the newspaper industry.[56] The turning point occurred with the Post Office Act of 1792. Along with fueling the rapid growth in the numbers and efficiency of post offices and postal workers, the 1792 Act had two principle features that directly promoted newspaper distribution. First, it admitted every newspaper into the mail, provided that it paid the nominal fee of one penny if was being transported under 100 miles or one and half cents if it was being transported further. No other class of mailable items received such favorable rates. This government subsidy for newspaper dissemination had an enormous effect. Prior to the Act, the delivery of newspapers through the mail only occurred for members of Congress sending a newspaper to a constituent or between newspaper printers. This norm of free printers' exchange, a custom carrying over from the colonial era, allowed printers to see and copy what other newspapers had covered without paying a fee for the newspaper or news itself. The second important aspect of the Post Office Act was to put this printer's exchange policy on legal footing, codifying it and protecting it from future litigation.[57]

As a result of the Post Office Act, the total volume of newspapers that printers sent to subscribers through the mail grew exponentially. By 1800, 1.9 million newspapers were transported through the postal office, 6 million in 1820, 16 million by 1830 and 39 million by 1840. Perhaps even more striking is that by 1830 there were over 1.5 newspapers sent through the mail per capita, increasing to 2.7 in 1840, approximately the same as the number of letters transmitted per capita. The extremely inexpensive postage for newspapers removed the financial and geographic limitations restricting the printers of the Elite PCO and was so influential that

[56] Richard R. John, *Spreading the News: The American Postal System from Franklin to Morse* (Cambridge, MA: Harvard Univ Press, 1995), 2.
[57] Ibid.

historian Richard R. John suggests that this amounted to a communication revolution in and of itself.[58]

Combining the increasing population, literacy rate, and technological advances with this low cost, subsidized distrbution by the U.S. Post Office led directly to the growth of the audience for the mass newspaper industry. After only two months *The Daily Sun*'s readership grew to 2000, up to 5000 after five months, and to 8000 after six months. This number ballooned to over 30,000 readers daily by 1837, not including the expanding penny press in most of the other major cities across America.[59]

At the same time that newspaper circulation was growing, nationwide political participation was also skyrocketing. Western states admitted to the Union after 1815, including Indiana (1816), Illinois (1818), and Missouri (1821), adopted state constitutions that allowed for universal male suffrage. Nearly every other state followed suit during the 1820s and political participation grew dramatically as all classes were included in the political business of America for the first time.[60] The best indication of this expanding political participation was the incredible growth in the popular vote during the 20 years coinciding with the first PCR. In 1820 just over 108,000 votes were cast in the presidential election, a total that would increase more than tenfold by the election of 1828 and balloon to over 2.4 million in 1840.[61] While the population grew by 177 percent during that 20-year period, the popular vote grew by an

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[58] Ibid., 4, 30-39.

[59] Other inexpensive dailies that followed *The New York Sun* included James Gordon Bennett's scandalous *New York Herald*, Horace Greeley's *New York Tribune*, and Henry Raymond's *New York Times*. Articles from these papers were widely disseminated and used in other dailies around the nation placing New York at the center of the American newspaper empire. Berkman and Kitch, *Politics in the Media Age*, 20-22.

[60] Vermont had never included property ownership as part of their voting requirements.

[61] The 1820 popular vote represented 1.12 percent of the U.S. population for that year including slaves and 1.34 percent not including the slave population. The over 17 million votes cast in 1840 represented 14.1 percent of the population or 16.48 percent not including slaves. The numbers of votes grew over 22 times during that period. The voter turnout also grew during this period. The earliest record of voter turnout as a percentage of voter age population (V.A.P.) was in 1924 when there was 26.9 percent turnout. This number nearly doubled to 57.6 percent in 1928, then after staying relatively stable though 1936 catapulted to 80.2 percent, a number unfathomable in modern politics.

astounding 1,250 percent, over seven times the rate of population growth. Along with changing state suffrage laws, party politics evolved during this period opening the political process to the public in a way it had never been before.

In light of the massive growth in newspaper circulation, the growth in political participation gave this quickly diffusing medium the potential to impact political discourse broadly throughout America. Together the greatly expanded readership, increase in national political coverage, vastly expanded post office (along with its subsidization of newspaper distribution), and increased political participation created the first PCR leading into the Mass PCO. For the first time in American history, the majority of the American public, regardless of class, gained access to both the newspapers and the political system, changing the strategies and methods of political communication forever.

The Mass Political Communication Order

After newspaper access grew during the first PCR, its role within the political process changed along with it. During the Elite PCO newspapers were identified with political causes or politicians. During this early period, newspapers were essentially advertisements for parties, politicians, and their platforms. The Mass PCO witnessed a transition from the partisan press, which dominated newspapers during the first order, to more neutral and independent news reporting, though this evolution occurred gradually. In 1850, the census classified only five percent of newspapers as neutral and independent, rather than political, scientific, or literary. By 1940, 48 percent of newspapers were labeled as independent with another 24 percent identified

as Independent Democratic or Republican. Only 28 percent of papers continued to explicitly align themselves with one party or another.[62]

In the early twentieth century, the emergence of pubic relations meant that information was given to the newspapers through publicity agents representing the interests of their employers. It did not take long for these agents to be used by government agencies and politicians as well. As a result, reporters now had ready access to information, but that information was highly filtered.[63] Along with press releases and wartime propaganda, these publicity agents undercut the objective nature of newspaper reporting that existed through the early twentieth century. It was at that time that the full-scale effort to control what facts reached the journalists, and in turn the public, began.[64] These strategic actions taken by politicians are precisely the type of choices that lead to transformations in political communication once ICTs, like printing and newspapers, saturate society and become politically viable.

There are many examples of ICTs that have fundamentally shifted how society communicates that have not had a revolutionary effect on political communication. Two examples of politically viable ICTs that fit this description are the telephone and telegraph. Though clearly distinct, these two ICTs share similar infrastructure and design. Although ideation of sending sound over great distances by wire began in the mid 1600s, the first recognizable prototypes of the electric static telegraph began in 1816, when Francis Ronalds successfully sent a message over eight miles of wire. Ronalds' prototype was promptly rejected as useless due to a lack of a social need for this product. The need came in 1825 when another technological innovation, the railroad, required instant communication over great distances as a

[62] Kathleen Hall Jamieson, *Packaging the Presidency* (New York: Oxford University Press, 1996), 22.
[63] Berkman and Kitch, *Politics in the Media Age*, 25.
[64] Ibid., 26.

matter of safety.[65] The next great leap in the usefulness of the telegraph took place in 1837, when after five years of experiments and trials, Samuel Morse (assisted by Alfred Vail) developed his system, including a code that could be easily learned. The code itself, derived from research with local printers, was much simpler, clearer, and more efficient than earlier ones. Thus one important reason Morse's system prevailed was due to his insight of modeling his communication system after the known and developed printing system.[66] Quickly the telegraph was incorporated into the newspaper business. In 1844 the first "wire" story was sent over telegraph. Four years later the Associated Press was formed as a joint venture of six New York newspapers as a means of cutting the cost of newsgathering. Each paper had equal access to the news gathered and could sell the stories to clients in other cities.[67] The telegraph thus increased the nationalization of news coverage available in newspapers and helped to expand the forms of political communication already occurring. However, it was not actively used to alter how politicians or parties communicated with the public because, unlike the social need created by the railroad, there was not an obvious political need that the telegraph could solve.

On the other hand, the ownership of the telegraph system was an important issue that ultimately had enormous ramifications in terms of the regulation and control of future communication systems. In 1845 the Morse line had been operated by the U.S. Post Office. The Postmaster general asked the crucial question: "How far the government will allow individuals to divide with it the business of transmitting intelligence…or will it purchase the telegraph, and conduct its operations for the benefit of the public?[68] Despite the Postmaster General's talk of "an instrument so powerful for good or evil," which could not "with safety be left in the hands of

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[65] Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 8-9, 19-23.
[66] Ibid., 26-27.
[67] Berkman and Kitch, *Politics in the Media Age*, 21.
[68] Gerald W. Brock, *The Telecommunications Industry : The Dynamics of Market Structure*, Harvard Economic Studies V. 151 (Cambridge, Mass.: Harvard University Press, 1981), 63.

private individuals uncontrolled by law," a crucial privatizing precedent was set when Congress failed to take greater control of the telegraph industry. In the U.S. the transmission of intelligence and information was to forever be shared by the government, press, and business forces.[69]

Transmitting speech over the wire was the next great step. Prototypes of the telephone began in the 1860s, often attempting to modify the telegraph for this new purpose. Looking back, it is surprising to note a distinct lack of interest in the development of the telephone on the part of Western Union, the leading telegraph provider, and various electric companies around the nation. Some of the speed in the development of the telephone can therefore be attributed to a patent race between Alexander Bell (assisted by Thomas Watson) and Elisha Gray during the mid 1870s. This resulted in Bell's patent of a machine that only partially worked in February 1876.[70]

The supervening social necessity, which catapulted the telephone forward, was the development of the modern office. Though the social uses of instantaneous verbal communication over the wire were considered immediately, the cost and profitability of the telephone placed it in American offices much more often than in homes in the late 19th Century. Although America was in a severe economic downturn until the 1890s, technological and legal advances allowed for new, more expansive business systems that could use this new communications medium in a variety of ways.[71] The first use of the telephone for news reporting took place in April 1877, thus working along with the telegraph to update the newspaper business.

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[69] For more on the role of regulation in the PCR cycle and during PCOs see chapter six. Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 27.

[70] Ibid., 37, 43-50.

[71] This relative utility was reflected in the lease terms advertised by Bell Telephones in 1877: $20 per year for social purposes connecting a dwelling with any other building, and $40 per year for business purposes. Ibid., 53.

The telephone remained primarily a tool for business for its first 50 years. In 1894, when the Bell patent expired, there were 285,000 telephones leased in the US or one for every 190 Americans. That number grew to 3.36 million in 1904, 6.1 million in 1907, and 7.6 million in 1911.[72] However it wasn't until after World War II that most households leased a telephone.[73] Once telephone access reached this critical mass, the personal and political potential of this medium greatly expanded. However, in terms of political communication, the telephone, like the telegraph before it, increased the speed and communication capability of political offices and newsgathering but did not affect broader political communication activities around the country.[74]

The impetus behind the second PCR was the birth of the radio. The earliest ideation of the radio can be traced back to Mahlon Loomis in 1872, and following some of Loomis' ideas Gugliemo Marconi was credited with inventing the wireless telegraph in 1895.[75] Besides improving on earlier prototypes, Marconi also realized that shipping communication provided the social necessity for wireless radio. Naval communication in particular called for the radio for long distance communication due to the growth in ironclad ships at the end of the 19th Century. These ships were much more durable and powerful than traditional ships with wooden hulls, yet far less nimble, requiring greater distances between ships and communication capabilities

[72] Starr, *The Creation of the Media : Political Origins of Modern Communications*, 202.

[73] This slow diffusion is a key reason why the political viability of the telephone grew so slowly that it had very little potential disruptive effect on political communication. For more see chapter three. J Carey and M. L. Moss, "The Diffusion of New Telecommunications Technologies: Telecommunication Policy," (New York: New York University, 1985), 4.

[74] This would obviously change with the robo-calls, which started in the late twentieth century. After that point improved capabilities and convenience of telephones, the advent of cell phones, and the reduction in calling costs led to much greater impact on political communication, however this took place after the second PCR and the end of the National PCO.

[75] Marconi was the first to show that radio telegraphy, the wireless transmission of code, was both technically feasible and practically useful. Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 68, 70; Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 3.

beyond that of traditional flag signals. Thus, just as the railroad had created a need for the telegraph, improved shipping had made wireless communication a necessity.[76]

At the turn of the twentieth century the public market for what would become the radio was still in development, as wireless started to become popular outside of naval and shipping interests for the first time. Wireless amateurs popped up everywhere, filling the airwaves and listening in to naval signals. In 1906 Reginald Aubrey Fessenden became the first to successfully transmit the human voice.[77] The radio itself became a public communication fixture only after two dramatic events paved the way. During the Titanic disaster in 1912, American Marconi operator David Sarnoff, picked up distress signals in New York, bringing radio to the forefront of public interest and prompting Congress to pass legislation requiring radio transmitters on all ships with over 50 passengers.[78] Second was World War I, which created the need for coordinated radio systems. The government forced all amateurs off the air during the war, taking control of the airwaves for coordination, intelligence, and wartime propaganda.[79]

After the War, radio remained a hobby for many Americans, as some 100,000 amateurs again popped up, communicating with one another.[80] The fixation on point-to-point communication was the real brake suppressing the potential of wireless communication. Once the Radio Corporation of America (RCA) was formed in 1919, Sarnoff, its new president, set out to create a radio industry based on the open broadcast of news and entertainment and the sales of millions of home radio sets.[81] Thus radio was conceived by its creators not as a public service but

[76] Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 70-71.
[77] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 4.
[78] Sarnoff would become president of the RCA and later dominate National Broadcasting Company (NBC) radio and television.
[79] Berkman and Kitch, *Politics in the Media Age*, 28-29.
[80] Ibid., 29.
[81] Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*, 76-77.

as a consumer product.[82] Spurred on by the popularity of Frank Conrad, an amateur who transmitted phonographic music from the top of his garage, Westinghouse built a large transmitter in East Pittsburgh to stimulate the sale of its home receivers in 1920. On November 4, 1920 station KDKA became the first radio station to broadcast regularly scheduled programs, when it transmitted progress reports of the Harding-Cox presidential election results.[83]

The number of radio stations exploded across the nation starting in 1922 due to improving economic times, the appearance of complete radio sets that required little home assembly, and newspapers devoting space to radio scheduling and announcements. In January of that year there were 30 broadcasting stations on the air; the total jumped to 556 one year later. Also in 1922, AT&T linked stations by telephone wire, creating the basic condition for the modern network, allowing many stations to play the same program at the same time. By 1924, this network had connected 25 stations from coast-to-coast.[84] Overwhelming growth in the industry contributed to a growing number of legal and licensing issues and the need for government regulation. This need was met by the creation of the Federal Radio Commission (FRC) that later became the Federal Communication Commission (FCC), in 1927. The Radio Act, which created the FCC, was intended to put some controls on the commercial use of radio and stated that the airwaves were public, and belonged to the people. This completed the broadcast industry's basic structure including government regulation, stations operating on temporary licenses, and networks of stations linked by wire and supported by advertising.[85]

Not surprisingly, along with the number of radio stations, radio use in America skyrocketed during the 1920s. In 1922, only .2% percent of American households owned radios.

[82] Spinelli, "Radio Lessons for the Internet."
[83] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 8.
[84] Berkman and Kitch, *Politics in the Media Age*, 29-30.
[85] Ibid., 30-31.

In 1925, the figure rose to 19.2 percent, and by 1930, 45.8 percent owned radios receivers. One decade later, in 1940, over 80 percent of households owned radios.[86] Sales of radios went from $60 million in 1922 to $843 million in 1929.[87] The nationwide radio network, which simultaneously broadcasted programs to a national audience, created a national culture in a way that had never existed before. At the same time, the number of political broadcasts grew so quickly that already during the election cycle of 1924 political messages on the radio had become widespread enough to lead the major broadcasting companies to develop a common policy on political broadcasting, focusing on major national figures and the two major parties.[88] In other words, the radio had become politically viable and the dawn of the Broadcast PCO had arrived with the strategic use of this medium by both political actors and broadcasters.

The Broadcast Political Communication Order

Though the first scheduled radio program was political in nature, reporting the election results of 1920, it was not until a year later that politicians began experimenting with the use of radio for campaigning. In that year New York City Mayor John F. Hylan and his challenger Henry F. Curran both reached out to potential voters during the final two days of the campaign. The experiment in political communication was so new that Curran's campaign manager could not even provide the exact time of his remarks.[89] Not until 1923 could the broadcasters and radio companies offer politicians increasingly reliable service. These technological improvements combined with the widely supported ideological belief of radio exceptionalism, as described by

[86] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 12.
[87] Library of Congress, "Radio: A Consumer Product and a Producer of Consumption," http://lcweb2.loc.gov:8081/ammem/amrlhtml/inradio.html.
[88] The major companies involved were AT&T, RCA, Westinghouse, and General Electric Company (GEC). They also limited their political coverage to an hour a day suggesting the large demand for political coverage by the political campaigns. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 117.
[89] Ibid., 141.

Enzensberger at the beginning of the chapter. As historian Douglas Craig suggests, "This [combination of factors] convinced broadcasters that their own self-interest and radio's destiny as a bringer of civic improvement required radio to be available to those engaged in, or aspiring to, political offices. This confidence of technical development, radio exceptionalism, and broadcasters' self-preservation meant that radio was now ready do to political service."[90]

Though Woodrow Wilson was the first president to experiment with sending his voice over the radio in 1919 and Harding made more successful attempts in 1922 and 1923, Coolidge became the first president to use the radio as a means of political communication and advancement.[91] These early attempts paved the way for the 1924 election, the first that utilized widespread strategic use of the radio by politicians and interest groups. In a preview of what would happen again with the introduction of television and the Internet into politics, political campaigns became much more technologically savvy in the course of one or two national campaign cycles. Most analysts agree that the Hoover-Smith presidential race in 1928 was the first true radio campaign, with both sides understanding its nuances and utilizing it extensively. This was followed by nearly 80 radio addresses during President Hoover's four years in office, and then the unquestioned champion of radio politics, Franklin Roosevelt, who took his broadcasting technique very seriously and completed dozens of addresses yearly including his compelling and historic fireside chats.[92] He understood that the radio did not simply offer a new way to speak with the public but had redefined the art of political communication and the relationship between politicians and the American mass audience. According to one Roosevelt radio address in 1932:

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[90] Ibid.

[91] Coolidge did not make addresses specifically for radio, instead broadcasting speeches to live audiences, with radio actings as a technological extension bringing the event to millions around the country. Ibid., 142.

[92] for more on how and when political actors innovated using the radio see chapter three. Ibid., 143-66.

> In the olden days, campaigns were conducted amid surroundings of brass bands and red lights. Oratory was an appeal primarily to the emotions and sometimes to the passions…With the spread of education, with the wider reading of newspapers and especially with the advent of radio, mere oratory and mere emotion are having less to do with the determination of public questions under our representative system of government. Today, common sense plays the greater part and final opinions are arrived at in the quiet of the home.[93]

While this was rooted the belief in radio's exceptionalism it was nevertheless, accurate in describing the effect of the second PCR spurred on by the radio. The Broadcast PCO had clearly been established.

Though obviously offering substantial benefits to technologically proficient politicians, the radio was also championed as a democratizing force and potential centerpiece of a more equitable and accessible political process. This concept was used by Sarnoff, the president of RCA, who linked this unifying cultural force with democratic ideals and consumerism in his testimony before the FCC during the late 1930s. He described listening to radio not only as a sign of membership in a national culture, but as a patriotic act that fed other American free market ideals. Sarnoff thus veiled himself in the rhetoric of social benefits of listening to the radio in order to build a defense against anti-trust legislation. He went on to suggest that radio "must be appraised by the effect it has upon the daily lives of the people of America – not only the masses who constitute a listening audience numbered in the tens of millions, but the sick, the isolated, and the underprivileged, to whom radio is a boon beyond price. The richest man cannot buy for himself what the poorest man gets for free by radio."[94] Although the sources of information remained firmly in the hands of private companies, the broad political uses and

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[93] Franklin Delano Roosevelt, *The Public Papers and Addresses of Franklin D. Roosevelt: The Genesis of the New Deal: 1928-1932* (New York: Russell and Russell, 1969), 659. as quoted in Jamieson, *Packaging the Presidency*.

[94] Radio Corporation of America, *Principles and Practices of Network Radio Broadcasting - Testimony of David Sarnoff before the Federal Communications Commission, November 14, 1938 and May 17, 1939* (New York: RCA Institute Technical Press, 1939), 102.

access suggested by Sarnoff did hold some truth. For instance, messages and themes embedded into popular songs broadcast on radio helped to create organized insurgency and political mobilization among textile workers in the South during the Great Depression, even though they had no formal organization or union.[95] Additionally, the direct and personal connection between national politicians and the public through radio broadcasts did make many feel much closer to the political process, as exemplified by Roosevelt's fireside chats, which often offered little substance but increased support for the president and the New Deal.

Although technically a spin-off of the radio, the invention of the television had a remarkable impact on politics all its own. Yet the changes in political communication through this new medium merely introduced a new stage to the Broadcast PCO as the fundamental relationship between the political actors and public as well as the institutions, regulations, and overarching communication strategies remained relatively constant. Following World War II, the development and diffusion of the television occurred quickly due to the ability to transition to it from radio. Television technology had already become sophisticated before the mass production of sets, and by 1948 there were about 70 stations and several million sets across the nation.[96] The network idea was already in place, and by 1951 a coast-to-coast television network had been established. Television quickly took over the dramas, soap operas, westerns, variety shows, and amateur nights that had been on the radio, while radio moved to the automobile and catered to audiences when television was unavailable. Even government regulations were already in place as the FCC simply expanded its control over television.[97]

[95] Vincent J. Roscigno and William F. Danaher, "Media and Mobilization: The Case of Radio and Southern Textile Worker Insurgency, 1929 to 1934," *American Sociological Review* 66, no. 1 (2001): 21-48.
[96] Berkman and Kitch, *Politics in the Media Age*, 34.
[97] Ibid.

In terms of political reporting, early television dramatically decreased news programming due to increasing public demand for entertainment shows and advertisers' interest in the largest audience possible. The three main broadcasting companies through most of the early era were the National Broadcasting Company (NBC) and the Columbia Broadcasting System (CBS) and the American Broadcasting Company (ABC).[98] From 1947 to 1956 NBC carved out only 15 minutes for news programming five nights a week. Along with the lack of popularity for televised news, the inflexibility of early television cameras limited new footage to anything that was prearranged so that lights could be set up. As the smaller camera, detached recorder, wireless microphone, and VCR were developed, television news could dramatically increase the possibilities of television journalism.[99] However the political focus of the television largely grew out of politics itself. While President Truman and Eisenhower had both used the television to address the nation, President Kennedy was the first to use it strategically to campaign and govern.[100] The presidential debates in 1960 between John F. Kennedy and Richard Nixon drew uninterrupted coverage from all three networks and attracted an estimated audience of 60 to 75 million viewers.[101] As is famously repeated, the television viewers overwhelmingly felt that Kennedy had won the debates, while listeners on the radio believed the winner was Nixon. What was clear was that politics and television combined to place image at the forefront of American politics.

Political news coverage expanded during the 1960s following not only national politics but local and international events as well. The civil rights movement was the first widespread use

[98] NBC and CBS were carryover broadcasters from the radio era while ABC emerged as a major broadcaster as the television era was dawning after the FCC forced NBC to sell one of its networks due to federal anti-trust regulation. They sold the Blue Network to ABC in 1941. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 279.

[99] Berkman and Kitch, *Politics in the Media Age*, 39-40.

[100] For more on the transformational role of Kennedy in campaigning see chapter four.

[101] Laurence Bergreen, *Look Now, Pay Later: The Rise of Network Broadcasting* (New York: Doubleday Books, 1980), 221.

of television to attract outside attention to issues of injustice. Nonviolent protesters used civil disobedience to highlight the brutality of Southern racism, knowing the cameras would capture it for the entire world to see. This strategic use of television news coverage altered the public agenda, increased outside involvement, and forced the government to create and enforce civil rights legislation. The protests and activism of the civil rights movement blended into the antiwar movement, as coverage of the fighting in Vietnam and the unrest at home dominated news coverage through the end of the 1960s and early 1970s.[102]

The expansion of cable and satellite television has offered some reduction in government regulation of television programming and, more notably, has increased the diversification and partisan nature of cable news. Access to television is nearly universal. With the 24-hour news cycle generated by cable, the volume of political information available has increased dramatically. Most Americans today who follow politics still get their political news from television, but it has become more editorial and contentious in nature. Regardless of these changes in types of information and positions taken by so-called television journalists on cable news, it is still used to broadcast political messages instantly to a mass American audience, much as the Broadcast PCO has since the 1930s.

The Broadcast PCO took place during a relatively long period that included major technological and political upheaval. I admit that it is controversial to suggest that the political communication order, which became dominant during the Great Depression, would continue through all of the major political changes during the following six decades. This suggestion is perhaps more controversial because during the Broadcast PCO the television was developed, perhaps the single most influential ICT of the past century, and still the dominant medium for political communication. However from the 1930s to the 1990s the ICTs available were all used

[102] Berkman and Kitch, *Politics in the Media Age*, 40-41.

to broadcast political information to the masses. The technological tools may have changed but the form and function of political communication and the mainly unidirectional orientation of messages to the public remained constant. The effect of immediate and personal connection between political elites and the public was consistent whether it was through the Franklin Roosevelt's fireside chats or the televised speeches of Ronald Reagan. Throughout this PCO the image of politicians were central to their electability and often their effectiveness. Although there are different stages in the Broadcast PCO with the introduction of television and later cable and satellite, they were not substantial enough to qualify as distinct PCRs. Instead they were each incremental changes in the midst of a stable PCO. The most recent revolution could not take place until the Internet was introduced into American politics in a substantive way in the 1990s.

The Emerging Information Political Communication Order

The development of the Internet obviously would not be possible without the computer, which stretches its scientific roots back well over a century. However the Internet as a medium was born much more recently. Many have suggested that the U.S. government created the Internet as a communications resource that could withstand a Soviet attack during the Cold War. The reality is that the government scientists and university researchers who developed the early forms of the Internet were aiming for a more scientific goal.[103] Massachusetts Institute of Technology (MIT) professor J. C. R. Licklider began publicly investigating the benefits of computer networking early in the 1960s and became the first head of the U.S. Department of Defense's Advanced Research Projects Agency (DARPA) in 1962. Fellow MIT researcher Lawrence Roberts, who was studying the effects of packet-switching communication, later joined him at DARPA. Packet-switching allows messages to be broken up into packets, which

[103] Andrew L. Shapiro, "The Internet," *Foreign Policy*, no. 115 (1999): 16.

can travel separately to a destination, then recombine. In 1967, Roberts proposed a packet-based computer network that would come to be known as ARPANET, the precursor to today's Internet. Although other researchers were working on a decentralized network safe from Soviet attack, the first four nodes of ARPANET were set up in universities in 1969 with the primary goal of increasing research capabilities.[104]

Over the next 15 years many technological innovations, growing largely out of universities around the world, led to numerous new applications including e-mail and a large increase in the number of Web hosts and users around the world.[105] To handle this increased traffic, the ARPANET was phased out during the late 1980s and was replaced by the NSFNET (set up by the National Science Foundation), which launched in 1985 and provided a more robust backbone for the Internet and served as the direct forerunner to today's Internet. Starting in 1984, Web hosts doubled approximately every nine months topping one million in 1992. In 1993 Web browsers like Mosaic were introduced and the public commercial-driven Internet grew quickly. This became the entirety of the Internet when the NSFNET was phased out in 1996.[106] These browsers were, by most accounts, the technological innovation that made the Internet accessible and useful to the masses bringing political viability to the Internet.

During the early 1990s a group including former Vice President Al Gore, proposed a national research and education network that would focus primarily on making networked computing a tool for education, scientific progress, and community empowerment. Instead the federal government chose to privatize the Internet, creating the commercially driven net that we

[104] Ibid.: 16-17.
[105] A Web host stores the pages of a website. These hosts then make these pages available to computers connected to the Internet.
[106] Kerry G. Coffman and Andrew M. Odlyzko, "Growth of the Internet," *Optical Fiber Telecommunications 4B: Systems and Impairments* (2002).

have today.[107] This privatization does not mean that the government has opted against regulating information online. Corporate and government regulation exists in many forms today and will, no doubt, become a greater issue as the development of the Internet continues.

Even casual observers of the evolution of the Internet and related new media would agree that their use and role in society has exploded since the mid 1990s. Web browsers provided the catalyst for a true explosion in the scope of the Internet in 1994. Web traffic on Internet backbones in the United States grew 100-fold in only two years from 1994 to 1996.[108] In December 1995 there were 16 million Internet users worldwide, growing to 361 million by the end of 2000, and over 1.5 billion in 2008.[109] This unbelievable growth has already revolutionized entertainment, communication, business practices, research and information gathering, as well as the methods used for political communication. Political communication methods have continued to evolve quickly in the midst of this revolution. This third PCR has occurred in a similar way to its predecessors: as the use of the Internet grew exponentially, it gained political viability and was then explored and used by political actors.

It is not a coincidence that political actors started using the Internet for campaigns and direct communication with the American public in 1994, just as Web browsers started opening up the Internet to the masses. It was at this time when national institutions and campaigns started looking to use the emerging Internet as an alternative way to reach the American public. On July 29, 1994 the Clinton Administration launched the first White House website.[110] A handful of midterm candidates created campaign websites in that same year, and by 1996 most major

[107] Shapiro, "The Internet," 17.
[108] Coffman and Odlyzko, "Growth of the Internet," 19,42.
[109] Miniwatts Market Research, "Internet Growth and Stats," http://www.allaboutmarketresearch.com/internet.htm.
[110] This basic website was the first of four versions just during the Clinton Administration. It was launched on July 29, 2004. National Archives and Records Administration, "Welcome to the White House," http://clinton1.nara.gov/.

national candidates had followed suit. The year 1996 also saw the emergence of websites for political parties, interest groups, news media, and nonprofit voter education organizations.[111] The sophistication of Web tools and the numbers of political organizations online have continued to mushroom since the late 1990s. These tools continue to revolutionize political communication by making accessible information nearly limitless and increasing tools for interaction. The information PCO is being formed but has yet to become stabilized, thanks to the ever-expanding political possibilities online.

The Internet itself is a large and complicated concept to define. Following the warning of Bruce Bimber, I will avoid getting tangled up in the intricate breakdown of all elements of what make up the Internet today, because it will undoubtedly continue to change quickly. What is important to the current study is a basic, yet broad definition of the Internet as an ICT that continues to play an increasingly important role in both political communication and the actual process of governing in the U.S. For this study the "Internet" will include all elements in the evolution from ARPANET to NSFNET and the commercial Internet that now exists relating to computing and methods of transferring data over what has become global network, generally referred to as the World Wide Web.[112]

Among the many innovations inherent in the dynamic ICT, the level of interactivity is the most profound. The interactivity of online communication is simply unavailable from any previous communications medium. This interactivity may provide an opportunity to break from the evolutionary line of top down organizing, providing more interactive and potentially democratic interchange of ideas and powerful tools for recruiting supporters, raising resources, and mobilizing political action. The democratizing potential and interactivity of the Internet will

[111] Bruce Bimber and Richard Davis, *Campaigning Online: The Internet in US Elections* (New York: Oxford University Press, 2003), 23-25.
[112] Coffman and Odlyzko, "Growth of the Internet."

be examined in depth in chapter five. Yet before the specific elements of the Internet or other historical ICTs can be evaluated it is first necessary to address the role of new ICTs in the emergence of PCRs. This will be done in two steps. First the development of new ICTs has offered varied levels of influence on political communication through U.S. history. I will therefore evaluate when and how particular technologies become socially diffused to the point of becoming politically viable (chapter three). Once new technologies become politically viable, then the political uses of these new tools are determined by the actions and choices of political actors. These political choices are the primary determinants of whether a new PCR emerges or whether the existing order is maintained, and will be examined in chapter four.

Chapter 3 - The Technological Imperative: How and When New ICTs Become Politically Viable

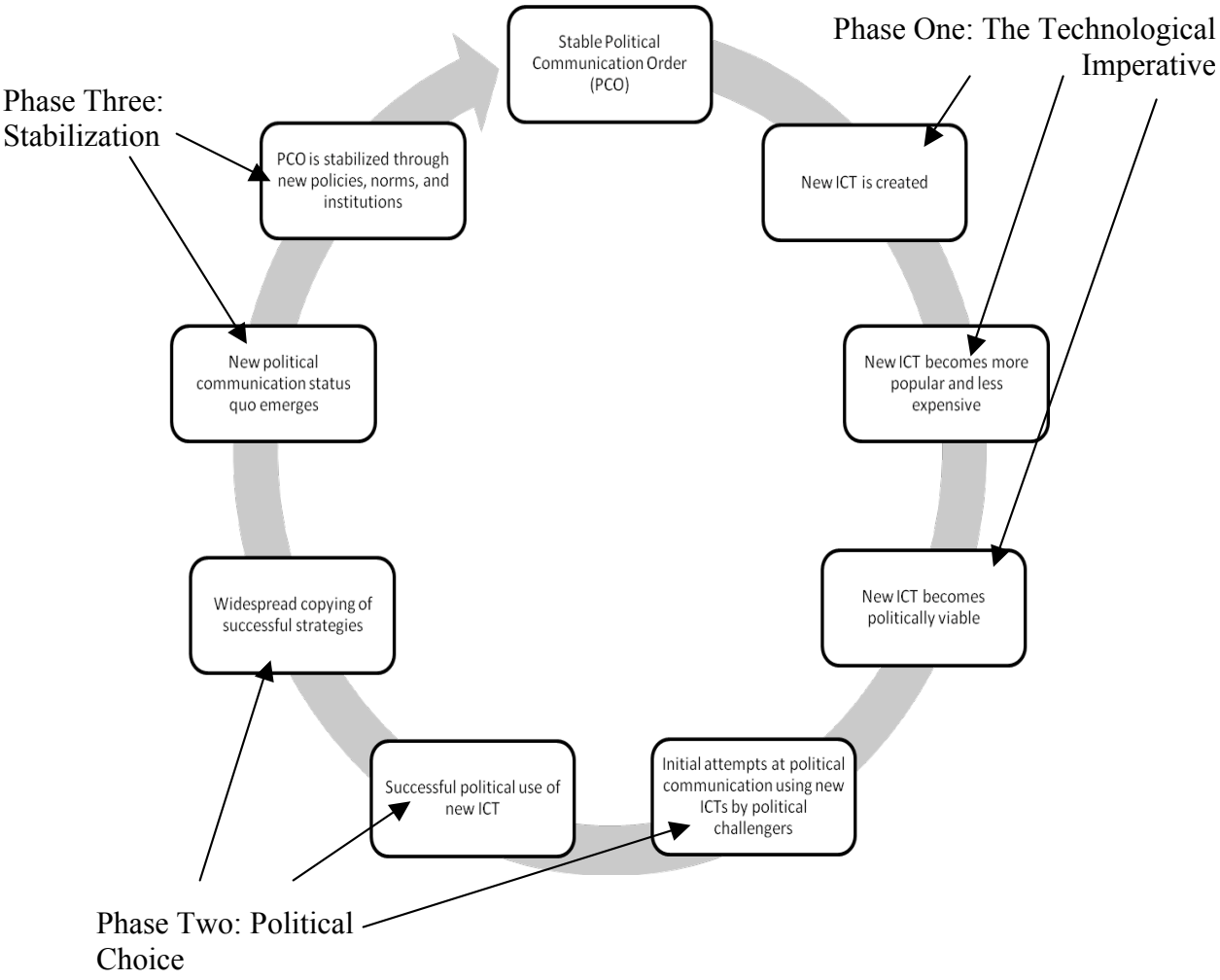
A political communication revolution (PCR) does not happen often. In fact, as noted in detail in chapter two, we are currently experiencing only the third PCR in American political history. Yet it is impossible to deny the numerous dramatic changes in social communication over the past 250 years. Many of these changes have resulted from the development of new Information and Communication Technologies (ICTs), which have increased the speed and interactivity of communication while providing a greater variety of forms of media and messages. Irving Fang, a journalism and mass communications scholar, defines information revolutions as profound changes involving new means of communication that permanently affect entire societies politically and socially on both personal and communal levels.[113] Unlike the broader information revolutions described by Fang, PCRs specifically describe lasting and fundamental changes that specifically affect political communication activities by permanently altering the relationship between the sources and audiences of political messages. It is important to note that political communication is more structured, specific, and strategic than general communication. Therefore, while changes in social communication may lead to changes in political communication, they are, by no means, equivalent. In other words, PCRs are related to, but much more specific, than broader information revolutions and are influenced by technological advances and communications patterns in different ways.

Chapter One described the multilayered process necessary to disrupt an existing Political communication order (PCO) and produce a successful PCR. A closer look suggests that there are

[113] Fang, *A History of Mass Communication: Six Information Revolutions*.

fundamentally three phases in a complete PCR cycle: a technology-focused stage, a period of political choices, and finally the stabilization of a new PCO.

Figure 3.1: The Political Communication Revolution Cycle



The PCR cycle begins with new communication capabilities brought on through an innovation in communication technology. This requires a new ICT that gains political viability through widespread diffusion in society. The dissemination of the emergent ICT across society is a necessary step toward a PCR, but insufficient to create a PCR on its own.

This chapter will analyze the first phase of the PCR cycle, what I label the technological imperative, to clearly identify how and when new ICTs become politically viable and how this affected the political utility of specific ICTs developed through U.S. history. I begin with what constitutes a politically viable ICT. Next, after a brief review of diffusion literature, I will analyze the elements of the major ICTs that have been developed over the past 250 years in order to demonstrate not only how each became politically viable but why some were much more likely to precipitate a PCR than others.

What Makes a Communication Technology Politically Viable?

The political viability of an ICT is based in large part on the successful diffusion of a technology. All successful ICT developments have gone through a diffusion process and have achieved widespread social and economic success. At the same time, they have also achieved at least some level of political viability. Because political communication is centered on strategic information dissemination, political mobilization, and strategies to attract and maintain supporters, the more users of a new ICT there are, the greater its political viability. Therefore, at a basic level, political viability comes down to access by a large portion of Americans.

As access to a new ICT increases, it will eventually reach what has often been termed a critical mass, the point at which it becomes a mass medium. Once a critical mass is met the diffusion of a new devise spreads quickly (see figure 3.1). For any new ICT to be considered a mass medium, a critical mass of adopters must be achieved.[114] Before critical mass is met there is little incentive for new adopters because a new device's social utility remains severely limited, acting as a social and economic brake. For example, the telephone system was not particularly

[114] Merrill Morris and Christine Ogan, "The Internet as Mass Audience," *Journal of Communication* 46, no. 1 (1996); Rogers, *Diffusion of Innovations*, 11-23.

advantageous to its earliest users because there were few people for them to call. Some have argued that the critical mass for communication technologies range from 10 to 20 percent, while others suggest it may vary by the type and variety of communication available on each device.[115] No matter the actual size of the critical mass, wide access is necessary for any ICT to become political viability and entice political actors to innovate their political communications activities. Once a new ICT reaches its critical mass, both its diffusion and political viability are nearly assured.

In terms of political viability, all widespread diffusion is not alike. Just as any technological innovation must be perceived as offering a benefit relative to prior technologies in order to be adopted by new users, a new ICT also needs to be perceived as politically advantageous to political actors to prompt them to innovate. While the choices of political actors will be discussed in great detail in the next chapter, ICT diffusion must be both 1) very fast, and 2) take place in American homes. The faster an ICT diffuses the greater the chance that its incorporation into political communication activities will be both sudden and disruptive. At the same time, political communication, as defined in this study, involves the interaction and relationship between political actors and the public. Therefore the masses need to have access to the ICT and personally use it at home in order to incentivize political actors to use it for their political communication activities.

The Diffusion of Communication Technology

The path toward political viability for new ICTs is essentially measured by the diffusion of the new technology. As mentioned in the introduction, Everett Rogers defines diffusion as the process by which an innovation is communicated through certain channels over time among the

[115] Morris and Ogan, "The Internet as Mass Audience."

members of a social system.[116] He defines the central cog in this operation, the innovation itself, as "an idea, practice, or object that is perceived as new." Therefore the most important element of ICTs in terms of their diffusion is not when they actually originated but how new they are perceived to be.[117]

The most comprehensive diffusion research and most fully developed understanding of diffusion comes from sociology and economics.[118] Both disciplines have studied why some new ideas and inventions catch on while others do not, mainly by looking from different perspectives at the process of deciding if and when to use an innovation. Scholarship on the spread of ideas and innovations over time has grown primarily out of sociological research, much of which has focused on social networks and the transmission of information, understanding, and trust about innovations. Some has focused on the importance of when individuals learn about an idea or innovation.[119] Others have paid particular attention to traits of individuals and organizations that are more likely to innovate early or wait for others to try the new idea or product first (for more on this see chapter four).[120]

Social analysis offers a fundamental and well-documented foundation as to the diffusion of not only new ICTs but new uses of existing communication tools and strategies within American politics. In a classic and widely cited study, Ryan and Gross (1943) illustrate how applicable this sociological research can be for the study of the diffusion of the political use of

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[116] Rogers, *Diffusion of Innovations*, 5, 12.

[117] Two major aspects to the diffusion of ICTs are the perception of potential adopters and the social processes that affect how they learn about innovations. These will be analyzed in detail in the next chapter in relation to political actors decisions if and when to use ICTs perceived as being new.

[118] Trish, "The Diffusion of Campaign Technology."

[119] Greenberg, "Diffusion of News of the Kennedy Assassination."; Rogers, *Diffusion of Innovations*.

[120] This research will be particularly useful in the next chapter when the choices and actions of political actors are analyzed in detail. It is most important, for the time being, to point out that diffusion by individuals is not identical to diffusion within and between by organizations. This means, for instance, that the decision to start to use strategic radio advertisements, e mail, or twitter is made differently by individual Americans and organizations like the National Rifle Association (NRA) and Congressional campaigns, an important distinction that will be elaborated in the next chapter. Deutschmann and Fals-Borda, *Communication and Adoption Patterns in an Andean Village*; Mohr, "Mohr."

ICTs and changes in political communication activities.[121] The authors, both rural sociologists, studied the rapid adoption of hybrid corn, which produced greater yields and resisted insects, among farmers in Iowa during the 1930s.[122] They interviewed 345 farmers regarding when and why they adopted the hybrid corn. In doing so they created the founding document for the research specialty of the diffusion of innovations and established the customary research methodology to be used by most future diffusion researchers. [123] The study's most notable contribution was to the understanding of the rate of adoption of innovations over time. Ryan and Gross described the general trend about the relative speed with which an innovation is adopted as an "S-curve." Although diffusion of any particular innovation varies based on many factors, the S-curve is extremely useful as a model for the general adoption rate over time, as shown in Figure 3.2. Specifically it shows that early on, only a few individuals adopt an innovation. Soon the adoption rate increases as it hits the critical mass point where enough individuals have adopted the new innovation that its further diffusion is self-sustaining. This critical mass is particularly important in the study of communications technologies because people use each ICT for social interaction. Therefore, after the critical mass is reached, it increasingly seems as though everyone else is using the new ICT so non adopters are more and more likely to adopt the innovation. After this point, adoption escalates until eventually the growth rate slows as the adoption rate gets closer to 100% and fewer non-adopters remain.[124]

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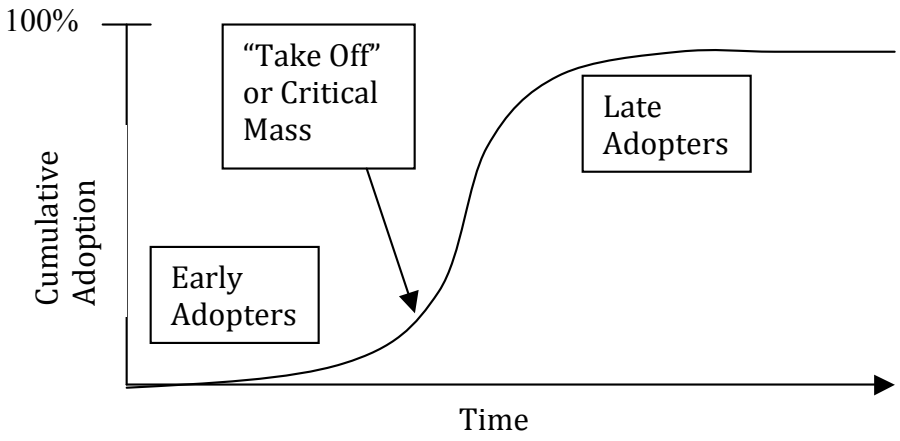
[121] Trish, "The Diffusion of Campaign Technology."

[122] Hybrid corn became available to Iowa farmers in 1928 or 1929 and accounted for 75 percent of corn acreage in the state by 1939. This rapid diffusion provided a great opportunity to study diffusion based on interviews asking farmers to recollect their shift to hybrid corn during the relatively recent past. They suggested, in general, that their decision to use hybrid corn was credited primarily to seed salesmen and neighbors, though some media-based influences such as print and radio did played a factor as well. Ryan and Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities."; Trish, "The Diffusion of Campaign Technology."

[123] Ryan and Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities."; Rogers, *Diffusion of Innovations*, 31-35.

[124] Rogers, *Diffusion of Innovations*, 11-23.

Figure 3.2: Diffusion of Innovations: S-Curve[125]



Perhaps the most important factor that determines whether the political viability of a new ICT might lead to a new PCR is the speed of its diffusion. The rate of adoption of new ICTs, modeled by the S-curve, charts the path that each successful new technology takes toward widespread diffusion and, at the same time, political viability. When fast diffusion rates are paired with the ability to personally own and use a new ICT, then the likelihood that political actors innovate their political communication strategies by using these new tools will be maximized. This is because relative to prior ICT options, political actors will perceive the greatest political utility of quickly diffusing ICTs that are used regularly in American homes.

Technically Speaking: The Elements of a New Communication Technology

The diffusion rate of each technology is affected by many factors including the characteristics of the innovation itself. It is important to elaborate on what exactly makes up a "technology." Nearly all technology is made up of two parts: hardware and software, both of which play different roles in determining the political utility and diffusion of technologies. The

[125] Image adopted from Trish, "The Diffusion of Campaign Technology."; Rogers, *Diffusion of Innovations*, 11.

hardware component of a technology consists of the tool that embodies the technology as a physical object.[126] Thus a physical telephone or television is a piece of technological hardware. The software component of technology is the informational base for the tool. For example, the keyboard, screen, case, and circuitry of a computer including the cables and wires that connect it to the Internet, make up a computer's hardware. On the other hand, computer software includes computer code and programs, like Web browsers that are used to access the Internet and websites themselves. While almost all technologies, and certainly all ICTs, represent a combination of hardware and software, the hardware is the more tangible of the two and therefore is generally the focus of most studies of technological diffusion.[127]

Besides having multiple components many technological innovations, especially ICTs, are related to one another. It is often very difficult to determine where one innovation stops and another starts. Because innovations are classified as such by those who perceive them to be new, the ability to differentiate between one ICT innovation and another also belongs to potential adopters who do the perceiving.[128] Closely related innovations form what diffusion scholars call technology clusters.[129] The hardware involved in the early newspaper business, namely the printing press, has evolved dramatically over the past 250 years of American newspaper making, yet this ICT cluster is combined into one area for the purpose of this study using the consistent medium, the newspaper, as the overarching label. The next successfully integrated ICTs in terms of American political activities were radio and television. Television was built upon the radio by adding sophisticated hardware to allow video and also usurping some of radio's existing

[126] Rogers, *Diffusion of Innovations*, 12-14.
[127] Ibid.
[128] Ibid., 14.
[129] Most diffusion research has generally investigated each innovation is if it were completely independent from other innovations. However that can be a bit misleading as some innovations build closely upon one another, while others are more distinct. Ibid., 14-15.

networks (hardware). Because these two extremely important technologies each led to important innovations in political communication activities, yet form a clear technology cluster and were used in such similar political ways, they make up two important periods within a single Broadcast Communication Order as detailed in chapter two.

Traits of ICTs and Their Rate of Diffusion

Although social elements and the characteristics of potential adopters do have an affect on the timing, rate, and comprehensiveness of diffusion, the diffusion rate also reflects the innovation itself.[130] For any new technology to spread through a society, the innovation must appear to offer a relative advantage over existing technologies in some way.[131] Sometimes this is measured in economic or status benefits to users of a new technology. But in the case of ICTs, successful new innovations must ultimately offer at least a potential increase in utility, usually measured by some combination of speed and sophistication of message delivery. In addition, a new technology must be able to consistently fit in with existing values and most importantly the needs of potential adopters.[132] A useful new ICT may be used extensively by a citizen in their daily lives, but unless it can be used to respond directly to a perceived political need it is unlikely to be incorporated into political communication activities and therefore offers minimal political utility.

Potential adopters of new technologies move through what Rogers calls the innovation-decision process by gathering information about the innovation. The more observable the benefits of the ICT are, then, the more likely potential adopters are to choose to adopt it. In

[130] The detailed examination of what type of political actors will likely innovate early and how their actions can, under certain circumstances, snowball into dramatic and widespread changes in political communication will be the main topic in the next chapter.
[131] Rogers, *Diffusion of Innovations*, 229-36.
[132] Ibid., 240-49.

general, communication technologies are very observable: anyone who came in contact a radio, television, telephone, or laptop computer would be able to see what it had to offer. This is not to say that observability translates directly into adoption. If the observable technology does not serve some need or is not affordable or attainable, then it will likely remain unadopted and offer limited potential for diffusion. Further, if those uncertain about an innovation can use it on a trial basis first, they are much more likely to adopt. In the Ryan and Gross study, every one of the Iowa farmers who adopted hybrid corn had first tested it on a small portion of their farms before completely making the switch.[133] This is far less possible for ICTs, though social connections can allow some trials for new ICTs.

One additional barrier to the adoption of new ICTs is their perceived complexity.[134] Many can be intimidated by using new technology that appears to be complicated to operate. Others may not believe that the potential benefits are worth the discomfort and time involved in learning how to use the new device. Ultimately the diffusion of a new ICT, or any innovation, is based less on the technological characteristics of the hardware or software and more on the perceived characteristics of the technology in terms of its affect on the user's life. Innovations that are perceived by individuals as having greater relative advantage, compatibility with their needs, observability, and trailablity, with less complexity, will be adopted more rapidly and often more completely than other innovations.[135]

The All-Important Dollar: Cost as a Factor in Diffusion

Although many characteristics of new technologies may offer clues as to if and when they will be widely diffused through society, the most tangible element contributing to ICT

[133] Ryan and Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities."
[134] Rogers, *Diffusion of Innovations*, 257.
[135] Ibid., 16.

diffusion and political viability is cost. As mentioned earlier, all technology has both a hardware and software component. The costs associated for using ICTs may include separate costs for the device itself and the software that provides the ability to send or receive information. Table 3.1 displays the types of costs required to use the six successful ICTs included in this study. Some ICTs require a user to purchase hardware in order to utilize the technology for communication, which can require substantial upfront cost. Meanwhile others require the user to pay for the ability to access the software being communicated, which is generally a lower but more regular cost.

Table 3.1: Costs Required for Use of Various ICTs[136]

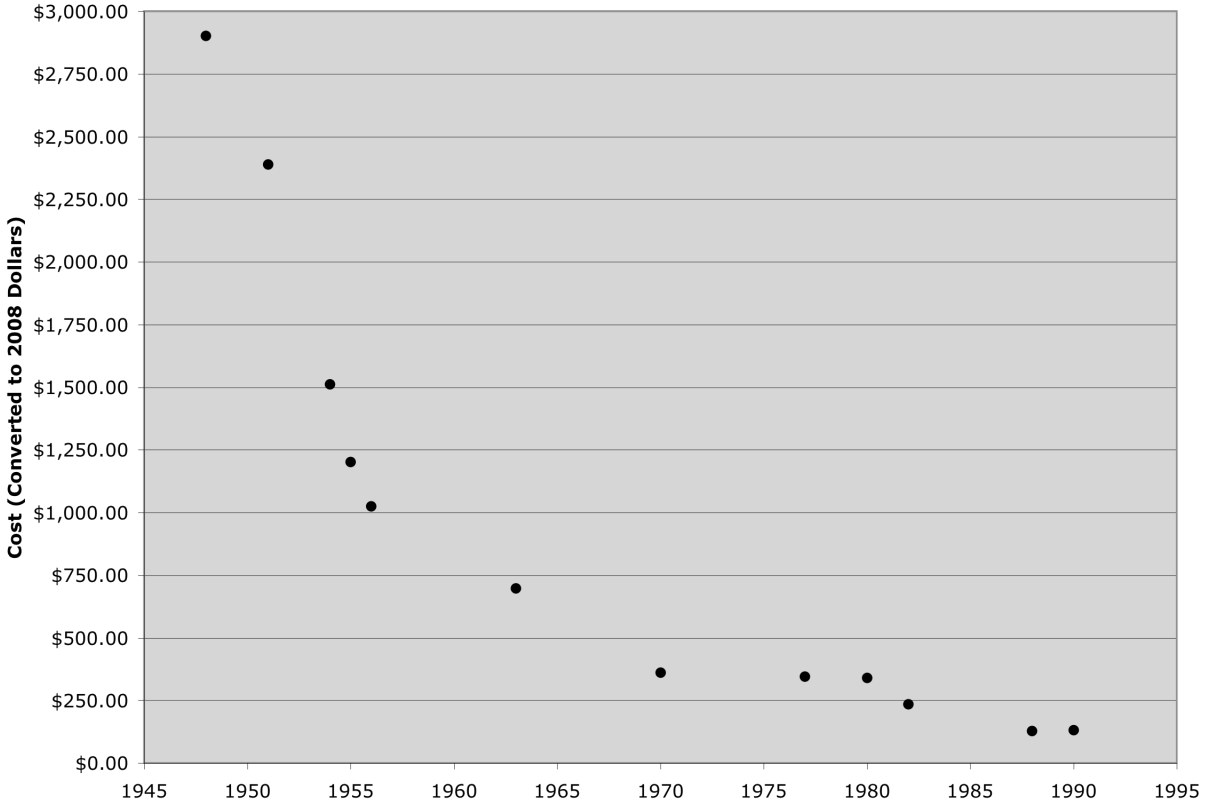
ICT	Cost for Hardware required	Cost for Software/Information required
Newspaper		X
Telegraph		X
Telephone	X	X
Radio	X	
Television	X	
Internet	X	X

Although it is generally assumed that the costs of new ICTs start high and decrease over time, data show that changes in cost can vary dramatically. The rate of decreasing costs affects whether potential adopters will perceive new ICTs as accessible, regardless of whether they see the ICT as a offering relative advantages over older but more affordable ICTs. The cost for hardware begins extremely high, then drops rather quickly as the technology advances and becomes more commonplace. Consider a familiar example, the changing costs for black and

[136] Additional costs may be required in the case of radio, television, and the Internet in order to access additional channels or better service. Examples would include radio and television stations accessed through cable or satellite subscriptions, and premium services such as broadband Internet and premium television channels. In fact today over 90 percent of American households access their television through cable or satellite. However this study is focused on what is required in order to simply access information via ICTs for political purposes and therefore neither television nor radio requires this. In addition during the period of substantial diffusion for both the radio and television the only content available was free.

white televisions (see Figure 3.3). When they burst on the scene in 1948, basic tabletop black and white sets started at $325, or the equivalent of over $2,900 today when adjusted for inflation.[137] This price dropped by 50% in less than seven years and continued to decrease in smaller and smaller increments following a clear logarithmic curve.

Figure 3.3: Changing Cost of New Black and White Television Adjusted for Inflation: 1948-1990[138]



Similar trends characterize cost curves for purchasing hardware associated with radios,[139] color televisions, and personal computers required for connecting to the Internet. For example,

[137] tvhistory.tv, "Tv Selling Prices," http://www.tvhistory.tv/index.html.

[138] All original costs adjusted for inflation using Consumer Price Index conversion factors determined by the Department of Labor, Bureau of Labor Statistics and made publicly available by Robert Sahr, "Inflation Conversion Factors for Dollars 1774 to Estimated 2019," Oregon State University, http://oregonstate.edu/cla/polisci/faculty-research/sahr/sahr.htm. Original prices were lowest price black and white tabletop television advertised for those years and were taken from tvhistory.tv, "Tv Selling Prices."

[139] At the point when radios started to reach a mass audience in 1922, RCA radios ranged from 18 to 350 dollars. When adjusted for inflation the radio started at 230 dollars could be as high as 4,500 dollars, nearly the

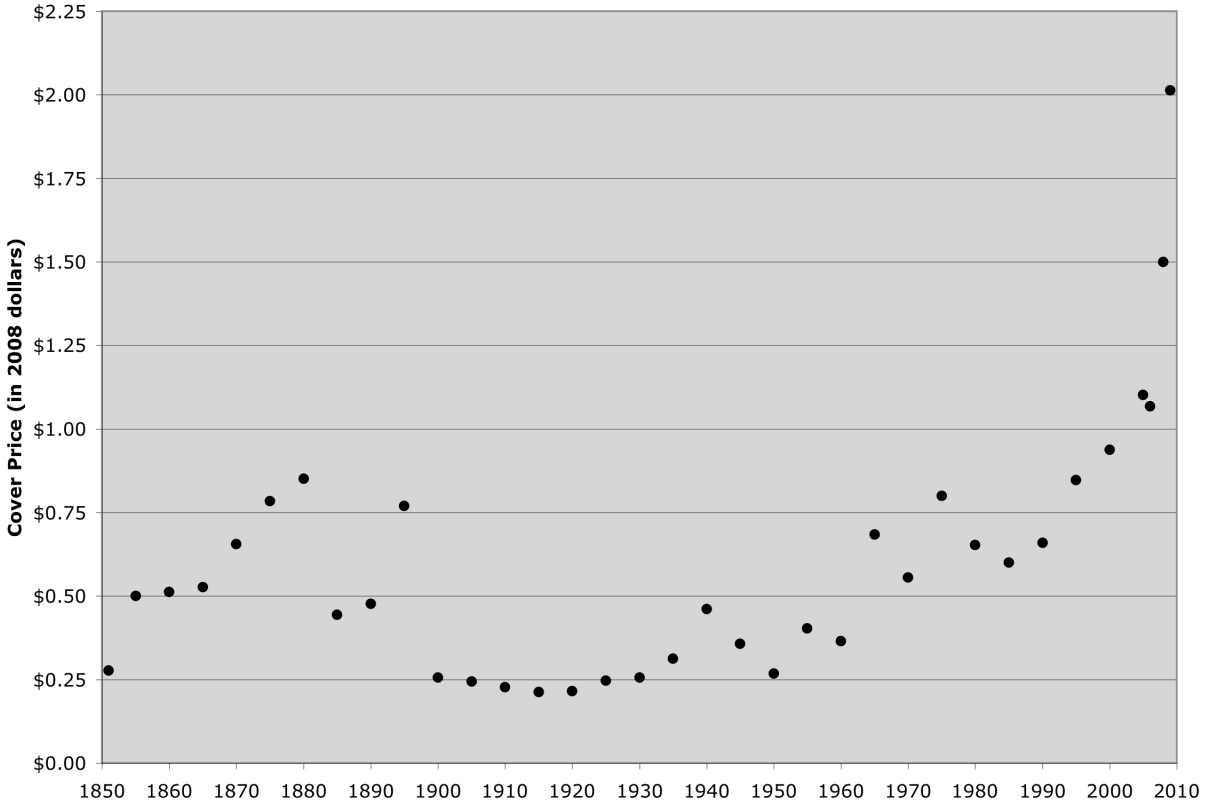
the inflation adjusted cost for personal computers dropped from over $7,200 in 1981 to around $1,700 20 years later.[140] Today netbook computers designed specifically for Internet computing are available for under $100.

While the only cost required to use radio and television (at least before dawn of the cable and satellite era) was the hardware, the other ICTs required usage or monthly fees in order to access information. The variation in these costs was extremely important in determining the speed of diffusion for these ICTs and their political viability as well. In the case of newspapers, the dawn of the mass audience, and simultaneously the emergence of the first PCR, occurred with the emergence of the penny press in 1833. Prior to that year most dailies sold for six cents per issue, a price much too steep for the average citizen. When adjusted for inflation, that six-cent newspaper in 1825 would have cost $1.30, a surprisingly low cost considering how large a barrier it proved to be at the time. The price reduction to one penny, 26 cents when adjusted for inflation, was substantial enough to bring the newspaper and its political coverage and messages to a mass audience. In order to compete, most dailies reduced their cover price to match, and nearly 20 years later when the *New York Times* launched in 1851 it was also priced at one penny. Figure 3.4 displays the changing cover prices, adjusted for inflation, of the *New York Times* throughout its history. Although the price of the *Times* has increased many times, the inflation adjusted price has remained low, staying below one dollar until 2002.

same price as an entry level 1922 Ford Model T. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 10.

[140] Lincoln Spector, "Pc History: The Pc at 20," *PC World* 2001.

Figure 3.4: The New York Times Weekday Cover Price Adjusted for Inflation: 1851-2009[141]



Communication via the telephone and telegraph also has largely been a pay per use endeavor.[142] However, unlike the newspaper, their costs have fluctuated significantly. The costs of sending a telegram and making a long distance call from New York City to various cities are displayed in Tables 3.2 and 3.3 respectively. These costs have ranged dramatically based largely on the distance of the messages being communicated. After adjusting for inflation, a telegram sent to Philadelphia in 1850 cost less than seven dollars. Shockingly, 16 years later a telegram sent to San Francisco cost over 100 dollars. This discrepancy was large but nothing when compared to telephone rates. In 1902 calls to Philadelphia cost 13 dollars while a call to Chicago

[141] Cover prices taken from historical weekday editions of the New York Times from January 1-5 of each year.
[142] Trends do suggest that most communication technologies do eventually trend toward simpler flat rate costs as is evidenced by the convergence of telegraph costs shown in Table 2. Andrew Odlyzko, "Internet Pricing and the History of Communications," *Computer Networks* 36, no. 5-6 (2001).

cost 10 times that rate. Over a decade later, one of the first available calls to San Francisco cost $440! Even though these prices declined steadily, they remained high enough to make regular use for mass communication implausible. Thus the use of these ICTs for political communication on a massive scale remained impractical for political actors looking to reach a broad nationwide audience like those reached by the newspapers.

Table 3.2: Cost of Sending a Telegram from NYC to Various Cities Adjusted for Inflation: 1850-1970[143]

Year	NYC to Philadelphia	NYC to Chicago	NYC to San Francisco
1850	$6.94	$43.06	*
1866	$3.38	$25.00	$100.66
1870	$4.10	$16.39	$81.97
1883	$3.19	$10.64	$31.91
1890	$4.76	$9.52	$23.81
1908	$5.81	$11.63	$23.26
1919	$3.75	$7.50	$15.00
1946	$3.63	$7.25	$14.51
1950	$3.57	$6.70	$12.95
1954	$6.80	$10.00	$13.60
1960	$8.03	$10.58	$13.87
1966	$8.47	$11.33	$14.87
1970	$12.50	$12.50	$12.50

* Telegraph lines were not established between NYC and San Francisco until transcontinental telegraph lines were completed in 1861.

[143] All data represent Western Union Prices and were taken from Ben J. Wattenberg, *The Statistical History of the United States, from Colonial Times to 1970* (New York: Basic Books, 1976), 790. Prices adjusted for inflation to 2008 dollars.

Table 3.3: Cost of Making a Long Distance Telephone Call from NYC to Various Cities Adjusted for Inflation: 1902-1970[144]

Year	NYC to Philadelphia	NYC to Chicago	NYC to San Francisco
1902	$13.75	$136.25	*
1915	#	#	$440.43
1917	$12.71	$84.75	$313.56
1919	$6.88	$58.13	$206.25
1927	$7.41	$40.12	$111.11
1937	$6.72	$32.84	$97.01
1946	$4.95	$17.03	$27.47
1952	$4.07	$12.20	$20.33
1960	$3.65	$10.58	$16.42
1965	$3.42	$9.59	$13.70
1970	$2.78	$5.83	$7.50

* Calls from NYC to San Francisco were not available in 1902
# no data available for the cost of calls from NYC to Philadelphia and Chicago in 1915.

One notable trend is the similarity between telegraph and newspaper prices. Telegram prices consistently dropped for a century until competition from the telephone forced remaining telegraph companies to increase rates. These increasing prices lead to a reduction in competitiveness, which factored into the ultimate demise of the telegraph for public communication. Similarly, over the past decade, newspapers have struggled to keep pace as more and more people have received their news and information from the Internet and cable television. As a result print media have cut staffs, increased prices, and in many cases closed their doors. Although the final chapter of the newspapers is far from guaranteed, the increase in *New York Times* prices indicates a worrying trend for advocates of the need for quality newspaper reporting in the future.

Research suggests that at the same time that costs of communication technologies have decreased, pricing has also become simpler, moving from multi-tiered price schemes to flat-rate

[144] Ibid.

costs.[145] Today more and more long distance calling is done on cell phones which lump all minutes together under the monthly subscription plans as opposed to itemizing long distance calls as traditional home phone companies did. This trend matches changing costs for Internet access. Early Internet access through Internet Service Providers (ISPs) like America On Line and CompuServe offered multiple types of subscription costs ranging from monthly-unlimited access to hourly rates. Most ISPs today offer flat rate plans with unlimited access to the Internet.[146] The shift toward simpler flat-rate access fees increases the probability that potential users will be more likely to adopt the innovation.[147] However, what has become largely extinct in the current era of cable television, broadband internet, and cell phones, is the possibility of buying a piece of hardware that offers unlimited free content without access fees. This free content was available for the radio and television, the two ICTs with the fastest diffusion rates in American history.

The Lessons of the Newspaper and Telegraph

Although each of the six most successful ICT innovations did gain some level of political viability, they did not all diffuse in the same manner and therefore must be compared carefully. The telephone, radio, television, and the Internet were each ICTs that required the user to own a piece of hardware. This leaves the newspaper and telegraph as the two successful ICTs that did not require home ownership of particular technologies. And while this sets these two ICTs apart from the rest, it mainly provides an opportunity to examine why the newspaper became politically integrated while the telegraph did not.

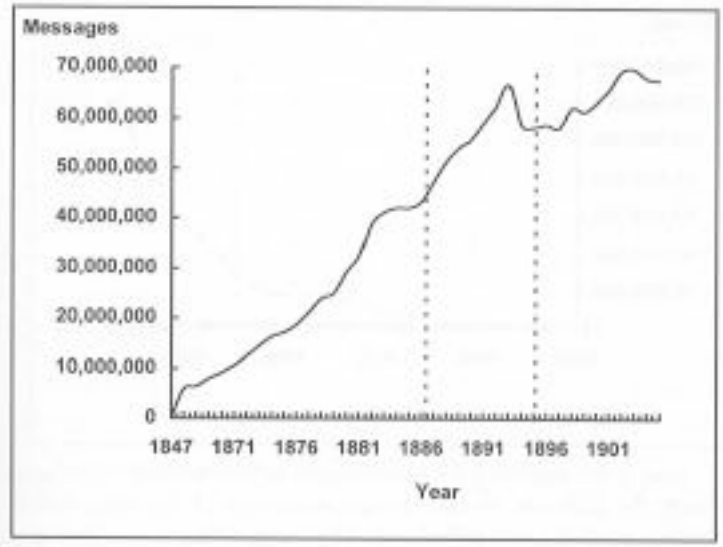
[145] Odlyzko, "Internet Pricing and the History of Communications."
[146] This may be changing as numerous challenges to net neutrality have been brought by large cable and telephone companies which are the primarily ISPs for broadband internet today.
[147] Odlyzko, "Internet Pricing and the History of Communications."

The newspaper is unique among the six due to the fact that it is not a technology that people choose whether or not to own. Instead they choose whether or not to subscribe to newspapers or purchase them on the street. While the number of newspaper subscriptions grew at an impressive rate starting at its takeoff point in the 1830s, the newspaper remains a medium as opposed to a piece of technological hardware. Nonetheless, newspaper circulation rates and total readership have been very important to political communication since the colonial era. Therefore newspaper diffusion must be viewed through a slightly different lens than some other ICTs but still offers a valuable comparison.

Just like the newspaper, the use of the telegraph did not require the purchase of technological hardware and thus must also be compared to the other successful ICTs carefully. The growth of the early telegraph was directly connected to the expansion of railways across the country.[148] As the S-curve in Figure 3.5 displays, the growth in the number of telegraph messages grew steadily from the 1840s through the end of the century, when it started to decline as a result of the introduction of the telephone.

[148] The network of telegraph wires mirrored the railways and soon interpersonal and business related telegrams were regularly sent around the nation. The 1920s marked the peak of interpersonal telegram use when sending a telegram was substantially cheaper than making a long distance call. However the use and expense of sending messages via the telegraph kept it out of homes and more and more in businesses. For more see Annteresa Lubrano, *The Telegraph : How Technology Innovation Caused Social Change*, Garland Studies on Industrial Productivity (New York: Garland Pub., 1997); Winston, *Media Technology and Society: A History: From the Telegraph to the Internet*; Starr, *The Creation of the Media : Political Origins of Modern Communications*.

Figure 3.5: Telegraph S-Curve for Domestic Telegraph Messages 1847-1905[149]



Although the use of this ICT grew dramatically, its private ownership did not because telegrams were transmitted for customers by telegraph companies.[150] Even at the peak of its popularity, the telegraph was not owned in homes and messages were conducted by telegraph operators and then hand delivered through companies like Western Union. It was not until 1958 that privately owned telegraph, or Telex machines, and were almost exclusively owned by businesses.[151] In other words, even though the telegraph was extremely popular for over a century, the technology itself did not diffuse to American homes. The technology's political viability was limited by the lack of a direct link between political groups or politicians and the American public at large.[152] While neither the newspaper nor telegraph were ICTs owned in American homes, the primary difference in the political viability between the two can easily be easily attributed to the huge cost difference. However those ICTs purchased for use in the home,

[149] Image from Lubrano, *The Telegraph : How Technology Innovation Caused Social Change*.
[150] Although the use of the telegraph has all but ended today, telegram messages are still sent on occasion mainly by businesses to send official notices because telegrams, unlike e-mails, faxes, or phone calls, are legal documents.
[151] Phillip R. Easterlin, "Telex in New York," *Western Union Technical Review* 13, no. 2 (1959).
[152] Ben Epstein, "The Democratizing Power of the Internet in Historical Context," in *2010 Annual Conference of the Southern Political Science Association* (Atlanta, GA2010).

namely the telephone, radio, television, and Internet-ready home computer each incur major technological costs as well. And while the diffusion rates of these four ICTs impact their political viability, as the next section explores, they each played a substantially greater role in political communication than the telegraph, due to its absence in American homes.

Comparison of Diffusion Rates of Historical ICTs

The mass diffusion of a product rarely begins when it is invented. It usually takes years until the first innovative group of any notable size adopts it. Therefore, I will focus on diffusion rates starting from the year when one percent of the American population adopted the new ICT. A simple measure of the speed of adoption of particular technologies is the time they take to achieve a given level of use in households across the country, generally called the penetration rate. Table 3.4 outlines the time required for various ICTs to reach penetration rates of 20, 50, and 75 percent diffusion, beginning with the year they reached one percent of the population.[153] What is notable is the remarkably short period of time that it took for the radio, television, and Internet to diffuse widely across the country. Each of these innovations reached 20 percent diffusion in less than six years and 50 percent diffusion is less than nine.

[153] Excluded from this list are newspapers and the telegraph, the two ICTs that do not require the purchase of hardware in order to send or receive messages.

Table 3.4: Diffusion Rates of Selected ICTs in U.S. History[154]

ICT	Household penetration begins (1%)	Years to 20%	Years to 50%	Years to 75%	Rank in Speed of Diffusion
TV (black and white)	1948	2	5	7	1
Radio	1923	3	6	8	2
TV (color)	1961	6	6	10	3
Internet (all types of access)[155]	1991	5	8	18	4
Broadband (high speed)	1999	5	8	*	5
Telephone[156]	1890		56	67	6

* has not yet reached this penetration rate

At first glace the radio, television, and Internet may not appear to have diffused particularly quickly, yet compared to the telephone and other popular household innovations, these diffusion rates are striking.[157] For instance, while the radio, television and Internet each

[154] All information for the radio and television is from Sue Bowden and Avner Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s," *The Economic History Review* 47, no. 4 (1994): 729.

[155] American Internet access from 2000-2010 derived by aggregating Pew's Internet and American Life survey data which is conducted several times each year. All surveys prior to March 2000 were conducted by the Pew Research Center for People & the Press. For 1995, Internet users include those who ever use a home, work, or school computer and modem to connect to computer bulletin boards, information services such as CompuServe or Prodigy, or computers at other locations. For 1996-1998, Internet users include those who ever use a home, work or school computer and modem to connect with computers over the Internet with services such as America Online or Prodigy. For 2000-2004, Internet users include people who ever go online to access the Internet or to send and receive e mail. For 2005, Internet users include those who at least occasionally use the Internet to send or receive e-mail. As a result some data, especially that taken from 1995-1999, may overestimate the actual percentage of Americans who accessed the Internet at home during those years. If anything this would only suggest that the rate of adoption remained slower a bit longer and then increased at an even more dramatic rate, which would affect the shape of the S-Curve during those years. All data prior to 1995 was taken from International Telecommunications Union estimates. Pew Research Center's Internet and American Life Project, "Online News Survey," (Pew Research Center's Internet and American Life Project, 2010). International Telecommunications Union, "ICT Statistics," http://www.itu.int/ITU-D/ict/statistics/.

[156] 1920 ratio of telephones to households extrapolated backward to 1890. United States Bureau of the Census, *Statistical Abstract of the United States: 1990*, 110 ed. (Washington D.C.: United States Census Bureau, 1990). Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s," 729.

[157] It took 13 years for the refrigerator to reach a 50% household penetration rate, 16 years for the automobile, and 28 years for the vacuum cleaner respectively. To reach the 75% mark it took 23 years for the refrigerator,

took eight years or fewer to reach 50 percent household penetration rate,[158] the telephone took 56 years to reach 50 percent diffusion and 67 years, or nearly three generations, to reach 75 percent.[159]

While comparing these particular thresholds is instructive, the S-curves for the diffusion of each ICT provide a more detailed comparison. In particular, when the S-curve for the diffusion of household ownership of the telephone is compared to the equivalent S-curves of the radio, television and Internet, the difference in political viability becomes clear. The grade of the incline of an S-Curve indicates the rate of diffusion. The shorter a period of time between initial public use and widespread diffusion the more sudden and jarring this innovation is. Figure 3.6 clearly shows how slow the diffusion rate of the telephone was in comparison to the radio, television, and Internet.[160] This difference in rate of diffusion is a fundamental reason why the radio, television, and Internet each played substantive roles in the creation of a PCR while the telephone did not. As mentioned earlier, one vital element to the potential adoption of a new technology is its accessibility, and one of the major barriers to access is cost. It is not surprising, then, that the television and radio, which offered free content, diffused fastest, followed by the

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48 years for the vacuum cleaner, and an amazing 52 years for the automobile. Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s."

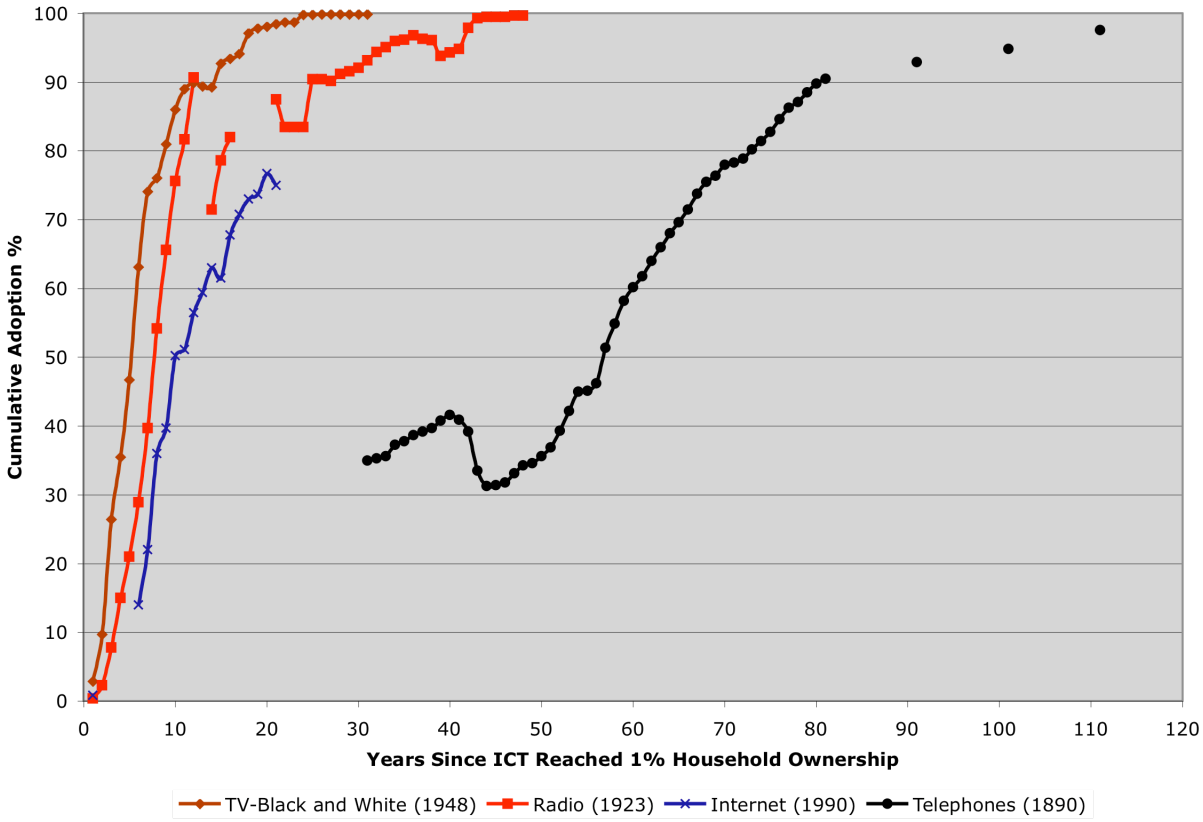
[158] It is also helpful to demonstrate the diffusion rates of related technologies. Those ICTs most obviously forming technology clusters include the black and white and color televisions and the Internet which started with dial-up service in households, and newer high speed broadband connectivity. Both color television and high speed Internet access provide added functions and greater features than their precursors and were introduced mainly as innovations and replacement for their more traditional and primitive cousins. In both cases the 2nd generation technology diffused at very similar rates to the original and all diffused incredibly fast. In fact it the diffusion of broadband internet has matched the rate of diffusion of the Internet exactly. Rogers, *Diffusion of Innovations*.

[159] This slow household diffusion was due to telephones remaining very expensive and mainly being used in the modern office until nearly halfway through the twentieth century. Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s."

[160] All data about the radio and television taken from Ibid.. All data about the internet derived from Pew Research Center's Internet and American Life Project, "Online News Survey."; International Telecommunications Union, "ICT Statistics.". See footnotes 23 and 24 for more details on analysis of Internet data. All data pertaining to the telephone taken from United States Bureau of the Census, *Statistical Abstract of the United States: 1990*. and Wattenberg, *The Statistical History of the United States, from Colonial Times to 1970*. 1890, the date when Bowden cited as the first year when the telephone reached 1% household penetration rate was derived through backward extrapolation by the U. S. Census.

Internet, with its monthly subscription rates, and then the telephone with very high per use costs. Thus the type, or absence, of access costs seem to have a greater impact on diffusion rates than the costs for the technological hardware, and this rate of diffusion is what leads to greater political viability and potential political disruptive capability.

Figure 3.6: Comparison of S-curves of Household Ownership Rates of Successful ICTs



Conclusion

The PCR Cycle has three phases: 1) the emergence of an ICT which gains political viability, 2) the political choices about whether or not to use new communication tools on a massive scale, and 3) the stabilization of a new PCO. This chapter analyzes phase one, the technological imperative, in order to determine what factors make a new ICT more or less

politically viable. Several factors play a role in determining the political viability of an ICT that could lead to a PCR. First is the diffusion rate of a new communication technology, which indicates whether the ICT has the potential to serve as a disruptive force if political actors choose to utilize it.

Arguably the most important characteristic affecting the diffusion rate of an ICT is its cost. Although hardware costs can be high for ICTs, they can still diffuse quickly if they do not have follow up costs for software. This was the case for the radio and television, which diffused incredibly fast and once owned could be used for free indefinitely. The only other ICT that comes close to the rate of diffusion of the radio and television is that of the Internet, which does require fees to access content. However the hardware required for Internet access, a personal computer, obviously has multiple uses and therefore its cost is not perceived to be exclusively connected to accessing the Internet. In addition Internet access fees have largely been flat-rate unlimited monthly charges, which, like the television and radio, avoid high per usage charges that served as barriers to the diffusion of the telegraph and telephone.

Besides diffusing quickly, ICTs must diffuse into households across the nation in order to potentially impact the relationship between political elites and the American public. This condition further limited the political viability of the telephone and telegraph. The telephone eventually diffused to nearly every household in America but did so at such a slow rate that its impact on political communication activities during any particular period of the twentieth century remained extremely low. Even more limited was the telegraph, which never made it into American homes.

Beyond diffusion rates, the political viability of ICTs is based largely on their perception by potential adopters. Technological innovations that are perceived by political actors as having

greater relative advantage, compatibility with their needs, observability, and testability, than prior ICTs, while being perceived as less complex, will be adopted more rapidly and often more completely than other innovations.

Ultimately, evaluating the political viability of ICTs past and present can help to clarify the important distinction between a socially successful communication medium and a politically powerful one. Those few ICTs that do reach high levels of political viability in a short period of time have reached the end of phase one of the PCR cycle. Even then, however, it is up to the political actors as to whether the ICT will continue along a revolutionary course.

Chapter 4 - Political Choice: Determining If and When Political Actors Incorporate New ICTs

New information communication technologies (ICTs) often emerge as fixtures in political communication strategies. These new technologies offer new options for communication and information presentation, which present opportunities to reach broader audiences and mobilize political action. While these innovations seem promising, the decision to use them is far from automatic. Diffusion scholars agree that the likelihood that technological innovations spread through society is based on the characteristics of not only the innovation but also the potential adopters.[161] Political actors go through a decision making process in which they must carefully weigh many different considerations before incorporating new technologies into their political communication activities, because each innovation has advantages and drawbacks associated with it.[162]

The political choices about whether or not political actors innovate their political communication activities are affected by several determinants. As Druckman, Kifer, and Parkin argue, political actors must consider both practical and political issues in making these decisions.[163] Practical issues include the technical ease of using new technologies as well as their cost. These issues are a function of organizational and financial capacity, which leads to my first

[161] See Rogers, *Diffusion of Innovations*; Barbara Wejnert, "Integrating Models of Diffusion of Innovations: A Conceptual Framework," *Annual Review of Sociology* 28(2002).

[162] Druckman, Kifer, and Parkin conducted one of the best studies of the political decision making process focusing on how and why to innovate political campaign websites. They analyzed 444 campaign websites from House and Senate campaigns in the 2002 and 2004 elections and looked at a number of candidate-level variables that they hypothesized might affect decisions about whether or not to innovate. James N. Druckman, Martin J. Kifer, and Michael Parkin, "The Technological Development of Candidate Web Sites: How and Why Candidates Use Web Innovations," in *Politicking Online: The Transformation of Election Campaign Communications*, ed. Costas Panagopoulos (New Brunswick, NJ: Rutgers University Press, 2009).

[163] Ibid., 25.

resource claim: *those political actors with greater financial and technological resources are more likely to innovate earlier.*

The political issues that must be considered are more situational in nature and center around a political cost-benefit analysis of innovation. While the political price of innovation could include a reduction in audience size, influence, or control of message, the potential political gains could be tremendous if individuals and organizations can use the new tools to influence public discourse and political agenda setting in a way that they could not have without innovating. This political risk evaluation generally provides much more incentive for a political challenger or outsider who has less to lose and substantially more to gain by changing tactics and reaching for a new ICT. Thus my second **challenger** claim: *political challengers or outsiders are more likely to innovate earlier than incumbents.*

It is important to note that these claims are not mutually exclusive and it is possible that a political challenger could have tremendous resources, as is the case with many candidates for office with large personal fortunes or substantial financial backing. These political actors would be most likely to innovate early relative to all others. In the terminology of diffusion scholars, they would have the highest level of innovativeness, which can be defined as "the degree to which an individual is relatively earlier in adopting new ideas than other members of a system."[164] It is also possible that certain political actors may be in power but have very limited resources, like a mayor of a town facing severe budget constraints. These actors would be the least likely to innovate based purely on the resource and challenger claims. Taken together, these two claims result in a four-cell matrix describing the innovativeness of political actors with varying levels of resources and political status as shown in table 4.1 below.

[164] Rogers, *Diffusion of Innovations*, 267-68.

Table 4.1: Political Actor Innovativeness Matrix

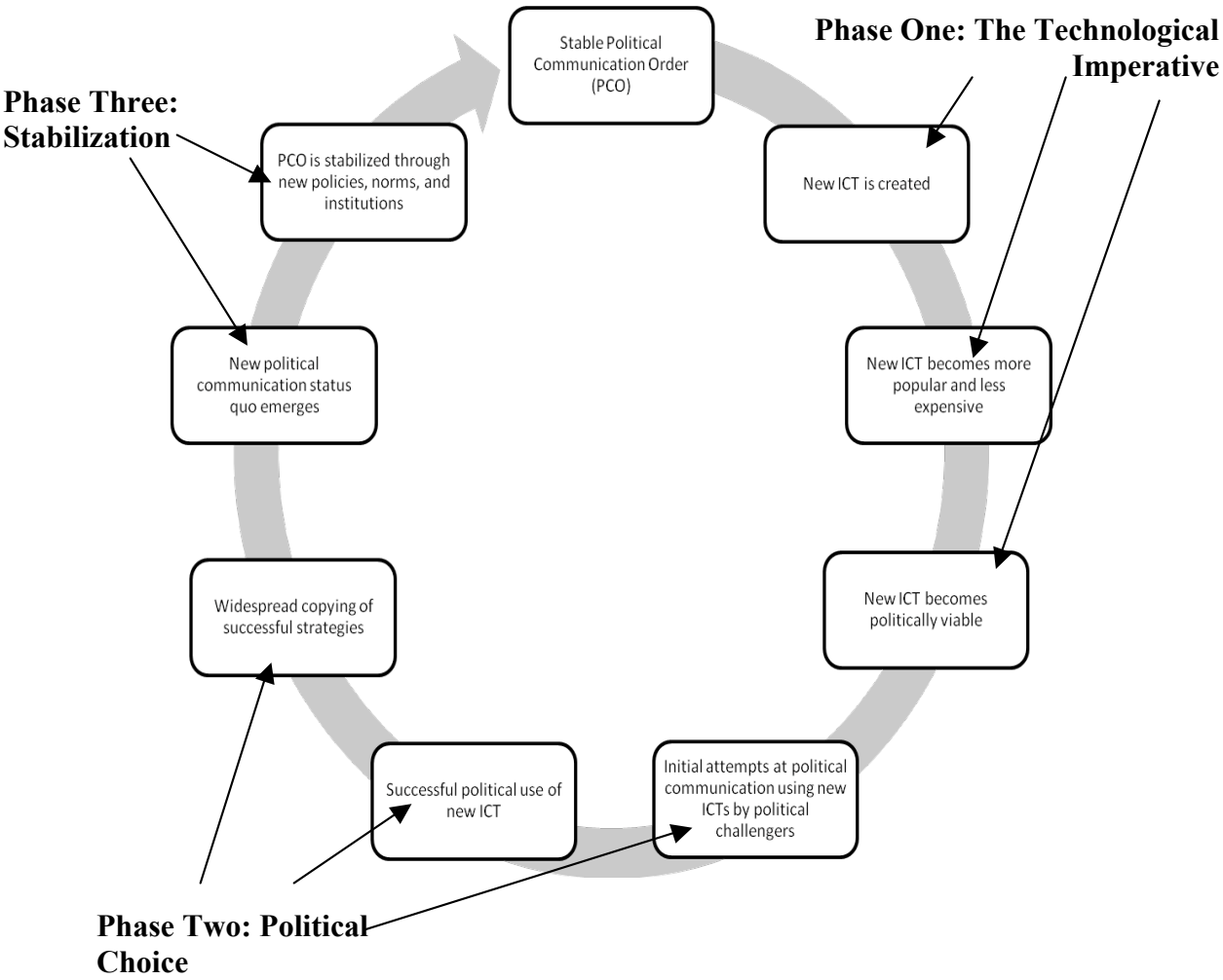
Practical Factors	**Political Factors**	
	Political Actor in Power	Political Challenger
High Resources	Low motivation to innovate political communication activities in substantial ways because they already have power and control of message, likely to innovate in subtle incremental ways in order to maintain power.	Highest innovativeness because they have little to lose politically and much to gain and they have the resources to direct toward innovation which may be costly. Among high resource political competitors these actors are more likely to innovate early because their political risk level is much lower than current power holders.
Low Resources	Lowest level of innovativeness because of lack of political motivation and lack of resources.	Most likely to innovate when those they are competing against are in power and have similar low levels of resources because they have the most to gain and least to lose politically. However among political challengers those with the greatest resources have a much greater likelihood of innovating their political communication activities earlier.

Beyond the characteristics and considerations of each political actor, the political contest in which they are competing is likely to affect their decision making process. Specifically, the more competitive a political contest is, the greater the incentive for political risk taking. This expectation results in a third **competitiveness** claim: *all political actors are more likely to innovate as political contests become more competitive.*

All of these claims affect the decision-making process of political actors and are part of the second, political choice phase of the political communication revolution (PCR) cycle. Following the first phase of the PCR cycle described in the last chapter, the political choice phase begins with a period of early experimentation of a newly politically viable ICT to test

whether it could actually provide a political advantage over traditional ICTs and communication activities. If these early adopters achieve moderate success, the reluctance to innovate is greatly reduced and political actors begin to copy successful innovations (see Figure 4.1). The political choice phase is the most important stage of the PCR cycle because it is where PCRs specifically shift from a broader social change in behavior to one that is specifically directed by political goals and strategies. This chapter will examine the political choice phase by analyzing how and when campaigns have decided to innovate their communication practices.

Figure 4.1: The Political Communication Revolution Cycle



After a review of diffusion literature detailing the decision process for individuals and organizations, I will summarize the major innovations in campaign communication tactics from 1796 through the 1990s, providing examples of how variations in resources, challenger status, and competitiveness of elections affected political communication innovations. Next, I will provide a more detailed examination of the history of online campaign innovations ending with the Obama 2008 campaign. The Obama campaign was the most sophisticated, strategic, and successful online campaign in history, which provided a model for other national campaigns to copy. This chapter will conclude by evaluating the extent to which the Obama model was replicated in the 2010 midterm election by analyzing Senate campaign websites, in part, through original quantitative research.

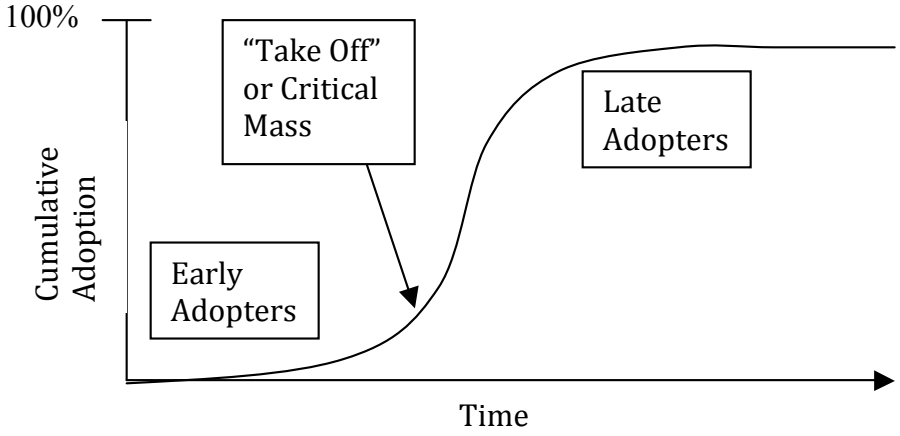
Diffusion Research: Linking Innovativeness and Political Choice

The political viability of ICTs comes about through the rapid and widespread diffusion of an ICT through society, with many factors contributing to the size, speed, and breadth of diffusion. The political choice phase of the PCR cycle is effectively a second, distinct diffusion process in which a communication medium that is used widely in society may or may not be adopted by political actors. Chapter three detailed the characteristics of ICTs that make them more or less likely to become politically viable, namely their speed of diffusion, the relative low cost per use, and the convenience of having the ICT available at home. The attributes of a new communication technology may help to predict whether it has the potential to revolutionize political communication, but it only tells one part of the story. Technologies that successfully make it through phase one of the PCR cycle still must be adopted by political actors and then spread throughout the political community. Each potential adopter goes through a process,

dubbed the innovation-decision process by leading diffusion scholar Everett Rogers, through which s/he initially learns of the innovation, evaluates it, decides whether or not to adopt it, and then confirms or rejects that decision. The information gathering involved in this process is needed to reduce uncertainty about the innovation and decide whether its potential benefits outweigh its costs.[165]

Potential adopters move through the innovation-decision process in different ways and at very different speeds, creating a pattern of adoption, known as the S-Curve, that is useful in helping to understand innovativeness. As detailed in the last chapter, the S-Curve represents the cumulative adoption of a successful innovation over time.[166] Early on, few innovators adopt a new technology, but increasingly more and more people adopt until most have done so, after which the cumulative rate of adoption slows. (see Figure 4.2). If, instead of cumulative number of adopters, a line graph displays just the number of new adopters over time, the result would closely approach a normal curve, which proves beneficial when detailing the innovation-decision making process across a society.

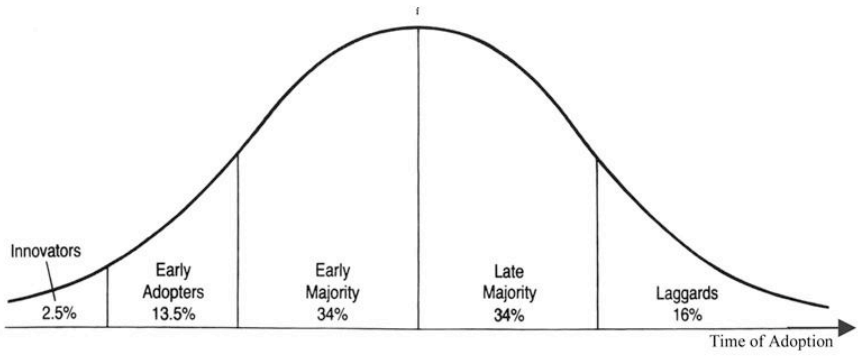
Figure 4.2: Diffusion of Innovations: S-Curve[167]



[165] Ibid., 168-218.
[166] For more see chapter three and the pioneering 1943 hybrid corn diffusion study which originated the S-Curve. Ryan and Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities.".
[167] Image adopted from Trish, "The Diffusion of Campaign Technology."; Rogers, *Diffusion of Innovations*, 11.

The likelihood that each individual or organization actually adopts a new idea, product, or, in this case, ICT early on is based on the person's or group's level of innovativeness. As defined earlier, innovativeness is the probability that a potential adopter innovates earlier than others. No aspect of the diffusion process has received as much attention as innovativeness. Researchers have focused particularly on categorizing adopters based on this attribute. The most common adopter categorization was developed by Rogers based on the properties of the normal curve which characterize diffusion rates.[168] After looking at dozens of diffusion studies, Rogers divided adopters of innovations into five innovativeness categories based on the mean time to adopt and the standard deviation: innovators, early adopters, early majority, late majority, and laggards (see Figure 4.3).[169]

Figure 4.3: Number of New Adopters: Normal Curve[170]



[168] Rogers' adopter categorization grew out of the goal of creating categories that were 1) exhaustive, including all the units of a study, 2) mutually exclusive, with no unit of study appearing in more than one category, and 3) derived from a single classificatory principle. In this case he created adopter characterizations based on the statistical properties of the normal curve once it was shown that the S-curve is in fact a normal curve represented in a different way. Rogers, *Diffusion of Innovations*, 272-75, 80.

[169] The area to the left of the mean time of adoption minus two standard deviations represent the earliest 2.5 percent of adopters known as "innovators." The next group, including the 13.5 percent of people whose innovativeness falls in the area between the mean minus two and minus one standard deviations, is appropriately labeled "early adopters." The next 34 percent lying between the mean and the mean minus one standard deviation are the "early majority," with those classified as "late majority" falling between the mean and the mean plus one standard deviations. The final 16 percent of those to adopt an innovation are those more than one standard deviation above the mean in terms of time taken to adopt and are labeled "laggards." Ibid.

[170] Image taken from Future of Identify in the Information Society, "Diffusion of Innovations," http://www.fidis.net/resources/deliverables/mobility-and-identity/int-d11100010/doc/25/. adopted from Rogers, *Diffusion of Innovations*, 273.

Once the categories have been established, an obvious question follows: what characterizes those who are likely to innovate earlier as opposed to those who are likely to wait until adoption is unavoidable? The five adopter categories commonly used are ideal types and are used to create useful divisions in the innovativeness continuum. Innovators are those few people who are most excited about innovating. They are willing to take the risks associated with a possibly flawed innovation in exchange for being on the cutting edge. In order to do so, innovators must have access to substantial financial resources and must have the ability to understand and apply technical knowledge. They serve as the gatekeepers for the entrance of an innovation into a social system.[171] Early adopters are less extreme than the innovators and are the primary group that influences others to adopt, labeled opinion leaders by Rogers. Those in the early majority make up over one-third of all adopters and, though they are deliberate and do not jump to be the first to innovate, they still innovate before the majority of people have done so and provide important links between early innovators and later adopters within a society's interpersonal networks. The late majority is as large as the early majority but this group is much more skeptical about innovating, which may be due to relatively fewer resources. These adopters must be confident that the innovation will succeed before signing on; the influence of their peers and opinion leaders is very important in overcoming this uncertainty. Laggards are extremely traditional and reluctant to innovate. They are often those with the least resources and the fewest social connections. As a result they often base their decisions on what has worked in the past and hold off innovating, largely because of economic necessity, until it is absolutely necessary.[172]

[171] Rogers, *Diffusion of Innovations*, 282-83.

[172] Beyond these adopter categories, Rogers offers generalizations about the differences between earlier and later adopters relative to one another, gleaned from dozens of diffusion studies. Several generalized

While it may be obvious that those with more resources have greater ability to bear the cost of innovations as well as the risks involved, the claim that political considerations create a difference in innovativeness between incumbents and challengers requires a theoretical foundation. This expectation stems in part from Clayton Christensen's *The Innovator's Dilemma*, which focused on disruptive innovations in the business world that revolutionized particular markets. Christiansen points out the important difference between sustaining innovations, the relatively small, incremental shifts that dominant players masterfully adopt in order to maintain power, and disruptive innovations that incumbents usually do not react to until relatively late in the adoption process.[173] Disruptive innovations are substantial enough to create entirely new business markets or, if we carry the idea over to the political realm, offer an entirely new pool of potential political supporters and new ways to connect with these potential supporters. However these innovations offer limited potential benefits for those already dominating the current system. Thus while other challengers jump at the opportunity to compete using the new innovation, the incumbents hold off, continuing to tweak the activities that have helped them maintain power.[174] If challengers effectively master a quickly evolving disruptive innovation, then they can leverage that advantage to take control, disrupting the dominant positions of the incumbents and forcing them to scramble to keep up in the newly emerging political communication order (PCO).

In politics, the decision to innovate may be made by either individuals or organizations, and it is necessary to distinguish between the two in terms of their innovativeness and

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socioeconomic, personality, and communication characteristics provide rough guidelines about who is likely to innovate earlier than others. Ibid., 282-85.

[173] Clayton M. Christensen, *The Innovator's Dilemma : When New Technologies Cause Great Firms to Fail*, 1st HarperBusiness ed., The Management of Innovation and Change Series (New York: HarperBusiness, 2000).

innovation-decision process. Individual innovativeness is particularly important for individual politicians acting alone and individual citizens incorporating new ICTs into their political communication activities.[175] Hong and Tam (2006) evaluated factors contributing to individual decisions to adopt mobile data service technologies. Besides the general (usefulness and ease of use) and specific (service availability and monetary value) characteristics of new ICTs, the amount that individuals gained satisfaction from the innovation, social influence and approval, and demographics all played a roll.[176]

Most influential political actors are not individuals acting independently; instead they are organizations like interest groups, think tanks, political parties, bureaucratic agencies, legislative offices, and political campaigns.[177] The decisions about whether organizations should innovate are different than the decision making process for individuals. A study by Goode and Stevens (2000) considered various factors that determine whether organizations chose to adopt Internet technology. The study showed that the younger an organization and the greater its level of IT support, budget, technological experience, the more innovative the organization would be.[178] Research has also consistently demonstrated that larger organizations are more innovative. One

[175] For decades campaign managers, media consultants, and organized staff have used poll data and countless metrics to strategically shape the public image of politicians. However today there are increasing opportunities for actors to choose how to communicate as individuals through online media such as twitter or social networking sites like Facebook. Their individual innovativeness factors heavily into the timing of these decisions. For more on how the Internet is affecting political communication activities of individual members of American society see chapter five.

[176] Hong and Tam, "Understanding the Adoption of Multipurpose Information Appliances: The Case of Mobile Data Services."

[177] One notable exception is former Governor and Vice Presidential candidates Sarah Palin. She is an individual political actor directing her own political communication largely through social media. She has built a huge influence primarily through Twitter and Facebook posts since the 2008 election and has specifically avoided the majority of traditional media other than the conservative Fox News on which she makes semi-regular appearances. She may in fact be an early innovator who uses self-directed political communication in a new and influential way and others may follower her lead in the future. Regardless, her recent activities and the speculation about whether or not she will run for President in 2012 are a great example of an individual who is breaking from tradition in terms of political communication activities in a way that an organization would not. See Mark Leibovich, "Sarah Palin and the Politics of Winging It," *The New York Times*, June 5, 2011 2011.

[178] Goode and Stevens, "An Analysis of the Business Characteristics of Adopters and Non-Adopters of World Wide Web Technology."

relevant study by Mahler and Rogers (1999) rated how innovative 324 German banks were in innovating their communication technology. They found that innovativeness was highly correlated with bank size, whether measured by total bank assets, number of employees, branches, or customers.[179] Although smaller businesses are often assumed to be the most nimble, large organizations generally have more resources, IT knowledge, and connections to other similar organizations, and therefore translate these characteristics into higher innovativeness.[180]

Decisions about whether or not organizations should innovate can be made either by consensus or by a small group with authority.[181] Regardless of decision-making process, charismatic leaders who support risk taking or influential champions of change within the organization can greatly increase the likelihood of innovation. However, even with leaders who strongly support innovations, new innovations often take a long time to reach critical mass and diffuse through an organization. Additionally, increased complexity, social interconnectedness, and excess resources and skills within an organization lead to greater innovativeness.[182] Finally it is important to note that unlike the fairly simple individual choice about whether to innovate or not, organizations go through a multistage process to determine not only whether to innovate but how to implement innovations.[183]

Political Choice and Campaign Innovation from the Founders through the Broadcast Era: 1796 – 1990s

Political campaigns have made numerous substantive tactical innovations in their communication strategies over the past 225 years. An innovative campaign tactic is one that is

[179] The correlation coefficient between innovativeness and total bank assets was .75 and number of employees was .70. Mahler and Rogers, "The Diffustion of Interactive Communication Innovations and the Critical Mass: The Adoption of Telecommunications Services by German Banks."
[180] Rogers, *Diffusion of Innovations*, 409-11.
[181] Ibid., 402-03.
[182] Ibid., 411-20.
[183] Ibid., 420-32.

still in the testing phase, and may fail or slowly gain popularity.[184] This is, in other words, the beginning of the political choice phase of the PCR cycle, in which different innovations are attempted with a select few successful tactics catching on and becoming widely used political communication activities. A look back at the history of campaign communication innovations begins to show how differences in resources, political status, and competitiveness play a role in who innovates earliest. What becomes clear is that through most of American political history those who are political challengers have been most likely to innovate earlier than incumbents. Furthermore, these innovations have been fueled by candidates with the largest and most heavily funded campaigns competing in open elections, which are highly competitive.

The important role of competitiveness and challenger status in innovating began to become apparent shortly after the first contested presidential election, pitting the Federalist John Adams against his Democratic-Republican opponent Thomas Jefferson in 1796.[185] This election included brutal printed attacks on the leading candidates through partisan newspapers and political broadsides disseminated directly to people on the street. Republican documents and newspapers painted Adams as a monarchist while their Federalist counterparts labeled Jefferson an atheist and an enemy of the Constitution.[186] Although political printing was far from an innovation in 1796, the first contested election offered new opportunities to use the printing press for campaigning. Both parties used the printing press to drive their campaigns during this very competitive race. But the losing party, the Democratic-Republicans, continued to exploit the

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[184] Paul Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation," in *Southern Political Science Association Annual Meeting* (New Orleans, LA2011), 9.

[185] During the creation of our Constitution, the framers clearly envisioned our electoral process as a dignified, orderly, and decidedly elitist affair. It was not to be as only George Washington was elected to the presidency in this manner. This dignified ideal was perhaps most clearly articulated by Alexander Hamilton in Federalist Letter 68, which describes the need for knowledgeable and qualified electors. Quote from Bernard A. Weisberger, "How to Get Elected," *American Heritage*, August 1964, 63-64. as quoted in Jamieson, *Packaging the Presidency*.

[186] Jamieson, *Packaging the Presidency*, 5.

partisan press by dramatically increasing their messages during the four years of John Adams's tenure, building to Jefferson's successful campaign in 1800. This is especially notable because the oppositionist writing was targeted by the Sedition Act of 1798.[187] While this was not a new PCR, it did represent the first example of the party out of power moving its political communication strategies forward more than the party in power, a trend that would continue through much of American political history.

Over the next century, presidential elections evolved into full-blown campaigns with party organizations championing their candidate, allowing the candidates to remain outside of the campaign and maintain a distinguished and detached position. One attempt to change these campaign norms took place during the election of 1840. This election took place during the first PCR, as the newspaper began to gain nationwide circulation for the first time and politics shifted from a topic for the political and business elites to one that interests and included the masses.[188] It was during the buildup to that election that the campaign of William Henry Harrison, the Whig challenger to Martin Van Buren, produced the first systematic and widespread use of image advertising as well as the first songster. In addition, Harrison was the first presidential candidate to actively campaign on his own behalf.[189] While image advertising became a fixture in campaigns during the second half of the 19th century, the innovation of self-campaigning for the office of the President was rejected for over 70 years until Wilson used it successfully in 1912.[190] This is a clear example of a political challenger innovating their political communication tactics with some innovative tactics being imitated and others rejected.

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[187] Pasley, *"The Tyranny of Printers": Newspaper Politics in the Early American Republic*, 132-75.

[188] The first PCR developed through a convergence of political, technological, and infrastructure changes. Universal male suffrage emerged during the Jacksonian era expanding the numbers of people directly invested in national politics, while newspapers were quickly becoming accessible to most of society following the development of the penny press in 1833. Along with the subsidization of newspapers by the U.S. Post Office the Mass PCO began to emerge. For more see chapter two.

[189] Although Harrison won the election he died after serving as President for only nine months.

[190] Jamieson, *Packaging the Presidency*, 8-15.

During the 1920s the massive diffusion of the radio allowed candidates to speak directly to the American public, which brought about the second Political communication revolution (PCR). This revolution ushered in the Broadcast Political Communication Order (PCO), which transformed the delivery, audience, and content of political messages. A live, direct political message sent simultaneously to millions of radio listeners nationwide changed campaigning forever.[191] No longer was a railway whistle-stop tour necessary to reach millions of potential supporters.[192] Over the course of 100 days during the 1896 campaign, the tireless William Jennings Bryan made 600 speeches in 27 states while traveling over 18,000 miles in order to reach five million people.[193] In a single radio address a few decades later, Franklin Roosevelt would be able to reach over 60 million.[194] Political communication and campaigning would never be the same.

Before Franklin Roosevelt could speak to millions in his fireside chats, the initial cohort of radio politicians began experimenting with the medium. As discussed in Chapter Two, though Woodrow Wilson was the first president to send his voice over the radio in 1919, the first innovators to experiment with the use of radio for campaigning were New York City Mayor John F. Hylan and his Republican challenger Henry F. Curran in 1921.[195] Although less than one percent of American households owned a radio in 1921, New York was by far the largest and most densely populated city in America with over twice as many people than Chicago, the second largest city.[196] In fact, this was the first mayoral election in U.S. history in which there

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[191] Ibid., 19-20.
[192] However this strategy was not scrapped, and actually played a substantial role in the surprising election of Harry Truman in 1948.
[193] William Jennings Bryan, *The First Battle. A Story of the Campaign of 1896* (Chicago: W. B. Conkey Company, 1896).
[194] Jamieson, *Packaging the Presidency*, 19-20.
[195] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 141.
[196] The population of New York City in 1920 was 5.6 million with a population density of 18,796 people per square mile. Chicago had 2.7 million residents that year and a population density of 14,013 per square mile.

were over one million voters. Thus the concentration of radio listeners and potential voters in New York City was the largest in the country making the radio more politically viable in New York than anywhere else.[197] In addition, radio was still a relatively immature medium at that point with nearly all broadcasts remaining local. It made sense, then, that a local race would actually be more likely to innovate with radio use before national campaigns.[198]

On the presidential stage, Calvin Coolidge became the first president to use the radio as a means of regular political communication and advancement.[199] In 1924, Coolidge spoke an average of 9,000 words per month by radio.[200] Even so, radio campaigning was still in its infancy as Coolidge only used the radio twice during his presidential campaign.[201] Coolidge's limited use of the radio for his 1924 campaign was due in large part to the lack of political incentive. In 1923, under three percent of American households owned radios, a number that jumped to 54 percent by the time he completed his term in 1929.[202] Coolidge did successfully innovate his communication style while in office to target this growing radio audience and enhance his public image, an innovative choice made possible by the vast resources available to the president.[203]

In a preview of what would happen again with the introduction of television and the Internet, political campaigns became much more technologically savvy in the course of one or two national campaign cycles. In 1928, Coolidge did not run for reelection, creating an open race without an incumbent. Open presidential elections like this offer a particular opportunity for the

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United States Bureau of the Census, "United States Census," ed. United States Census Bureau (Washington D.C.1920).

[197] The 1921 election did not prove to be a very competitive one with Hylan, the Democratic incumbent winning by 35.7 percent of the vote.

[198] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 140-41.

[199] Coolidge did not make addresses specifically for radio`, instead broadcasting speeches to live audiences, with radio acting as a technological extension bringing the event to millions around the country. Ibid., 142.

[200] The majority of Coolidge's radio time during 1924 was the airing of speeches not specifically intended for a radio audience. Jamieson, *Packaging the Presidency*, 25.

[201] Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 72.

[202] Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s."

[203] Gleason L. Archer, *History of Radio to 1926* (New York: The American Historical Society, Inc., 1938). Elmer E. Cornwell, *Presidential Leadership of Public Opinion* (Bloomington, IN: Indiana University Press, 1965).

application of new campaign communication strategies, just as in 1796 and later in 2008. This is due to the fact that these elections are often highly competitive, and the political viability of emerging ICTs has been established but they have yet to be used widely and strategically.[204]

Most analysts agree that the presidential race in 1928 between Republican Herbert Hoover and Al Smith, the New York Democrat, was the first true radio campaign, with both sides understanding its nuances and utilizing it extensively. Both campaigns had enough funding to purchase substantial radio time and had the clear incentive to use the new radio, which had reached nearly 50 percent household penetration rate by 1928. In short, both campaigns innovated because they had the necessary resources and this was the first presidential election after the radio gained political viability. The Republican National Committee (RNC) set out $350,000 for radio broadcasts during the campaign, representing nine percent of its total budget and 17 percent of its publicity budget. The Democrats gave even greater importance to radio, dedicating $600,000 or 17.5 percent of their total budget to the radio, the largest single expense of the campaign.[205] Beyond speeches, conventions, debates, and party activity, many radio campaign innovations were introduced including advertisement in the guise of entertainment like the Democrats' presentation of an "all star dramatization of Governor Smith's life" and the Republicans presenting 174 localized five-minute radio ads by local heroes or celebrities. Both campaigns also attempted to target specific audiences including spending substantial money for morning radio time aimed at women. Additionally Hoover became the first presidential candidate to address listeners without the presence of live audience in November.[206] The *New*

[204] The 1796 and 2008 elections were highly competitive, but the 1928 election was primarily only competitive during the lead up to the Republican convention. Ultimately Herbert Hoover was nominated and defeated Al Smith by 18.6 percent of the popular vote and 357 electoral votes.

[205] When the RNC ultimately made its final expenditure tallies at the end of the campaign it too found that radio was the largest single expense coming in at $436,000.Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 147.

[206] Ibid., 147-48.

York Times summarized the importance of the radio in 1928 in a headline that read: "The New Instrument of Democracy Has Brought the Candidates into the Home, Enabled Them to Reach All of the People, and Radically Changed the Traditional Form of Political Appeal."[207] Perhaps no other headline could have better proclaimed the arrival of the Broadcast PCO.

By the 1932 campaign, both parties believed that the radio was simply an indispensible tool and invested heavily in it even with budgets reduced due to the depression. The DNC devoted 18 percent of its budget to radio broadcasts compared to the RNC's 20 percent. Yet both parties massively underestimated their radio budget and in the end the GOP, which regularly had a much larger budget than the Democrats, produced 136 radio programs filling 70 hours 32 minutes of airtime at a cost of approximately $1.25 million. The Democrats filled 49 hours and 32 minutes of radio airtime with 71 programs costing around $875,000.[208]

While many radio innovations continued during the mid-late 1920s, the 1932 election brought the unquestioned champion of radio politics, Franklin Roosevelt, to a national stage. Despite the larger Republican budget, no one believed that the incumbent Hoover outperformed the Democratic challenger Franklin Roosevelt during the campaign. He was an insurgent candidate who had both the experience and financial resources needed to revolutionize the way that radio was used in national politics. Long before Roosevelt broadcast from the White House, he, along with many other skillful radio politicians like Huey Long, refined their radio style at the state level. This experience built his confidence in the utility of the radio for political communication. As he said before he entered the White House: "Time after time, in meeting legislative opposition in my own state…I have taken an issue directly to the voters by radio, and

[207] Jamieson, *Packaging the Presidency*, 25.
[208] Republican spending would be the equivilent of $19.8 million in 2010 dollars once adjusted for inflation and the Democrats total would equal $13.8 millionCraig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 152-3.

invariably I have met a most heartening response."[209] Roosevelt took his broadcasting technique very seriously and completed dozens of addresses yearly, including his compelling and historic fireside chats.[210]

The power of the radio for political communication grew significantly through the Roosevelt presidency due to the increase in quality political programming, his mastery of the medium, and, most importantly, the huge growth in the number of radio sets nationwide, which topped the 90 percent diffusion rate by 1933.[211] High diffusion assured the political viability of the medium. Monumental growth created a tenfold increase in political radio audience in only six years – from 6.3 million radio listeners to an FDR address in 1932 to the 61.4 million who tuned in to hear him on February 23, 1942.[212] Eight years after the radio was first used in presidential campaigns, Roosevelt successfully innovated its use by incorporating it into the way he communicated and related with the public, both during his campaign and his terms in office. His style of Presidential communication centered around the radio changed the very nature of presidential communication.

Television entered the political scene in the 1940s and quickly grew to dominate political communication, a position that it still holds today. Politicians made the transition from the radio to television relatively quickly because both mediums share a consistent network infrastructure, institutions, regulations, and communication strategies. The success of the radio and the speed of television diffusion reduced the perceived risk of trying to use the television for political communications.[213]

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[209] Arthur M. Schlesinger, *The Coming of a New Deal* (Boston: Houghton Mifflin, 1959). as quoted in Jamieson, *Packaging the Presidency*.
[210] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 143-66.
[211] Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s."
[212] Jamieson, *Packaging the Presidency*, 28.
[213] However the high costs of television time limited early innovators to national politicians and their campaigns, which had the budgets large enough to afford television time.

The rapid diffusion of television quickly made it a politically viable medium and opened the door for political innovators to shift attention to the new medium, yet politicians did not substantially innovate their campaign tactics to incorporate television for over a decade. By 1948 there were about 70 stations and several million sets across the nation,[214] representing one percent of households.[215] It is not a coincidence that the 1948 campaign was the first one in which presidential campaigns purchased television time.[216] However, campaign spending was a miniscule part of overall campaign spending during that campaign and Truman's victory was largely credited to his whistle-stop railroad tour instead of his radio or television campaigning. By 1951 a coast-to-coast television network had been established,[217] and the number of televisions across the country grew at an exceptional rate, rising from 35 percent of American households to 81 percent by 1956.[218] Yet during the 1952 and 1956 elections Dwight Eisenhower and Adlai Stevenson only experimented with television campaign advertising, conducting most of their campaign efforts through local party organizations.[219] While television clearly had gained political viability by 1956, Eisenhower as the incumbent, lacked the political incentive to innovate and Stevenson's political communication style was poorly suited for television. Stevenson was a politician built in the mold of the previous PCO. He loved to write and give rousing speeches, but hated the limitations of being constrained to a teleprompter and could not effectively connect with most Americans over the television. As someone who took pride in

[214] Berkman and Kitch, *Politics in the Media Age*, 34.
[215] Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s," 729.
[216] Jamieson, *Packaging the Presidency*, 34.
[217] Ibid.
[218] Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s."
[219] One experiment by the Eisenhower campaign in 1952 was allowing media advisor Ben Duffy, who had a long-standing relationship with the Republican Party, to make strategic suggestions about President Eisenhower's television campaign. This was very unusual as early media advisors of the 1940s and 1950s existed essentially to check the technical aspects of radio and television addresses, far from the modern media consultants who strategically manage a campaign's multimedia image today. Jamieson, *Packaging the Presidency*, 35; Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 73.

directing his campaign, and criticized Eisenhower as a general who was being politically maneuvered by consultants, Stevenson opposed innovating his campaign communication strategies though the incentive was clearly present.[220]

While President Truman and Eisenhower had both used the television to address the nation while in office, President Kennedy was the first to use it strategically to campaign and govern. Kennedy was a young, Catholic, first-term senator when he declared his candidacy to be the Democratic nominee for the 1960 election, and was considered a political long shot both within his party and especially in his campaign for the White House. He rehearsed regularly in front of the camera and surprised many by using his youthful and dynamic image on television to first defeat Democratic favorite Hubert Humphrey for the nomination and then to best Richard Nixon in the general election. Kennedy's election victory is often credited to his performance during the first nationally televised presidential debate.[221] The debates between Kennedy and Nixon drew uninterrupted coverage from all three networks and attracted an estimated audience of 60 to 75 million viewers.[222] As is famously repeated, the television viewers overwhelmingly felt that Kennedy had won the debates, while listeners on the radio believed the winner was Nixon. Kennedy clearly fit the challenger role, with little to lose and everything to gain by innovating his campaign for the television. In addition he had the resources available and was motivated by an incredibly competitive election with only .1 percent of the popular votes separating Kennedy and Nixon. In short, all three claims were clearly met in this campaign, which changed the way national campaigns were conducted forever.

The Kennedy campaign's successful innovation was a watershed event in campaigning and was imitated widely as the PCR cycle would predict. For instance, the portion of national

[220] Jamieson, *Packaging the Presidency*, 58-68.
[221] Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 73-74.
[222] Bergreen, *Look Now, Pay Later: The Rise of Network Broadcasting*, 221.

candidate's budgets devoted to television advertising doubled during the 1960s from just over eight percent to 16 percent.[223] The era of image-driven, candidate-centered campaigning had arrived, displacing the central position that political parties traditionally played in campaigns for national office.[224] Starting in the mid 1960s campaigns became consultant driven, with strategic, top-down management of campaign messages and candidate image, ushering in what some scholars have labeled the twentieth century campaign model.[225] This image-driven, consultant-managed campaign model remained a core fixture of national campaigns until the innovative use of the Internet for national campaigns began during the current PCR.

Political Choice and Campaign Innovation in the Internet Era: A Retrospective

Starting in the early 1990s, political campaigns began experimenting with innovating their campaign tactics to include the Internet. Bill Clinton, a Democratic challenger and political long shot early in the 1992 race, was the first to use the Internet for a campaign. The Clinton campaign posted full texts of speeches, biographical information, position papers and advertisements online. However, access to the Internet was so minimal that this use did little more than attract some nominal interest from academics.[226] As the popularity of the Internet began to mushroom in the mid 1990s, its political viability also grew and more presidential campaigns began to use it as a campaign tool.[227] By 1996 most major candidates had campaign

[223] Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 74.
[224] One important reason the parties lost influence at this time was a shift toward primaries, which took control of the nomination process out of the hands of the parties.
[225] Dennis W. Johnson, *Campaigning in the Twenty-First Century* (New York: Routledge, 2011), 2-4.
[226] Bimber and Davis, *Campaigning Online: The Internet in US Elections*, 23-24.
[227] The Clinton Administration unveiled the first White House website in 1994 and, although it was extremely simplistic by modern standards, it indicated the beginning of the use of the Internet as a communication tool used to govern from the highest level of national office.

websites.[228] That year brought a major milestone in online campaigning when Bob Dole, a Republican challenger, announced his campaign website during a televised presidential debate. This marked the first time that a candidate used a traditional media forum to advertise his Internet presence, an innovation once again adopted by a challenger campaign.

In 1996 online campaigning did not extend much beyond the race for the White House, with only a minority of federal congressional campaigns developing an online presence.[229] This follows the resource claim that national-level campaigns, which have the largest amount of resources available, not to mention largest target audience, would be the first to innovate. These innovations in online campaigning diffused to congressional and gubernatorial races, but once again, the resources needed to campaign on the Internet allowed larger campaigns to innovate earlier than smaller ones. For instance, during the 1998-midterm elections the number of campaign websites swelled, with over 70 percent of major party Senate candidates and over one-third of major party candidates for the House of Representatives offering campaign websites. In competitive races these numbers rose to 100 percent of Senate candidates and 57 percent of U.S. House candidates using campaign websites.[230] Interestingly, it appears that candidates for executive offices were more likely to develop campaign websites early, as over 95 percent of major party candidates for governor had websites in 1998. Thus, as expected, a higher proportion of larger Senate and gubernatorial campaigns innovated than campaigns for the House, and more competitive races further increased innovativeness.

Besides the growing numbers of online campaigns, the 1998 election cycle witnessed further online campaign innovations sparked by political challengers. Minnesota gubernatorial

[228] Though most major presidential candidates had campaign websites in 1996, the majority generally offered digital versions of their campaign brochures, earning the nickname "brouchureware."
[229] Bimber and Davis, *Campaigning Online: The Internet in US Elections*, 24-25.
[230] Ibid.

candidate Jesse Ventura, a former Navy SEAL and professional wrestler, and perhaps the ultimate political outsider, waged an improbably successful third party campaign. Ventura's campaign used his website and growing e-mail list to regularly update campaign events, defend against opponents' attacks, attract young voters, and raise money.[231] Ultimately he raised $50,000 of his total campaign treasury of $600,000 online, a very impressive feat at that stage of online fundraising.[232]

The Internet's roll in political communication continued to grow during the 2000 election cycle, which was seen by many as the beginning of modern Internet campaigning. Thanks to a 1999 Federal Election Commission (FEC) ruling, candidates were now authorized to raise money online and receive matching funds for those donations. Although several candidates used the Internet to receive credit card donations in 1998, the FCC ruling incentivized campaigns to incorporate fundraising into their online campaign strategies. It became clear that this change would substantially shift how campaigns raised money, when by fall 1999 Bill Bradley, a Democratic challenger to Vice President Al Gore, had collected $600,000 by 3,700 online donations averaging $162 apiece.[233] The most impressive online fundraising feat during the 2000 election belonged once again to a political challenger, Republican John McCain, who raised $1.4 million over the three days following his surprising New Hampshire primary victory.[234] The McCain campaign was also the most innovative in its use of the Internet for fundraising, employing new online fundraising strategies like inviting supporters to a live chat with the

[231] This was the most successful use of mobilization using e-mail lists up to that point. For months the camping had no physical headquarters, only a growing e-mail list. Thomas A. Hollihan, *Uncivil Wars: Political Campaigns in a Media Age* (Boston: St. Martin's, 2009), 201.

[232] Johnson, *Campaigning in the Twenty-First Century*, 4; Bimber and Davis, *Campaigning Online: The Internet in US Elections*, 24-26.

[233] At the same time Republican challenger John McCain had gathered $260,000. Eventually the Bush campaigned averaged over $200,000 per e-mail solicitation. Bimber and Davis, *Campaigning Online: The Internet in US Elections*, 38.

[234] At the peak of this online donating blitz, his campaign was receiving $18,000 an hour. Ibid., 38-39.

candidate if they first donated at least $100. Overall the innovative use of the Internet for fundraising by political challengers in 2000 demonstrated how campaigns could utilize the speed and interactivity of the Web to capture immediate economic gains.[235]

The 2000 presidential candidates also moved well beyond online fundraising and began integrating their websites into campaign volunteer and political mobilization efforts. Most of the campaigns included both options for traditional volunteering as well as online activism. Online toolkits were provided by many campaigns including instructions and information that supporters could use to conduct letter-writing campaigns, organize events in their community, and fundraise without ever speaking directly with a member of the official campaign team. Meanwhile each campaign was actively building e-mail lists of supporters that they could use to mobilize, fundraise, and target throughout the campaign. The webmaster for Republican challenger Steve Forbes' campaign website perhaps best described Web campaigning in the new millennium when he said "we're not just posting a Web page, we're launching a huge communications network for current and prospective Forbes supporters."[236] It should come as no surprise that these innovations came about during an election so competitive that it took a Supreme Court ruling to decide it.

If the 2000 election witnessed the earliest innovations in online campaign tactics that utilized the interactivity of the Internet, the 2004 campaign represented the maturation of sophisticated and fully integrated Internet campaigns. Most major candidates relied heavily on their Web presence during the 2004 campaign, including Senator John Edwards, who announced his candidacy through his website. However, by far the most innovative use of online

[235] Ibid., 39.
[236] Ibid., 40-42.

campaigning belonged to Democratic challenger Howard Dean, the former Governor of Vermont.

The Dean campaign can be credited with several major innovations in the evolution of online campaigning. First was interactive communication between the campaign and its supporters.[237] Dean was the first politician to really utilize the power of online grassroots organizing, known as netroots. For instance, he was the first presidential candidate to create a blog and was heavily influenced by Jerome Armstrong, one of the most successful pioneers of political blogging, who eventually worked for the campaign's online presence.[238] While blogging provided an important interactive component to his campaign, even more innovative was the promise that Dean made to take the best ideas from his supporters and incorporate them into his campaign. This was one of the earliest attempts to crowdsource ideas about a campaign, asking for ideas from supporters that would actually help direct the campaign itself. It represented a break from the purely professionally directed, top-down campaign defining the twentieth century campaign model.[239]

The Dean campaign's second major innovation was the use of online communication tools to organize and coordinate offline political activities that brought groups of supporters together. The campaign collaborated with Meetup.com, a website that allowed users to sign up

[237] Johnson, *Campaigning in the Twenty-First Century*, 5.

[238] Jerome Armstrong created his blog called myDD.com in 2000 following the controversial presidential election. Following the lead of just a few bloggers at the time he started allowing readers to comment on his posts. The response was enormous including an aggressive writer known as "Kos," the screen name for Markos Moulitsas Zuniga who later created his own blog, the now dominant DailyKos.com. In 2002 Armstrong, often known as the "Blogfather" for his pioneering role in the blogosphere, wrote in his blog that Dean needed to "exploit the Internet… His current Web site is sparse, not updated, and not very interesting. What he needs to develop is a website that gravitates the online discussion of 2004 toward him." Armstrong then went on to create an unofficial site and showed it to Dean himself. Soon the pioneer of the political blog was playing an active role in the Dean campaign. Bai, *The Argument : Billionaires, Bloggers, and the Battle to Remake Democratic Politics*, 133-34.

[239] Johnson, *Campaigning in the Twenty-First Century*, 5.

online to find out about real world meetings in their area.[240] Meetup.com sought to use the Internet to bring people together, and the campaign used it to attract thousands of Dean supporters to house parties in towns and cities around the country and thus dramatically increased his nationwide visibility and political viability.[241] This Web-based grassroots mobilization was the first to link netroots and traditional grassroots organizing on a national political campaign and represented a campaign's use of social networking in its infancy.

Finally, Dean brought online campaign fundraising to a new level, building on McCain's success in 2000. The Dean campaign raised approximately $22 million online in the lead up to the Iowa Caucuses, relying heavily on small donors as opposed to nearly all of his opponents.[242]

His campaign exploited the interactivity of the Internet to show how the medium could be used to recruit, mobilize, and interact with legions of political supporters. However, its potential was not maximized and ended soon after his third place finish in Iowa.[243] As Matthew Hindman, one of the leading scholars on Internet politics, noted, "For months leading up to the Iowa caucuses, the Dean campaign seemed poised to do for the Internet what the Kennedy-Nixon debate did for television: provide an undeniable demonstration of the new medium's political power. The result proved anticlimactic."[244] In the end, the most consistent and effective, albeit less innovative, online campaign of 2004 belonged to the Bush-Cheney reelection campaign. The contrast between Dean's ultimate failure and the Bush-Cheney success demonstrates an important lesson of the PCR cycle -- those who innovate first (see Table 4.2) are rarely the most successful politically. Though Dean's insurgent campaign faded quickly after the Iowa caucuses,

[240] This goal was shaped largely by the work of Robert Putnam on Social Capital, especially his Seminal work *Bowling Alone*. Stephen E. Frantzich, "E-Politics and the 2008 Presidential Campaign: Has the Internet Arrived?," in *Winning the Presidency 2008*, ed. William J. Crotty (Boulder: Paradigm, 2009); Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation."
[241] Bai, *The Argument : Billionaires, Bloggers, and the Battle to Remake Democratic Politics*, 135-36.
[242] Matthew Hindman, *The Myth of Digital Democracy* (Princeton: Princeton University Press, 2009), 29.
[243] Johnson, *Campaigning in the Twenty-First Century*, 5.
[244] Hindman, *The Myth of Digital Democracy*.

the innovations from his online efforts were effectively incorporated into future campaigns, including Obama's historic run in 2008. Thus Hindman's view that the Dean campaign was unable to prove the political power of the Internet was only true if the measure of success was his electoral victory. Instead, placing the campaign within the broader perspective of the PCR cycle, the innovations that Dean launched were widely imitated by others following his run, clearly demonstrating the Internet's power in campaigning. After the 2004 election it became possible to dramatically innovate an online campaign and win, if sufficient resources were integrated with campaign strategy effectively.

Table 4.2: First Use of Selected Online Communication Tools in Political Campaigns[245]

Online Communication Tool	Year
Websites	1992
E-mail	1992
Text Messaging	2000
Blogging	2003
Social Networking	2004
YouTube	2006
Twitter	2008

The Election of 2008 and the Obama Campaign: Establishing a Model of Online Campaign Success

While the evolution of online campaigning from 1992-2004 was truly amazing, the model of a strategically innovative and politically successful Internet campaign remained absent until 2008. The political choice Phase of the PCR cycle involves moving from an initial period of experimentation to a successful model that could serve as a blueprint for others to imitate. The early innovators in online campaigning experimented with the Internet as a new campaign information center and source of campaign donations during the mid-late 1990s. Starting in

[245] Johnson, *Campaigning in the Twenty-First Century*, 12.

2000, every major election brought online campaigning to new levels of sophistication, earning the repeated title of "the Internet Election" by numerous scholars and pundits. From 2000-2006, every major candidate had a Web presence and many, like Dean, found success at expanding their influence by experimenting with new dynamic and interactive online strategies. However, no highly innovative campaign had yet to demonstrate the power of the new ICT to help a candidate win as Roosevelt did with the radio and Kennedy achieved with the television. By the end of the 2008 election the Obama campaign had provided that definitive model of successful innovation.

From the outset of the 2008 election cycle, every presidential candidate had a multifaceted website and utilized interactive netroots in some way or another. No candidate was driven by online activists early in the campaign as much as Republican and former Libertarian candidate Ron Paul. Just as they did for Dean four years earlier, bloggers and meetups organized in support of Paul; however, this time they worked largely independently from the campaign. Paul supporters demonstrated how a handful of people could become an online movement, hinting at the true potential of grassroots online activism for campaigning. As of January 2008 there were more than 1,140 Paul meetup groups in 900 cities with more than 67,000 members. Furthermore, they raised tremendous sums for the campaign, including a one-day total of over four million dollars, which was a record among the Republicans running for president in 2008 at that time.[246] While Paul's campaign was impressive during the early months of the campaign, and was clearly fueled and in many ways led by enthusiastic supporters using the interactive power of the Internet, it did not have staying power due to the fact that Paul's views were too far

[246] Kathearine Q. Seelye and Leslie Watne, "The Web Takes Ton Paul for a Ride," *The New York TImes*, November 11 2007.

from the party mainstream. As a result, the Paul campaign provided another case of experimental Internet campaigning.

Although every candidate had a substantial online presence in 2008, Barack Obama's campaign was the most successful of the Internet era, possibly in all of American political history. The Obama campaign stands apart from all other Internet campaigns on three fronts: scale, strategy, and most importantly success.[247] In terms of scale, the Obama campaign took every existing Internet campaign strategy, e-mail, fundraising, mobilizing, organizing, multimedia, and social networking, and did it bigger and better than ever before. Second, the comprehensive scale of the Obama Web presence grew out of the campaign's Internet strategy, which was integrated into every facet of the overall campaign strategy. The Obama campaign Internet strategy was not a series of experiments testing what the Internet could do for the improbable candidate. Instead the Web campaign was designed, based on substantial political research, to maximize the recruitment of volunteers regardless of political background.

Political involvement has largely been connected to social capital, a concept most closely connected with Robert Putnam and his seminal work *Bowling Alone*. In his book Putnam defines social capital as "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them."[248] Putnam argues that increased social capital produces many positives for society, including political participation. Like the unsuccessful Dean campaign four years earlier, the Obama Web campaign was clearly designed to increase these social connections and, in a very real sense, build social networks that would help its overall political goal. An important study by Ronald La Due Lake and Robert Huckfeldt found that as individuals become increasingly active within a political social network by building social

[247] Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation," 21.
[248] Robert D. Putnam, *Bowling Alone : The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000), 19.

capital, both their individual involvement in politics and the likelihood of political participation increase.[249] The overall Web strategy of the Obama campaign was carefully designed and tested by a team that took the Internet seriously and understood its unique power to translate online interest and social networking into political action.

Third, unlike the others before him, Obama won, marking a clearly identifiable use of Internet campaign tactics that were powerful, comprehensive, sophisticated and politically successful.[250] Where Matthew Hindman had hoped the 2004 Dean campaign would demonstrate beyond doubt that innovative online campaigns could succeed, Obama provided the actual proof four years later. A closer examination of the Obama campaign reveals what was easily the most technologically savvy political campaign in history, providing a model of successful modern campaigning. Placed within the PCR cycle, the overwhelming Obama success should offer a set of political communication activities that will be widely imitated by other campaigns.

Before exploring the successful innovations introduced by the successful Obama online campaign, it is necessary to detail why the watershed Internet campaign took place in 2008 and why Barack Obama was such a likely candidate to create such a transformative campaign. As demonstrated in the last chapter, the diffusion rate of a new ICT dramatically influences its political viability. The Internet, like the radio and television before it, diffused at an incredibly fast pace. This fast diffusion rate had a large impact on both when the new ICTs were first used for campaign communication and also when the first successful innovation occurred. As displayed in Table 4.3, campaigns first experimented with these ICTs when a tiny fraction of the American public used the new technology. In other words, campaign innovation started at a time

[249] Ronald La Due Lake and Robert Huckfeldt, "Social Capital, Social Networks, and Political Participation," *Political Psychology* 19, no. 3 (1998).
[250] Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation."

when only the earliest innovators had adopted the new ICT, not nearly enough people to have a substantial affect on an election outcome.

In contrast, by the time that the radio, television, and the Internet were used in a successful innovative campaign, the vast majority of the American public had these ICTs in their home.[251] Besides the similar diffusion rates, the length of time between first experimental campaign use and the successful integration was very similar between these three ICTs: 11 years for the radio, 12 for the television, and 16 for the Internet or approximately 3-4 presidential election cycles for each (see Table 4.3). Using these three ICTs to build a predictive model, it appears that once the penetration rate of a new ICT tops 60 percent and there have been at least a decade worth of campaign innovation, then a truly successful innovative campaign could occur.

[251] By 2008 the Internet was not only in 73% of American homes but for the first time more than half of all adults were using it for political purposes. In the buildup to the election 74 percent of all adult Internet users went online to get information about or participate in the 2008 election making up 55 percent of all adults in America. More specifically 60 percent of Internet users (44 percent of all adults) used the Internet to get information or news about politics in 2008 up from 33 percent of Internet users in 2000 and 22 percent in 1996. Aaron Smith and Lee Rainie, "The Internet's Role in Campaign 2008," (Washington D.C.: Pew Internet & American Life Project, 2009).

Table 4.3 Comparison of Time From First Campaign Use to Successful Political Model: Radio, Television, and the Internet[252]

	Radio	Television	Internet
Year Nationwide Penetration Rate Reached One Percent	1923	1948	1990
First Year Used for Campaigning (Percent Diffusion in That Year)	1921 NYC Mayor Race (Hylan v. Curran) (< .4%)	1948 Truman (2.3%)	1992 Clinton (About 1%)
Year of Successful Campaign Model (Percent Diffusion in That Year)	1932 Roosevelt (81.7%)	1960 Kennedy (89.4%)	2008 Obama (73%)
Years Between First Use and Successful Model	11	12	16

While the table was set for the first politically successful innovative Internet campaign in 2008, Obama was particularly well situated to be the candidate to create one. He fit perfectly all of the characteristics of a likely innovator. First, Obama was a political challenger in every way. He was a first-term senator from the party out of power, much like Kennedy when he ran for the White House in 1960. Even within the Democratic Party Obama was seen as an unlikely candidate from the outset, trailing far behind Hillary Clinton, the clear favorite early in the campaign. Additionally, striving to be the first black candidate to become president made Obama a challenger both politically and historically, providing tremendous incentive to innovate. If the 2008 general election campaign did not prove in the end to be particularly competitive, it stayed close until the Wall Street collapse in late September. Moreover, the Democratic nomination was extremely competitive, and Obama had to innovate strategically from the beginning of his

[252] All data for the diffusion rates of radio and television are from Bowden and Offer, "Household Appliances and the Use of Time: The United States and Britain since the 1920s," 729. American Internet access from 2000-2010 derived by aggregating Pew's Internet and American Life survey data which is conducted several times each year. All surveys prior to March 2000 were conducted by the Pew Research Center for People & the Press. For 2000-2004, Internet users include people who ever go online to access the Internet or to send and receive e-mail. All data prior to 1995 was taken from International Telecommunications Union estimates. Pew Research Center's Internet and American Life Project, "Online News Survey." International Telecommunications Union, "ICT Statistics."

campaign in order to compete with the heavily favored Clinton. Finally, the Obama campaign had tremendous technological and financial resources. He was personally comfortable with new communication technology and hired a campaign staff that was more focused on integrating the Internet and Web metrics into campaign activities than any other in history. Additionally, his campaign was enormously effective at fundraising online and offline; so much so that his campaign chose to be the first ever to turn down public financing during the presidential general election. Ultimately the decision served the campaign well, as it raised a record of around $775 million, over $500 million of which came from online donations.[253] He was the right challenger candidate running at the right time to create the most successful Internet campaign.

The specific innovations that the Obama campaign brought to online campaigns may become the blueprint for future online campaigns. Some of these innovations were improvements on ones that originated during earlier campaigns while others were wholly original. Among the most important of these innovations, the campaign built an enormous e-mail list, a cost-effective and direct online multimedia message machine, and personalized online political mobilization tools, all directed toward creating a sense of community among Obama supporters. The campaign capitalized on growing enthusiasm to capture supporters' e-mail addresses at an amazing rate. The vast majority of those who signed up for the Obama e-mail list

[253] It is misleading to suggest that online fundraising drove his early campaign. Obama had a well-organized traditional fundraising operation, which he relied on heavily during the first year of his campaign. Internet donations totaled only 15 percent of his total through 2007. Once Obama had early campaign successes, especially in the Iowa Caucus, he was seen as a viable candidate and the floodgates of online donations began to open. Ultimately the Obama campaign raised over $500 million in online donations from three million donors who donated a total of six and a half million times. The half billion dollars was raised with an astonishingly low average donation of only 80 dollars. In September 2008, Obama's single biggest month of fundraising, he raised 100 million dollars online, and 150 million dollars in total. After Republican Vice Presidential nominee Sarah Palin dismissed the value of community organizing in her acceptance speech saying "I guess a small-town mayor is sort of like a community organizer, except that you have actual responsibilities," Obama raised ten million dollars in 24 hours. Richard Wolffe, *Renegade: The Making of a President* (New York: Crown Publishers, 2009). Jose Antonio Vargas, "Obama Raised Half a Billion Online," *Washington Post*, November 20 2008.

through 2007 did so without solicitation. One quarter of them donated online and nearly all volunteered to help the campaign. The campaign recognized immediately how active these early supporters were and actively tried to build its e-mail list.[254] E-mail was the main method of communication between the campaign and its supporters, and each message was carefully crafted with a mix of text, pictures, and hyperlinks, including a link to donate to the campaign. The campaign emphasized short and concise e-mails that conveyed an intimate and inclusive tone.[255] David Plouffe, Obama's campaign manager, began sending regular strategy updates to the e-mail list. Though he initially doubted this strategy as a means of invigorating supporters, Plouffe realized that "[i]t could not have been more important for [Obama] supporters to understand how we saw the race and to know why their money and time were so important."[256] The campaign also used big events to increase their lists, including advertising that the first announcement of Obama's selection of his running mate would be sent via text message, motivating thousands to sign up online.[257] By the end of the campaign the e-mail list had grown to 11 million.

The Obama campaign also set the bar in terms of online multimedia, thoroughly dominating all other candidates in the 2008 election. This was particularly evident in the online videos posted by the campaign. By Election Day the campaign had posted over 1,800 videos on its YouTube channel totaling 110 million views, while McCain, his Republican opponent, had

[254] David Plouffe, *The Audacity to Win: How Obama Won and How We Can Beat the Party of Limbaugh, Beck, and Palin* (New York: Penguin, 2010), 327.
[255] Rahaf Harfoush, *Yes We Did: An inside Look at How Social Media Built the Obama Brand* (Berkeley, CA: New Riders, 2009).
[256] Plouffe, *The Audacity to Win: How Obama Won and How We Can Beat the Party of Limbaugh, Beck, and Palin*, 83.
[257] Adam Nagourney and Jeff Zeleny, "Obama Chooses Biden as Running Mate," *The New York TImes*, August 23 2008.

posted 330 videos with only 25.5 million views (see Table 4.4).[258] The videos posted by the Obama campaign served several purposes. First, the campaign posted television ads and other messages to essentially gain free advertising opportunities. Web users watched nearly 15 million hours of official online videos from the campaign. By one estimate, the campaign would have had to spend almost 47 million dollars to reach that many people through 30-second television ad buys (see Table 4.4).[259] Only a small percentage of these videos were actually campaign ads, however. Many were speeches, offering current or potential supporters the chance to hear from the candidate anytime they wanted.[260] Along with saving a tremendous amount of campaign resources, online videos help to provide a direct message to supporters, including messages meant to encourage them, share campaign strategy, and create a sense of community.[261]

[258] Peter Fenn, "Communication Wars: Television and New Media," in *Campaigning for President 2008: Strategy and Tactics, New Voices and New Techniques*, ed. Dennis W. Johnson (New York: Routledge, 2009).
[259] Andrew Rasiej and Micah L. Sifry, "The Web: 2008's Winning Ticket," *Politico*, November 12 2008.
[260] Perhaps the most important video produced by the campaign was Obama's "A More Perfect Union" speech on race. Although it was 37 minutes long, eventually tens of millions of people watched it through various outlets, primarily online according to campaign manager David Plouffe. Plouffe, *The Audacity to Win: How Obama Won and How We Can Beat the Party of Limbaugh, Beck, and Palin*, 214.
[261] Perhaps the most effective style of these direct messages to supporters were volunteer testimonials which featured Obama supporters sharing their experiences and reasons for supporting the campaign and urging others to do the same. Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation," 27.

Table 4.4: Online Metrics for the 2008 Presidential Campaign[262]

	Obama	McCain
Facebook friends on Election Day	2,397,253	622,860
Number of Twitter followers	125,639	5,319
Unique visits to campaign websites on week ending Nov. 1, 2008	4,851,069	1.464,544
Online videos mentioning candidate	104,454	64,092
Campaign-made videos posted on YouTube	1,822	330
Total hours people pent watching campaign videos (as of Oct. 23, 2008)	14,600,000	488,000
Cost of equivalent purchase of 30-second TV ads	$46.9 million	$1.5 million
References to campaign voters contact operation on Google	479,000	325
Number of direct links to the campaign's voter contact tool	475	18

The Obama campaign's single most important original tactical innovation was the development of a website that was empowering, interactive, and fully integrated with the rest of the campaign. Research has shown that most visitors to campaign websites are not swing voters, but rather are those with strong allegiances to particular parties, and are thus more likely to be ready and willing to actively get involved in a campaign.[263] David Plouffe describes how the Obama campaign strategically aimed to capitalize on these potential volunteers by realizing "that a smart, and large, Internet presence was the best way to provide people with the opportunity and tools to get involved with the campaign – they were already immersed in the world of technology and would be more likely to encounter us there."[264]

The centerpiece of this Web presence was my.barackobama.com, generally called "MyBO," a custom built social networking site fully embedded into the official campaign website. MyBO offered a Web-based action center where users could directly connect to local campaign activity or issues they found most important, and served as the most direct link

[262] Rasiej and Sifry, "The Web: 2008's Winning Ticket."
[263] Kirsten A Foot and Steven M. Schneider, *Web Campaigning* (Boston: MIT Press, 2006); Bimber and Davis, *Campaigning Online: The Internet in US Elections*; Hindman, *The Myth of Digital Democracy*.
[264] Plouffe, *The Audacity to Win: How Obama Won and How We Can Beat the Party of Limbaugh, Beck, and Palin*.

between netroots activity and more traditional grassroots organizing offering hundreds of thousands of opportunities for real world political action. Where the Dean campaign four years earlier was the first to utilize social networking, the Obama campaign integrated social networking into its entire Web strategy, linking online networks to offline campaign activity. As with other social networking sites, users could personalize this site by creating profiles, posting pictures, and writing blogs, and they were given the tools to take political action such as making campaign calls from home and creating personal fundraising pages.[265] In addition, MyBO included interactive features such as meetup coordination, videos, and links to a wide variety of social networking sites.[266] Each of these online campaign activities awarded users points, creating additional incentives for supporters, and were monitored by the campaign so it could identify highly active volunteers it might want to recruit into official campaign service. The campaign also frequently featured goal-oriented challenges, such as making a certain number of calls or raising a specified fundraising total. Taken together, this was the most successful example of the gamification of online campaigning.[267] Much of the credit for the nuanced, interactive, and dynamic online presence goes to Chris Hughes, a cofounder of Facebook, who

[265] Over two million profiles were created on mybarackobama.com. In addition, 200,000 offline events were planned, about 400,000 blog posts were written and more than 35,000 volunteer groups were created. Individuals could create their own personal fundraising pages using this site and 70,000 were created raising over 30 million dollars. Vargas, "Obama Raised Half a Billion Online."

[266] The site also includes links to the largest social networking sites including facebook.com and myspace.com and was designed. Similar sites designed around various subsets of the population also linked to the Obama site include migente.com and MyBatanga.com, for the American Hispanic population, AsainAve.com, for Asian Americans, Faithbase.com, for faith – based Christians, eons.com, for Baby Boomers, and Glee.com, for the Gay, Lesbian, Transsexual, and bisexual communities. "Change We Can Believe in - Home," http://www.barackobama.com/index.php. .

[267] Gamification refers to incentivizing political participation by creating game-like activities like awarding points for activities, allowing supporters to reach different levels of commitment, and providing incentives for political action like matching donations. Although most candidates in 2008 used some forms of gamification of their sites, the Obama campaign integrated this process in the most seamless and effective manner. However 2008 was not the first time this strategy was used with some tracing the earliest attempts at awarding supporters points in order to gamify campaign websites back to the 2000 Bush campaign. *Personal Interview with Fritz Chaleff*, (2011), Personal Interview.

was hired by the Obama campaign as Director of Online Organizing and played an important role in the design of MyBO.[268]

The campaign's online presence was constantly monitored and analyzed in order to maximize efficiency and utility.[269] This included refinements in tools as sophisticated as MyBO tools and as seemingly straightforward as e-mail. The campaign tested multiple variations of the same e-mail in order to assess the impact of a header, the value of embedding video versus audio, and whether a donate button might be more effective than a text link.[270] The careful data analysis provided strong metrics that helped gather and use information from all online supporters in a way that would not have been possible without the sophisticated MyBO online centerpiece and the data-capturing abilities of the Internet. Ultimately the tools and refinement of the online campaign were used to aid and build an enormously effective offline campaign, including canvassing, phone calls, and get out the vote (GOTV) efforts.

Obama and his campaign professionals created the first politically successful online campaign because they strategically integrated its interactive power with its political goals at a time when the American public was ready and able to respond. Obama was a political challenger who had to fight for his political life during the Democratic primaries, and in doing so built a prolific fundraising machine. The campaign's incorporation of new technology satisfies all of the claims laid out earlier in the chapter. The PCR cycle suggests that innovations from this successful campaign, including the personal communication, multimedia, and personalized social networking website (MyBO) would likely be copied by future campaigns. The 2010 midterms

[268] Plouffe, *The Audacity to Win: How Obama Won and How We Can Beat the Party of Limbaugh, Beck, and Palin*, 92. Harfoush, *Yes We Did: An inside Look at How Social Media Built the Obama Brand*, 74.
[269] Hunt, "Thinking Outside the Tube: Why Insurgent Campaigns Drive Internet Innovation," 31.
[270] Harfoush, *Yes We Did: An inside Look at How Social Media Built the Obama Brand*, 159.

offered the first opportunity to test whether Obama's successful model would be copied to the point of becoming the new status quo.

Case Study: Political Choice and Web Tools Used by the 2010 Congressional Campaigns

To gauge the degree to which the Obama campaign innovations have been imitated and signal the onset of a new PCO, I evaluated the campaign websites for every 2010 Senate race. I sought to answer two broad questions: First, to what extent did the campaigns copy the Obama online campaign by offering similar types of online tools? Second, what types of campaigns were most likely to innovate or imitate the Obama model?

Senate races were selected for my study because they are the largest campaigns conducted during the midterm elections and both my resource claim and historical precedent suggest that the campaigns with the most resources innovate earliest.[271] Initially, data from 105 campaign websites were collected and coded for candidate characteristics, resources raised, and online tools offered by the campaign websites. The dataset was then narrowed to 86 serious candidates running for Senate offices in 2010. Serious candidates were identified as those who raised over one million dollars for their campaign. While there are other criteria that could be used to determine which candidates are serious contenders, 67.4 percent of those raising over one million dollars won their primary and 41.9 percent won the general election. All told, there were only four candidates who won primaries with under a million dollars raised. These four campaigns raised, on average, $126,800, and each lost its general elections by an average of 41

[271] As detailed earlier in the chapter, presidential campaigns are by far the largest campaigns and have always been the first to innovate followed by campaigns targeting smaller geographic areas and constituencies (other than early radio which was limited in its nationwide coverage). One clear historical example is the innovation of creating a campaign website during the 1990s, the innovation spread from the presidential campaigns to Senate and governors races and then to House campaigns.

percent.[272] Every candidate who won the general election raised over one million and only two, Mike Lee of Utah and Tom Coburn of Oklahoma, won elections raising less than three million dollars. Limiting the dataset to the campaigns that raised over one million dollars also served the important role of guaranteeing that all candidates had the resources to create a sophisticated and interactive Web presence if s/he chose to do so. These campaigns are all well funded, though how they allocate their resources varied greatly. Further, the campaigns studied also vary widely in the amount of resources available, a range of nearly 50 million dollars between the campaigns with the highest and lowest amount of money raised. Thus the resource claim was met for all campaigns, but a huge range in level of funding could still play a large role in determining who is likely to innovate first.

The first glimpse into how the fully integrated and highly sophisticated Obama online campaign model might be used on the Congressional level after 2008 was the special Senate election to fill Sen. Edward Kennedy's seat in Massachusetts. Republican Scott Brown waged a successful campaign, defeating the once heavily favored Democrat Martha Coakley. His victory in January 2010 was based in large part on a very impressive online campaign that built upon the Obama model with techniques that were not even in play in 2008.[273] But questions remained as to how widespread efforts like the Brown campaign would be throughout the 2010 Senate races.

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[272] The four campaigns included Tracy Potter of North Dakota, Sam Granato of Utah, Tom Sullivan of Idaho and Alvin Greene of South Carolina. Sam Granato raised the most of the four with $306,522, nearly three times as much as Potter and Sullivan. Alvin Greene was a truly shocking primary winner, one who not only had no active campaign and less than $5,000 total raised (the minimum threshold required for the FEC to keep records), but he had no campaign website. He was the only candidate to have such a nonexistent campaign and there are widespread rumors that Republicans may have planted him as a losing candidate. No proof of this has emerged however. It may not be surprising that Granato, with the most money raised also ran the closest campaign but he still lost by 28.8 percent. All fundraising data comes from the final 2010 campaign report collected by the Federal Election Commission. Federal Election Commission, "Campaign Finance Reports and Data: Summary Reports Search," http://fec.gov/finance/disclosure/srssea.shtml.

[273] Johnson, *Campaigning in the Twenty-First Century*, 1-2.

The most concrete way to determine whether or not the 2010 Senate campaigns chose to imitate the successful online campaigns of Obama and Brown was to look at the individual tools that they chose to integrate into their campaign websites. The campaign websites were examined for numerous different features and interactive tools, each of which played a role in the Obama Web campaign. While it was not expected that each would be replicated by every Senate campaign, the scope and scale of the online campaigns varied significantly.

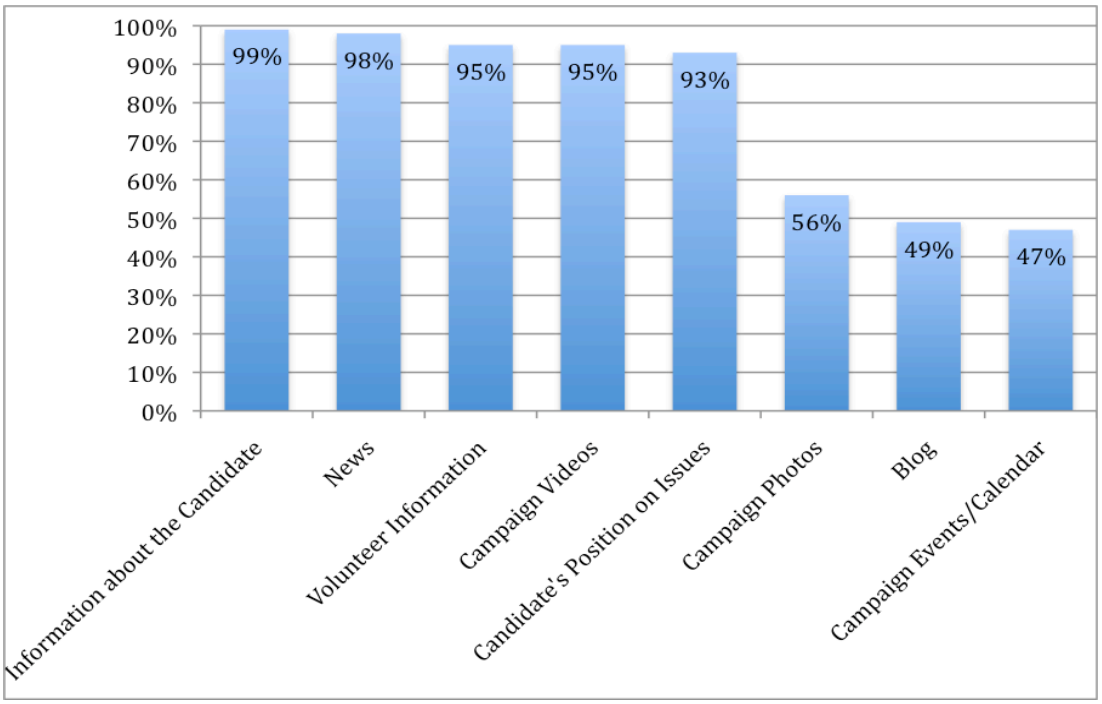
Several features were nearly universal across campaign websites, many of which had to do with the types of information offered by the campaign. As Figure 4.4 indicates, nearly every campaign offered biographical information about the candidate (99%), campaign news (98%), volunteer information (95%), and information about the candidate's position on various issues (93%). As the Obama campaign demonstrated, the incorporation of multimedia has become essential for providing information and interactive updates that potential supporters would be likely to access. In 2004 69% of Senate campaign websites and 40% of House campaign sites had incorporated some form of audio or video multimedia.[274] By 2010 all Senate campaigns incorporated at least minimal multimedia capabilities into their sites. In particular the campaign sites embraced video, with 95% offering some video content, including 90 percent with a link to a YouTube clip or official campaign channel.[275] In the end, although these sites offer information in much more varied, interesting, and dynamic forms than those offered by early campaign websites, there is little in the way of ongoing informational innovation on campaign websites.

[274] Druckman, Kifer, and Parkin, "The Technological Development of Candidate Web Sites: How and Why Candidates Use Web Innovations," 30-31.

[275] This number seems especially high when compared to the 64 percent that offered a link to Flickr, a popular photo sharing website, and the 56 percent that offered official photos posted by the campaign on their site. Campaign photos included any photos that were posted by the campaign other than one at the top of the page of the candidate. This was often done in a photo section or occasionally through an official campaign Flickr account. However a separate section was not needed to qualify as having campaign photos.

The 2010 Senate campaigns demonstrate that most informational tools and strategies including multimedia have been adopted by all serious campaigns.

Figure 4.4: Types of Information Offered on 2010 Senate Campaign Websites



Interactivity, on the other hand, started to play a major role in nearly all Web campaigns in 2010, but remains far from universal in its usage. This marks a substantial change since the earliest uses of social networking by the Dean campaign six years earlier. Williams and Gulati have conducted several studies of website design and social networking use by campaigns and have seen dramatic changes over the past few election cycles.[276] In 2010, they evaluated how

[276] See Christine B. Williams and Girish J. Gulati, "Social Networks in Political Campaigns: Facebook and the 2006 Midterm Elections" (paper presented at the Annual Meeting of the American Political Science Association, Chicago, 2007); ———, "Closing Gaps, Moving Hurdles: Candidate Web Site Communication in the 2006 Campaigns for Congress," in *Politicking Online: The Transformation of Election Campaign Communications*, ed. Costas Panagopoulos (New Brunswick, NJ: Rutgers University Press, 2009); ———, "Facebook Grows Up: An Empirical Assessment of Its Role in the 2008 Congressional Elections," in *Annual Meeting of the Midwest Political Science Association* (Chicago2009); ———, "Congressional Candidates' Use of Youtube in 2008: It's Frequency and Rationale," *Journal of Information Technology & Politics* 7, no. 2-3 (2010); ———, "Communicating with Constituents in 140 Characters of Less: Twitter and the Diffusion of Inovation in the United States Congress," in *Annual Meeting of the Midwest Political Science Association* (Chicago2010).

836 Congressional campaigns used Facebook, Twitter, and YouTube, and noted both a high adoption rate and very fast diffusion rate over just a few election cycles. Facebook was launched in early 2004, with YouTube beginning a year later and Twitter emerging mid-2006. Facebook was first available to candidates during the 2006 campaign, and only 16% of Democrats and Republicans running for the House adopted a Facebook profile that year. By 2008 that number had spiked to 72%, and increased again to 82% in 2010.[277] The 2010 midterm election marked only the second election in which YouTube was available to Congressional candidates, with use again jumping from 28% in 2008 to 72% in 2010. Twitter is the youngest of the social networking sites,[278] and although 2010 was the first election cycle in which it was available, nearly three-fourths (74%) of all House candidates adopted a Twitter account, even more than YouTube although it had been available during previous election cycles.[279]

As expected, Senate campaigns, which are larger and better funded, innovated at a faster rate and used each of the social networking platforms to a higher degree than those running for the House. A striking 98% of Senate candidates had a Facebook account, 90% had a YouTube channel, and 94% opened a Twitter account in the first election where it was available (see Figure 4.5). This is especially impressive when compared to communication methods that did not use social networking sites (SNS). SNS were used by about the same number of campaigns as sending e-mail updates (96%) and twice as often as sending text message updates (42%). It seems obvious that social networking tools have already become standard and will likely be used by all serious candidates running in future elections, that is, unless the social networking sites

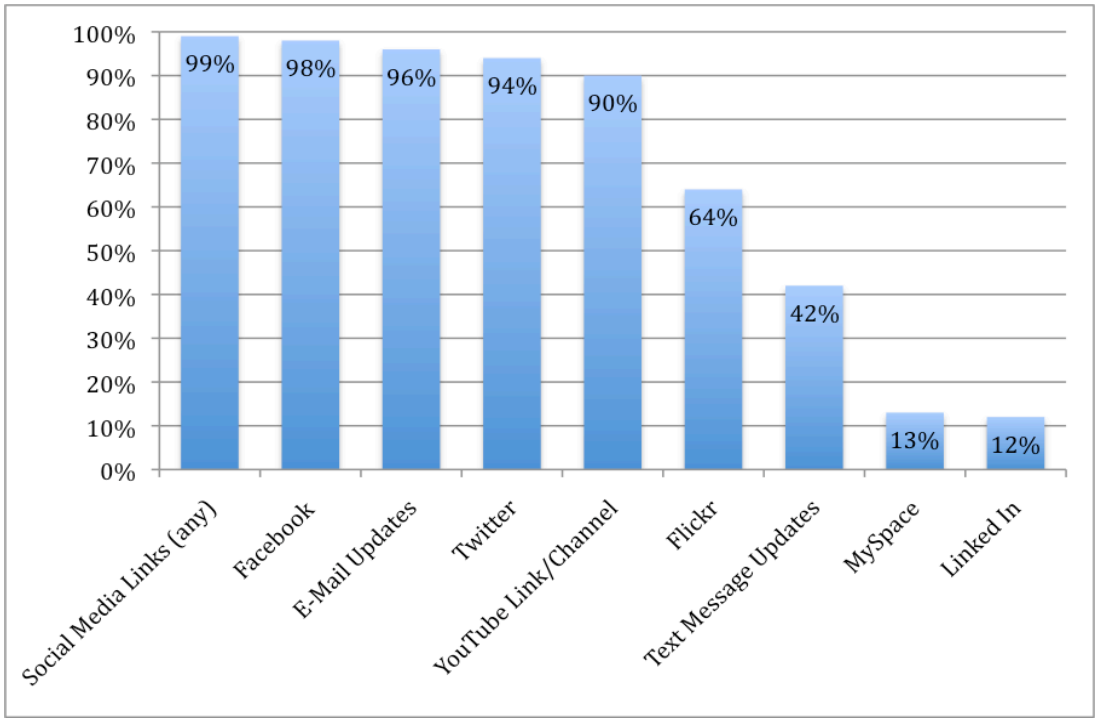
[277] Christine B. Williams and Girish J. Gulati, "Social Media in the 2010 Congressional Elections," in *Annual Meeting of the Midwest Political Science Association* (Chicago2011).

[278] Some have argued that Twitter is less of a social networking platform than others like Facebook because messages are primarily public and essentially broadcast while others can follow Twitter users without actually interacting or knowing one another at all.

[279] Williams and Gulati, "Social Media in the 2010 Congressional Elections," 13.

become less popular. For instance, the once mighty myspace.com was only utilized by 13% of Senate candidates. Once a social networking site loses its popularity, its political viability disappears. Though individual sites may come and go, social networking has clearly become a staple of online campaigning.

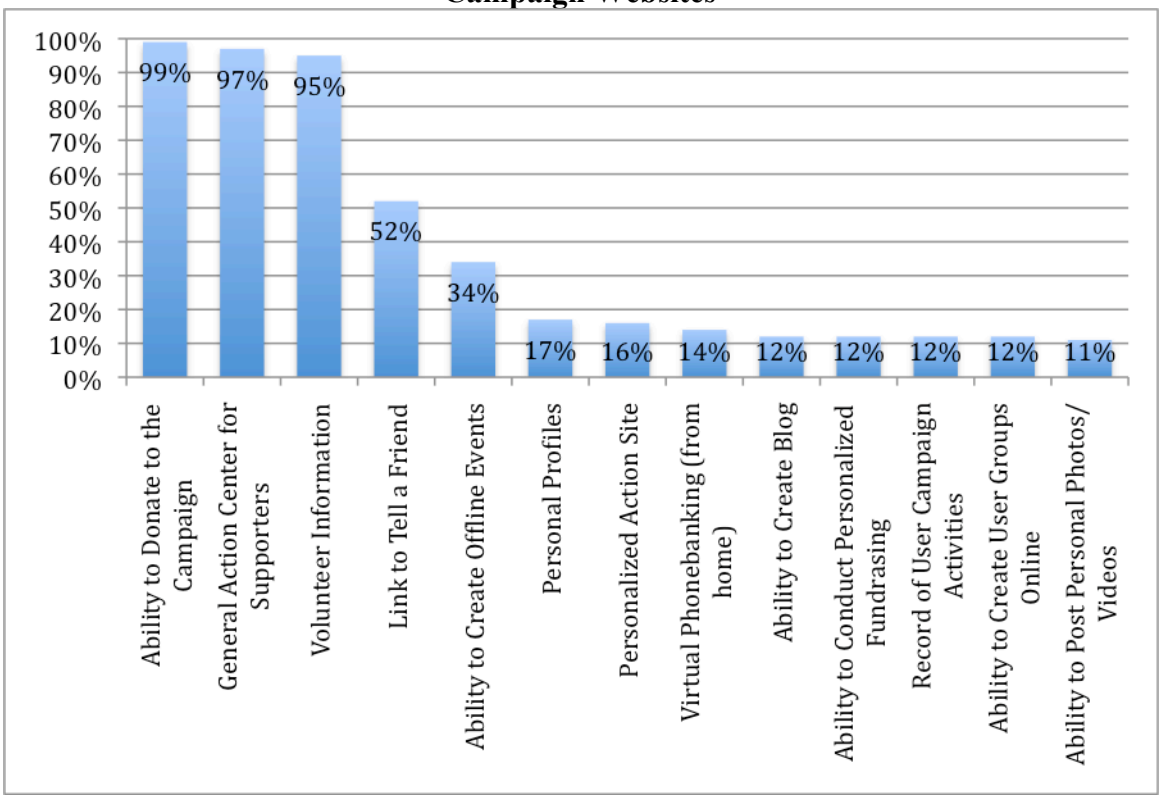
Figure 4.5: Types of Social Networking Incorporated into 2010 Senate Campaign Websites



The most innovative strategy used by the Obama campaign was the full integration of social networking, political mobilization, and personalization within the campaign website. MyBO was the hub for Obama supporters whether they wanted to watch campaign videos, modify their personal profiles, or make phone calls from home. These embedded Web-based tools were used much less frequently by Senate campaigns than the external social networking sites. Nonpersonalized political mobilization was used widely, with a full 99% of sites including an option to donate to the campaign, 97% including an action center of some kind with information about how to get involved, and 95% including specific information for those

interested in volunteering. However, none of these mobilization tools target individuals or small groups specifically or require any interactivity embedded within the website. In other words these were broadly targeted Internet-based political communication tools. Only 16% of campaigns had personalized pages along the lines of MyBO, and even fewer provided a platform for supporters to phone bank from home (14%), create blogs (12%), organize personalized fundraising efforts (12%) or post personal photos or video (11%) (See Figure 4.6). Overall, a surprisingly low percentage of 2010 Senate campaigns imitated Obama's successful innovations of 2008.

Figure 4.6: Types of Personal Political Action Tools Offered on 2010 Senate Campaign Websites



One possible reason for the surprisingly low imitation rate is the high level of resources and technological expertise needed to incorporate these tools into a campaign. Still, serious

Senate campaigns should have had little problem raising enough resources.[280] Yet, their allocation of funds lies at the core of the political choice phase of the PCR cycle, and many campaigns may have simply not felt that these innovations were cost-effective. The data suggest that, at least in 2010, they may not have been. While 64.3% of those who created a personalized site won their primary, 68.1% of those without the sites won. The effectiveness of these sites is even less evident when it came to general elections, as only 35.7% of those with the sites won compared to 43.1% of those without. Furthermore, there is no statistically significant correlation between Senate campaigns with these sites raising more money or having a higher percentage of their fundraising coming from individual donors. It is unclear whether these tools are simply marginally effective or whether they are still in the experimental phase in the same way that the Dean campaign attempted social networking with meetups in 2004.

The answer may lie much more in how the sites were used as opposed to simply whether they existed at all. The Obama campaign set out to integrate its online tools with a strategic plan from day one, and created a highly sophisticated site with numerous mobilization tools and personalized areas. The Brown campaign followed Obama's example and won decisively in early 2010. Others who want to copy this successful model will need to hire those who are capable of setting up and running sites with MyBO style sophistication. A cottage industry of Internet firms have sprouted up offering political groups of all kinds customizable packages of tools making this a more common and less costly venture moving forward.[281] Personalized and embedded social networking sites are clearly at a much earlier point in the innovation decision-

[280] The average serious Senate campaign raised 7.8 million dollars in total and 4.8 million from individual donors, though these values was highly skewed with the Linda McMahon campaign raising over 50 million dollars. The median is therefore the most appropriate measure of central tendency for these skewed fundraising figures. The median fundraising total is still 4.4 million, with a median of 2.9 million dollars raised from individual donors. All campaign fundraising data taken from Commission, "Campaign Finance Reports and Data: Summary Reports Search."

[281] Only 38% of Senate campaigns named their website creator although many others surely used outside firms to create and maintain their interactive and personalized networking sites.

making process and are likely to increase greatly in number and complexity over upcoming election cycles.

In order to evaluate what types of campaigns are more likely to innovate earlier than others, I will test whether my resource, challenger, and competitiveness claims accurately predicted the innovativeness of the 2010 Senate campaign websites. Based on these claims, there are three clear expectations about what I expected to see after analyzing the websites. First, challengers should have been more likely to innovate than incumbents. Second, money matters, and those campaigns that raised the most money would be most likely to innovate and have the most sophisticated Web sites. Finally, the most competitive races would be likely to include campaigns from both parties that were more willing to innovate.

To test my claims, similar website features were grouped together creating four scale variables measuring categories of campaign website features. First was the information scale that measured the amount of informational features available on each site. Next, the personalization scale tallied features involved in the personalized use of the site including mobilization and social networking options used by Obama's MyBO. Third, the communications scale measures the methods of communication and interaction between the campaign and supporters. And finally, the social networking scale measures the number of social networking sites actively linked to each campaign website.[282] As I expected, there was a negative correlation between incumbency and each of the four scale variables, suggesting that challengers are more likely to offer more features and interactivity in their online campaigns across the board. However, only

[282] See footnotes 287-290 for more complete explanations of the information scale, personalization scale, communication, and social networking scale.

the connection scale and incumbency showed a statistically significant negative relationship, substantially weakening the confidence of this finding (see Table 4.5).[283]

A clearer picture of which campaigns are most likely to innovate emerges when the types of SNS each campaign uses are specified. Among Senate campaigns there was no significant relationship between incumbency status and Facebook use, which was used by nearly every campaign after three election cycles. In House races, which were much more varied, Williams and Gulati found that incumbents were significantly more likely to have adopted Facebook, which went against my challenger claim.[284] However, among Senate campaigns my research found that both YouTube and Twitter use had statistically significant negative correlations with incumbency, suggesting that the newer social networking innovations were, in fact, being used more by challengers. These findings differ somewhat from those in the Williams and Gulati study on House races. They found that incumbents were more likely to have YouTube channels than challengers, but, like my findings about the Senate, challengers were more likely to adopt Twitter use for their campaign.[285] One important reason for this is that once set up, a campaign can carry over its social networking accounts, like YouTube channels and Facebook pages, from election to election. This means that incumbent campaigns can simply maintain these sites, which, after a few election cycles, have entered the late adoption stages with only a few laggard incumbents holding out.[286] Twitter, the newest resource of the three, had the strongest correlation coefficient, suggesting that challengers facing strategic disadvantages were more likely to innovate than incumbents. Within a few short election cycles, though, successful social networking tools like Facebook become common campaign strategy for all serious campaigns

[283] The social media scale was nearly significant at the .05 level, registering a significance of .051 and a correlation coefficient of -.211.
[284] Williams and Gulati, "Social Media in the 2010 Congressional Elections," 15.
[285] Ibid.
[286] Ibid., 15-16.

making the challenger claim less capable of predicting who is likely to innovate using SNS after the initial set of early innovators (see Table 4.6).

Table 4.5: Correlation Between Incumbent Status, Party, Money Raised and Various Groups of Website Features

Pearson's r N=86		**Incumbent** Challenger = 0 Incumbent = 1	**Party** Dem. = 1 Rep. = 2	**Total Money Raised**	**Personalization Scale**
Information Scale[287]	Correlation Coef. Sig. (2-tailed)	-.129 .236	-.081 .458	.267* .013	.495*** .000
Personalization Scale[288]	Correlation Coef. Sig. (2-tailed)	-.170 .118	-.036 .743	.188 .084	1
Connection Scale[289]	Correlation Coef. Sig. (2-tailed)	-.240* .026	-.060 .586	.326** .002	.230* .033
Social Media Scale[290]	Correlation Coef. Sig. (2-tailed)	-.211 .051	-.008 .939	.218* .044	.273* .011

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

[287] The information scale included a tally of all features providing information about the candidate such as the candidate's position on issues and biographical information.

[288] The personalization scale included a tally of all features allowing personalization of the site for social netowking or political mobilzation along the lines of the MyBO site for the Obama campaign. This included features such as personal fundraising pages, profiles, and virtual phonebanking opportunities.

[289] The connection scale included a tally of all features that allowed the campaign to connect and interact with supporters. This included such features as e-mail and text updates and various social networking links including Facebook, Twitter, YouTube, Linked In, and MySpace.

[290] The social media scale is a subset of the connection scale tallying the number of social media links available on the campaign site.

Table 4.6: Correlation Between Incumbent Status, Party, and Use of Various Social Networking Sites

Pearson's r **N=86**		**Incumbent** Challenger = 0 Incumbent = 1	**Party** Dem. = 1 Rep. = 2
Facebook	Correlation Coef. Sig. (2-tailed)	-.071 .515	.043 .696
YouTube	Correlation Coef. Sig. (2-tailed)	-.283** .008	.132 .224
Twitter	Correlation Coef. Sig. (2-tailed)	-.388*** .000	.217* .045

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

In 2002 and 2004, Democrats, who faced a unified Republican government, were substantially more likely to innovate their websites with personalized and interactive features.[291] By 2010 the tables had turned 180 degrees and the party most likely to innovate shifted from blue to red, as witnessed by one Republican campaign media consultant:

> What I've seen in the 112th Congress [which began in January 2011], at least on the Republican side, so many more offices embracing new technology and interactivity with constituents and reporters and I think it's been great. The 111th [Congress, which started in January 2009] was the testing ground for both parties in the House, if you look at most of the articles that came out in January 2010 after the first session was over you will see that the Republicans really put themselves out there and kind of kicked the ass of the Democrats and then Democrats really decided to kick it into gear but were a year behind the Republicans. And now what I think your seeing is that in the 2010 election, last November, you have a lot of these people who have young communication folks who not only believe in it but are really comfortable with Facebook and Twitter especially...You will always have people who have been there for a while, incumbents, who will poo poo it.[292]

Unlike incumbency status, party identification appeared to have almost no perceivable statistical relationship with any of the four scale variables in 2010 (see Table 4.5). Though this

[291] Druckman, Kifer, and Parkin, "The Technological Development of Candidate Web Sites: How and Why Candidates Use Web Innovations," 33-38.
[292] Fritz Chaleff was the Communications director for Congressman Brian Bilbray (CA – R) in 2010. *Personal Interview with Fritz Chaleff*.

may be surprising, analysis of social networking use shows that Republicans were more likely to use each of the three social networking sites, although only their more aggressive use of Twitter is statistically significant (see Table 4.6). One possible explanation for this weak support for my claim is that majority/minority status can change frequently. It is likely that those who do well during one political cycle may be less inclined to innovate next time, yet the more the parties trade positions in the driver's seat, the less the discrepancy in motivations to innovate. Regardless of the cause it appears that the challenger claim holds up in terms of incumbency status but not in terms of party in power. It will be interesting to observe the next election cycles to see if these trends change as social networking continues to grow in terms of number of sites, number of users, and political utility.

My resource claim was largely confirmed by the fact that campaigns that raised more money were more likely to offer more information features, connection features, and social networking links (see Table 4.5). Looking deeper into campaign fundraising, it is notable that there was a statistically significant positive relationship between these same campaign features and money raised from sources other than individual donations (such as PACs, Party committees, and the candidate themselves), but not from individual donations.[293] Thus it appears that the resource claim is strongest when resources come in larger amounts from more reliable sources including established political organizations, as opposed to individual donations. This is an interesting finding that bears the need for further study. There was also a significant positive correlation between overall wealth of campaigns and their inclusion of a personalized campaign site, like MyBO (see Table 4.7). Overall it seems clear that more resources allow campaigns to invest more in innovating their websites and creating a more comprehensive online presence.

[293] These significant correlation coefficients were also present when the candidate's personal money was used as the resource variable further supporting the fact that known resources support the resource claim while les reliable individual donations do not.

Table 4.7: Correlation Between Incumbent Status, Party, Success in Primaries and the General Election, Total Money Raised and Various Innovative Website Features

Pearson's r N=86		**Incumbent** Challenger = 0 Incumbent = 1	**Party** Dem. = 1 Rep. = 2	**Total Money Raised**
Personalized Campaign Website	Correlation Coef. Sig. (2-tailed)	-.144 .187	.065 .549	.217* .027
User Profile	Correlation Coef. Sig. (2-tailed)	-.159 .143	.086 .433	.207* .035
Personal Fundraising	Correlation Coef. Sig. (2-tailed)	-.232* .031	-.172 .112	-.073 .462
Tell a Friend	Correlation Coef. Sig. (2-tailed)	.150 .169	-.221* .041	.283
Total Money Raised	Correlation Coef. Sig. (2-tailed)	.186 .058	-.002 .984	1

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

Testing whether my competitiveness claim is plausible depends on how the competitiveness of elections is measured. Many news organizations observe polling data leading to elections and name races as safe for one candidate or the other, leaning Democrat or Republican, or a toss up. This measure of competitiveness is based on perception before the election. The other common measure is the actual margin of victory measured after the election results are tabulated. None of the variables were significantly correlated to the perceived competitiveness of the race.[294] However, if the margin of victory was used to measure competitiveness then there was a statistically significant negative correlation between margin of victory and informational features, personalized features, and connection features. In other

[294] This was determined using the election classifications from RealClearPolitics.com, a trusted political news and polling aggregator.

words, the more competitive these races actually were, the more likely campaigns were to include these innovative features, supporting my competitiveness claim (see table 4.8).

Table 4.8: Correlation Between Total Number of Campaign Website Features, Total Money Raised, and Victory Margin

Pearson's r N=86		**Total Money Raised**	**Incumbent** Challenger = 0 Incumbent = 1	**Victory Margin**
Total Campaign Website Features	Correlation Coef. Sig. (2-tailed)	.276* .010	-.24* .03	-.357** .001

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

It is clear that resources, challenger status, and competitiveness each increase a campaign's innovativeness, but together these variables generally account for only 10 – 20 percent of the variability in the overall innovativeness of campaigns (see Table 4.9). I used OLS regression to model how various statistically significant independent variables contribute to the amount of innovative features and social networking links Senate campaign websites had. In terms of resources, these models offered two important takeaways. First, while overall campaign resources consistently increased innovativeness, fundraising specifically from sources other than individual donors was an even stronger determinant of innovativeness. Second, among campaigns with over a million dollars, the variability in resources affected campaign innovativeness in very minimal ways, requiring millions of dollars to be added to increase the innovative features of a site (see Table 4.9). Both challenger status and a smaller margin of victory consistently contributed to more innovative campaign features, further supporting my challenger and competitiveness claims.

Table 4.9: OLS Regression Models Measuring Determinants of Campaign Website Innovation During 2010 Senate Campaigns

Ind. Variables	Dependent Variables								
	Informational Features		Person-alized Features	Connection Features			Social Networking Links		Total Features
Incumbent Status 0=No 1=Yes				-.660* (.281)	-.537 (.278)	-.615* (.284)	-.531* (.236)	-.485* (.234)	-1.69 (.093)
Final Money[$]	.004* (.002)			.005** (.002)			.003* (.001)		.01* (.01)
Individual Donations[$]						.003 (.003)			
Money Not From Individual Donations[$]		.007** (.002)			.006* (.002)	.006** (.002)		.004* (.002)	
Final Victory Margin[%]	-.025* (.010)	-.028** (.010)	-.049** (.018)	-.007 (.008)	-.012 (.008)	-.008 (.009)			-.07* (.03)
Constant	7.149 *** (.307)	7.335 *** (.249)	4.009 *** (.422)	5.000 *** (.240)	5.274 *** (.201)	5.083 *** (.253)	3.602 *** (.162)	3.715 *** (.136)	16.99 *** (.8)
N	86	86	86	86	86	86	86	86	86
R^2	.134	.160	.081	.188	.183	.198	.102	.107	.203
Sig.	.003**	.001**	.008**	.001**	.001**	.001**	.011*	.009**	.000***

Notes: OLS Regression conducted only for variables with statistically significant correlation coefficients
Standard Errors are in Parentheses
***p < .001, **p < .01, *p < .05
[$] - All money variables are in units of $100,000
[%] - Final victory margin is in percent

Perhaps the most helpful single model in determining innovativeness modeled the impact of total resources, challenger status, and margin of victory on the total number of features that a campaign website utilized. There were 28 different features identified; some of these features included basic information and communication that had been a part of online campaigning for over a decade. Yet this overall scale variable provided the best overview of how comprehensive campaign websites had become in 2010. According to this model, challengers had 1.69 more features than incumbents, supporting the challenger claim. Surprisingly, both the resource claim and competitiveness claim barely affected results. In fact, it took 10 million additional dollars raised, or a 14 percent closer race to add one feature to a website (see Table 4.9). Perhaps the

most important finding is that over 80 percent of the variability in campaign innovativeness is caused by sources other that resources, challenger status and competitiveness, showing the need for further analysis.

Conclusion

The political choice phase is, quite simply, the most critical phase of the PCR cycle. It is during this second phase that the specific political nature of communication is applied to what was a broader social communication revolution. Political actors, both individuals and organizations, must evaluate new opportunities and decide if the potential benefit is worth the expense and overall political risk.[295] The political choices about whether or not to innovate their political communication activities are affected by several factors. Diffusion research identifies various general characteristics of potential adopters that affect their innovativeness. My analysis of historical and contemporary political campaigns specifically reveals that a campaign's technological and financial resources and challenger status increase its innovativeness, along with the competitiveness of the race in which they are competing.

Campaigns have innovated their communication strategies since the earliest days of party activity in the late 18th Century. As demonstrated by the campaigns that innovated using the radio, television, and the Internet, the earliest innovators are rarely successful politically, and when they are, it is not because of their ICT innovations. For instance Howard Dean's 2004 campaign displayed the power of innovative strategies online, but failed to earn a defining political success. Yet once the ICT has diffused to the majority of society, innovators with enough resources can use the ICT strategically to achieve political victory. There is no better

[295] Druckman, Kifer, and Parkin, "The Technological Development of Candidate Web Sites: How and Why Candidates Use Web Innovations."

example of this process than the Obama Internet campaign in 2008. Obama was a clear outsider with abundant resources who systematically integrated his online presence into his entire campaign. The result was MyBO, the most sophisticated and strategically integrated set of mobilization and communication tools ever unveiled by a campaign.

The tools mastered by the Obama campaign provided a model that others could follow. In the wake of the 2008 election, many of these innovative tools were imitated as the PCR cycle predicted. Yet serious candidates running for the U.S. Senate did not adopt them as universally as expected. That being said, research suggests that campaign innovation diffusion usually moves slower at the congressional level than at the presidential. It will be interesting to analyze campaign innovation in the 2012 election because it is the first presidential election since the successful model was established four ears earlier.

Overall, both my historical and current findings did provide support for my challenger, resource, and competitiveness claims. Non-incumbent challengers were clearly more innovative than incumbents. However, the expectation that the party out of power would also be more likely to innovate was less conclusive. Campaigns with the greatest resources and those competing in the closest races were more likely to innovate earlier than others. Yet the willingness to innovate does not mean that it will be effective. It is only after several election cycles that innovation can be strategically incorporated into the larger campaign in a way that can bring great political success. Once these strategic political choices are imitated to the point where they become nearly universal the political choice phase of the PCR cycle draws to a close. The only remaining steps are the establishment of a new status quo in political communication activities and the creation of regulations, organizations, and norms used to stabilize these changes and create a new long-standing PCO.

Chapter 5 - Controlling the Political Surf

Today the Internet is a seemingly endless source of information, communication, and entertainment. It has been called the network to end all networks. The Internet is immediate, infinite, and interactive, and it is growing at an exponential pace. But not long ago the Internet was a much simpler, almost quaint enterprise. It was an era when we didn't Google anything or Facebook anyone. Tweeting was reserved for birds and the staying power of something called electronic mail was hotly debated. In the early to mid-1990s, "surfing" was the only verb ascribed to going online and "surfing the Web" described the fun process of bouncing around the Internet with the skill and endurance necessary to do it well.[296] At that point in time, the oceans of online information were limited, for most users, by the relatively scarce options prescribed by the Internet Service Providers (ISPs). Political information on the Web was minimal at best.[297] This period quickly became known as the Internet revolution and has, without question, transformed how people access information and interact with one another. As the amount of information available online has continued to grow, the tools Internet users have at their disposal to manage and create online communication have become increasingly sophisticated and user friendly.[298]

The increasing sophistication, personalization, and customizability of online communication is particularly important in the world of politics, which is also currently being transformed through the current Political communication revolution (PCR). As defined in

[296] Jean Armour Polly is credited with inventing the term "surfing the Internet," with her journal article and book, both with the same title published in 1992. Jean Armour Polly, "Surfing the Internet," *Wilson Library Bulletin* (1992).

[297] In the mid 1990s the vast majority of Internet users connected to the Internet through Internet Service Providers (ISPs) like CompuServe, American Online, and Prodigy. For much more about the history of the Internet, and especially the development of political communication online, please see chapter 2.

[298] One speaker at the 2010 Personal Democracy Forum Conference in New York noted that more information has been generated since 2009 than all of the written material before it due to the growth of online information.

chapter two, a PCR marks the transition between one stable Political communication order (PCO) and another. The current PCR is shifting political communication from the broadcast era of radio and television into the Information PCO centered around the dynamic, immediate, and interactive communication opportunities available online. The current PCR is the most recent of three that have occurred in American history, and each has gone through a life cycle with three phases, examined over the previous two chapters.[299] While it is clear, nearly two decades into the current PCR, that political communication will never be the same as it was before the Internet started to diffuse widely, it is still unclear how this interactive and open medium will be used within society at large and within the narrower world of politics.[300] In other words, the Internet-induced PCR is still mid-cycle. The fundamental questions at this stage are: who steers the ship through the political surf today and who will control the helm in the future? This chapter attempts to start to answer these questions by measuring the effect that the decentralization of online political communication has on active Internet users as opposed to traditional political elites. To assess the impact on users, I created and conducted an original Web survey that provides interesting new insights about what political communication activities Internet users are actually participating in and what type of user is more likely to use them.

[299] Each PCR involves the development of a new Information Communication Technology (ICT), its quick and widespread diffusion though society, which creates a level of political viability strong enough to motivate political entrepreneurs to experiment using new communication tools. Next is a phase of political choice where political actors determine how the new tools can be most strategically used and political communication strategies are altered or reinvented. Finally the PCR is stabilized into a new political communication order (PCO) through the regular use of new political communication activities and the establishment of regulations and norms to set and maintain a new status quo, which I label a political communication order (PCO). For more see chapters 1-3.

[300] Wu, *The Master Switch: The Rise and Fall of Information Empires*, 12.

The Democratization Debate

Recently a debate has waged between those who believe that the design and interactivity of the Internet will tear down barriers to political participation and increase democratic discourse through increasingly decentralized political communication,[301] and others who contend that political and corporate elites will likely minimize the democratizing effect of the Web. If the latter are correct, the same elite hands that controlled political communication in the past will continue to dominate information online.[302] Fulfilling the democratizing potential created by increasingly sophisticated communication technology is anything but guaranteed.

On one side stand those who maintain the Internet has strong democratic tendencies. It allows individuals from around the world to interact in open forums, creating extraordinary opportunities for public dialogue and political mobilization.[303] The decentralized structure of the Internet helps individuals to bypass gatekeepers and control the flow of information online.[304] This decentralized communication is the primary source of hope for those who believe the Internet will continue to open the doors of political influence to those who had previously been mere onlookers.[305] Furthermore, the interactive nature of the Internet allows users to create information, thus allowing anyone with access the capability of taking part in this technology-

[301] e.g. Paul DiMaggio et al., "Social Implications of the Internet," *Annual Review of Sociology* 27(2001); Shapiro, "The Internet."

[302] Davis, *The Web of Politics: The Internet's Impact on the American Political System*; Hargittai, "Radio's Lessons for the Internet." Jack L. Goldsmith and Tim Wu, *Who Controls the Internet? : Illusions of a Borderless World* (New York: Oxford University Press, 2008). Wu, *The Master Switch: The Rise and Fall of Information Empires*; Kay Lehman Schlozman, Sidney Verba, and Henry E. Brady, "Weapon of the Strong? Participatory Inequality and the Internet," *Perspectives on Politics* 8, no. 2 (2010).

[303] Shapiro, "The Internet."

[304] Ibid.

[305] The role of the Internet in political movements in Iran, Egypt, Bahrain, and elsewhere over the past two years shows that regardless of the direct connection between online communication and political revolution, the Web does increase the opportunities for those outside of traditional political power to organize and attract outside media attention.

driven marketplace of ideas.[306] Placing all of these factors in the context of the democratizing debate, enthusiasts find evidence of a re-engaged, more deliberative, and more equitable political community stemming from new opportunities available online.[307]

On the other side are those who believe that the decentralization brought about by the Internet is overstated or completely naïve. Some argue that the euphoria over the effect of the Internet is misguided because the types of connections made so convenient through the interactivity of the Internet are weak and are thus very different from those needed to motivate real change, let alone real revolution.[308] Others argue that regardless of a democratizing potential, those who use the Internet for political purposes come from the same elite SES groups who have always dominated offline participation.[309] Additional skeptics foresee the regulation of information on the Internet and the battle between government and corporations to control content as antithetical to the democratizing force that the democratizing proponents have predicted.[310] They worry that the reemergence of a dominant commercial force online, now with greater capability to invade the privacy of individual citizens, will take the real power and flexibility of the Internet away.[311] This is due to the fact that all of the features of the Internet are

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[306] Access to the Internet is far from even. This inequality has been commonly referred to as the digital divide and has marked divisions between technology rich nations and poor ones, between those with the resources and those without within each nation, and also those with the know-how to use it to improve their economic, political, or social positions. The digital divide has changed dramatically and is no longer merely an issue of a division between the haves and the have-nots. Today in developed nations the divide is largely based on the quality and type of access, between those who have the newest and fastest connections at home and those that may have access but are using slower computers or Internet connections or have limited access at school, or through public services. This topic requires a more focused study as it is one of the largest civil rights issues of the twenty-first century.

[307] DiMaggio et al., "Social Implications of the Internet," 319.

[308] Malcolm Gladwell, "Small Change: Why the Revolution Will Not Be Tweeted.," *The New Yorker*, October 4 2010.

[309] Schlozman, Verba, and Brady, "Weapon of the Strong? Participatory Inequality and the Internet."; Hindman, *The Myth of Digital Democracy*.

[310] For a detailed account of government regulation of the Internet around the world and why the Internet is not nearly as open and free as most users perceive it to be see Goldsmith and Wu, *Who Controls the Internet? : Illusions of a Borderless World*.

[311] DiMaggio et al., "Social Implications of the Internet."

shaped by flexible computer code and subject to alterations, often in ways that may not be obvious to the majority of users.[312] This technology design will be at the heart of various power struggles and many argue that it is only natural for powerful corporations and governments to shape the code of the Internet to maintain their profitability and authority.[313]

As mentioned in chapter 2, a group including former Vice President Al Gore proposed a national research and education network that would focus primarily on making networked computing a tool for education, scientific progress, and community empowerment in the early 1990s. Instead, the federal government chose to privatize the Internet, creating the commercially driven net that we have today.[314] This privatization does not mean that the government has opted against regulating information online. Corporate and government regulation exists in many forms today and no doubt will become a greater issue as the development of the Internet continues.

However, as censoring tools are placed under the control of private corporations, censorship can take place away from public scrutiny.[315] Just as radio, television, and print media have employed gatekeepers to screen the information that the public sees, many media corporations are attempting to do the same thing with the Internet.[316] In the United States today, the largest telephone and cable companies, including AT&T, Verizon, Comcast and Time Warner, are currently trying to become Internet gatekeepers, deciding which Web sites go fast, which go slow, and which won't load at all. These corporations would like to discriminate in favor of their own search engines, Internet phone services, and streaming video, while potentially slowing down or blocking their competitors in order to dramatically increase profits.[317] This has

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[312] Shapiro, "The Internet," 14.
[313] Ibid.: 15.
[314] Ibid.: 17.
[315] Hargittai, "Radio's Lessons for the Internet," 56-57.
[316] Pariser, *The Filter Bubble: What the Internet Is Hiding from You*; Hargittai, "Radio's Lessons for the Internet."
[317] Free Press, "Save the Internet: Frequently Asked Questions," http://www.savetheinternet.com/frequently-asked-questions.

led many individuals and organizations, including Free Press's broad Save the Internet coalition, to lobby against such efforts. This coalition supports permanent network neutrality (commonly called net neutrality),[318] which prevents Internet providers from speeding up or slowing down Web content based on its source, ownership, or destination, and forms the foundation of the democratizing potential of the Internet.[319]

The net neutrality debate recently reached its most fevered pitch as the Federal Communications Commission (FCC) ruled on December 21, 2010 that it would essentially create two classes of access, one for wired Internet access and another for the increasingly pervasive wireless Internet. The ruling stated that fixed-line Internet providers could not block access to sites, though speed of access was not clearly addressed. Wireless service providers were given much more latitude regarding limiting services and applications online.[320] This ruling represented a compromise on net neutrality, which satisfied neither the hard-line net neutrality advocates nor the anti-regulation opponents. However, it did mark the clearest indication as to who will have increasing control over Internet content, political or otherwise. Wireless Internet access is increasingly becoming the norm and this trend will surely continue with the growth of Web enabled smartphones, tablets, and laptop computers. This wireless access, though using the same tools and websites, is under much greater control by Internet Service Providers (ISPs) and therefore content is likely to become increasingly regulated by private companies. The recent merger of Comcast and NBC Universal is further evidence of this trend, a threat to those who want the government to legally protect net neutrality. Even if the FCC modifies its ruling in the future to guarantee net neutrality and lock in the democratic features of the Internet, the ultimate political impact of this communication medium must be judged on how it is used.

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[318] Ibid.
[319] Ibid.
[320] Brian Stelter, "F.C.C. Is Set to Regulate Net Access," *The New York Times*, December 20, 2010 2010.

The Decentralization of Online Political Communication

As quoted in chapter two, German broadcaster and poet Hans Magnus Enzensberger wrote of the radio in 1970:[321]

> For the first time in history, the media are making possible mass participation in a social and socialized productive process, the practical means of which are in the hands of the masses themselves. Such a use of them would bring the communications media, which up to now have not deserved the name, into their own. In its present form, equipment like television or film does not serve communication but prevents it. It allows no reciprocal action between transmitter and receiver; technically speaking it reduces feedback to the lowest point compatible with the system.[322]

In describing the radio, Enzensberger critiqued unidirectional communication and praised the democratizing power of this media using utopian words similar to those used by current supporters of the potential for the Internet today.[323] Some have described this so-called democratizing potential as the power to mobilize.[324] More advanced communication technology has changed the very nature of what political mobilization might look like. No longer is political mobilization limited to traditional protests in the streets or voter registration drives. Today, unique and innovative uses of the Internet and other new media have created new and powerful forms of political mobilization ranging from political blogs and localized e-mail campaigns, to broad-based political action committees, powerful Web-based fundraising machines, and grassroots led revolutionary movements. This style of online organizing, known as netroots, has exploded in influence and power over the past decade.

[321] Spinelli, "Radio Lessons for the Internet," 1.
[322] Enzensberger, "Constituents of a Theory of the Media," 15.
[323] Spinelli, "Radio Lessons for the Internet."
[324] Ibid.: 30.

The Internet's democratization of political communication actually goes well beyond mobilization. Mobilizing political action is only one of the goals of political communication, along with recruiting supporters and resources and disseminating information. Each of these goals has been decentralized by the interactivity, speed, and low costs of the Internet.[325] The result is a decentralized political communication network where anyone with access to a Web-connected device can not only consume but also create political messages designed to target one or more of these political communication goals.

Although the speed and low cost of Internet communication help this process occur, the level of interactivity is the Internet's most profound decentralizing feature. The interactivity of online communication simply could not be achieved by any previous communications medium. As a result, the Internet provides an opportunity to break from the evolutionary line of top down, unidirectional communication that was a constant in broad-based political communication up until now. In 2002, Sally McMillan, professor at the University of Tennessee, described a four-part model of cyber interactivity consisting of monologue, a one-way transmission of information from a website; feedback, which allows limited responses from website users; responsive dialogue, which allows two-way communication where the sender retains the majority of control; and mutual discourse, which allows for both parties to send and receive messages and gives participants greater control.[326]

Because the role of the Internet within American politics has changed dramatically since 2002, this four-way model must be expanded to also include three-way communication aimed at

[325] For more on the effect of cost on the dissemination and political viability of the Internet and other ICTs see chapter 3.

[326] Chat rooms and bulletin boards are examples of mutual discourse.

influencing other parties or providing a mechanism for public deliberation.[327] This important aspect of interactivity can be measured along two variables: the level of interactivity, and the direction of communication.[328] Yet the fact that the Internet can provide high levels of interactivity does not mean that more decentralized communication is actually taking place online. In order to gain a greater sense of whether this is happening or not we must look at how active Internet users are utilizing the Internet for various political communication activities.

Unfortunately, the evaluation of how politically active Web users are using the Internet is a complicated task. Several research companies, most notably the Pew Research's Internet and Life Project, offer dozens of studies detailing various aspects of political and social uses of the Internet. However, I have yet to find a thorough survey, which evaluates the types of online political activities conducted by users, coupled with the sources of information they receive and a wide variety of demographic characteristics from which to analyze group dynamics. Therefore I created a Web survey specifically targeting these self-identified politically active Internet users (see Appendix A for survey questions).

Ultimately 238 people completed the survey, representing people from all across the nation and all major political and social demographic groups.[329] The survey was open to responses for a six-week period from Oct. 23 – Dec. 6, 2010.[330] The survey sample was not

[327] Paul Ferber, Franz Foltz, and Rudy Pugliese, "Cyberdemocracy and Online Politics: A New Model of Interactivity," *Bulletin of Science Technology & Society* 27, no. 5 (2007): 393.

[328] Higher levels of interactivity include at least two-way if not three-way communication and the modification of subsequent visits by website users were based on activities in earlier sessions. The direction of communication includes one-way monologues, two-way interaction including e-mail the author of a website, and three-way communication like a bulletin board where either the author, the responder or a third party would be able to respond to messages being posted. Ibid.: 394.

[329] The 238 respondents represented an 83 percent completion rate among all those potential respondents who started the survey.

[330] The 2010 midterm elections took place on Nov. 2, 2010, approximately two weeks into the six-week survey window.

scientifically selected and therefore was not representative of the U.S. population overall.[331] However, it is representative of an extremely active online community who participates in more political communication activities online than the average American (see Appendix B for complete explanation of methodology). The level of political activity varied greatly among the respondents, as I discuss in detail in the next section. However, the respondents on the whole were consistently very active Internet users. Among all respondents, 98 percent accessed the Internet at home and 96 percent had either wired or wireless high-speed Internet access, far higher than the national average of 76 percent reported by the Pew studies.[332] Most respondents spent a relatively large amount of time online with 50 percent spending at least 20 hours online per week and nearly 20 percent spending over 40 hours per week (see figure 5.1). Regular Internet use did not necessarily translate into a lot of time spent focusing on politics, however. Only 32 percent of respondents spent more than 5 hours per week using the Internet for something related to politics (see figure 5.2). Even with this surprisingly small amount of time spent focusing on politics online, the data suggest that there was enough time for many different types of online political communication to be conducted by those who know how to actively use the Web tools for political communication.

[331] The sample was not a representative cross-section of the national population. It overrepresented a number of demographic groups including: Whites (95%), Females (62%), Jews (29%), Liberals (56%), Democrats (65%), and Minnesotans (37%). Extrapolating from this sample to the entire American population is not recommended, however with more substantial resources a more scientific and representative sample could be selected in future iterations of this survey.

[332] Kathryn Zickuhr, "Generations 2010," (Washington D.C.: Pew Internet & American Life Project, 2010).

Figure 5.1: Respondents' Weekly Internet Use

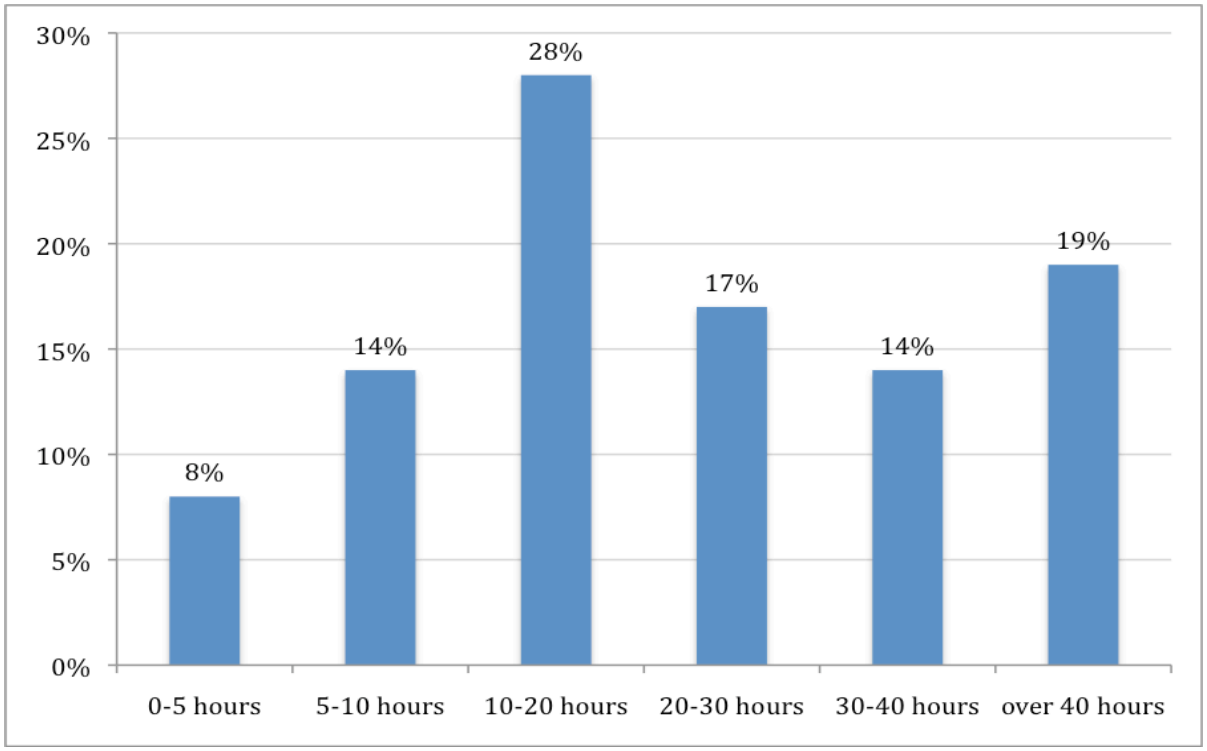
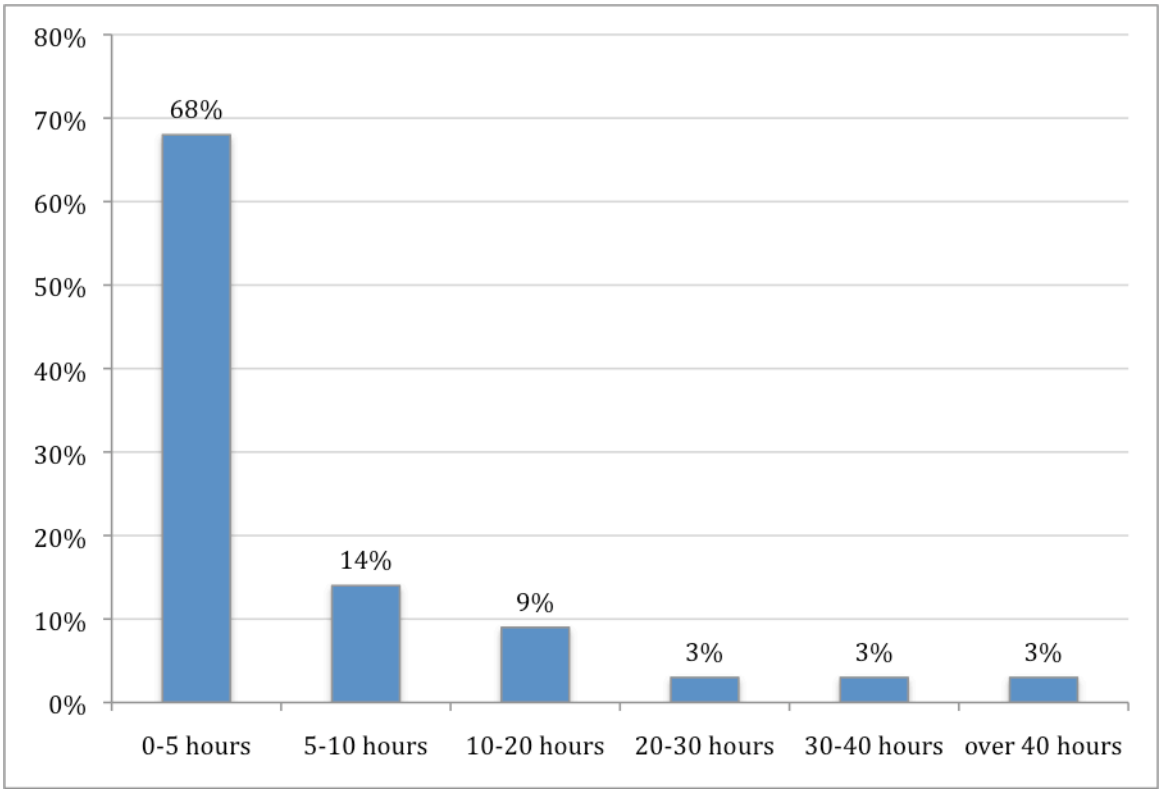


Figure 5.2: Respondents' Weekly Internet Use for Politics



A Useful Snapshot of Online Political Communication Activities

There is no doubt that political communication is increasingly taking place online. However, it is unclear exactly what types of communication activities are more likely to take place on the Internet and to what extent the interactivity of the Web creates a more decentralized American political community. In other words, where are we within the current political communication revolution (PCR) and where are we headed?[333] This study offers a very clear assessment of where we are today, with some strong suggestions as to where we are headed tomorrow.

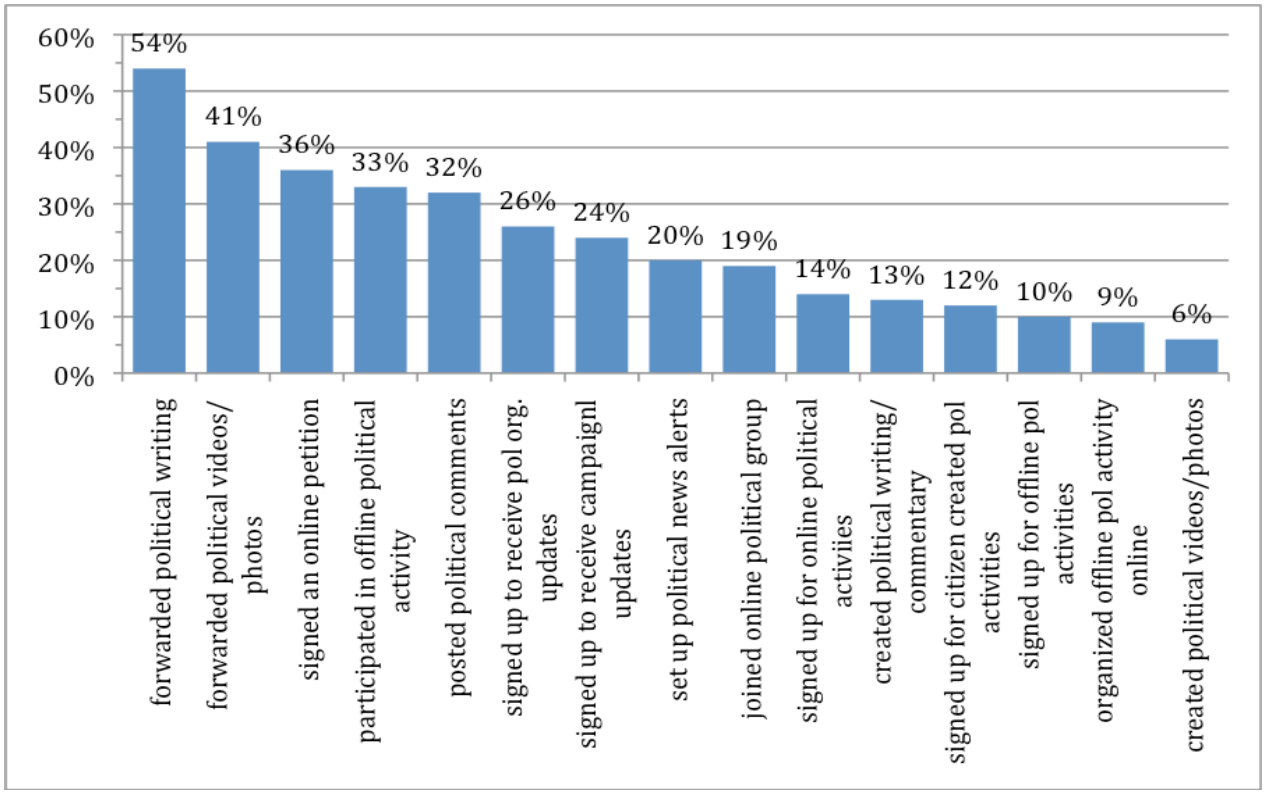
Political communication activities online are varied. Respondents were asked whether or not they had engaged in various activities during the previous month. In total there were 16 different political actions presented.[334] The percentage of respondents who had done specific activities during the past month is reported in figure 5.3 below. Taken separately these political activities tell an important story about what types of political communication are occurring online. The most common political actions were forwarding political writing and media. While it is not surprising that these are popular actions taken online, it is striking how much more frequently people forward ideas compared to those who take political action or create original online political content. Many have asserted that because of the low cost and ease of political participation online, it would open the floodgates to people participating in the political process. While this transformation may be taking place, it is clear that most are taking a relatively passive political role online through actions like forwarding ideas and gathering information. In fact, the

[333] For one of the best accounts of a predictive use of history to answer these questions see Wu, *The Master Switch: The Rise and Fall of Information Empires*.

[334] Fifteen of these activities were online political communication activities with one remaining activity was participation in an offline political activity.

only Web-based political communication activities that these respondents did more than traditional offline political activities were forwarding political ideas and signing online petitions.

Figure 5.3: Percentage of Respondents Who Have Done the Following Online Political Activities During the Previous Month



When the data are analyzed at the indivdual level, it immediately becomes apparent how varied the political activity of the respondents was. Among the 16 different political activities, nearly 25 percent of respondents reporting that they did not participate in any online political communication activities in the previous month.[335] However, during the same time 48.1 percent of respondents participated in three or more political communication activities, 12 percent

[335] This is particularly notable because the survey was conducted before and after the 2010 midterm elections, when an unusually large number of people follow American politics.

participated in nine or more, and an impressive 5.8 percent participated in 12 or more activities. This paints a somewhat mixed message about the decentralizing effect of the Internet. On the one hand the Internet may not be immediately decentralizing political participation across the nation, as the majority of political communication is originiating from a relatively small number of users. Even a small percentage of online users, though, represents a dramatic increase in the number of people actively communicating about politics. Furthermore, the amount and variety of political activities that people are participating in from their home computers, or Internet-ready devices, is impressive and is on the rise.

Instead of looking at online political communication activities as one large category, it may be more beneficial to group together similar activities. The activities listed in figure 5.3 were aggregated into four categories: actions which generate political content, forward ideas, take political action, and receive political information. Traditionally, the public could do little more than read, hear, or watch political messages, and the reception of information is still a primary function of Web users. In fact, 79 pecent of respondents used online news sources during the previous month, with 62 percent using them more than once per week. Although this passive use of the Internet is common and meaningful, the decentralization of politicial communication will only occur through the active steps used to take action by communicating in various ways. As figure 5.3 indicated, people took active steps to forward political ideas to others much more than any of the other three categories. Over 60 percent of respondents forwarded political ideas during the preceding month. That is over twice the rate of any other category of political communication activities. Although the act of forwarding information is not equvilent to generating original content it can produce opinion leaders who are influential in terms of amplifying particular messages which can be extremely important for political

communication.[336] After forwarding political ideas, the next most common actions taken online are, respectively, gathering political information, taking political action and generating political content. For every person who generates original political content there are roughtly 1.2 who take political action online, 1.8 who actively gather information and 3.8 who forward political information to others.[337]

This finding offers substantial evidence supporting the decentralization of political communication, especially when compared to earlier PCOs which utilized other ICTs. Politcal communication distributed via the newspaper, radio, and television consisted of unidirectional messages with no way to forward or generate political content for their milions of regular users. Thus the political elites that generated political messages exercised nearly complete control over the public political discourse in America. That era is clearly ending as the Internet is helping to open up the possibility of the American public driving more of the political communication messaging. Whether the majority of Americans will use these new Web-based tools for political communication remains to be seen. There is a growing body of research that shows that online

[336] For more see Shaomei Wu et al., "Who Says What to Whom on Twitter," (New York, NY: Yahoo! Research, 2011). David Leonhardt, "A Better Way to Measure Twitter Influence," *The New York Times Magazine*, March 27, 2011 2011. In addition there is a growing industry designed around using Web analytics to measure and rate the influence of each individual internet user. Sites such as Klout.com and Peerindex.com create scales to determine each user's impact and businesses and political interests will increasingly use this information to identify and target influential pinion leaders.

[337] The online political communication activities were grouped into four categories and then converted into scale variables. The mean scores, measuring how many activities the average respondent did in each of the communication categories, were then used to compare across categories. The scores ranged from 0 – 1 with a score of 1.00 indicating that the average respondent used the Internet for 100 percent of the communication activities in a particular category, such as generating political content. The mean score for generating political content was .1352, which was the lowest of all. This mean score was then divided into each of the other means to determine the ratios between groups. The means for the other categories were taking political action: .162; collecting information: .2225; and forwarding political ideas: .4799. Each of the categories had roughly the same standard deviation (.222-.259) except forwarding political ideas which was nearly twice as varied as the other groups (.433) suggesting that those who forwarded ideas, forwarded all forms of content as opposed to just text or media. It is important to note that that the collecting political information category included active steps such as signing up for e mail updates and new feeds. The more passive reading of political news or visiting political websites was done at a much higher rate as mentioned earlier.

communication, though decentralized, is still dominated by elites and opinion leaders.[338] In addition, a growing army of digital political agencies are creating sophisticated online political communication tools that are being employed by campaigns and Interest groups to maintain control on messaging and political influence.[339] Regardless, messages have clearly become more multidirectional and decentralized.

Who is Talking Online?

The survey results, along with other research, support the idea that political communication is becoming decentralized. But much more clarity is needed about who is actually using the Internet for political communication in order to help determine how new and diverse these online political voices truly are. Although my sample is not representitive of the U.S. population, it does indicate who plays active roles in the current era of online political communication and who is staying on the sidelines.

The transformational potential of the Internet owes much to its speed and ease of use. The result is incredibly efficient communication. In politics, many have proven to be very influential communicators through just a few keystrokes on Twitter or Facebook. Sarah Palin has demonstrated the power of social networking sites. Since leaving public office, Palin has become one of the most quoted and influential conservative commentators across the nation, mainly

[338] Schlozman, Verba, and Brady, "Weapon of the Strong? Participatory Inequality and the Internet." Another interesting study shows that roughly 50 percent of messages received by Twitter users, commonly referred to as tweets, are generated by just 20,000 elite users who make up less than .05 percent of the user population. This study also shows substantial support for the mass communications theory of two-step flow of information, as almost half of the information on Twitter that originates from media is transmitted to the masses by intermediaries who are forwarding these on. These intermediaries can become opinion leaders if they regularly forward information and are followed by at least a modest number of people. Wu et al., "Who Says What to Whom on Twitter."

[339] *Personal Interview with Mindy Finn*, (2011), Telephone Interview.

through her Facebook and Twitter messages.[340] During the 2010 midterm elections alone, her endorsements, though rarely more than 140 characters, helped to sway several primary battles.[341] For non-political elites, the effectiveness of political communication is often connected directly with the number of online political activities that each person conducts. Often the best indicator as to the level of political activity online is simply the amount of time spent online for political purposes. The survey data supports this with a statistically significant positive correlation between the number of hours per week that individuals use the Internet for politics, and the number of online political communication activities that one conducts ($r_{\text{hours per week, online political activities}} = .478$, $p = .000$) (see Table 5.1).

It follows that we need to look carefully at who is spending more time online for political purposes. Pundits and strategists often debate which party or political groups are "winning" the online messaging war.[342] The survey data shows a statistically signifiant, albeit weak, correlation between party identification and hours using the Internet for something related to politics. Based on the coding of the survey, the somewhat negative correlation shown in Table 5.1 suggests that those who identified as Democrats spent more time using the Internet for politics than those who identified as Republicans. The data also suggests that younger people spend more time online for politics, though this is a weak correlation. Those who make less money were also likely to spend

[340] The politically active Internet users who responded to the survey are extremely active on social networking sites as well. A whopping 85 percent use such sites when compared to the national average of 61 percent. Seventy-four percent of respondents use social networking sites at least once a week and an amazing 73 percent use Facebook just as frequently. Although these findings are likely resulting from my use of social networking to elicit responses for the survey, it nevertheless indicates the interrelationship between social networking and the evolution of online political communication. Zickuhr, "Generations 2010."

[341] Palin is one of the leaders in affecting public political discourse through social media. However, other traditional goals of political communication are being lead online by a variety of political actors. Interest groups like MoveOn.org have grown to national prominence by aggregating millions of politically active Web users across a wide liberal spectrum. The art of online campaigning reached unparalleled success with Barack Obama's online campaign during his 2008 presidential run. Chapter four details the strategies used by these successful groups and how they have been copied by others.

[342] For more on how various parties and candidates used online campaigning tools during the 2010 U.S. Senate races see chapter 4.

more time online, though this was an even weaker connection than that of age (see Table 5.1). Depite weak correlations, the finding suggest that the groups that traditionally held the majority of political sway in the nation, namely those who were older and wealthier, are no longer dominant in the online political landscape, at least in terms of numbers.[343]

Table 5.1: Correlations Between Hours of Online Political Activity Per Week and Various Demographic Factors

Spearman's rho		Number of Online Political Activities	Party Identification (strong dem=1 strong gop=7)	Gender (male=1 female=2)	Age	Salary
Hours per week using the Internet for something political	Correlation Coef. Sig. (2-tailed) N	*.478**** *.000* *238*	*-.165** *.011* *237*	*-.217**** *.001* *234*	*-.205*** *.002* *234*	*-.152** *.023* *224*

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

The data also suggests which groups are more or less politically active. As mentioned earlier, there is a statistically significant and strong positive correlation between time spent online for politics and the total number of political communication activities conducted. There is also a strong positive correlation between time spent online and more narrowly grouped activities involved in forwarding ideas, generating political ideas, taking political action, and gathering political information respectively. The younger the respondents were, the more likely they were to forward political ideas and generate them. But there was no significant correlation between age and taking political action (see Table 5.2).

[343] This finding suggests that the case made by Schlozman, Verba, and Brady that online political activity is still dominated by the wealthiest and best educated may be changing and requires further study. This was a conclusion that they predicted in the conclusion of their study that was based on data from a 2008 Pew poll. Schlozman, Verba, and Brady, "Weapon of the Strong? Participatory Inequality and the Internet."

In terms of party identification, respondents who identified as Democrats were more likely to forward ideas and take political action but not to generate political ideas (see Table 5.2). Not surprisingly, this was also the case for those identifying as liberals as opposed to conservatives on the political ideology scale.[344] This suggests that although liberals and Democrats may be slightly more active in using the Internet for relatively passive political communication of gathering information and forwarding information, they are not taking the lead in idea generation and therefore are doing less to shape the political content online. Additionally, Democrats are using the Internet to take political action more than Republicans, but the correlations is a relatively weak -.233 (see Table 5.2).

Table 5.2: Correlations Between Age, Party Identification and Various Types of Online Political Activities

Spearman's rho		Number of Online Political Activities	Activities that Forward Political Ideas	Activities that Generate Political Ideas	Activities that Take Political action on/offline
Hours per week using the Internet for something political	Correlation Coef. Sig. (2-tailed) N	*.478**** *.000* *238*	*.405**** *.000* *246*	*.388**** *.000* *244*	*.371**** *.000* *242*
Age	Correlation Coef. Sig. (2-tailed) N	*-.198*** *.003* *229*	*-.240**** *.000* *237*	*-.272**** *.000* *235*	-.067 .310 233
Party Identification (strong dem=1 strong gop=7)	Correlation Coef. Sig. (2-tailed) N	*-.270**** *.000* *232*	*-.187*** *.004* *240*	-.110 .090 238	*-.233**** *.000* *236*

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).

[344] The ideology and party identification of respondents overlapped and were strongly correlated and statistically significant ($r_{\text{Party, Ideology}} = .743$, $p = .000$). Therefore those identifying as more strongly liberal were more likely to strongly identify strongly as Democrats. The same was true with the correlation between conservatives and Republicans. Both Democrats and liberals were more likely to be politically active online but the ideological and party differences were slight.

One particularly interesting set of findings had to do with opinions about the online political process. While it seems logical that those who are more active online would feel much more positive about the role of the Internet in American politics, the survey results only weakly supported this hypothesis. Those who spent more time using the Internet for politics felt that the Internet helped them to feel more personally connected to political groups and politicians that they supported. Similarly, there was a direct correlation between time spent online for politics and reponsdents positive feelings regarding the overall effect of the Internet on the democratic process. But the correlations, though statistically significant, were weak (See Table 5.3.)

Table 5.3: Correlation Between Hours of Online Political Activity Per Week and Various Opinion Questions about Politics Online

Spearman's rho		The Internet has more useful political information than misinformation	The Internet helps me feel more personally connected to political groups/politicians that I support	The Internet helps the democratic political process	It is easy to find useful political information online
Hours per week using the Internet for something political	Correlation Coef. Sig. (2-tailed) N	.058 .370 238	*.232**** *.000* *240*	*.174*** *.007* *238*	*.278**** *.000* *236*

*** Correlation is significant at the .001 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).

Further, the more time people spent online, the more strongly they believed that it was easy to find useful political information online. However, there was no correlation between time spent online and the belief that the Internet has more useful information than misinformation (see Table 5.3). The more time people spend online, then, the more they feel that they can weed out the useful political information from misinformation. Still, heavy Internet users are no more confident that the Internet provides more consistently useful political information overall. This would also suggest that that those who spend more time online develop a form of political Web

literacy that helps them interpret and use information from the Web for political purposes, an interesting window into political communication online that begs for further exploration.[345] Finally, there was no correlation between the amount of time people spend online for politics and how positively they felt about the effect of the Intenet on the quality of public debate or on the overall effect of the Internet on politics. This was a surprising finding and should factor into any debate about the tranformative effect of the Internet on people's opinion of political discourse.

Conclusion

We are living in the midst of a Political communication revolution (PCR) brought about by the Internet and new media. However it is not yet clear where exactly we are in this PCR cycle and what the ultimate result of the revolution will be. Is the Internet opening up the political process to anyone with access to a Web-enabled device? If so, then this truly will become the democratizing force that many have predicted. The potential is there as the Internet is the fastest, easiest, most maleable, and most interactive communication medium ever divised. It has quickly diffused throughout society and is now a required resource for anyone who wants to keep pace with the quickly changing world in which we live. Yet when it comes to politics, many doubt that the revolutionary prospects of the Internet era will come to fruition. In order for a revolutionary decentralization of political communication to take place, the broad public need to do more than have access to political information and the the ability to pull up a seat at the table. They need to actually take the opportunity and act. Otherwise the Web will simply become the latest in a long line of powerful political communication tools which is monopolized by the same types of political elites who dominated past ICTs.

[345] For more on political Internet literacy and how faculty can help improve their students skills and understanding in this area see Ben Epstein, "Why We Must Weave with the Web: The Growing Need for Internet-Based Political Education," in *2011 APSA Teaching and Learning Conference* (Albuquerque, NM2011).

I created an online survey of active Internet users in order to determine what types of politcal communication activities the American public is actually conducting. Respondents identified themselves as politically active, though the political activity of respondents varied greatly. Out of 16 different online political communication activities, only forwarding political ideas to others was done by more than half of the respondents during the preceding month and most activities were done by less than 20 percent of respondents. There were a minority of respondents who were extremely active online, as nearly six percent had conducted 12 or more of the activities during the previous month.

Although the interactivity of the Internet allows for many more political communication activities online, it does not mean that all acts are equal. They vary in ease, time involved, and impact on the political discourse. Historically, political elites created messages and sent them to the public. Today the public has the opportunity to speak back, and more often than not, speak to each other. This ability to respond and even circumvent the traditional sources of political ideas is what has fueled the speculation that the Internet will be a revolutionary decentralizing force. For this to occur Internet users must not only receive information online but generate new and original political content that affects the agenda setting and policy making process. While nearly 80 percent of respondents gather news from online sources at least once a month and 62 percent do so more than once a week, a much lower percentage are generating political content. The simplest way to actively communicate online is by forwarding political messages and this is by far the most common active political communication activity conducted. After forwarding political ideas, the next most common actions taken online are, in descending order, gathering political information, taking political action and generating political content. Although most are not actively communicating about politics on the Internet, the volume of online political ideas

and interaction emenating from the public is far higher than during any previous Political communication order (PCO), showing that the current era has witnessed a clear decentralization of political communication.

This leads to the inevitable question of who is communicating online in this increasingly decentralized, Internet-driven comunication era. It will not surprise many that younger respondents were more likely to spend greater time online for political purposes and were more likely to forward and generate new online content. However, there is a weaker correlation than between age and online political activity than I predicted.[346] More surprising is the realization that there is a weak negative correlation between salary and hours spent online for politics, suggesting that those groups that have historically been most political, namely, the older and wealthier Americans, are no longer in nearly complete control of political messages.

As the partisan battle to control political discourse shifts steadily online, the debate about who is more active online is constantly argued. The survey respondents who identified as Democrats were more active in forwarding political messages and taking political action, but no more likely to generate original political content. This provides mixed signals about which party's supporters are more active online.

Ultimately the clearest indicator about who is most active politically online comes down to who spends the most time online for political purposes. The more time respondents spent online for something related to politics, the more active they were in terms of communication, as opposed to simply gathering and consuming political news. Furthermore, as time spent online increases, Internet users feel more connected personally to the political groups and candidates

[346] This might be explained by the fact that although younger generations are more universally using the Internet, the older generations are catching up quickly. Furthermore specific internet activities including visitng government websites are actually done more by those aged 34 – 64 as opposed to those under 34. Zickuhr, "Generations 2010," 10.

they support and report it easier to find useful political information. This suggests that as people spend more time online, they find it easier to develop a method of culling useful information online, a type of political Internet literacy. But also they are apt to get caught in a virtual echo chamber, receiving information mainly from political sources with which they already agree.

The results of the survey provide some important details about online political communication today but, at the same time, raise countless other questions and the need for further research. What types of political communication activities have the greatest effect on political discourse and what types of tools are these Internet users utilizing? If the American public is using the Internet to interact with one another and the political elites and decision makers does it mean that people are listening? In other words, does this decentralization of political communication actually change political decision making and agenda setting? One thing is certain: the interactivity of the Intenet has clearly infused itself into political communication across America, creating a decentralized and evolving network of active participants. The Internet now allows Americans who have an interest in politics to speak in greater numbers than ever before. The question remains as to how loud their voices are.

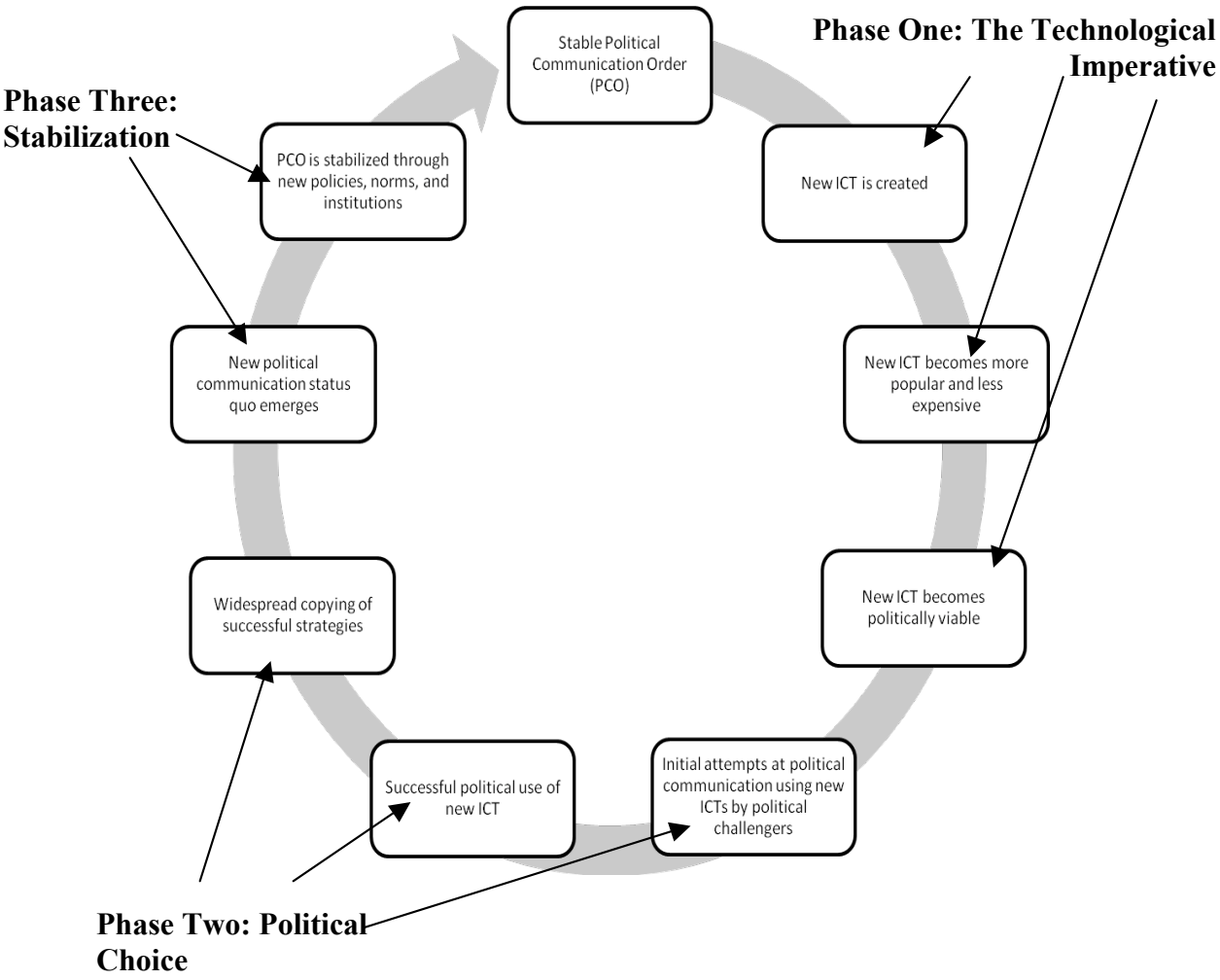
Chapter 6 – Conclusions

The Political Communication Revolution Cycle

Political actors today have nearly identical political communication goals as those throughout American history, yet the political communication activities they use have changed in substantial and consequential ways. These changes did not take place in a slow, gradual process. Instead political communication has lurched through periods of dramatic and durable change, termed political communication revolutions (PCR), and periods of relative stability, identified as political communication orders (PCO). This project primarily explores the PCR process by analyzing the role that new ICTs play in this process and, most importantly, how political actors make decisions about using new communication tools.

Political communication revolutions have occurred repeatedly through American political history creating a pattern of disruptive change that I identify as the PCR cycle, the central focus of this dissertation. Through historical and contemporary research, I have developed and tested my PCR cycle model to demonstrate that it can serve as a valuable framework upon which to evaluate and compare major political communication changes over time. Furthermore it can be used to map more specific changes in political communication within its broader historical context. These tools are particularly useful in evaluating the dramatic changes taking place during the current PCR propelled by the political communication on the Internet, an emphasis of this study. The PCR cycle has three phases: 1) the technological imperative, in which an ICT emerges and gains political viability; 2) the political choice, during which political actors choose if, when, and how to use new communication tools made possible by these ICT innovations; and 3) stabilization, during which the PCO takes shape through the building of norms, institutions, and regulations (see Figure 6.1).

Figure 6.1: The Political Communication Revolution Cycle



The technological imperative stage of the PCR cycle begins with the innovation of ICTs and their diffusion throughout society. Although this is a necessary step, it is insufficient to precipitate a PCR. Rather, the technology must be used in explicitly political ways. PCRs thus also require the political choice phase, during which the personal and strategic political choices made by political actors link ICT innovation to political communication activities. Overall, the PCR model is built around careful evaluation of five claims that I identified in the introduction. After I summarize my findings, which focus on the first two phases of the PCR cycle, I analyze the stabilization phase in detail for the first time. This chapter will conclude with a discussion

about potential areas of future research related to this study and ultimately the value added by this dissertation.

Summary of Findings: from Technological Diffusion to Political Choice

Embedded within the PCR cycle model are five claims about how technological and political forces disrupt political communications activity and how these disruptions may lead to new PCOs. The cost claim focuses on the characteristics of new ICTs that may lead them to become politically viable during the technological imperative phase of the PCR. The resource, challenger, and competitiveness claims are all integrated into the political choice phase. The interactivity claim focuses on the convergence of technology and political choice when interactivity is greatly enhanced, as is the case with the Internet. This dissertation sought primarily to test these claims in order to demonstrate the utility of the PCR model. The findings are summarized below.

In chapter three I focused on the characteristics of ICTs that make them more or less politically viable. Political viability comes about primarily through widespread diffusion. Though several factors could affect the diffusion rates of new communication technologies, I expect the cost of new technology to play a particularly large role, leading to my **cost** claim: *as the cost of new ICTs declines, the potential for its incorporation in political communication activity increases.* I tested this claim by selecting the six most successful ICT innovations during American history -- newspapers, telegraph, telephone, radio, television, and the Internet -- and comparing their costs and diffusion rates. I find that costs do clearly affect the diffusion rate of ICTs, but that it is important to distinguish between costs associated with buying ICT hardware and those needed to access software, or content. Although hardware costs can be high for ICTs,

they can still diffuse quickly if they do not have follow up costs to access content. This was the case for the radio and television, at least before the era of cable and satellite television, and it is not a coincidence that these two ICTs diffused faster than any other. The only other rate of diffusion close to the radio and television is that of the Internet, which does require fees to access content. Internet access fees have largely been flat-rate, unlimited monthly charges, which avoid high per usage charges that served as barriers to the diffusion of the telegraph and telephone.[347] Furthermore, the personal computer, required for Internet access, has multiple uses and therefore its cost is not perceived to be exclusively connected to accessing the Internet. Also, more and more Internet users are accessing the web through less expensive pieces of hardware, like smartphones, netbooks, and tablets.

The political choice phase is the most important phase of the PCR cycle because it is during this second phase that a communication revolution becomes explicitly political. While widespread diffusion helps these ICTs gain political viability, it does not specifically change political communication unless political actors choose to use the new technologies. During this phase political actors make choices about if and when to adopt politically viable ICTs for their political communication activities. This innovation adoption decision is a key element of diffusion research.[348] Much of the diffusion literature focuses on measuring and predicting potential adopters' innovativeness, or the likelihood that they adopt an innovation earlier than others.

Within the context of political communication, political actors must weigh the potential benefit of innovating their political communication activities against the expense and overall

[347] I found that political viability also requires that ICTs must diffuse into households in order to potentially impact the relationship between political elites and the American public. This condition further limited the political viability of the telephone, which entered American households very slowly and the telegraph, which stayed out of households altogether.

[348] Rogers, *Diffusion of Innovations*.

political risk involved in changing communication tactics.[349] Political actors are likely to weigh these choices very differently depending on their characteristics. I argue that a political actor's innovativeness is affected by three main factors. First, my **resource** claim: *those political actors with greater financial and technological resources are more likely to innovate earlier.* Early adoption of new ICTs is usually very costly and technical as described in chapter three, and those with more resources have greater capacity to absorb the costs**.** Second, I posit a **challenger** claim: *political challengers or outsiders are more likely to innovate earlier than incumbents.* Those out of power have less to lose and potentially much more to gain by innovating their political communication activities. Finally, the political context in which political choice takes place affects the decisions of the actors involved. Specifically, the more competitive a political contest is, the greater the incentive for political risk taking, which leads to my **competitiveness** claim: *all political actors are more likely to innovate as political contests become more competitive.*

I tested these claims in chapter four by analyzing political communication innovations of campaigns across time. Overall, both historical and original research supports my challenger, resource, and competitiveness claims. Non-incumbent challengers were clearly more innovative than incumbents. Additionally, campaigns with the greatest resources and those competing in the closest races were more likely to innovate earlier than others. Yet it is necessary to mention that early innovation rarely leads to political success. Only after several election cycles is it possible for a campaign to strategically incorporate political communication innovations in a way that can bring great political success.

[349] Druckman, Kifer, and Parkin, "The Technological Development of Candidate Web Sites: How and Why Candidates Use Web Innovations."

The best example of a campaign that used innovative communications to achieve political success was the Obama Internet campaign in 2008. Obama was a clear political challenger with record-breaking resources who systematically integrated his online presence into his entire campaign. The epicenter of this online presence was my.barackobama.com (MyBO), the most sophisticated and strategically integrated set of mobilization and communication tools ever unveiled by a campaign. My PCR cycle model would predict others would follow the path pioneered by the Obama campaign. I tested the extent to which others imitated the Obama model by evaluating Senate campaign websites during the 2010 election. Many of the serious candidates running for the Senate did adopt a good number of the tools used by the Obama campaign, but did not adopt them as universally as expected. More specifically, I find that some types of online campaign tools, like informational pages, have already become the status quo while others, including personalized social networking sites like MyBO, are still early in the diffusion process with only a handful of campaigns using them in 2010.

After exploring the PCR cycle in detail in chapters three and four, chapter five was dedicated to analyzing the current PCR to determine how the Internet is affecting political communication today. The Internet, latest in a line of ICTs, has provoked a broad debate about its democratizing potential. There is no doubt that the Internet is the most interactive ICT and the fact that it offers the ability to break from the tradition of unidirectional political messaging has fueled the speculation that it will be a revolutionary decentralizing force. Yet when it comes to political communication, many doubt that the revolutionary prospects of the Internet era will be actualized.[350] In the context of this debate I tested my **interactivity** claim: *If a new ICT increases interactivity, the emerging PCO will become increasingly decentralized rather than top-down or*

[350] For two strong recent studies showing that the democratizing effect of the Internet may be small see Hindman, *The Myth of Digital Democracy*; Schlozman, Verba, and Brady, "Weapon of the Strong? Participatory Inequality and the Internet."

hierarchical. I gathered data through an original online survey of active Internet users in order to determine what types of online politcal communication activities the politically active Internet users were conducting and whether this was having a decentralizing affect on political communication at this stage in the PCR cycle (see appendix A for survey questions and appendix B for methodology).

I find that many Internet users conduct a variety of political communication activities online even though they do not spend much time online for political purposes. The most common online political communication activities, much like previous PCOs, include passively reading or watching political news, which does little decentralize political discourse. However, a number of active political communication activites, central to an increasingly decentralized political discourse, are common as well. Among these active political communication activities, by far the most common is forwarding political messages to others. After forwarding political ideas, the next most common actions taken online are actively gathering political information,[351] taking political action, and generating political content respectively. Although most users are not actively communicating about politics on the Internet, the volume of online political ideas and interaction emenating from the public is far higher than during any previous PCO, confirming that the current era has witnessed a clear decentralization of political communication. Nevertheless, decentralized political communication online will not bring about a revolutionary democratizing effect unless a much greater proportion of the American public takes active steps to shape political discourse beyond watching news and forwarding political ideas. Otherwise the

[351] Active information gathering includes actions such as signing up for news or campaign updates via e-mail or text message. Although ultimately this results in mainly unidirectional communication it requires active attention and choices made on the part of the Web user. This is an important distinction between active information gathering and passive news reading/watching, which was the only option for the public using newspapers, radio, and the television during earlier PCOs. Active political communication lies at the center of my interactivity claim.

Web will simply become the latest in a long line of powerful political communication tools dominated by political elites.

In order to get a clear picture of the current state of the PCR cycle I used survey data to evaluate what types of Internet users were participating more in this increaingly active online politial community. I find that the best indicator about who is most active onlne is simply who spends the most time online for political purposes. Specifically, the more time respondents spent online for something related to politics, the more active they were in terms of active communication, as opposed to simply gathering and consuming political news.[352] Who spends more time online for political purposes? I find that the younger the Internet user and the less money s/he makes the more time they spend online for politcs, though these are weak relationships. In terms of partisanship, survey respondents who identified as Democrats were more active in forwarding political messages and taking political action, but no more likely to generate original political content. This provides mixed signals about which party's supporters are winning the battle for online messging supremacy.

The Third Phase of PCR Cycle: Stabilization

The final phase of the PCR cycle, the stabilization phase, shapes what the emerging PCO will look like through the establishment of new norms, institutions, and regulatory policies (see Figure 6.1). It is necessary to note that the elements that stabilize a PCR result from activity both inside and outside of the political realm. Political communication norms grow out of the choices

[352] It was not surprising to find that as time spent online increases, Internet users feel more connected personally to the political groups and candidates they support and report it easier to find useful political information. But more time online did not correlate with the belief that the Internet had more useful political information than misinformation. Together, these findings suggests that as people spend more time online, they find it easier to develop a method of culling useful information online, a type of political Internet literacy, an interesting subject for future study.

of political actors while the institutions and regulations that create the infrastructure and laws to maintain the new order emerge from a combination of government and private sources. Political communication norms are established through the widespread imitation of successful political communication innovations during the political choice phase and the standardization of these once innovative activities creates a new status quo. The institutions and regulations that shape communication in general and political communication in particular, are formed by a combination of private and public forces, often varying greatly depending on the communication medium under scrutiny.

Newspaper content, along with all printed material, has remained the least regulated media form, protected primarily by the First Amendment to the Constitution. The seeds for the freedom of the press were planted during the colonial printing era when John Peter Zenger, a German immigrant and printer of the *New York Weekly Journal* was sued and jailed for seditious libel after several wealthy lawyers wrote anonymous articles criticizing the Royal Governor of New York. Even through Zenger kept the authors' identities a secret, the jury refused to convict him, establishing the precedent that free press should be protected as long as it did not consciously misrepresent the truth to libel an individual or group.[353] Although the freedom of the press prevents the censorship of printed content, individuals can be held responsible for actions resulting from their expression. This concept, known as prior restraint, is the bedrock of the freedom of the press and has been defended throughout nearly all of American legal history.[354] Efforts to increase the government's ability to censor newspaper publication, such as the Sedition Acts of 1798 and 1918 were later repealed, had their constitutionality questioned by court

[353] See Pasley, *"The Tyranny of Printers": Newspaper Politics in the Early American Republic*.

[354] The first time that prior restraint was granted was during the 1971 case *New York Times v. United States*. The Supreme Court found that *The New York Times* and *Washington Post* must cease publishing the leaked Pentagon Papers because of the possible effect on the Vietnam War effort.

decisions, and are considered black marks on our generally consistent history of freedom of the press.

Unlike print media, which receive nearly complete protection under the First Amendment, broadcast communications including radio and television face significant regulation. The justification for government regulation of the airwaves is that access is not available to all. The operation of a newspaper printing press does not exclude others from printing a different paper. However, useful radio and television frequencies were limited resources, at least until cable and digital broadcasts, and thus the competition for signals required regulation.[355]

The best example of the development of regulatory institutions and policies to stabilize a PCR took place during the emergence of the radio. As mentioned in chapter two, growth in the industry contributed to a growing number of legal and licensing issues and the need for government regulation. During the early years of radio broadcasting from 1921 to 1927, Commerce Secretary Herbert Hoover regulated the infant industry.[356] Hoover argued that the role of government was to assist self-regulation of the radio that supported harmonious competition, and that radio use must be promoted in the public interest.[357] The first radio campaigns developed during this period of self-regulation and the number of political broadcasts grew so quickly that by the election of 1924 the major broadcasting companies had developed a

[355] Although frequencies are infinite in number, the distance between frequencies must be far enough apart so as to avoid interference. This has obviously changed with the addition of cable and satellite television, and digital media. However, the regulations were established when broadcast frequencies were very much a scare resource. Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 13-14.

[356] The Radio Act of 1912 gave the regulatory power over radio to the secretary of commerce, but the power was significantly limited by the wording of the law. The secretary had no power to deny broadcast licenses and questionable authority to allocate frequencies and broadcast hours. Hoover's conception of radio regulation was based on associationalism, a concept that envisaged industrial, governmental, and community organizations as partnerships between private and public interest groups. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 45-46.

[357] Ibid., 45.

common policy on political broadcasting, with no clear oversight by the Commerce Department.[358] Hoover maintained his control until legal challenges during the mid 1920s dismantled his authority over radio regulation.[359] This lack of authority, along with mounting pressure from industry leaders calling for a stronger regulatory body, led Congress to pass the Radio Act of 1927, which created the Federal Radio Commission (FRC).

The FRC was an independent commission that very quickly replaced Hoover's concept of self-regulation with a more forceful distinction between how large and small stations would be regulated in the new era. The Commission sided with the large, networked broadcasters from the beginning, and soon announced, "There is not room in the broadcast band for every school of thought, religious, political, social, and economic, each to have its separate broadcasting station, its mouthpiece in the ether."[360] Perhaps nothing could more clearly mark the distinction between broadcast regulation and the freedom of the press protected by the First Amendment. The ideology of the FRC was closely aligned with those of RCA, NBC, and the rest of the broadcast industry leaders that had shaped their business practice around gaining the largest audiences possible to increase advertisement revenue. As a result, the FRC quickly took action to remove the majority of small stations from the radio dial.[361] These changes had the effect of fortifying the networks, which produced quality programming, nationwide audiences, and consequently

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[358] The major companies involved were AT&T, RCA, Westinghouse, and General Electric Company (GEC). They also limited their political coverage to an hour a day suggesting the large demand for political coverage by the political campaigns. Ibid., 117.

[359] In December 1925, Eugene McDonald, president of both the Zenith Corporation and the National Association of Broadcasters brazenly challenged Hoover's authority by using frequencies reserved for Canadians. When Hoover ordered him to stop, McDonald sued, challenging the secretary's right to control frequencies and a federal district court found that Hoover lacked the authority all along. Wu, *The Master Switch: The Rise and Fall of Information Empires*, 82; Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 48.

[360] From the FRC Third Annual Report as quoted in Steven J. Simmons, *The Fairness Doctrine and the Media* (Berkeley: University of California Press, 1978), 32.

[361] The FRC's General Order No. 32 demanded that 164 smaller stations show cause why they should not be eliminated. The regulatory body went further with General Order No. 40, which reset the radio dial and made room for forty nationwide "clear channels" by removing or reducing hundreds of smaller stations. Ibid., 83-84.

quickly made the radio viable for political use on a national scale. The result was a powerful, albeit short-lived, regulatory body that was wedded to the industrial companies it was entrusted to regulate.[362] This offered a clear example of communication winners seeking to influence policy during the stabilization phase in order to institutionalize their leader status, a pattern that repeats itself.

Following the recommendation of President Roosevelt, Congress drafted and passed the Communications Act of 1934 with relatively little resistance from industry leaders. The new act, as it related to radio broadcasting, made only minor changes to the Radio Act of 1927, maintaining and even strengthening the leading broadcasters' hold on the radio market. Importantly, the 1934 act created the Federal Communications Commission (FCC), an independent regulatory commission, to replace the FRC.[363] The FCC has maintained control over communications regulatory policy since 1934 with only a few modifications since.

Communication policies have consistently supported broadcasters, yet they have also tried to balance commercial interests with the ideal that radio is a utility that was meant for public good, especially in terms of political communication deemed in the pubic interest. The restriction of congested airwaves through the licensing power of the FCC led to the reduction in the number of broadcasters, creating many local broadcasting monopolies. These monopolies threatened the availability of balanced discussion about public affairs and politics, one of the core democratic capabilities of the radio championed by early radio advocates.[364] The Communications Act of 1934 tried to solve this conflict by treating broadcasters as trustees for the benefit of the public. Broadcasters were granted free and exclusive licenses as long as they acted as agents for the "public interest, convenience, and necessity," though the act said little

[362] Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, 59-77.
[363] Ibid., 86-88.
[364] Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 18.

about what this meant or how it could be enforced. The act also established the equal time rule, which required a broadcaster that sold time to a legally qualified political candidate to provide the same opportunity to any other qualified candidates.[365] The FCC later sought to encourage open discussion of public issues by implementing the fairness doctrine in 1949, which required broadcasters to provide airtime for controversial issues of public importance and offer opportunities to present contrasting viewpoints concerning these issues.

In the 1980s and 1990s substantial steps were taken to deregulate the communications industry, including the repeal of the fairness doctrine in 1987 by the FCC, and the Telecommunications Act of 1996, which was passed by Congress and signed into law by President Clinton.[366] One important result of the 1996 act was the deregulation of station licensing rules, which aimed to reduce prices and increase competition, but which resulted in furthering the consolidation of radio and television stations and programming under just a few huge broadcasting networks.[367]

The stabilization of the PCR cycle is inevitable once substantial and permanent changes in political communication activity become the status quo. Yet the form of the stabilized order varies considerably based on choices of many different relevant actors and the type of communication medium. The choices of political actors determine the types of innovative political communication activities that are copied and become the norms of the new order. The choices of regulatory institutions, chiefly the FCC, help determine the level of control that the

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[365] Jamieson, *Packaging the Presidency*, 28; Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 18.

[366] The fairness doctrine was repealed, in part, due to technological advances, which made it possible to offer many stations in a particular location. This weakened the original impetus for the rule: creating fair and open discussions using broadcast frequencies, which were a very scarce resource. Ansolabehere, Behr, and Iyengar, *The Media Game: American Politics in the Television Age*, 19-21.

[367] The Telecommunications Act of 1996 was the first major overhaul to the Communications Act of 1934. The 1996 law included the Internet in communications regulation for the first time and clarified the roll of the FCC regulatory powers regarding the increasingly complicated communications industry including cable and satellite television. Wu, *The Master Switch: The Rise and Fall of Information Empires*, 243-45.

government wields over the political content in broadcast media and online. Finally, the choices of the media companies themselves are enormously important in the largely deregulated climate dominating communications today. The legacy of the current PCR will be shaped through ongoing choices by government regulators and Internet providers about the norms, institutions, and policies that will structure online communication.

The main regulatory question that will shape the next stabilized order is net neutrality, a concept introduced in chapter five that will undoubtedly attract substantial research interest in the future. Net neutrality is the 21st Century version of common carriage, where any owner of a part of the Internet's infrastructure must offer the whole Internet to all who use its services to access the Web.[368] As Tim Wu effectively argues in *The Master Switch* (2010), net neutrality is an essential aspect of free expression online that must be maintained through regulation. While there were opportunities to maintain open networks in the past, such as the open radio system that Hoover regulated during the 1920s, choices were made that exclusively benefited the network broadcasters. These huge corporations, which both created and delivered content, were extremely concentrated during the formation of radio and television regulatory policy and yielded great influence over government decisions. Today, as net neutrality decisions are being determined, Internet content providers and Internet service providers (ISPs) are making efforts to merge, forming industries that will have the monopolizing power to selectively control the speed of Web content or to censor it outright if net neutrality is not codified. These corporations are trying to influence the FCC just as the radio and television broadcasters have since it was

[368] Common carriage is the concept that certain businesses are so important for the public good, or so powerful that they must be compelled to conduct their affairs in a nondiscriminatory way, giving everyone equal opportunity to use its services. This concept can be traced back to 15th Century England where many services that today are conducted by governments, like roads or ferries, were owned and operated by private entities. Ibid

established in 1934.[369] FCC decisions about whether or not to guarantee that net neutrality remains in effect through government regulations will have an enormous impact on the freedom of information available online.

The Most Important Takeaways from this Study

By evaluating major political communication change through the lens of the PCR cycle, this project offers important theoretical and practical benefits to others working on related research in either political science or communications/media studies. The PCR cycle model aims to bridge the current gap between existing bodies of literature that analyze political communication as well as revolutionary changes in communication and communication technology. The PCR cycle is a necessarily broad theoretical model, but it can be used to help evaluate very specific changes in political communication. The PCR cycle provides a map to a previously uncharted area of political communication change over time. I believe that the PCR cycle can also be used as a much-needed framework for other, more detailed studies on the intersection of information technology and politics. For instance, there is a growing body of research that examines the political impact of the Internet on everything from campaigning and political mobilization to social networking. The PCR cycle can help to both link these studies together into one larger cycle of revolutionary change or can be used to situate a particular study in its place within the cycle.

In the broadest sense this dissertation provides a theoretical framework and terminology to discuss major political communication changes. The interdisciplinary research used in this project should benefit those who continue to study the intersection of information technology and politics. Diffusion research, which grew mostly out of sociological and economic work,

[369] Free Press, "Save the Internet: Frequently Asked Questions."

specifically provided very import structural building blocks upon which to build my PCR framework. Thus substantial literature already exists evaluating how technological innovations are created and how they diffuse through society. This project took the important step to link diffusion and American political development research. In particular, the concepts of Political Communication Revolution (PCR) and Political Communication Order (PCO) are terms that scholars can use to talk about political communication changes over time and compare studies of cases occurring at different times. Perhaps surprisingly, the PCR cycle framework, and these terms in particular, should help to avoid overstating small changes, declaring that every new communications wrinkle is a revolution in and of itself. Instead, ongoing and important changes in political communication will be properly viewed as an incremental part of larger systemic changes that take place within the context of the PCR cycle.

Beyond the theoretical benefits of the overall study, the ability to measure the political viability of ICTs and the political choices of political actors about whether or not to innovate, provides practical applications useful for future research. As I stated in the introduction, the potential value-added of this project depends on my ability to demonstrate that substantial disruptions in political communication activity result from choices made by political actors only after new ICTs have become politically viable. In chapter three, diffusion research was used to evaluate how the characteristics, cost, and use of successful ICTs shape adoption, which should aid those studying Internet diffusion and political communication online. Perhaps more important, in chapters four and five, I demonstrated two ways to measure how political actors choose if and when to use politically viable ICTs for their political communication activities. In chapter four, historical and statistical analysis of campaign communication innovations presented strong evidence that the political choice phase of the PCR cycle is observable and measurable in

practice. In chapter five, through an original survey, I was able to evaluate the democratizing effect of the Internet on political participation and discourse at the current state of the PCR cycle.

In the end this project offers tools to evaluate the patterns of disruptive and stabilizing forces on political communication activities through American history. These tools can be used to conduct historical analysis, measure the current state of the cycle, and make informed predictions about the next steps in the story. Because we are currently experiencing the Internet-driven political communication revolution, there is a tremendous opportunity to use the findings of this study to build a greater understanding of the impact of the Internet on political communication and the effect that this interactive medium is having on the relationship between political elites and the American public.

Opportunities for Future Research

The PCR cycle is a model that presents many different potential directions for future research. First is the immediate opportunity to apply this model to ongoing changes in online political communication during the current PCR. There is a growing body of research on the Internet and politics, most of which has focused narrowly on a particular innovation or political event.[370] These detailed and very specific studies can be used together as cases to test how robust the PCR cycle model is.

[370] For examples of excellent narrowly focused studies that are very helpful in analyzing particular changes in how social networking is being used to change political communication see Leticia Bode, Kajsa E. Dalrymple, and Dhavan V. Shah, "Profile of a Political Tweeter: A Survey of Twitter Users Who Follow Political Candidates," in *Annual Meeting of the Midwest Political Science Association* (Chicago2011); Williams and Gulati, "Communicating with Constituents in 140 Characters of Less: Twitter and the Diffusion of Inovation in the United States Congress."; ———, "Social Media in the 2010 Congressional Elections."; ———, "Congressional Candidates' Use of Youtube in 2008: It's Frequency and Rationale."; ———, "Facebook Grows Up: An Empirical Assessment of Its Role in the 2008 Congressional Elections."; ———, "Social Networks in Political Campaigns: Facebook and the 2006 Midterm Elections"; Wu et al., "Who Says What to Whom on Twitter."

As the current PCR moves through the political choice phase toward stabilization, there will be a additional opportunities to apply the model. For instance, it will be interesting to see how the diffusion of online political communication activities by political elites continues to spread. Future election cycles will offer a continual opportunity to measure and evaluate the changes in online campaign communications and whether the successful Obama model is imitated widely as the PCR cycle predicts. Similar research on the political choices of other elite actors (interest groups, community organizations, governing institutions, political parties) could provide more diverse opportunities to apply PCR cycle model in new political contexts.

It will also be very interesting to use the PCR model to evaluate the extent to which the Internet facilitates greater political participation and a decentralization of political communication. The future research on the decentralization of political communication online will likely center on two main areas: first, an ongoing evaluation of the types of political communication activities Internet users are conducting and the extent to which these activities are being directed by political elites; and, second, the extent to which the decentralization of political communication actually changes political decision making and agenda setting.

Finally, there is a great need for further research about the regulation of political communication, the stabilization of PCRs, and the formation of political communication orders. As mentioned earlier, the stabilization phase of the PCR cycle is inevitable once systemic and permanent changes to political communication occur, but how it stabilizes the disruptions in political communications activities is far from certain. Looking forward, the Internet will certainly continue to grow as a source for political information and communication.[371] The regulation of the Internet, and decisions about net neutrality in particular, will be very

[371] This will be enhanced through the convergence of ICTs, as computers will likely use the Internet to integrate the television, radio, print media, and Internet specific content.

consequential in determining how open, interactive, and decentralized it remains. As the stabilization of the current PCR continues, there will be a great opportunity to use a historical comparative case study to test how the deregulation of the radio and television compares to the net neutrality policies that are now starting to emerge.[372] Finally future research on the freedom of information online will increasingly look at the ways that content providers filter information available on searches and social networking sites. This nearly invisible censoring of what we see, and do not see, online is the main concern of Eli Pariser in his book *The Filter Bubble* (2011), and has very powerful ramifications when it comes to the ability to access all political information online equally.[373]

We are in the midst of a political communication revolution, one in which dynamic and interactive online tools are becoming embedded in the way we communicate about politics. This is changing the nature of the relationship between political elites and the American public. Hopefully, when the current PCR Cycle is complete, the new political communication order will maximize the democratic and decentralizing potential of the Internet. Regardless of what the new PCO looks like, it is only a matter of time until political actors start to ponder whether or not to innovate their activities using the newest politically viable ICT and the revolutionary process begins once again.

[372] One important difference between broadcast and Internet communication is that the radio and television networks produced programs and transmitted them over their network to American homes while Internet content providers, like Google and Amazon, are separate from ISPs like Verizon and Comcast, who own the wires and cables that connect American homes to the Web. If content providers and ISPs continue to join forces their monopolizing power will more closely resemble that of the radio and television industry during the formation of broadcast regulations.

[373] Pariser, *The Filter Bubble: What the Internet Is Hiding from You*.

Appendix A: Online Political Communication Survey Questions

1. Do you have Internet access at home?

○ Yes

○ No

1A. If yes, how do you access the Internet at home?

○ Dial-up Service

○ Wired High-Speed (DSL/Cable)

○ Wireless High-Speed

○ Public Wireless

2. How many hours per week do you:

	0-5	5-10	10-20	20-30	30-40	over 40
use the Internet?	○	○	○	○	○	○
access the Internet using a computer?	○	○	○	○	○	○
access the Internet using a cell phone or smart phone (iPhone, Droid, Blackberry, etc.)?	○	○	○	○	○	○
use the Internet for something related to politics?	○	○	○	○	○	○

3. How often do you use the Internet for the following types of activities?

	daily	few times a week	weekly	monthly	less than monthly	never
send/receive e-mail	○	○	○	○	○	○
shopping	○	○	○	○	○	○
entertainment	○	○	○	○	○	○
blogging	○	○	○	○	○	○
read news	○	○	○	○	○	○
social networking (using sites like Facebook, Twitter, MySpace, Linked In, etc.)	○	○	○	○	○	○

4. How often do you use the following social networking sources?

	daily	few times a week	weekly	monthly	less than monthly	never
Twitter	○	○	○	○	○	○
Facebook	○	○	○	○	○	○
YouTube	○	○	○	○	○	○
Myspace	○	○	○	○	○	○
Flickr	○	○	○	○	○	○
Linked In	○	○	○	○	○	○

5. How often do you use the following sources for news?

	daily	few times a week	weekly	monthly	less than monthly	never
local newspaper from your city/town (print)	○	○	○	○	○	○
local newspaper from your city/town (online)	○	○	○	○	○	○
national newspaper (print)	○	○	○	○	○	○
national newspaper (online)	○	○	○	○	○	○
news magazine (print)	○	○	○	○	○	○
news magazine (online)	○	○	○	○	○	○
National Public Radio	○	○	○	○	○	○
other radio news	○	○	○	○	○	○
talk radio	○	○	○	○	○	○
local TV news produced near your city/town (ABC, NBC, CBS)	○	○	○	○	○	○
national broadcast TV news (ABC, NBC, CBS)	○	○	○	○	○	○
Fox News	○	○	○	○	○	○
MSNBC	○	○	○	○	○	○
Comedy Central	○	○	○	○	○	○
CSPAN	○	○	○	○	○	○
political blog	○	○	○	○	○	○
any online news source	○	○	○	○	○	○

6. Have you done the following online political activities during the past month?

	Yes	No
signed up to receive e-mail updates from a political campaign	○	○
signed up to receive e-mail updates from a political organization (i.e. interest group, think tank, etc.)	○	○
Signed an online petition related to a political issue	○	○
set up news alerts to get political updates sent to you	○	○
posted comments on a website or blog about a political or social issue	○	○
forwarded someone else's political commentary or writing to others	○	○
forwarded photos, videos, or audio files related to political events, news, or elections belonging to someone else	○	○
created or posted your own political commentary or writing on a blog or website	○	○
created and posted your own photos, videos, or audio files related to political events, news, or elections	○	○
created an online group related to politics	○	○
joined an existing online group related to politics	○	○
signed up online for any online activities related to a campaign or organization (i.e. phone banking from home, donating, etc.)	○	○
signed up online for any offline activities related to a campaign or organization (i.e. canvassing, volunteering, phone banking for a campaign, etc.)	○	○
signed up online for any political activities created by a citizen created political group	○	○
used online tools to organize political activity which took place offline	○	○
participated in political activity which took place offline	○	○

7. How often did you use the Internet for the following political communication activities during the past month?

	daily	few times a week	weekly	monthly	less than monthly	never
receive e-mail updates from a political campaign	○	○	○	○	○	○
receive e-mail updates from a political organization (i.e. interest group, think tank)	○	○	○	○	○	○
sign an online petition related to a political issue	○	○	○	○	○	○
receive news alerts to get political updates sent to you	○	○	○	○	○	○

post comments on a website or blog about a political or social issue	○	○	○	○	○	○
forward someone else's political commentary or writing to others	○	○	○	○	○	○
forward someone else's photos, videos, or audio files that relate to political events, news, or elections	○	○	○	○	○	○
create and posted your own political commentary or writing	○	○	○	○	○	○
create and posted your own photos, videos or audio files online that relate to political events, news, or elections	○	○	○	○	○	○
post something political on Facebook	○	○	○	○	○	○
post something political on Twitter	○	○	○	○	○	○

8. Opinion Questions About the Internet and Politics

Please indicate how strongly you agree or disagree with the following statements

	strongly agree	agree	unsure/no opinion	disagree	strongly disagree
The Internet has more useful political information than misinformation and propaganda	○	○	○	○	○
The Internet helps those with the loudest and most extreme voices more than the majority of users	○	○	○	○	○
The Internet helps me feel more personally connected to political groups/politicians that I support	○	○	○	○	○
The Internet helps the democratic political process	○	○	○	○	○
It is easy to find useful political information online	○	○	○	○	○

9. Effect of the Internet

Please indicate the effect of the Internet on the following areas

	very positive	positive	somewhat positive	no major effect	somewhat negative	negative	very negative
How positive or negative is the overall effect of the Internet on the quality of public debate about political candidates	○	○	○	○	○	○	○

and issues?

How positive or negative is the overall effect of the Internet on politics in general?	○	○	○	○	○	○	○

10. Political Donations

In the past MONTH how much have you donated to a political campaign?	$0
	$1-$50
	$51-$100
	$101-$250
	$251-$500
	$501-$1,000
	$1,001-$2,500
	over $2,500
In the past YEAR how much have you donated to a political campaign?	$0
	$1-$50
	$51-$100
	$101-$250
	$251-$500
	$501-$1,000
	$1,001-$2,500
	over $2,500
In the past MONTH how much have you donated to a political cause/organization?	$0
	$1-$50
	$51-$100
	$101-$250
	$251-$500
	$501-$1,000
	$1,001-$2,500

○ over $2,500

In the past YEAR how much have you donated to a political cause/organization?

○ $0
○ $1-$50
○ $51-$100
○ $101-$250
○ $251-$500
○ $501-$1,000
○ $1,001-$2,500
○ over $2,500

10 A. Approximately what percentage of your donations over the past year were donated online?

○ 0%
○ under 50%
○ about 50%
○ over 50%
○ 100%

11. Are you a registered voter?

○ Yes
○ No

12. In politics today, do you consider yourself a Republican, Democrat, or Independent?

○ Strong Democrat
○ Democrat
○ Lean Democrat
○ Independent
○ Lean Republican
○ Republican
○ Strong Republican

13. In general, you would describe your political views as:

○ Very Conservative
○ Conservative
○ Moderate
○ Liberal
○ Very Liberal

14. Did you vote in 2008?

○ Yes
○ No

15. Who did you vote for in 2008?

○ McCain
○ Obama
○ Did Not Vote
○ Other, please specify:
_____

16. How strongly do you support/oppose the Tea Party Movement in America today?

- ○ Strongly Support
- ○ Support
- ○ No Opinion
- ○ Oppose
- ○ Strongly Oppose

17. Gender

- ○ Male
- ○ Female

18. Age

- ○ Under 18
- ○ 18-24
- ○ 25-34
- ○ 35-44
- ○ 45-54
- ○ 55-64
- ○ 65 or Above

19. Marital Status

- ○ Single, Never Married
- ○ Married
- ○ Living with Partner
- ○ Separated
- ○ Divorced
- ○ Widowed

20. Where do you live? (States/Territories/D.C./Outside the U.S.)

21. Race / Ethnicity (check all that apply)

- □ American Indian / Native American
- □ Asian American
- □ Black / African American
- □ Hispanic / Latino
- □ Pacific Islander
- □ White / Caucasian
- □ Other, please specify: _____

22. Religious Affiliation

- ○ Buddhist
- ○ Catholic
- ○ Evangelical Christian
- ○ Hindu
- ○ Jewish
- ○ Muslim
- ○ Protestant Christian
- ○ Other Religion
- ○ Non-religious

23. How religiously observant do you consider yourself?

- ○ Very observant
- ○ Moderately observant
- ○ Not very observant
- ○ Non-religious

24. How did you hear about this survey?

- ○ Twitter
- ○ Facebook Comment / Wall / Status Update
- ○ E-mail
- ○ Friend / Family
- ○ Teacher
- ○ Political Organization
- ○ Other, please specify: _____

25. Household income per year

- ○ Under $20,000
- ○ $20,000 - $30,000
- ○ $30,000 - $40,000
- ○ $40,000 - $50,000
- ○ $50,000 - $75,000
- ○ $75,000 - $100,000
- ○ $100,000 - $150,000
- ○ $150,000 - $250,000
- ○ $250,000 - $1,000,000
- ○ $1,000,000 or more

Appendix B: Online Political Communication Survey Methodology

Recruiting self-identified political active Web users proved to be a bit more difficult than I anticipated. I attempted to recruit respondents who considered themselves politically active primarily by utilizing social networking sites. In addition, a monetary prize was given to one randomly selected respondent who completed the survey. Initially I attempted to use Twitter to attract random respondents through the use of political hash tags (#), which are used by Twitter users to target particular audiences and to identify certain ideas or groups.[374] Next, I created a Facebook page describing my research and linked it to political groups on the site. Neither of these attempts to attract a relatively random sample using social media proved effective.[375] In the end, personal appeals proved to be much more useful. These messages were sent out to my Facebook friends, twitter followers, and then forwarded on through social media and e-mail. Friends are those people who are connected on Facebook. Followers are those Twitter users who are connected, or following, a particular user. The process of eliciting respondents offered a valuable lesson regarding the effectiveness of using social networking to conduct social science surveys. Namely that Facebook and e-mail were extremely effective in generating responses, while Twitter offered limited utility for my survey. Thirty-seven percent of respondents mentioned that they heard about the survey through Facebook, compared with 12 percent through e-mail, and one percent through Twitter. An additional 46% mentioned they learned of

[374] Tweets with hash tags can be grouped through searches or aggregated by various twitter applications. Political hash tags that are widely popular include #gop (Republicans), #tcot (Top Conservatives on Twitter), #p2 (progressives), #dem (Democrats), #gov20 (government 2.0 which looks at the future of online politics), and many others. Many have researched which groups are most effectively using twitter and it is widely believed that conservatives have most effectively used this online tool. However many indicate that the Twitter gap between conservatives and progressives s shrinking.

[375] For one of the best examples of effective respondent solicitation using social networking sites see the use of Twitter to recruit respondents used in Bode, Dalrymple, and Shah, "Profile of a Political Tweeter: A Survey of Twitter Users Who Follow Political Candidates."

the survey from a friend or family member, which could have been through any social networking or traditional communication form.

Ultimately 238 people completed the survey representing people from all across the nation and all major political and social demographic groups.[376] The survey was open to responses for a six-week period from Oct. 23 – Dec. 6, 2010. The 2010 midterm elections took place on Nov. 2, 2010, approximately two weeks into the six-week survey window. The survey sample was not scientifically selected and therefore was not representative of the U.S. population overall.[377] However, it is a large enough to represent a diverse population and offer very useful insights into their political communication activities online.

[376] The 238 respondents represented an 83 percent completion rate among all those potential respondents who started the survey.

[377] The sample was not a representative cross-section of the national population. It overrepresented a number of demographic groups including: Whites (95%), Females (62%), Jews (29%), Liberals (56%), Democrats (65%), and Minnesotans (37%). Extrapolating from this sample to the entire American population is not recommended, however with more substantial resources a more scientific and representative sample could be selected in future iterations of this survey.

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