

Online Communication Practices of Reform Judaism Congregations

by

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Abstract

This study's purpose was to determine online communication practices of congregations associated with the Union for Reform Judaism (URJ), the governing body of American Reform congregations. The study examined 252 American URJ congregational websites using a content analysis to determine how congregations used their websites from both an organizational and religious perspective. Website content was grouped into material designed to promote "religion online"—content designed to promote the organization and provide information—such as information related to organizational identity building, community outreach, mobilization of civic and social action, and information related to "online religion," or engagement in spiritual activity via the Internet (Farrell, 2011). ANOVA and MANOVA analysis was used to determine significant differences in content based on congregation size and region. Results revealed larger congregations were more likely to use websites for organizational identity building, mobilization of civic and social action, and the practice of "online religion."

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Chapter 1:

Introduction

According to the Pew Research Center (2012), 32% of all American adults have used the Internet for religious or spiritual purposes. With such a large portion of American adults using the Internet this way, the study of religion and new media has become an important area of Internet research. This research has undergone an evolution over the last few decades, moving from surface level descriptive and speculative discussions (Rheingold, 1993; Zaleski, 2002; O'Leary, 1996), to mapping widespread trends in Internet practice (Sturgill, 2004; Hashim & Hashim, 2007; Smith, 2012). In recent years, researchers have also begun applying theoretical frameworks to gain a firmer understanding of how “offline community patterns and discourse determine online use and beliefs” (Campbell, 2011a, p. 240).

The number of studies examining the interactions of religious groups via the Internet have increased over the last decade. However, most of the research has focused on Christianity, and some religious groups have been largely overlooked. (Campbell, 2011b). Although the Reform Judaism movement is the largest branch of Judaism in North America (Union for Reform Judaism, 2011c), its online practices have received no attention from researchers. The Reform movement is particularly suited to the online world as it promotes the idea that Judaism and its laws evolve over time to meet the changing nature of society (Union for Reform Judaism, 2011d). Furthermore, it embraces the idea of inclusion and assimilation instead of emphasizing isolation. While members of more observant branches of Judaism, such as the Orthodox and Conservative movements, face religious laws that might inhibit their online interactions (Cohen, 2012), members of the Reform movement possess a more liberal understanding of Jewish law, believing in the autonomy of the individual and the right to follow one's conscience above all else (Einstein & Kukoff, 1999).

This study addresses the gap in the literature by proposing a content analysis of Reform Judaism congregational websites in order to identify the general patterns of communication practices of these organizations. The website addresses were collected from a Union of Reform Judaism database. The Union for Reform Judaism (URJ) serves as the governing body of the Reform movement within North America (Union for Reform Judaism, 2011). Primary areas of analysis will be how websites are used for

informational and organizational goals, how websites are used for community building and civic and social action, and the extent to which Reform communities embrace the idea of practicing and experiencing religion via electronically mediated sources. Finally, this study will provide the groundwork for determining how Internet-based innovations are being diffused among Reform Judaism congregations, and how those innovations are changing as they are adopted and implemented.

Chapter 2:

Literature Review and Research Questions

Literature Review

The present study uses a content analysis of URJ congregational websites to analyze the communication practices of these groups in this electronically mediated environment. This literature review provides a brief background on the study of the Internet within the field of communication, presents a historical background on Reform Judaism and research on Jewish online practices, and finally discusses the current state of research on new media and religion, separating the field into three waves of research and providing theoretical frameworks for how to conduct the present study.

The Internet in Communication Research. In 1996, Newhagen & Rafaeli argued for the importance of communication researchers studying the Internet for multiple reasons. At the time, the general public's use of the Internet as a mass communication tool was a relatively new phenomenon as, prior to the 1990's, the Internet had been used primarily for military and educational purposes (Hojsgaard & Warburg, 2005). Hype over the emergence of such a revolutionary communication technology led to multiple discussions of the Internet's possible effects on society. Although Internet research was primarily the domain of engineers, computer scientists, and cognitive psychologists, Newhagen & Rafaeli (1996) argued that communication scholars could and should play an active role in the study and evolution of the Internet. First and foremost, they argued that the Internet promotes a level of interactivity that no communication tool in the past has succeeded in providing. Second, due to the archival nature of the Internet, it provides an enormous amount of raw data with which researchers can analyze human interaction. Third, they argued that the same research questions and tactics employed by mass communication scholars in the past can be employed to study the Internet, as the same communication processes exist within the virtual realm. They suggested that research into the Internet can provide valuable insights into both what communication patterns exist and why those patterns exist, as well as providing inferences to the effects of such patterns.

Drawing on the theories of diffusion of innovation (Rogers, 2010) and mediamorphosis (Fidler,

1997), Tomasello et al. (2010) plotted a 17-year-adoption curve of the evolution of new media research in the communication discipline. They argue that new media research, particularly research on the Internet and related technologies, is reaching “critical mass” and has emerged as an important research field in communication. In doing so, they point to both a rapid increase in new media-based articles in traditional communication journals and the rise of new media specific journals. This increase in new media research has accompanied the penetration of the Internet and related technologies into many aspects of our daily lives.

Because the Internet so drastically impacts multiple facets of peoples' lives, research into how and why people use the Internet has become a dominant area of interest for both practical and academic reasons. Communication scholars (especially those in mass communication) have been particularly interested in studying the Internet, with a heavy focus on theory building (Walther, 2005; Newhagen & Rafaeli 1996). Walter (2005) argues that, from a communication standpoint,

[c]ommunication technology research has the potential to unlock and refresh our views and understandings of the basic ways people interact with each other, offering new lenses with which to view normal, traditionally focused processes in intrapersonal and interpersonal dynamics, group functioning, the development and impacts of social networks, organizational behavior, commerce, and global information sharing (p. 652).

The present study builds on diffusion of innovation research in order to determine how Internet-based innovations are being adopted and implemented within the Reform Judaism movement, as well as to create the groundwork necessary for a longitudinal study of how those innovations are being re-innovated over time. Diffusion of innovations research is one of the more prominent fields of behavioral science research, with contributions from a variety of disciplines and close to 4,000 publications accounted for (Rogers, 2010). The diffusion of innovations process is a special type of communication in which innovations (ideas, practices, or objects that are perceived as new by an individual or social unit) are communicated through specific channels over time to

members of a social system (Rogers, 2010). In relation to the present study, the social systems are the religious congregations and the organizations they are affiliated with, the innovations are the online practices of the congregations, and the communication channels consist of the communication networks actually used by the congregations, which includes both the websites themselves and word of mouth.

The primary goal of this study is to determine how a specific set of organizations, URJ congregational websites, use the Internet. We know a significant amount about how people use the Internet in general, especially within the United States. Internet usage has increased dramatically over the past decade or so, on both a global scale and at the national level. In 2006, approximately 18% of the world's population was online. As of 2011, this number had risen to one third of the world's population, and 70% in the developed world (International Telecommunication Union, 2012). Internet use is widespread in the United States. According to the Pew Research Center (2012), as of September 2012, 81% of all American adults use the Internet. Of these users, 91% use the Internet for search engines and e-mail, 80% use the Internet for medical information, 78% use the Internet for product information before making a purchase while 71% actually shop online, 71% use the Internet for viewing videos or video services, 69% use social networking sites, 61% use online banking, 56% research potential jobs online, 36% play online games, and 32% use the Internet for spiritual purposes.

Research have examined many of these Internet-based interactions, including e-commerce (Delone & Mclean, 2004; Liebermann & Stashevsky, 2002; Marc Lim & Hooi Ting, 2012; White & Selwyn, 2013), medicinal applications (see Diaz et. al, 2002; Henderson et. al, 2013; Valero-Aguilera et. al, 2012), social media use (Andzulis et. al, 2012; Lenhart et. al, 2010; Macnamara et. al, 2012), and, most relevant to the present study, the use of the Internet for religious purposes (Campbell, 2011a; Farrell, 2011; Kyong, 2011; Smith, 2012; Sturgill, 2004). With 32% of American adults who use the Internet using it for religious or spiritual purposes (essentially 29% of the broader population), this research area is a particularly important one. As it stands, academic research exists on a variety of religious groups, including Christianity, Buddhism, Islam, and Judaism. A review of existing new media and religion literature at the time of the present study revealed that the majority of research centers on Christianity and Christian groups. Research

about Islamic websites has focused primarily on attempts to counter negative imagery associated with Islam through the use of the web (Kort, 2005; Hashim & Hashim, 2007), while research on Buddhist websites has focused on who uses Buddhist websites and why they are used (Ostrowski, 2006; Smith, 2012). Research concerning Judaism and the Internet has been limited, and tends to focus primarily on the Orthodox streams of Judaism. In contrast, the online practices of the Reform movement, which is the movement that the majority of American Jews are affiliated with (Union for Reform Judaism, 2011c), has not yet received attention. The following section provides a brief overview of the Reform movement, followed by a discussion of scholarship on religion and the Internet, and a discussion of the role of Diffusion of Innovation theory in this study.

Reform Judaism. *History of Reform Judaism.* Similar to many other religions, Judaism has segmented over time as differing opinions have led to different streams of thought. These movements in Judaism are not denominations, but rather represent differing philosophies (Einstein & Kukoff, 1989). The Reform movement represents one such philosophy. The Reform movement began as a response to the challenges faced by the Jewish community as it attempted to integrate into the modern world in Germany in the nineteenth century (Einstein & Kukoff, 1989), although some scholars have suggested that early roots of the movement trace back as far as the seventeenth century (Meyer, 1995). During this time, expanded social contact with non-Jews created a situation in which cultural elements of European lifestyle began to penetrate into the social strata of European Jewry (Meyer, 1995). Over time, as secular opportunities seemed to lie in conflict with the rigorous constraints of Judaism, many Jews began to feel resentful of traditional Judaism and either cast aside some of its tenants or discarded it entirely. Furthermore, government policies began to interfere with the Jewish community's internal religious controls, making sanctions (such as excommunication) within the Jewish community much more difficult. For example, a Prussian declaration in 1792 explicitly required that “all coercion in matters of religious practice cease and that it be left to each individual head of a family to decide on matters of ritual observance” (Meyer, 1995, p. 12). As a result, by the beginning of the nineteenth century, the Jewish community was heavily divided and some Jewish leaders began to call for a reformation of Judaism. This period is now referred to as the Jewish

Enlightenment, or *Haskalah* (Meyer, 1995).

Reformist ideas initiated during the Jewish Enlightenment eventually disseminated throughout Jewish society, and now play an important role in modern Jewish life. The Reform movement is currently one of the largest branches of Judaism in the modern world, and the Union for Reform Judaism is the largest Jewish movement in North America (Union for Reform Judaism, 2011c). The URJ is a dynamic network of Reform congregations and individuals spread out across America and Canada, and it represents Reform congregations in a variety of organizations and provides networking opportunities for Reform Jews to “enhance their capacity to build and expand community, deepen Jewish learning, energize worship, pursue social justice and develop inspired leadership” (Union for Reform Judaism, 2011).

The URJ was founded in 1873 as the Union of American Hebrew Congregations, and was renamed as the URJ in 2003 (Union for Reform Judaism, 2011c). According to its founder, Moritz Loth, the Union was originally formed not to promote the Reform movement, but rather to prevent reforms from becoming too excessive. He was primarily referring to radical reformers in eastern Europe, who had been willing to give up traditions such as dietary laws and the traditional Sabbath (Meyer, 1998). As of 2011, the URJ consists of around 900 congregations in the United States, Canada, the Bahamas, Puerto Rico and the Virgin Islands (Union for Reform Judaism, 2011c).

Reformist ideology. Reform Judaism differs from more observant branches of Judaism, in part because the movement began largely as an attempt to reconcile basic Jewish beliefs with modern life: “The essential principle of Reform is that religion is organic and dynamic. It must change to meet new situations” (Einstein & Kukoff, 1989, p. 153). One of the largest distinctions between the Reform movement and many of the other movements within Judaism is the idea that worshipers are encouraged to make personal decisions regarding their religious practice (Einstein & Kukoff, 1989). Rather than believing that every word of the *Torah* comes directly from God, they believe that the *Torah* provides an account of the encounter between the Jewish people and God (Einstein & Kukoff, 1989). This is an important distinction, because it implies that not everything in the *Torah* necessarily applies to every situation or to every individual.

Reform congregations are encouraged to be sensitive to the specific needs of their members.

Reform Judaism congregations are democratic, and value the autonomy of their individual members (Birth of a Synagogue Movement, 2011). The Jewish practices of a particular congregation are determined by the needs or desires of the majority of that congregation. For example, “if 50% of Reform congregants grew up in traditional synagogues listening to a cantor chant the liturgy and the other 50% were raised in temples with a professional choir, the congregation which never had a cantor would hire one—and keep the professional choir” (Birth of a Synagogue Movement, 2011). There is also a strong emphasis on individual autonomy and the implicit right to follow one's conscience above all else (Einstein & Kukoff, 1989). Personal religious practices are ultimately left up to the individual to decide.

In addition to the belief that Judaism must change and adapt to the needs of the present, The URJ notes several other principles that distinguish Reform Judaism from other forms of Judaism. Reform Judaism focuses on inclusion rather than exclusion, reaching out to inter-faith families and Jews-by-choice, and attempting to form a positive relationship with other religions (Union for Reform Judaism, 2011d). They also believe in fundamental equality for women, and were the first Jewish movement to embrace women rabbis, cantors, and presidents of synagogues. Furthermore, the Reform movement encourages the full participation of gays and lesbians in both synagogue life and society as a whole. In general, Reform Judaism attempts to be as accepting of the world around it as possible. Inclusion of interfaith couples is particularly important as, according to 2000–2001 data (the most recent survey data available), 46% of married Jews in the United States have a non-Jewish partner (Berman Jewish Data Bank, 2013). This is true among both the members of the Reform movement and broader Jewish community overall. This leads to a research question asking, “Do URJ Congregational websites provide information or links to information about or organizations affiliated with alternative forms of religion or Judaism?”

Alternative Judaism Movements. Reform Judaism is generally considered to be the most liberal branch of Judaism (Abel, 2012). Some other common streams of thought among Judaism include the Orthodox, Conservative, and Reconstructionist movements (Einstein & Kukoff, 1989). The Orthodox branches of Judaism are very ritualistic, and are strict in their observance of Jewish rituals and traditions (Abel, 2012). The Orthodox movement itself has gradations in observance and practice, ranging from the

Ultra-Orthodox, who most strictly observe tradition, to the Modern Orthodox who have made some accommodation with modernity (Einstein & Kukoff, 1989). The Orthodox tend to believe that theirs is the only true form of Judaism, and that all other branches of Judaism are deviations from the *Torah* (Einstein & Kukoff, 1989).

Conservative Judaism was sparked as a reaction to Reform excess, and argued that many members of the Reform movement had lost the true spirit of Judaism (Cohen, 2012). The Conservative movement agreed with the Reform movement that the Orthodox approach was too rigid, but felt that the Reform movement had lost too much of Jewish tradition in the transition (Einstein & Kukoff, 1989). The movement does not promote as much autonomy as the Reform movement. Conservative Judaism regards Jewish law as both binding and divinely inspired (Einstein & Kukoff, 1989). However, they also believe that Jewish law should not be seen as set in stone, but rather as evolving over time. Instead of religious practice being left up to individual congregations and worshipers to decide as it is in the Reform Judaism, in the Conservative movement, a rabbinical committee on law and standards rigorously analyzes any questions about the application of Jewish law in new situations, and changes are made slowly over time (Einstein & Kukoff, 1989). The Conservative movement lies somewhere in between Orthodox and Reform Judaism in beliefs and practices (Abel 2012).

While the various branches of Judaism have some fundamental differences, it is also important to note that there is an overlap in many of their beliefs and practices (Einstein & Kukoff, 1989). However, certain theological differences could lead to very different virtual experiences. Reform Judaism is of particular interest because members are not as strictly bound by Jewish religious law, known as *Halakha* (Cohen, 2012). The Internet has been highly controversial in some Jewish communities. Orthodox and Conservative branches of Judaism are limited both in the amount of information they can put on the Internet as well as in their online interactions (Cohen, 2012). For example, there has been a significant amount of controversy over Internet use on the Sabbath, and whether or not Internet usage on the Sabbath should be considered “work.” One instance of this can be seen in the debate over whether or not e-commerce websites should be permitted to remain active on the Sabbath; many Orthodox and Conservative Judaism practitioners believe that leaving e-commerce websites active they could create “stumbling

blocks” that cause others to do “work” on the Sabbath, which would be against *Halakha* (Cohen, 2012).

Another point of contention revolves around the disclosure of information on the Internet. There has been a debate in the Jewish community, especially in the Orthodox movement, over how to handle the publication of some types of information on the Internet, such as how to use God's name online and how to avoid releasing information that could be considered political or social gossip (Cohen, 2012). There is also concern among the more observant branches of Judaism concerning the portrayal of sexual information online, as there are restrictions on how a man must behave around women for fear of improper sexual arousal. This has led to a controversy over “how love can be portrayed and expressed in a manner which is religiously acceptable” (Cohen, 2012, p. 5). Finally, and perhaps most importantly, Orthodox and Conservative interpretations of *Halakha* prevent them from participating in virtual prayer services. A fundamental criteria for many types of communal prayer (*minyan*) is the requirement of the physical presence of 10 Jews. In Orthodox communities, this requirement is narrowed to the physical presence of ten men. In some Conservative communities, the *minyan* may also include women, but it still requires people's physical presence (Cohen, 2012). Because of this, as it currently stands, Orthodox and Conservative Judaism branches will never fully embrace modern information technology, as they are limited to using the Internet primarily for informational purposes, as opposed to using it for interactive worship opportunities, particularly during Shabbat.

Reform Judaism offers a new area of interest for Internet-mediated religion research. Farrell (2011) notes that there is a strong correlation between the “online” and “offline” characteristics of religious groups (Farrell, 2011). This finding suggests URJ congregational websites would mimic the characteristics of the Reform movement itself. However, there has been no scholarly research to date concerning the use of the Internet by members of the reform movement. In addition, while the use of technology by Reform congregations has been discussed among the community, it has never been a target of academic research. For example, the official URJ publication published an article about how different congregations are integrating technology with their traditional religious practices, and whether or not they faced any ethical challenges by doing so (Cyber Judaism, 2009). The rabbis quoted in the article argued that the use of emergent communication technologies by the Reform Judaism community is not a new practice, but rather

that “We have always been early adopters of any means of communication that allowed greater numbers of human beings to learn from and share opinions with one another” (Cyber Judaism, 2009).

The limited research on the practice of Judaism online has focused on the Orthodox streams (Cohen, 2012; Campbell, 2011b). Horowitz (2000) describes early Orthodox rabbinical attitudes towards the Internet, which were mostly negative and cautionary. In fact, ultra-Orthodox groups have twice banned Internet use by their members, first in 1999 and then once again in 2009, although the latter ban targeted only Haredi news websites and blogs (Campbell, 2011b). Cohen (2011) examined how the Internet has been adapted to meet the needs of ultra-Orthodox communities, while Lerner (2008) described many of the web-based resources used by the ultra-Orthodox groups. Similarly, Campbell (2011b) provides an excellent summary of the evolution of Israeli Orthodox attitudes towards the Internet, but did not discuss non-Orthodox views in any depth. The end result is that, non-Orthodox branches of Judaism have been largely missing in the academic discourse on online religious practices.

This section has provided a brief history about the Reform movement and the other branches of Judaism in modern society. The lack of literature surrounding the Internet use by the non-Orthodox branches of Judaism creates a strong need for further investigation into the online practices of these congregations. Because the Reform movement is not as heavily restricted by *Halakha*, Reformists may pursue opportunities for using the Internet that other branches of Judaism would not be at liberty to do. An in-depth analysis of Reform websites and their practices will add to our knowledge of how religious groups, in this case a previously unstudied one, use the Internet. In order to perform such an analysis, an understanding of current research in the field of new media and religion is necessary. The next section provides a history of the study of new media and religion and provides a framework that can be applied to the study of Reform Judaism’s use of the Internet.

Religion and the Web. The study of religious or church-affiliated websites is an area of focus among Internet research that has been gaining in popularity for over a decade (Kyong, 2011). While religions can be viewed in many of the same ways as traditional organizations, they have certain restrictions, purposes, and challenges that differ from most other organizations. The unique attributes associated with organized religions have led to an area of research devoted solely to the use of the Internet

by religious groups. The study of new media and religion has been characterized as developing “at an enormous speed, yet in a disorganized and somewhat messy manner” (Kyong, 2011). The growth of religious websites has been explosive. The earliest uses of the Internet for religious purposes dates back to at least the 1980's (Campbell, 2006), and since then the practice of religion in online environments has been steadily increasing (Campbell, 2011a).

In the late 1990's, scholars at the University of Arizona and Duke University initiated the National Congregations Study, in which they interviewed representatives from 1236 religious congregations, asking them, among other things, how their congregations operated (Chaves et. al, 1999). A follow up study, started in 2006, interviewed representatives from 1506 congregations (Chaves & Anderson, 2008) and found that among the areas studied, the use of technology had changed the most (Chaves & Anderson, 2008). The number of congregations with websites jumped from 17% in 1998 to 44% in 2006, nearly tripling in just a few years (Chaves & Anderson, 2008). Using inferential statistics, the researchers determined that approximately 10,000 new congregations added a website each year between the two surveys, and that by 2006 approximately 74% of representatives were members of a congregation that possessed a website (Chaves & Anderson, 2008).

Three Waves of Research. The dramatic rise of Internet usage among religious groups has lead to substantial research on the subject. Researches tend to approach research on the subject from two different approaches. The first approach looks at the use of the Internet by the religious groups themselves, while the second approach examines how users interact with religious Internet sites (Hashim et. al, 2007). Scholars on religion and the Internet have mapped three distinct waves of research (Campbell, 2011a, Hojsgaard & Warburg 2005, Kyong, 2011). These three waves can be characterized as descriptive, critical, and theoretical (Campbell, 2011b). The research waves show an evolution of research questions, which moved scholars from basic descriptions of online practices to making broader interpretations about what those practices suggest about human interaction. There is no clear time-frame between each wave. In fact, the three waves often overlap, as new research builds off of previous studies (Campbell, 2011a). New studies often fall within older waves of research when studying a previously unstudied group such as Reform Judaism.

First Wave Research. Early scholarship on the Internet and religion was often speculative and enthusiastic, and “was filled with either utopian fascination or dystopian anxieties about the surreal potentials of the new digital communication medium” (Hojsgaard & Warburg, 2005, p. 5). Early examples of these studies include O’Leary (1996) and Zaleski (2002). O’Leary (1996) provided a discussion of how early religious communities began to emerge within specific communities, and argued that cyberspace could be the next wave of contemporary spiritual liberation. Zaleski (2002) approached religion and the Internet with less optimism. He discussed different ways that various religious groups had used the Internet (including Buddhists, Baptists, Mormons, and Muslims), and explored philosophical questions raised by religion in cyberspace, such as whether cyberspace would replace traditional worship or make ministers obsolete, whether or not religious rituals could take place online, and whether divinity could be found online. Kyong (2011) argues that many of these early studies suffered from a lack of data to draw from, so speculation seemed acceptable at the time. As such, the studies focused on either specific religious communities or on how online religious community was emerging within a specific religious tradition (Campbell, 2011a, p. 238).

One of the most important issues for first-wave research involved the concept of online community (Campbell, 2011a). Rheingold (1993) presented the first study about how online discussion forums could be conceptualized as “virtual communities,” and since then researchers have become interested in how online life can be categorized in terms of community (Campbell, 2011a). Ridings & Gefen (2004) note that “virtual communities have been characterized as people with shared interests or goals for whom electronic communication is a primary form of interaction (Dennis, Pootheri, & Natarajan, 1998), as groups of people who meet regularly to discuss a subject of interest to all members (Figallo, 1998), and as groups of people brought together by shared interests or geographic bond (Kilsheimer, 1997)” (p. 01). First wave research attempted to characterize and describe these virtual religious communities. Campbell (2011) describes the research as an attempt to identify the technologies and methods people used to gather online and determine the discussions and practices that became the focus of the groups that emerged.

One primary concern for virtual religious communities involves how personal identifying

information is used and whether or not such information is protected by websites (Hoy & Phelps, 2003). The Federal Trade commission has ruled that organizations collecting personal identifying information have an obligation to protect that data from both internal and external threats (Hoy & Phelps, 2003). In a content analysis of U.S.-based religious websites, Hoy & Phelps (2003) determined that although 99% of the websites surveyed collected some form of personal identifying information from visitors, only 3% presented a privacy policy, and only 23% presented any form of information practice statement whatsoever. This suggests that at the time, religious organizations, like most other websites, were negligent in protecting users personal identifying information, an extremely important aspect of virtual communities. Organizations have become more aware of privacy issues in the ensuing decade. The URJ (2011b) presents guidelines for how and why congregations should protect personal data on their websites, including how to manage financial transactions and how to manage users' email addresses. The organization also recommends that congregational websites should have a privacy policy. While the privacy of user information is not the primary goal of the present study, it is an important consideration as a potential hindrance of the diffusion of online religious practice. Users may not feel comfortable using a congregational website if they have privacy concerns. This leads to a research question asking, "Do URJ Congregational websites take measures to protect users' personal identifying information?"

Second Wave Research. Following the initial wave of online religion scholarship, researchers began to move away from the dichotomous view of online religion as either utopian or dystopian, and began to "focus on the factually situated practice of religious online interaction" (Hojsgaard & Warburg, 2005, p. 5). These studies, having a significantly larger amount of data to work with than first wave studies, have focused on "technological differences, communication contexts, and the overall transformations of the late modern society" (Kyong, 2011, p. 5). Much of the research in this wave focuses on both positive and negative aspects of online religious practice (Kyong, 2011). Whereas first-wave scholarship is more descriptive and speculative, second-wave scholarship moves to definitional explorations (Campbell, 2011a). These studies ask questions relating to why religious life online functions the way it does, considering themes such as how communities and identities function online and how these online elements relate to the corresponding offline manifestations (Campbell, 2011a). Second-wave research is

characterized by mapping typologies and comparative studies of various forms of online religious communities (Campbell, 2011a). In the case of religious websites, this research includes examining how and why religious websites are constructed the way they are.

For example, Sturgill (2004) attempted to determine the scope and purposes of Southern Baptist websites by studying them from both a communication and organizational standpoint. She analyzed what information existed on the sites, and then drew conclusions about the purposes of those websites based on her findings. She found that church websites were constructed for a variety of purposes, and that even within the Southern Baptist online communities those purposes often differed.

Sturgill argues that churches view communication as purposive, referencing Emmanuel's (1999) outline of the World Association of Christian Communicators five Christian principles of communication:

1. Communication creates community
2. Communication is participatory
3. Communication liberates
4. Communication supports and develops cultures
5. Communication is prophetic

These principles suggest that churches recognize the potential of communication in the creation and negotiation of the identities they present to the public (Sturgill, 2004). The Internet furthers the potential of communication as a tool for identity formation and community building. Sturgill (2004) argues "churches may see Web sites as instruments of evangelism, corporate reputation builders, or community extenders that provide virtual substitutes for relational experiences" (p. 170). By conducting a content analysis of Southern Baptist church websites, Sturgill (2004) attempted to create an account of how churches used the Internet for such purposes. Church website content was analyzed for evangelical information, organizational and denominational information, website's interactivity, and its community outreach. Sturgill (2004) provides the groundwork for determining basic descriptive information about religious websites, which is an important component of the current study.

Elements of Sturgill's (2004) study were adapted into research questions about URJ congregational websites. Sturgill (2004) found that website material designed for organizational identity building was the

most common type of information found on the websites studied. This leads to a research question asking, “Do URJ Congregational websites promote organizational identity on their websites (e.g. mission statements, donations to the temple, etc.)?” Evangelical information was also very prominent on the websites studied by Sturgill (2004). Although Reform Judaism has no form of evangelism, they do openly accept Jews-by-choice (Union for Reform Judaism, 2011d), and therefore might provide information about their faith to those who might be interested in conversion, which leads to a research question asking, “Do URJ Congregational websites provide information about Judaism?” Finally, Sturgill (2004) found that community extension or outreach was a third main component of the websites studied. This leads to a research question asking, “Do URJ Congregational websites provide external links to other Reform temples and organizations?”

Second-wave research has also examined the difference between “online religion” and “religion online” (Farrell, 2011). The distinction lies in the functionality of religious websites (Hadden & Cowen, 2000). “Religion online” refers to websites that are primarily used for informational purposes, disseminating “information about doctrine, policy, calendars, events, directions, and so forth” (Farrell, 2011, p. 74). On the other hand, “online religion” invites users to actively participate in religious activities online, in which the virtual environment itself functions as a place of worship and fellowship (Farrell, 2011). Traditional religious practices such as prayer, meditation, and sermons are emulated within a virtual environment. Farrell (2011) suggests that the best way to address this distinction between “religion online” and “online religion” is through the use of qualitative content analysis and descriptive quantitative methods. This leads to a research question asking “Do URJ Congregational websites allow for the participation of religious rituals online (such as a virtual *minyan*, prayer services, online sermons, etc.)?”

Third Wave Research. The current “third-wave” of online religion scholarship moves toward “more theoretical, interpretive, and integrative work” (Campbell, 2011a, p. 240). Scholars have attempted to apply various existing theories to online religion scholarship, as well as create the groundwork for future theoretical construction. In third-wave research, scholars attempt to bridge the gap between various disciplines and perspectives in order to create more definitive assertions about online-interaction from a religious standpoint. It is important to note that third-wave research does not negate or diminish research

from previous waves; on the contrary, Campbell (2011a) argues that the progression is necessary in order to ask deeper and more focused questions about abstract concepts such as community and identity formation. Initial descriptive studies must be performed before more theoretical and interpretive frameworks can be constructed. Indeed, Campbell (2011b) argues that more descriptive work is necessary regarding online Judaism due to the fact that existing literature focuses primarily on the Orthodox branches of Judaism.

Within third-wave research, there is a larger focus on how “offline community patterns and discourse determine online use and beliefs” (Campbell, 2011a, p. 240). Research has moved from simply distinguishing between religion online and online religion to creating broader generalizations about what online-offline interaction reveals about modern life in an information-dominated culture (Campbell, 2011a). Farrell (2011) investigated how Christian websites integrated virtual religion with real world applications. The study focused on three specific aspects of online religious websites: mobilization, or how a website organizes members for civic and social action, visibility of denominational affiliation (the size and placement of the denominational affiliation of the website), and functionality, essentially how interactive a website is (Farrell, 2011). The data come from a qualitative content analysis of 600 congregation websites from nine Christian denominations and compares the differences between Liberal-Protestant affiliated congregations and Evangelical congregations. Farrell (2011) found that Liberal-Protestant congregations were more likely to promote political and civic mobilization than evangelical organizations, while evangelical congregations were more likely to downplay their denominational affiliation and were more likely to use cutting-edge interactive technology to increase website functionality (Farrell, 2011). Farrell's (2011) notion of mobilization is a major component of the current analysis of URJ congregational websites. Reform Judaism actively promotes civic and social involvement, and by analyzing whether or not their websites emphasize this aspect of their religion we can make insights into how important mobilization is to individual congregations. This leads to a research question asking “Are URJ congregational websites being utilized for mobilization of civic and social involvement, such as providing links to charities and social justice projects?”

Additional areas of research. The study of the relationship between the Internet and religious groups continues to evolve, and although the field is moving towards producing more theoretical work,

there are still many areas of interest that require research that falls into previous waves, such as new emergent technologies and interest groups that have not yet received attention. For example, the use of social media by religious groups is an area that requires further investigation. Stroope (2012) found that religious social networks promote participation in religious activity by reinforcing the idea that the individual is part of a larger community and not alone in his or her belief, an idea Stroope refers to as “social embeddedness” (p. 291), the strengthening of social bonds within religious social networks (Stroope, 2012). Because social media is primarily a tool for social networking, it should be expected that social media could be a powerful tool for religiosity via the Internet, both in building cohesion among online communities and strengthening the belief systems of those participating in them. Cheong (2011) provides a lengthy discussion of the use of social media for religious purposes, highlighting both the practical uses of social media and some of the resistance social media has encountered among religious groups, as well as some ethical concerns and challenges surrounding social media usage. The author focuses primarily on Christianity, as much of Internet-based religion research does; nevertheless, the article brings to light some very important issues related to social media usage. He points out that many pastors of Christian communities have felt pressured by their congregations “to be contactable online, and be more available and contactable via new and social media” (Cheong, 2011, p. 25). The ethical challenges Cheong (2011) mentions involve how personal information is distributed within social media sites. As discussed above, privacy is an important issue involving Internet usage for any organization. Cheong (2011) points out that social networking sites often reveal private and personal information by default using algorithms that are hidden or misunderstood by the general public. Because one of the key principles of Reform Judaism is to adapt to the needs of the changing times, it stands to reason that adopting social media usage would be one of their priorities. This leads to a research question asking, “Do URJ Congregational websites promote social media usage?”

Another area that has received little attention in religion and the Internet research is how congregational websites address the needs of disabled individuals. People that suffer from disabilities such as visual and auditory impairment, mobility limitations, speech impairment, cognitive limitations, and learning disabilities, require special design features in order to be able to properly use a website (W3C,

2008). Accessibility is an important aspect of web development. Tim Berners-Lee, creator of the World Wide Web and current World Wide Web Consortium (W3C) director, has argued “the power of the Web is in its universality. Access by everyone is an essential aspect” (W3C, 2010a). Because the idea of inclusion is so important to the URJ, accessibility should be a priority of URJ congregational websites.

There are many ways in which scholars have tested for accessibility standards. One of the most common methods involves the use of automated tools such as WebAIM’s WAVE that evaluate websites and give detailed reports about how to make the sites more accessible to users with a disability. When a user submits a website to WAVE, WAVE analyzes the code to check for violations based on usability standards such as the W3C’s Web Content Accessibility Guidelines (WCAG) (WebAIM, n. d.) and generates a report of errors that includes visual error indicators (see appendix C for illustrations). WAVE has been used in range of accessibility studies, including the accessibility analyses in e-government (Youngblood & Mackiewicz, 2012; West, 2008), online education (Klein, et al., 2003), and online health information (Gieger, et al., 2011). While studies focused strictly on accessibility will sometimes include usability testing with users with disabilities, expert code evaluation, or policy analysis (Jaeger, 2006; Olalare & Lazar, 2011), Youngblood & Mackiewicz, (2012, p. 584) point out that in broader studies such as this one, automated testing offers a “canary-in-the-coal-mine approach,” identifying major accessibility errors and suggesting further research might be needed if the automated analysis revealed substantial problems. As prior studies have found website accessibility problems in a wide range of fields including those related to, government (e.g. Youngblood & Mackiewicz, 2012; West, 2008; Jaeger, 2006; Olalare & Lazar, 2011), health information (e.g. Gieger, et al., 2011), education (e.g. Klein, et al., 2003), and corporations, (e.g. Loiacono, et al, 2009), it seems likely that URJ congregational websites may not follow accessibility guidelines despite the URJ’s emphasis on inclusion. This lead to a research question asking, “Do URJ Congregational websites follow appropriate accessibility guidelines?”

This section of the literature review has provided a brief history of the field of Internet and religion research and provides a methodological framework for conducting the present study, which seeks to fill in the gaps in the body of knowledge concerning the online practice of religion by Jewish congregations. The study focuses specifically on Reform Judaism, a group that has to this point received no attention in the

field of new media and religion. Because there is no academic research on the online practice of religion by Reform Judaism, the present study falls primarily into the second wave of Internet and religion studies, attempting to create a typology about general online communication practices of Reform congregations. However, the study also lays the groundwork for future theoretical work by studying how electronic innovations (such as the practice of “online religion”) are being diffused throughout URJ congregations. The following section provides a brief discussion about diffusion of innovations theory and how it will be applied in studying the congregational websites of the URJ.

Diffusion of Innovations Theory. As previously mentioned, diffusion is a special type of communication process in which innovations are disseminated through social systems via the information exchange of ideas among members of the social system (Rogers, 2010). Most early diffusion studies were based on a linear model of communication in which a message is transferred from a sender to a receiver through a communication channel (Rogers, 2010). However, our understanding of the communication process has continued to develop. Today, most diffusion studies use a convergence model of communication in which participants co-create and share information with each other in order to create a mutually agreed upon understanding of reality (Rogers, 2010). While some basic diffusion processes function well with a simplistic view of the communication process, such as a single individual (or “change agent”) informing a potential adopter about a new idea, more elaborate diffusion processes should be understood as a diffusion network in which individuals share new ideas, alter and reinforce those ideas as needed in order to form a shared understanding of how to implement and disseminate an innovation. This model of diffusion is certainly more appropriate for studying the Internet, in which multiple forces interact in order to spread new ideas. For example, if a congregation leader decides to implement online streaming of services in their website, that implementation will ultimately be influenced by the interactions and feedback of the congregation members. The congregation leader's original idea might be completely altered by the time it is implemented.

Diffusion of innovations theory has two important concepts that are relevant to the current study: rate of adoption, and factors that influence an individual's decision to adopt. Rate of adoption can be defined as the relative speed with which members of a social group adopt an innovation (Rogers, 2010).

Rogers (2010) distinguishes between five different adopter categories that adopt innovations at different rates: innovators, early adopters, early majority, late majority, and laggards. Innovators are the first to adopt an innovation. They are generally willing to take risks due to youth, high social class, and/or access to financial resources. Early adopters are the second fastest group to adopt an innovation, and share many of the same qualities as the innovators. However, they are more selective about which innovations to adopt, and are less likely to take risks that they know might result in failure. Because they are more selective, but still share the social status of innovators, early adopters have a greater influence on groups who are slower to adopt innovations, giving them a position of opinion leadership on their peers. Most people fall into the early and late majority groups, and are slower to adopt innovations until they have carefully weighed their options and been persuaded by opinion leaders that the innovation in question is worthwhile. Finally, laggards tend to resist change, have the least financial liquidity, and are generally the oldest age group. These adopter categories typically refer to individuals. However, for the purposes of the current study, these same adopter categories can apply to congregations instead of individuals. For example, early adopters might consist of larger congregations that have a large amount of financial support due to a large member body.

Categories of adoption play a major role in the diffusion of innovations process. In addition to this, Rogers (2010) describes five factors that influence an individual's decision to adopt an innovation or not: relative advantage (essentially the benefit an innovation provides to a potential adopter), compatibility (how easily an innovation fits into an adopter's lifestyle), complexity versus simplicity (the difficulty or ease in which an innovation can be adopted by an individual), trialability (the degree to which an adopter can experiment with an innovation prior to adoption), and observability (how visible an innovation is to others).

Although many religious groups are rapidly adopting the Internet as a tool for both communication and worship, certain innovations associated with Internet usage are still relatively new. For example, as of 2001, only 4% of individuals who used the Internet for religious/spiritual purposes participated in online worship (Larsen & Rainie, 2001). Research suggests that one of the greatest potential benefits the Internet has to religious groups is the ability to reach out to an age group that physical worship centers typically

struggle with, ages 15-25 (Rupp & Smith, 2002). While these age groups do not necessarily possess negative attitudes towards religion, they are generally less inclined to spend as much time in a physical building of worship than other age groups. Because of this attitude, the innovation of online religion has the potential to offer these age groups a way to worship that allows spiritual involvement without the requirement of being physically present. Similarly, as a consequence of the rapid growth and integration of the Internet into modern society, this age group might likely be less inclined to join a religious group that does not offer members the ability to participate in online worship activities. As such, Rogers' (2003) first attribute of innovation, relative advantage, is easily distinguishable for the adoption of Internet use by religious groups. In contrast, the attribute of simplicity versus complexity could turn away older members of the congregation who feel less comfortable with using the Internet. Some of the innovations that allow for online religion, such as live streaming, web camera integration and chat rooms, require at least some degree of expertise with certain technologies that some members of the congregation may be not be comfortable with. Because of this problem, some congregations may not be ready to implement newer technologies that would allow for a more interactive online spiritual experience.

Another potential hindrance religious congregations might face involves Rogers' (2003) compatibility attribute of diffusion, especially in relation to special needs groups. As previously mentioned, people with disabilities face challenges that require special design features in order for them to be able to use the Internet to the same degree as the average individual. By following accessibility standards, congregations can make their web services more easily available to members with disabilities. Since the Reform movement promotes the idea of universal inclusion, accessibility is something that should ideally be taken into consideration when creating congregational websites.

The review of the previous literature leads to the following research question: "What factors, such as congregational size and district (as determined by the URJ; see Table 1) share a significant relationship with the diffusion of innovations among URJ congregational websites?" For the sake of the present study, innovations refer to website features that are considered new. Because the use of the Internet by religious groups is a relatively new trend, and because we do not currently know how the Reform movement uses the Internet, virtually any website feature could be considered an innovation. The present study will allow us to

determine what electronic features are currently being used by URJ congregations, which will better allow us to determine what website features should be referred to as innovations. Because that has yet to be determined, every website feature will be considered an innovation for the sake of discussion purposes. The study will allow us to determine how innovations are being diffused among Reform Judaism congregational websites, determine how congregation size and region influences the diffusion of electronic innovations among Reform Judaism congregations, identify certain obstacles that might interfere with the diffusion of said innovations and lay the groundwork for a longitudinal study of how those innovations are changing over time. The next section reviews the research question raised in the literature review and groups the questions into logical categories based on “online religion” and “religion online.”

Research Questions

This study’s goal is to determine the purposes and functions of American URJ congregational websites. Reform Judaism is the most prominent form of Judaism in North America (Union for Reform Judaism, 2011c), and to date no literature exists on Reform Judaism websites. Farrell's (2011) study draws a distinction between “online religion” and “religion online,” with “religion online” referring to the use of the Internet primarily for informational purposes, while “online religion” refers to a transformation of a religious website into a place of worship. This study addresses both components in relation to URJ websites. This section lays out the research questions into four categories. The first category, research questions one to four, deal with how websites are used for “religion online.” The second category, research question five, addresses how websites are used for mobilization of civic and social action. The third category, research question six, focuses on how websites are used for “online religion.” The final category, research questions seven, eight, nine, and ten, address factors that influence the diffusion of innovations process.

Unlike Christianity, Judaism makes no attempts to convert non-Jews. Therefore, unlike the churches studied by Sturgill (2004), no aspects of Jewish websites should be designed to minister to the non-Jewish population; there is no Jewish custom similar to the Christian act of evangelism. However, Reform Judaism openly accepts Jews-by-choice (Union for Reform Judaism, 2011d), and might provide

information to accommodate visitors who are interested in learning about Judaism. As such, the following research question addresses how URJ congregational websites promote information about Judaism:

RQ1: Do URJ Congregational websites provide information about Judaism?

A primary function of the URJ is to “build and expand community” (Union for Reform Judaism, 2011). Because of this, it is expected that congregation websites would attempt to integrate themselves as much as possible into the larger Reform community, affiliating themselves with other temples and Reform organizations. The following research question addresses how URJ congregational websites promote inter-organization affiliation:

RQ2: Do URJ Congregational websites provide external links to other Reform Judaism temples and organizations?

Reform Judaism was the first form of Judaism to attempt to reconcile the conflicts between Christianity and Judaism (Meyer, 1998), and openly encourages inter-faith relations (Union for Reform Judaism, 2011d). As such, one point of interest is to determine whether or not URJ congregational websites promote inter-faith (between Judaism and other religions such as Christianity) or interdenominational (between various branches of Judaism, such as the reform and conservative movements) relations. The following research question was developed to address this issue:

RQ3: Do URJ Congregational websites provide information or links to information about or organizations affiliated with alternative forms of religion or Judaism?

Although the primary purpose of religious organizations may be spiritual in nature, they nevertheless share many of the same qualities as traditional organizations. Sturgill's (2004) study points out that many of the church websites studied served organizational purposes in addition to religious purposes.

The following research question addresses how Reform Judaism websites affiliated with the URJ promote individual organizational goals:

RQ4: Do URJ Congregational websites promote organizational identity on their websites (e.g. mission statements, donations to the temple, etc.)?

Farrell's (2011) study emphasized the concept of mobilization, or the ability of a website “to organize members for civic or social action” (Farrell, 2011, p. 80). Part of the URJ's mission is to “to build and expand community” and to “pursue social justice” (Union for Reform Judaism, 2011). As such is should be expected that the URJ would take part in promoting civic and social action. In fact, the URJ website has an entire section devoted strictly to social action. Because social action is such an important aspect of the URJ, the following research question addresses how websites of congregations affiliated with the URJ promote social action:

RQ5: Are URJ congregational websites being utilized for mobilization of civic and social involvement, such as providing links to charities and social justice projects?

The distinction between “online religion” and “religion online” is a very important one. As discussed by Cohen (2012), religious restrictions prevent many Orthodox and Conservative Judaism congregations from fully utilizing the Internet for religious practice. Because Reform Judaism is more liberal in its interpretation of Jewish law, it is expected that they would be more at liberty to participate in “online religion.” The following research question deals with how URJ congregational websites participate in online religion:

RQ6: Do URJ Congregational websites allow for the participation of religious rituals online (such as a virtual *minyan*, prayer services, online sermons, etc.)?

As previously discussed, Reform Judaism emphasizes the need for religion to change and adapt to

the needs of modern society (Einstein & Kukoff, 1989; Union for Reform Judaism, 2011d). In regards to adaptation, one area of interest involves social media usage. Cheong (2011) has indicated that many Christian communities have expressed the need and the desire for more social media implementation. It stands to reason that Reform communities might have similar needs and desires, especially since they claim to be early adopters of new forms of communication (Cyber Judaism, 2009). The following research question was created to address this issue:

RQ7: Do URJ Congregational websites promote social media usage?

The ethical use of the Internet has been an important discussion not only among the Jewish community but also for religious communities in general. One of the biggest ethical challenges concerning Internet usage involves the privacy of users. The URJ encourages congregations to take measures to protect users' personal and private data on their websites (Union for Reform Judaism). As previously discussed, this has been something that religious websites, as well as many other websites, have neglected in the past (Hoy & Phelps, 2003). The following research question was created in regards to how URJ congregational websites are currently dealing with this challenge:

RQ8: Do URJ congregational websites take measures to protect users' personal identifying information?

One of the most fundamental principles of Reform Judaism involves the notion of inclusion, rather than exclusion. As discussed above, Reform Judaism has attempted to integrate into modern society as much as possible, and as such openly promotes equality for women in religious practice, gay and lesbian members, interfaith families, and Jews-by-choice (Union for Reform Judaism, 2011d). As part of their efforts to integrate into modern society, and to adapt to the needs of the present, one group to consider is those who have special needs when it comes to using the Internet. Individuals with disabilities often require special attention in order to be able to properly use a website. The following research question seeks to

determine whether or not Reform Judaism websites address these special needs groups:

RQ9: Do URJ congregational websites follow appropriate accessibility guidelines?

This study seeks to determine how various innovations are diffusing among URJ congregational websites, such as the use of the Internet for “online religion” and what factors might affect diffusion, particularly the issue of congregational size.

RQ10: What factors, such as congregational size and region (as determined by the URJ; see Table 1) share a significant relationship with the diffusion of innovations among URJ congregational websites?

Chapter 3:

Methodology

Content analysis is a systematic method of inquiry for analyzing communication messages, and is widely used as a research tool for analyzing websites (McMillian, 2000). Krippendorff (2012) defines content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 24). Holsti (1969) identified three purposes for content analysis: to describe the characteristics of communication, to make inferences about the antecedents of communication, and to make inferences about the effects of communication (McMillian, 2000). Furthermore, as McMillan (2000) points out, content analysis is capable of dealing with vast quantities of unstructured data in an unobtrusive manner, which is essential to the study of the web, especially when attempting to create benchmarks or typologies. For these reasons, content analysis was selected as the method of data collection for this study.

Content Analysis of Web Sites

Data collection for this study is based on the five steps that McMillian (2000) outlines for conducting content analysis of web-based material. The first step involves the formation of research questions and/or hypotheses. The second step is to select a sample size. The third step is defining categories and context/coding units. Coding units are the smallest units of content that are counted in the content analysis, whereas context units are the body of material containing the smaller coding units (McMillian, 2000). For the purposes of websites, context units include individual web pages or the entire website as a whole, while coding units consist of specific features or content included in the website. The fourth step involves training coders and testing for inter-coder reliability. Finally, data is collected, analyzed and interpreted.

Sample Selection

The number of websites sampled during content analysis studies of religious websites differs among studies. Sturgill (2004) used a database of 1033 websites and sampled approximately one third of

them. Farrell (2011) sampled 600 websites from nine different denominations. Hoy & Phelps (2003), in their study about protecting private information, sampled only 102 randomly selected websites taken from all 50 states. Because this website closely mirrors the study performed by Sturgill (2004), and because the database used was approximately the same size, a similar sampling size (one-third) was selected for this study. The URJ (2011f) provides a database of 876 Reform Judaism congregations, with links to websites for each congregation. For the purposes of this study, all websites were taken from the URJ database and organized by congregation size and by district (Central, East, South, and West). Then, every third website was selected for the content analysis, beginning at a random number generated by the random number generator at random.org. Thirty congregations were removed from the initial list due to being located outside of the United States. The sample was stratified to reduce the chance of regional bias by drawing a one-third sample from each district. Congregation size was likewise stratified in order to make quantitative inferences as to the relation between congregation size and website attributes. Some congregations had dead links to their websites. These congregations were removed from the sample if the website was unable to be found in the first 30 results of a Google search using the congregation name, the state, and city, resulting in 11 entries being removed from the sample during the data collection process. Removing these congregations resulted in a final sample size of 252 websites

Coding Scheme and Inter-coder Reliability

Coding schemes for this study were created by synthesizing a variety of coding schemes from other Internet and religion studies conducted within the past decade. Coding schemes designed to answer RQ1-RQ4 were adopted from the coding schemes designed by Sturgill (2004), which were then altered in order to more appropriately measure Reform Judaism websites instead of Christian websites. Coding schemes designed to measure RQ5 and RQ6 were developed from Farrell's (2011) study, and were once again altered to more appropriately measure Reform Judaism websites. For RQ7, the coding unit was the presence of links to social media on the websites. Coding schemes from Hoy & Phelps (2003) were used in order to answer RQ8. For RQ9, the homepages for websites were run through WebAIM's WAVE (WebAIM, 2013), a tool designed to test websites for accessibility errors. Number of accessibility errors

identified by the tool will be scored as a numeric value.

Some coding units were divided into categories based on the type of information that was being analyzed. This was done so that multivariate analysis of variance (MANOVA) could be performed in order to determine the statistical significance of mean differences for multiple coding units when measured against independent variables. For example, for the research question about material designed for “religion online” purposes, coding units for online streaming, prayer requests, sermons, etc. were grouped together and measured against congregation size and region. This produced data on the significance of the independent variables' relationships with each individual coding unit as well as with the significance of the independent variables' relationships with the broader category as a whole. For research questions in which only a single coding unit was used to obtain the necessary information, such as the research questions concerning accessibility errors and user privacy, MANOVA was not required, and analysis of variance (ANOVA) was used instead. The coding unit categories are: website material designed for interfaith/interdenominational relations, which includes coding units for information about interfaith and interdenominational relations or links to interfaith and interdenominational organizations' websites; website material that promotes organizational goals, which includes coding units for worship service times, event calendars, temple address/phone numbers, photo galleries, etc. (for full list see table 3); website material designed for the mobilization of civic and social action, consisting of coding units for links to social causes and advocacy announcements; and website material designed for “online religion” purposes, which consists of coding units for online streaming, prayer requests, discussion threads, Torah study materials, sermons, and active participation in services.

The author served as the primary coder for the data and a second coder coded a subset of the data, which was then compared for intercoder reliability based on the recommendations of Neuendorf (2002). In order to determine intercoder reliability for this study, the author and a secondary coder evaluated a sample of 25 websites used in the study, representing a 10% overlap in coding. The results of the coders were then compared for degree of agreement, calculated using Kohen's kappa, with .8 being the lowest acceptable level of agreement (Neudendorf, 2002). Coders met for two training sessions using websites that were not part of the sample prior to collecting data for intercoder reliability. Intercoder reliability was calculated as

having a Kohen's kappa of .9514, well above the minimum acceptable value. Following the calculation of intercoder reliability, the author collected the remainder of the data. Coding took place over the course of three weeks.

Data Analysis

All data manipulation (such as ANOVA and MANOVA testing) was done using *IBM SPSS Statistics 20* statistical software. Content was analyzed for statistical significance in regards to congregation size and congregation region in order to address RQ9. Statistical significance was calculated using MANOVA and ANOVA as previously described, depending on the number of coding units involved, using a 95% confidence interval. For the purposes of determining statistical significance based on congregation size, congregation sizes were divided into groups of small, medium, large, and very large. The categories were determined based on the URJ classifications of congregation sizes: family congregations have less than 150 member units, pastoral congregations range between 200-350 member units, program congregations range between 400-800 member units, and corporate congregations include all congregations with more than 800 member units (URJ Department of Outreach, n.d.). Because the URJ classifications have small gaps, the sizes for the present study had to be adjusted slightly. For the purposes of the present study, small congregations have 150 or less member units, medium congregations range between 151-350 member units, large congregations range between 351-800 member units, and very large congregations include all congregations with more than 800 member units. Statistical significance for congregation district was based on the URJ classifications of district within the United States, found in Appendix B.

Chapter 4:

Results

This section provides the highlights of the significant data collected from this study. Due to the large amount of data collected, not every coding unit will be discussed in detail; however, all of that information is available in Appendix B, which lists the results of all the data collected from the content analysis. Table 2 lists the total number of each coding unit found during the analysis, Table 3 and Table 4 lists the results obtained from ANOVA testing for congregation size and district respectively, and Table 5 and Table 6 list the results from MANOVA testing for congregation size and district respectively. All data was calculated at a 95% alpha level. Out of the 252 websites surveyed, 50% (126) of those websites had some form of information about Judaism. This could have been in the form of a description page (e.g. “What is Judaism” or “About Reform Judaism”), downloadable resources that describe Judaism, or links to other websites that have information about Judaism. For RQ1 (Do URJ Congregational websites provide information about Judaism?), a one-way ANOVA was used to determine statistical significance of the differences between congregation size (see Table 3) and district (see Table 4) and the presence of information about Judaism. Congregation size ($F(3, 248) = 3.733, p = .012, \eta^2 = .043$) was found to have a significant relationships with the presence of information about Judaism (see Table 3). As congregation size increased, the likelihood of information about Judaism being present decreased. No significant differences in presence of information about Judaism were found among congregation districts ($F(3, 248) = 1.180, p = .318, \eta^2 = .014$).

RQ 2 asked, “Do URJ Congregational websites provide external links to other Reform Judaism temples and organizations?” Most (87%) of the sites surveyed provided links to external Reform Judaism temples or organizations such as the URJ and other reform organizations. One way ANOVA was used to test RQ2, and no significant differences were found in the use of external links based on either congregation size (i.e., small to very large; $F(3, 248) = 1.041, p = .375, \eta^2 = .012$; see Table 3) or geographic region ($F(3, 248) = 1.498, p = .216, \eta^2 = .018$).

RQ 3 (“Do URJ Congregational websites provide information or links to information about or organizations affiliated with alternative forms of religion or Judaism?”) focused on the Reform movement's organizational goals in regards to interfaith and interdenominational relations. As seen in Table 2, over half (58%) of all the congregations surveyed had some sort of information about interfaith or interdenominational relations. This was either in the form of links to interfaith/interdenominational organizations or in the form of resources available for users seeking information about interfaith/interdenominational living. Many of the websites surveyed had a statement about how they accepted and even embraced interfaith relations, however these statements were not counted if they did not provide resources, links to organizations, or information relevant to interfaith living. Based on MANOVA data (found in Tables 5 and 6) no statistical significance was found based on the overall relationship between congregation size (Wilk's lambda = 0.962, $F(3, 248) = 1.601$, $p = .145$, $\eta^2 = .019$) or district (Wilk's Lambda = 0.972, $F(3, 248) = 1.176$, $p = .316$, $\eta^2 = .014$) and the presence or absence of information, but univariate analysis revealed that as congregation size increased, the websites were more likely to provide information or links about interdenominational living or organizations ($F(3, 248) = 3.014$, $p = .031$, $\eta^2 = .035$). For example, very large congregations ($M = 0.62$, $SD = 0.5$) were more likely to have interdenominational information or links than small congregations ($M = 0.36$, $SD = 0.483$).

In regards to RQ 4 (“Do URJ Congregational websites promote organizational identity on their websites?”), every single website within the selected sample provided information that promoted organizational goals (See Table 2). However, for all but two congregations, this information consisted only of the congregation's address and phone number. The remaining two congregations provided no contact information. One point of interest is the fact that there were nearly double the amount of clergy biographies (rabbi and/or cantor) as there were biographies of other staff members, suggesting that the clergy is most likely deemed to be more important as a representation of the congregation to the public than the rest of the staff. Roughly a third of the websites provided some method for the user to provide feedback (33%) and allowed for users to sign up to receive periodic email updates from the temple (36%). Members-only

sections were relatively common, as 31% of sites within the sample used member logins and passwords, and most of these sites gave no suggestions as to what extra material was available for members.

Statistically significant differences were found for organizational identify data for both congregation size (Wilks lambda = .418, $F(3, 248) = 4.610$, $p = <.001$, $\eta^2 = .252$) and region (Wilks lambda = .700, $F(3, 248) = 1.726$, $p = <.002$, $\eta^2 = .112$). In particular, larger congregations were more likely to have photos of the temple/temple activities, calendars, email lists, temple newsletters, temple mission statements, list of temple staff, and biographies (see Table 3). Concerning district, the central district was less likely to provide photos on their websites, the south and west districts were more likely to provide calendars, the central and east district were more likely to provide temple mission statements, the east district was more likely to provide biographies of their Rabbi/Cantor than other districts, and the east and west districts were more likely to accept online donations (see Table 4).

RQ 5 (“Are URJ congregational websites being utilized for mobilization of civic and social involvement, such as providing links to charities and social justice projects?”) dealt with whether or not Reform Judaism websites reflect the Reform movement's goal of promoting social action. The majority of the websites surveyed (76%) did so in at least some manner. How this was done ranged widely. For example, some websites simply announced a food drive or provided a link to a charitable organization, while others provided opportunities for users to sign up to take part in events or provide online donations to specific causes. There was a significant difference in the use of congregational websites for mobilization among varying congregation sizes (Wilks Lambda = .899, $F = 4.610$, $p = <.001$, $\eta^2 = .052$), as well as among different districts (Wilks lambda = .005, $F(3, 248) = 3.119$, $p = <.005$, $\eta^2 = .036$). Large and very large congregations consistently showed a higher presence of civic and social action information than small and medium congregations (See Table 3 for means and standard deviations). With regard to geographic location, temples in the East ($M=.86$, $SD=.347$) and West districts ($M=.75$, $SD=.434$) produced more frequency of advocacy announcements than did the Central ($M=.69$, $SD=.469$) and Southern districts ($M=.55$, $SD=.503$). No significant differences were found in presence of links to social causes by District

($F(3, 248) = 1.093, p = .353, \eta^2 = .013$).

Concerning RQ 6 (“Do URJ Congregational websites allow for the participation of religious rituals online?”), approximately 71% of the congregations provided opportunities for some form of “online religion.” Of these, most offered some form of Torah study materials or downloadable/interactive content such as music and videos. Many of the websites that provided Torah study material did not have the materials locally but rather provided links to Torah study materials through an external source such as the URJ. Furthermore, much of the downloadable or interactive material on websites consisted of only a single video or a small sample of worship music. Only 17% of congregations offered texts of sermons on their websites, and only 8% of congregations offered live streaming. Two congregations allowed users to actively participate in services via teleconference, and eight congregations provided an area to read or submit prayer requests. Congregation size was linked to the presence or absence of “online religion” material (Wilks Lambda = .645, $F(3, 248) = 5.466, p < .001, \eta^2 = .136$). Specifically, as congregation size increased the likelihood of online sermons, online streaming and interactive content such as videos and worship music being present increased (see Table 3 for means and standard deviations). No such relationship existed with congregation district (Wilks Lambda = .918, $F(3, 248) = .998, p = .463, \eta^2 = .028$).

RQ 7 asked, “Do URJ Congregational websites promote social media usage?” Social media usage was relatively common among the websites surveyed. A majority (57%) of the websites within the sample had some form of social media (see Table 2). No significant differences were found for social media presence across the four regions MANOVA analysis (see Table 5 and 6) did not reveal a significant difference in social media usage among districts (Wilk's Lambda = 0.969, $F(3, 248) = .854, p = .56, \eta^2 = .010$), but did reveal a significant difference in social media usage among different congregation sizes (Wilks Lambda = .886, $F(3, 248) = 3.388, p < .001, \eta^2 = .039$). In general, as congregation size increased, the likelihood of a website using some form of social media increased. Of note, large congregations were more likely to use both Facebook and Twitter than very large congregations.

For RQ 8 (“Do URJ Congregational websites take measures to protect users’ personal identifying

information?”), a one way ANOVA was used to determine statistical significance of congregation size and district in relation to the presence of privacy policies. Despite the URJ's (2011b) advocacy for their congregations to employ privacy policies on their websites, only 22(8.7%) of the websites surveyed had privacy policies (see Table 2). An ANOVA analysis of privacy policies found no statistical differences based on congregation size ($F(3, 248) = .854, p = .56, \eta^2 = .010$) or district ($F(3, 248) = .854, p = .56, \eta^2 = .010$).

Finally, RQ 9 asked, “Do URJ Congregational websites follow appropriate accessibility guidelines?” Almost all (94.6%) of the websites viewed had at least one accessibility error. Only 13 of the websites in total had 0 accessibility errors. Again, no significant differences were indicated for either congregation size or region and accessibility errors (Congregation size, $F = 1.24, p = .296$; Region, $F = .505, p = .609$).

This section presented results for each of the research questions of this study. ANOVAs and MANOVAs were conducted to test for statistically significant differences. A detailed report of the statistical data obtained is presented in Appendix B. The following section discusses the findings of the study in detail and attempts to make inferences about what the findings suggest on a deeper level.

Chapter 5:

Discussion

The current study had two purposes, first, to determine how URJ congregational websites are being used by the organizations themselves, and second, to determine how web-based innovations are being diffused among URJ congregational websites. This section provides a detailed discussion of each research question addressed by the current study and provides suggestions for what the findings reveal about both the individual congregations and the Reform movement as a whole. Similar to the findings of Sturgill's (2004) study of Southern Baptist websites, material that promoted organizational identity was by far the most prominent type of information identified in the current content analysis. However, the websites were commonly used for a variety of other purposes, such as community building, promotion of civic and social action, online worship. In regards to how innovations are being diffused, larger congregations typically included more website features than smaller congregations. This finding is supportive of Rogers' (2010) theory of diffusion of innovations, which suggests that early adopters tend to have more resources at their disposal and are therefore more likely to adopt innovations.

Information about Judaism

The first research question asked, "Do URJ Congregational websites provide external links to other Reform Judaism temples and organizations?" This is of particular interest because Judaism, unlike the religions studied in Sturgill (2004) and Farell (2011), has no concept of evangelism. However, the Reform movement promotes ideas of inclusion and community outreach (Union for Reform Judaism, 2011d), and therefore might be likely to provide information about their faith to people who might be interested. Indeed, the content analysis found that half of the websites provided information about Judaism. While this is less than the number of Christian church websites examined by Sturgill (2004) (roughly 65%), the finding makes sense when considering the Christian tenant of evangelism. Of the 126 websites that had information about Judaism, many of them simply provided links to the URJ website's description page that explains what Reform Judaism is, or provided a sample of text about reform Judaism taken directly from the URJ

website. Other websites provided links to databases of information or other resources that could be beneficial to someone seeking information about Judaism.

Much of the information about Judaism on various congregational websites was targeted at people who were interested in conversion or who had interfaith families. This material overlaps with the coding units for RQ3 (“Do URJ Congregational websites provide information or links to information about or organizations affiliated with alternative forms of religion or Judaism?”). While this finding does not suggest an active attempt to convert, it reinforces the notion that Reform Judaism is open to new members from diverse backgrounds. Interestingly, smaller congregations, on average, had more instances of providing information about Judaism than larger congregations. The fact that smaller congregations provided more information about Judaism could part be due to the fact that the sample size of small congregations was larger than the other sample sizes, or that the information was buried on larger sites. However, it may also suggest that larger congregations do not feel that providing information/resources about Judaism is as important as smaller congregations do. Congregations may design their websites based on their target audience's needs, and providing information about Judaism may not be a very high priority for larger congregations that have such a large audience that is already Jewish. Organizational goals (such as event management) and providing services/resources congregants want/need might take precedent. On the other hand, the coder noticed that of the congregations that had information about Judaism, larger websites tended to have multiple resources with information about Reform Judaism, while smaller congregations often had brief descriptions or a single link.

Links to External Reform Organizations

Because community building is a primary function of the URJ (Union for Reform Judaism, 2011), RQ2 asked, “Do URJ congregational websites provide links to external Reform organizations?” As mentioned previously, it was common for congregation websites to provide links to other Reform organizations, such as the URJ, the Religion Action Center (RAC), and other URJ congregations. This finding suggests that a sense of community within the Reform Judaism movement is important. Even

though many of the websites only provided a link to the URJ homepage, this does not necessarily discount the idea of online community, as the URJ homepage provides links to a multitude of Reform organizations and congregations. It is also worth noting that many of the websites that had no links to external Reform Judaism organizations provided a logo of the URJ or a clause that stated “member of the Union for Reform Judaism.”

Interfaith/Interdenominational Relations

It has already been noted that the URJ promotes community building. The URJ also openly promotes relations with other religions and other denominations of Judaism (Union for Reform Judaism, 2011d). Additionally, intermarriage is quite common among the Jewish communities. The most recent survey data from 2001 indicated that 47% of Jewish marriages consisted of interfaith couples (Berman Jewish Data Bank, 2013). Therefore, interfaith relations should be of importance to Reform Judaism communities. The third research question focused on whether URJ websites mirrored this philosophy. Interestingly, there were almost as many websites with information about interfaith living as there were websites with information about Reform Judaism, although that might be due in part to the fact that many of the interfaith resources described information about Judaism, and were therefore counted towards both. It may also suggest that for the Reform community, learning to live with other religions is just as important as educating other religions about the Reform movement. This idea is somewhat supported by the finding that, while small congregations had more instances of information about Judaism than large and very large congregations, the opposite was true for interdenominational links/resources. This finding suggests that for larger congregations, interactions with those of different religions or different denominations are more important, possibly because as congregation size increases the chances of having interfaith families within the congregation increases. Once again, this finding supports the idea that congregation website features differ based on the needs of the congregation. Alternatively, it could suggest a deeper level of online communication in which small congregations are focused on presenting users with basic information about their temple and their religion while larger congregations are at more liberty to focus on community

outreach. Rogers' (2010) relative advantage factor of diffusion might also be influencing whether congregational websites provide such resources.. It might be more advantageous for larger congregations to provide interdenominational resources because, due to their size, they are more likely to have interactions with congregations or individuals of different denominations, while smaller congregations can remain autonomous.

Organizational Identity

RQ4 asked, “Do URJ Congregational websites promote organizational identity on their websites (e.g. mission statements, donations to the temple, etc.)?” Results for the study indicated that information designed to promote organizational identity was the most prominent type of information available on the websites studied. Every single website had some information designed to promote organizational identity, but larger congregations were more likely to have a larger number of features designed to promote organizational identity. For example, larger congregations were more likely to have photos of their temple, email lists, calendars, temple newsletters, biographies of clergy and staff, members-only sections, and online sign ups for temple activities. It appears, then, that larger congregations are early adopters . As congregation size increases, the staff likely has more resources available and, subsequently, can provide more website features than smaller congregations.

At the same time, some features may not be relevant for small congregations. For example, many small congregations do not have a permanent rabbi, which would necessarily preclude a biography of a rabbi on the website. Additionally, from a diffusion of innovations standpoint, if there is no relative advantage in adopting an innovation, it will not be adopted (Rogers, 2010). Members-only sections, online donations, feedback forms, etc. may not be necessary for small congregations if they can tend to their organizational needs easily via face-to-face interaction. In fact, for some small congregations, the cost of creating such features may outweigh the benefits. If so, this would create a barrier to the adoption rate of innovations such as online donations, which requires financial and technical resources to set up. Larger congregations may find it more difficult to address their organizational needs solely through interpersonal

interaction. The ability to deal with organizational issues online (such as the ability to donate online and provide feedback which might not be possible during services) could be extremely beneficial. Results of this study, then, supports the notion that congregation size influences the needs of the congregation and therefore influences the content of their websites. It also supports the idea that larger congregations are more likely to adopt electronic innovations than their smaller counterparts.

Mobilization of Civic and Social Action

One of the main goals of the URJ is to pursue social justice. RQ5 asked “Are URJ congregational websites being utilized for mobilization of civic and social involvement, such as providing links to charities and social justice projects?” Almost all of the websites promoted some sort of social cause. Many of the websites provided links to the Religious Action Center, Reform Judaism's centralized agency for social justice and political action. A large number of the sites promoting social action provided links to or information about natural disaster relief (e.g., hurricanes and tornadoes), violent acts (e.g., the Boston marathon bombing and recent school shootings), and calling for political action or donations to various causes associated with the events. Other causes included blood drives, food banks, Habitat for Humanity, homeless shelters, crisis centers, and various other localized events designed to help those in need.

One prominent mobilizer was RAC's social action news feed, which is similar to the Evangelical Lutheran Church in America (ELCA) denominational news feed found in Farrell's (2011) study. This news feed provided stories about recent government activities, natural disasters, and featured charities. In fact, for many of the websites analyzed, the URJ news feed was the only source of mobilization. This once again highlights the URJ's emphasis on community building, as many of the congregational websites share the same resources directly from the URJ. The majority of sites that promoted social action made it clear that social action was not only very important to their temple but to the Reform movement as a whole. Once again, the presence of advocacy announcements and links to social causes increased as congregation size increased, which could be the result of a number of factors. Fore example, it is possible that as congregation size increases congregations make more efforts to get involved with social action. It is also

possible that larger congregations had more advocacy announcements and links to social causes as an artifact of Rogers' (2010) compatibility factor of diffusion. Using websites to get members of a congregation involved in social action might be more compatible for larger congregations, while traditional methods such as interpersonal communication may be more effective for smaller congregations who do not have enough members to make Internet communication worthwhile.

Interestingly, the southern and western districts were more likely to provide both links to social causes and advocacy announcements than the central and eastern districts. One explanation for this trend could be advocacy announcements for hurricane relief (one of the most common social causes identified by the coder), which would be more relevant for coastal regions such as California (where the largest western district congregations lie) and states in the southeast (which have recently been hit by hurricanes).

“Online Religion”

RQ6 asked, “Do URJ Congregational websites allow for the participation of religious rituals online (such as a virtual *minyan*, prayer services, online sermons, etc.)?” The data collected from this study revealed that most congregations associated with the URJ participate in some form of “online religion.” However, the extent to which they do so is relatively small. The practice of “online religion,” while present among the URJ congregational websites, is something that is not yet used to a large degree. As mentioned in the results section, most of the sites that offered “online religion” resources did so only through Torah study materials or videos/music. Very few sites offered live streaming or the ability to actively participate in services. It is worth mentioning that the congregations that offered online streaming and texts or videos of sermons were much more likely to offer some additional form of “online religion,” such as Torah study materials or worship music.

Of note, there are enough instances of “online religion” to suggest that it could become much more common among the Reform movement in the future. For example, larger congregations (especially very large congregations) had more options for “online religion” than smaller congregation sizes. This could suggest that as congregations grow, there will be more options for “online religion” in the future. It also

reaffirms the idea that larger congregations are early adopters of innovations. This could be due to a number of factors, including the fact that larger congregations have more resources at their disposal. Additionally, there is more relative advantage for larger congregations to adopt innovations such as online streaming, because they have a larger member body that could participate. Larger congregations might also find it easier to adopt “online religion” innovations such as online streaming, as those congregations may be more likely to have members who know how to manage newer technologies, simplifying the adoption process. Importantly, newer technologies are likely to become more prominent among URJ congregations in the future because the URJ has started to advocate that their congregations use newer technologies such as online streaming, and provides in-depth tutorials for how to integrate such features into their websites (Union for Reform Judaism, 2011g). It is significant that the URJ is spreading such information because the URJ acts as an opinion leader for its congregations, and individuals are more likely to adopt innovations supported by opinion leaders (Rogers 2010). Additionally, Roger's (2010) factor of observability claims that the more visible an innovation is to the public the more likely individuals are to adopt it. The fact that the URJ spreading information about technological innovations makes them more “observable,” and therefore makes congregations more likely to adopt such innovations.

Social Media Usage

Social media presence was the focus of RQ7, which asked, “Do URJ Congregational websites promote social media usage?” Results of this study show that as an innovation, social media use, is quite common among the URJ congregational sites. As with online streaming and other newer technologies, the URJ advocates that their congregations integrate social media into their websites (Union for Reform Judaism, 2012g). In the websites analyzed, Facebook was by far the most common social media present, and sites that had other social media such as Twitter or LinkedIn generally also had a Facebook page. However, there were a few sites that only had a Twitter page, or only had a YouTube page. Other examples of social media included Myspace, Google+, Pinterest, Flickr, Vimeo, Ustream, and Blogger, although these were far less common. Google+ is of particular interest because it provides software that would enable

people to actively participate in services from a remote location, which would be extremely useful for congregations interested in practicing “online religion.” However, none of the websites surveyed used Google+ for that purpose.

As with many of the other coding units, social media was more common among websites that had larger congregation sizes. One reason for this finding might be that larger congregations are attempting to cater more to youth members, or it could be that they have a larger budget and more human resources capable of managing their social media presence. Regardless, it supports the notion that as congregation size increases so does the rate of adoption of innovations. Future research should look at how the congregations are actually using these pages.

Barriers to Innovations: Privacy and Accessibility

In addition to studying what innovations are present among URJ congregational websites, it is important to study factors that could inhibit the diffusion process. RQ8 (“Do URJ Congregational websites take measures to protect users’ personal identifying information?”) and RQ9 (“Do URJ Congregational websites follow appropriate accessibility guidelines?”) addressed two such factors. The fact that so few of the URJ congregational websites had a privacy policy despite the URJ advocating for the use of them could mean one of a few things. First, it could mean that user privacy is simply not a huge focus for congregations due to lack of awareness, it could be that congregations do not feel privacy policies are necessary in order to actually protect users’ private information, or it could just be that the need for privacy policies has not yet diffused to the broader Reform culture. Interestingly, two of the websites had discussions from the Rabbi about how privacy over the Internet was becoming a serious issue, but did not have privacy policies.

A similar situation could be seen with accessibility concerns. Several websites had a clause about how they promoted inclusion of people with disabilities, and yet almost all of the websites that had such a clause still had numerous accessibility errors. Accessibility is an important factor in respect to Rogers’ (2010) compatibility factor of innovation for congregational members with disabilities, because they cannot

adopt an innovation if that innovation is not compatible with disabled individuals. Only 13 of the 252 congregational sites in the study were free of accessibility errors. One of the error-free sites was for a congregation for the deaf, a community made up of people with a disability. While the number of accessibility errors among the URJ websites may appear large, as discussed in the literature review, it is important to remember that accessibility problems are quite common on websites in a variety of areas, including federal government sites that have a legal mandate for accessibility (e.g. Olalare & Lazar, 2011).

The majority of the errors identified by WAVE involved issues that would hinder screen reader users (for people who are blind). The most common errors by far were the absence of the document language and alternate text, both of which are needed in order for screen readers to function properly. The document language lets screen readers know which language to read a web page in, and alternate text indicates the purpose/content of images and other material that someone who is blind would otherwise not be able to access. Other common errors were empty links (links that contain no text, which can confuse keyboard and screen reader users), missing form labels (which let screen reader users know how to use forms properly), and empty headings (without which, screen readers cannot identify headings, which can confuse users).

The results of this study reveal valuable insights into the online communication practices of URJ congregational websites. The results also allow us to make inferences as to whether or not congregational websites emphasize the core values and goals set in place by the URJ, such as community outreach, social action, and the integration of emerging technological innovations. While the URJ has clearly made strides towards promoting these goals to its congregations, there are still some areas in which congregations are not meeting specific goals. For example, despite the URJ's advocacy for privacy policies, very few of the congregational websites studied had one. While the URJ promotes the use of online streaming, only 22 congregations had implemented streaming. Furthermore, while the URJ promotes the idea of universal inclusion, almost all of the websites had accessibility errors, and only 30% of the websites provided resources for interfaith families. These findings suggest that the URJ's efforts in providing technological support and advice is of critical importance and that the URJ should continue to look for new ways to reach

out to congregations. The following section discusses the study's limitations and offers suggestions for future research.

Chapter 6:

Limitations And Future Research

The nature of the data collected from this study is useful for determining general practices, however it does not allow us to make in-depth qualitative inferences about how these practices are influencing people's lives. While this study provides an adequate analysis of electronic innovations being diffused among Reform Judaism congregational websites, it does not allow us to determine if members of a given congregation are using specific website features. For example, while the results may show that a congregation provides opportunities for the practice of online religion, such as Torah study material and streaming services, the results do not tell us to what extent these features are actually being used. Future research should take a closer look at how congregation members are actually using their temples' websites. This could be done through a number of methods. One method would be to conduct interviews and/or focus groups with congregation members of a sub-sample taken from the sample used in this study in order to determine whether or not they actually use the websites and how. A survey of congregation members would be a second option. It might also be useful to examine how non-Jews or non-Reform Jews interact with these websites, although it could prove challenging to determine the demographics of those who actually use the website.

Another limitation of this study is that all of the data collected was dichotomous. Content was coded for either presence or absence, but the degree of presence was not accounted for. For example, although 42 websites provided texts of their sermons online, the number of sermons available varied widely. Some congregations only have sermons available for specific events, such as High Holy Days (the period beginning with Rosh Hashanah and ending with Yom Kippur), while other websites had large archives of sermons that dated back months or even years. Another, perhaps more significant, example is the coding unit for information about Judaism. Some websites provided numerous resources for learning about Judaism, while other websites provided only brief descriptions about Reform Judaism and their more fundamental Reform values, and still other website only provided links to descriptions of Judaism found on

the URJ homepage. Because of the structure of the content analysis, these were all coded as present, yet they vary greatly in degree. Although it was not in the scope of the present study, a qualitative analysis of each website that provides information about Judaism would be able to reveal more information about their organizational goals. The same could be said for many of the other coding units, including accessibility errors. The present study only evaluated accessibility errors based on the number of errors reported by WAVE. However, WAVE also provides descriptions of each error as well, as well as providing warnings for potential errors. A future study which focuses specifically on accessibility of URJ congregational websites could look at the number of each type of error as well as warnings, and could involve an in-depth analysis of the html/php/css code for the websites in order to determine the degree to which those errors/warnings might influence a user's experience.

Another limitation encountered while undergoing this study involves the use of members-only sections by congregation websites. It is possible that the members-only sections could include content that was coded as absent due to the coder being unable to see it. Future research could interview or survey congregational web managers to determine what content are available in these sections. This would also give a better estimation of what congregation members actually use the websites for. The use of social media also merits further investigation. The present study only analyzed the presence or absence of links to social media on congregational websites. The social media pages themselves were not examined. It is possible that website features coded as absent for some congregations might have been present on their social media pages. It is also possible that the congregants themselves are more likely to use the social media pages than the actual congregation website. Future research should analyze not only how social media pages are used by congregations, but should also analyze how congregation members perceive the value of their online interactions with both the congregation website and the congregation social media pages.

During the course of conducting this study, several trends became apparent that, while beyond the scope of this study, offer fertile ground for future research. A number of the websites in the sample used their websites for fundraising, essentially e-commerce, including gift shops, donations through

Amazon.com, goodsearch.com (a website that allows you to donate money to an organization every time you search. The URJ encourages temples to use their websites for fundraising (Union for Reform Judaism, 2013b) and looking at the role of this recommendation in making the decision to use websites for fundraising and the relative success of these ventures may help give additional insight into the role of the URJ as an opinion leader. Another trend, though less common, were advertisements and recommendations for online Jewish dating services such as JDate.com. Many websites not only provided links to these services, but openly suggested that their congregation members should try them out. Future research could study how these dating services are being integrated into Jewish communities, and what that says about the values and needs of the broader Jewish culture

Finally, one of the purposes of this study was to create preliminary data necessary for a longitudinal study of how innovations change over time for congregational websites. As technology advances and we continue to redefine our online interactions, it will be interesting to see whether or not URJ congregations will likewise change how they interact online. A follow-up study should be performed, ideally within the next 10 years because of the rapid advancement of modern technology, in order to determine how the website features coded in this study have changed for congregations over time.

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Appendix A: Codebook

The following codebook is designed to assist the coder(s) with making decisions regarding the coding of each of the elements under investigation. Coders are encouraged to be as critical and as objective as possible in their decisions. In most cases, coding units are ranked based on their presence on the homepage, or presence of links to information on the homepage. Specific instructions may be given for certain coding units that require more precise investigation. Coding units are ranked for presence or absence, 0 meaning the content is absent and 1 meaning the content is present.

1. Congregation name: This is the name of the temple or synagogue to whom the website belongs. Please enter the full name of the temple, omitting the words “temple” or “synagogue”.
2. District: This is the district in which the Temple resides (North, South, East, West), available from the information provided by the URJ database at <http://congregations.urj.org/display.cfm?state=ALL> (click profile next to the temple name)
3. Congregation size: This is the number of member units that belong to the congregation, available from the information provided by the URJ database at <http://congregations.urj.org/display.cfm?state=ALL> (click profile next to the temple name)
4. Information about Judaism: Does the website provide information about Judaism? This can be in the form of an About Judaism/What is Reform Judaism page, links to external information about Judaism, or a description on the homepage. This should specifically direct the reader to information about Judaism, not just to an organization. Enter 1 if there is information or direct links on the homepage.
5. Links to external Reform Judaism organizations' websites: Does the website provide external links to other Reform organizations (such as the URJ, other Reform temple websites, etc.)? Enter 1 only if direct links to organizations appear on the homepage. If there is a link that directs to a list of

organizations on the homepage, select 2 unless the link specifically states something similar to “other reform organizations”

6. Links to alternative forms of religion :
 - a) Does the website provide links to organizations affiliated with alternative forms or nondenominational forms of Judaism? Enter 1 only if direct links to organizations appear on the homepage. If there is a link that directs to a list of organizations on the homepage, select 2 unless the link specifically states something about alternate forms of Judaism
 - b) Does the website provide links to organizations affiliated with different religions entirely or websites that discuss interfaith living? If there is a link that directs to a list of organizations on the homepage, select 2 unless the link specifically states something about interfaith living or other forms of religion

7. Organizational goals and identities: The following coding units analyze how websites are being used for organizational purposes
 - a) Worship service times
 - b) Temple address/phone number
 - c) Photos of Temple/Temple activities
 - d) Temple calendar
 - e) E-mail lists – Ability to sign up to receive interval information from the temple via an email list (excluding newsletters)
 - f) Temple newsletter
 - g) Temple mission statement
 - h) Temple constitution/policies/bylaws
 - i) Listing of temple staff/clergy
 - j) Biography of rabbi/cantor
 - k) Biography of other staff
 - l) Guest book – Publicly accessible place for guests to leave feedback
 - m) Feedback form – Area for user to submit confidential feedback to the temple

- n) Sign-up for temple activities – Online form to fill out for registration or a printable form (not an email prompt)
 - o) Online donations
 - p) Info on religious school
 - q) Members-only section – Requires users to sign in for additional content/features
8. Material designed for “online religion” purposes: The following coding units analyze whether or not websites are capable as functioning as a virtual temple in which users may actively participate in religious practice:
- a) Torah study materials on temple's website
 - b) Text of sermons available online
 - c) Ability to submit/read prayers requests
 - d) Locally generated downloadable/viewable content such as music, videos, etc.
 - e) Online streaming of services
 - f) Ability to actively participate in services via web camera streaming, etc.
 - g) Discussion threads
9. Material designed for mobilization: The following code units are designed to analyze how temple websites are used for mobilizing users for social and civic action.
- a) Advocacy announcements – this is information that directly pertains to social and civic involvement, such as current news alerts, communal event announcements, political reaction statements, protests, or rallies and should not be specific to the temple itself
 - b) Links to organizations promoting social causes – these can be charities, government organizations, etc. If there is a link that directs to a list of organizations on the homepage, select 2 unless the link specifically states something about promoting social causes
10. Material designed to protect user information: Does the Temple website have a privacy policy – "a comprehensive description of a Web site's information practices that is located in one place on the site and may be reached by clicking on an icon or hyperlink" (Hoy & Phelps, 2003). If there is a link on the homepage, choose 1, if there is a link on a secondary page, choose 2

11. Presence of social media links

- a) Facebook
- b) Twitter
- c) Other

Appendix B: Tables

TABLE 1: Congregational District by State (As assigned by the URJ)

Central	East	South	West
Illinois	Connecticut	Alabama	Alaska
Indiana	Washington (D.C.)	Arkansas	Arizona
Iowa	Delaware	Florida	California
Kansas	Maine	Georgia	Colorado
Kentucky	Maryland	Louisiana	Hawaii
Michigan	Massachusetts	Mississippi	Idaho
Missouri	Minnesota	North Carolina	Montana
Nebraska	New Hampshire	Oklahoma	New Mexico
Nevada	New Jersey	South Carolina	Oregon
North Dakota	New York	Tennessee	Utah
Ohio	Pennsylvania	Texas	Washington
South Dakota	Rhode Island		Wyoming
Wisconsin	Vermont		
	Virginia		
	West Virginia		

TABLE 2: Presence of coding units¹

Website Item	# of Websites with Coding Unit Present
Coding units pertaining to Judaism	
Info on Judaism	126
Links to Reform Judaism Temples/organizations	220
Coding units pertaining to interfaith/interdenominational relations	
Info about/links to different religions or interfaith organizations	76
Info about/links to alternate denominations or nondenominational organizations	116
Total number of websites with at least one of the above	147
Coding units pertaining to organizational identity	
Temple constitution/policies/bylaws	25
Members-only section	78
Feedback form	83
Email Lists	90
Online signup for temple activities	91
Temple Mission Statement	95
Biography of other staff	117
Online donations	152
Temple Newsletter	187
Biography of rabbi/cantor	212
Information on Religious School	222
Temple Calendar	231

Listing of Temple Staff	232
Photos of temple/temple activities	236
Worship service times	249
Temple address/phone #	250
Total number of websites with at least one of the above	252
<hr/>	
Coding units pertaining to mobilization of social and civic action	
<hr/>	
Links to social causes	145
Advocacy announcements	188
Total number of websites with at least one of the above	193
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Coding units pertaining to “online religion” functionality	
<hr/>	
Ability to actively participate in services	2
Guestbook	4
Discussion Threads	4
Ability to submit/read prayer requests	8
Online streaming	22
Text of sermons available online	42
Download/Interactive content	103
Torah study materials	123
Total number of websites with at least one of the above	179
<hr/>	
Coding Units pertaining to social media usage	
<hr/>	
Other Social media	37
Twitter	59
Facebook	139
Total number of websites with at least one of the above	144
<hr/>	
Coding units pertaining to potential barriers of innovation diffusion	
<hr/>	

Privacy Policy	22
Accessibility Errors ²	228

¹*N* = 252

²*For accessibility N = 241; 11 were removed from the sample due to WAVE read errors*

TABLE 3: One-Way Analysis of Variance for Presence of Content by Congregation Size

Coding Unit	Mean (Standard Deviation)					ANOVA		
	Small ¹	Medium ²	Large ³	Very Large ⁴	Total Sample ⁵	F(3, 248)	p	eta ²
Information about Judaism	0.62 (0.489)	0.51 (0.504)	0.41 (0.495)	0.31 (0.471)	0.5 (0.501)	3.733	0.01	.043
Links to external Reform organizations	0.88 (0.328)	0.83 (0.382)	0.92 (0.267)	0.85 (0.368)	0.87 (0.334)	1.041	.375	.012
Links to or info about alternate/nondenominational Judaism	0.36 (0.483)	0.43 (0.499)	0.56 (0.5)	0.62 (0.496)	0.46 (0.499)	3.014	.031	.035
Links to or info about other religions/interfaith orgs	0.26 (0.443)	0.3(0.464)	0.32 (0.469)	0.38 (0.496)	0.3 (0.46)	.515	.673	.006
Worship Service Times	0.97 (0.18)	1 (0)	1 (0)	1 (0)	0.99 (0.109)	1.801	.148	.021
Temple Address/phone#	0.98 (0.147)	1 (0)	1 (0)	1 (0)	0.99 (0.089)	1.187	.315	.014
Photos of temple/temple activities	0.87 (0.34)	0.96 (0.205)	0.98 (0.123)	1 (0)	0.94 (0.244)	4.125	.007	.048
Temple Calendar	0.82 (0.383)	0.96 (0.205)	1 (0)	0.96 (0.196)	0.92 (0.271)	6.775	<.001	.076
Email Lists	0.16 (0.373)	0.38 (0.488)	0.53 (0.503)	0.54 (0.508)	0.36 (0.48)	9.968	<.001	.108
Temple newsletter	0.65 (0.48)	0.74 (0.442)	0.88 (0.329)	0.73 (0.452)	0.74 (0.438)	3.645	.013	.042
Temple Mission Statement	0.18 (0.383)	0.39 (0.492)	0.64 (0.485)	0.38 (0.496)	0.38 (0.486)	13.179	<.001	.138
Temple constitution/policies/bylaws	0.12 (0.328)	0.07 (0.261)	0.11 (0.31)	0.08 (0.272)	0.1 (0.3)	.399	.754	.005
List of Temple staff	0.81 (0.392)	0.96 (0.205)	1 (0)	1 (0)	0.92 (0.271)	8.512	<.001	.093
Biography of rabbi/cantor	0.66 (0.477)	0.9 (0.304)	0.98 (0.123)	0.96 (0.196)	0.84 (0.366)	14.342	<.001	.148
Biography of other staff	0.15 (0.363)	0.52 (0.503)	0.76 (0.432)	0.65 (0.485)	0.46 (0.5)	27.414	<.001	.249
Guest book	0.02	0.07	0 (0)	0 (0)	0.03	2.656	.049	.031

	(0.147)	(0.261)			(0.165)			
Feedback form	0.29 (0.454)	0.35 (0.48)	0.35 (0.48)	0.38 (0.496)	0.33 (0.471)	.449	.719	.005
Online signup for temple activities	0.14 (0.352)	0.49 (0.504)	0.48 (0.504)	0.46 (0.508)	0.36(0.481)	10.955	<.001	.117
Online donations	0.27 (0.449)	0.65 (0.48)	0.85 (0.361)	1 (0)	0.6 (0.49)	35.298	<.001	.299
Religious school	.71 (.454)	.96 (.205)	1(0)	.96 (.196)	.88 (.324)	14.856	<.001	.152
Members-only section	0.18 (0.383)	0.29 (0.457)	0.38 (0.489)	0.65 (0.485)	0.31 (0.463)	8.558	<.001	.094
Torah study materials	0.55 (0.5)	0.42 (0.497)	0.44 (0.5)	0.58 (0.504)	0.49 (0.501)	1.363	.255	.016
Text of sermons available online	0.04 (0.206)	0.12 (0.323)	0.23 (0.422)	0.58 (0.504)	0.17 (0.373)	17.679	<.001	.176
Ability to submit/read prayer requests	0.02 (0.147)	0.01 (0.12)	0.08 (0.267)	0 (0)	0.03 (0.176)	2.003	.114	.024
Download/interactive content	0.22 (0.416)	0.41 (0.495)	0.53 (0.503)	0.77 (0.43)	0.41 (0.493)	11.794	<.001	.125
Online Streaming	0 (0)	0.06 (0.235)	0.11 (0.31)	0.42 (0.504)	0.09 (0.283)	18.720	<.001	.185
Ability to actively participate in services	0 (0)	0.01 (0.12)	0.02 (0.123)	0 (0)	0.01 (0.089)	.578	.630	.007
Discussion Threads	0.01 (0.105)	0 (0)	0 (0)	0 (0)	0 (0.063)	.587	.624	.007
Advocacy announcements	0.59 (0.494)	0.74 (0.442)	0.88 (0.329)	0.96 (0.196)	0.75 (0.436)	8.589	<.001	.094
Links to social causes	0.47 (0.502)	0.55 (0.501)	0.71 (0.456)	0.65 (0.485)	0.58 (0.495)	3.351	.020	.039
Privacy Policy	0.03 (0.18)	0.13 (0.339)	0.11 (0.31)	0.12 (0.326)	0.09 (0.283)	1.855	.138	.022
Facebook	0.4 (0.492)	0.55 (0.501)	0.76 (0.432)	0.58 (0.504)	0.55 (0.498)	7.259	<.001	.081
Twitter	0.12 (0.328)	0.2 (0.405)	0.38 (0.489)	0.35 (0.485)	0.23 (0.424)	5.757	.001	.065
Other social media	0.09 (0.285)	0.14 (0.355)	0.18 (0.389)	0.27 (0.452)	0.15 (0.36)	2.112	0.12	.025

¹N = 91

²N = 69

³N = 66

⁴N = 26

⁵N = 252

TABLE 4: One-Way Analysis of Variance for Presence of Content by Congregation District

Coding Unit	Mean(Standard Deviation)				Total Sample ⁵	ANOVA		
	Central ¹	East ²	South ³	West ⁴		(3, 248)	<i>p</i>	<i>eta</i> ²
Information about Judaism	0.55 (0.503)	0.5 (0.502)	0.38 (0.491)	0.55 (0.503)	0.5 (0.501)	1.180	.318	.014
Links to external Reform organizations	0.92 (0.272)	0.89 (0.313)	0.87 (0.337)	0.79 (0.409)	0.87 (0.334)	1.498	.216	.018
Links to or info about alternate/nondenominational Judaism	0.55 (0.503)	0.5 (0.502)	0.4 (0.496)	0.36 (0.484)	0.46 (0.499)	1.644	.180	.019
Links to or info about other religions/interfaith orgs	0.27 (0.451)	0.33 (0.471)	0.23 (0.428)	0.34 (0.478)	0.3 (0.46)	.616	.605	.007
Worship Service Times	0.98 (0.14)	1 (0)	0.98 (0.146)	0.98 (0.137)	0.99 (0.109)	.676	.568	.008
Temple Address/phone#	1 (0)	1 (0)	0.96 (0.204)	1 (0)	0.99 (0.089)	2.989	.032	.035
Photos of temple/temple activities	0.84 (0.367)	0.99 (0.1)	0.94 (0.247)	0.92 (0.267)	0.94 (0.244)	4.309	.006	.050
Temple Calendar	0.84 (0.367)	0.98 (0.14)	0.85 (0.36)	0.94 (0.233)	0.92 (0.271)	4.346	.005	.050
Email Lists	0.33 (0.476)	0.39 (0.489)	0.34 (0.479)	0.34 (0.478)	0.36 (0.48)	.205	.893	.002
Temple newsletter	0.69 (0.469)	0.77 (0.421)	0.7 (0.462)	0.77 (0.423)	0.74 (0.438)	.654	.581	.008
Temple Mission Statement	0.47 (0.504)	0.45 (0.5)	0.32 (0.471)	0.21 (0.409)	0.38 (0.486)	3.799	.011	.044
Temple constitution/policies/bylaws	0.08 (0.272)	0.1 (0.3)	0.13 (0.337)	0.09 (0.295)	0.1 (0.3)	.226	.878	.003
List of Temple staff	0.84 (0.367)	0.96 (0.196)	0.91 (0.282)	0.92 (0.267)	0.92 (0.271)	2.158	.094	.025
Biography of rabbi/cantor	0.78 (0.415)	0.93 (0.255)	0.83 (0.38)	0.74 (0.445)	0.84 (0.366)	4.041	.008	.047
Biography of other staff	0.43 (0.5)	0.56 (0.498)	0.34 (0.479)	0.42 (0.497)	0.46 (0.5)	2.607	.052	.031
Guest book	0.02 (0.14)	0.04 (0.196)	0.04 (0.204)	0 (0)	0.03 (0.165)	.843	.472	.010

Feedback form	0.27 (0.451)	0.32 (0.468)	0.36 (0.486)	0.38 (0.489)	0.33 (0.471)	.509	.677	.006
Online signup for temple activities	0.27 (0.451)	0.36 (0.481)	0.38 (0.491)	0.43 (0.5)	0.36 (0.481)	.991	.398	.012
Online donations	0.47 (0.504)	0.66 (0.475)	0.49 (0.505)	0.72 (0.455)	0.6 (0.49)	3.661	.013	.042
Religious school	.88 (.325)	.93 (.255)	0.81 (.398)	.85 (.361)	.88 (.324)	1.759	.156	.021
Members-only section	0.33 (0.476)	0.28 (0.45)	0.32 (0.471)	0.34 (0.478)	0.31 (0.463)	.287	.834	.003
Torah study materials	0.51 (0.505)	0.53 (0.501)	0.51 (0.505)	0.36 (0.484)	0.49 (0.501)	1.548	.203	.018
Text of sermons available online	0.18 (0.385)	0.14 (0.347)	0.13 (0.337)	0.25 (0.434)	0.17 (0.373)	1.158	.326	.014
Ability to submit/read prayer requests	0.02 (0.14)	0.05 (0.218)	0 (0)	0.04 (0.192)	0.03 (0.176)	.957	.414	.011
Download/interactive content	0.39 (0.493)	0.43 (0.497)	0.34 (0.479)	0.45 (0.503)	0.41 (0.493)	.499	.683	.006
Online Streaming	0.1 (0.3)	0.09 (0.286)	0.11 (0.312)	0.06 (0.233)	0.09 (0.283)	.303	.823	.004
Ability to actively participate in services	0 (0)	0.01 (0.1)	0 (0)	0.02 (0.137)	0.01 (0.089)	.541	.655	.006
Discussion Threads	0.02 (0.14)	0 (0)	0 (0)	0 (0)	0 (0.063)	1.319	.269	.016
Advocacy announcements	0.69 (0.469)	0.86 (0.347)	0.55 (0.503)	0.75 (0.434)	0.75 (0.436)	6.094	.001	.069
Links to social causes	0.53 (0.504)	0.63 (0.484)	0.49 (0.505)	0.58 (0.497)	0.58 (0.495)	1.093	.353	.013
Privacy Policy	0.06 (0.238)	0.1 (0.3)	0.11 (0.312)	0.08 (0.267)	0.09 (0.283)	.330	.804	.004
Facebook	0.55 (0.503)	0.59 (0.494)	0.57 (0.5)	0.45 (0.503)	0.55 (0.498)	.972	.407	.012
Twitter	0.24 (0.428)	0.28 (0.45)	0.23 (0.428)	0.15 (0.361)	0.23 (0.424)	1.027	.381	.012
Other social media	0.2 (0.4)	0.12 (0.325)	0.19 (0.398)	0.11 (0.32)	0.15 (0.36)	.945	.420	.011

¹N = 91

²N = 69

³N = 66

⁴N = 26

⁵N = 252

TABLE 5: Multivariate Analysis of Variance for Presence of Content by Congregation Size¹

Coding Unit Categories	MANOVA*			
	Wilk's Lambda	F(3, 248)	p	eta ²
Interfaith/Interdenominational relations	0.962	1.601	.145	.019
Organizational identity	0.418	4.610	.001	.252
Mobilization for civic and social action	0.899	4.486	.001	.052
“Online religion”	0.645	5.466	.001	.136
Social Media Usage	0.886	3.388	.001	.039

¹N = 252

*See Table 3 for ANOVA data

TABLE 6: Multivariate Analysis of Variance for Presence of Content by Congregation District¹

Coding Unit Categories	MANOVA*			
	Wilk's Lambda	F(3, 248)	p	eta ²
Interfaith/Interdenominational relations	0.972	1.176	.316	.014
Organizational identity	0.700	1.726	.002	.112
Mobilization for civic and social action	0.928	3.119	.005	.036
“Online religion”	0.918	.998	.463	.028
Social Media Usage	0.969	.854	.566	.010

¹N = 252

*See Table 4 for ANOVA data

Appendix C: Wave Illustrations

WAVE Report of Accessible University Mock Site - Inaccessible Version - Mozilla Firefox

http://www.webaim.org/report/#/http%3A%2F%2Fwww.washington.edu%2Faccesscomputing%2FAU%2Fbefore.html

The following apply to the entire page:

Accessible University

Academics Admissions Visitors

About AU

Welcome!

Accessible University (AU) is a fictional university, and this is its fictional home page. This page is designed to demonstrate a variety of common web design problems that result in visitors with disabilities being unable to access the content or features of a web page. Although the heading at the top of this section of the page suggests that AU may be a welcoming institution, the inaccessible design of this page sends the opposite message.

horizontal line

Bienvenido!

Accesible Universidad (UA) es una universidad ficticia, y esta es su página de ficción. Esta página está diseñada para demostrar una variedad de común de diseño web que se traducen en problemas de los visitantes con discapacidad no poder acceder al contenido o las características de la página web.

h2? Apply Now! (required fields are in blue)

Name:

Email:

City:

State/Province:

Summary

WAVE has detected the following:

- 21 Errors
- 9 Alerts
- 0 Features
- 2 Structural Elements
- 0 HTML5 and ARIA
- 15 Contrast Errors

Panel Options

- DETAILS: A listing of all the WAVE icons in your page.
- DOCUMENTATION: Explanation of the WAVE icons and how you can make your page more accessible.
- OUTLINE: The heading structure of the web page.

Feedback | Powered by WebAIM

WAVE Report of Accessible University Mock Site - Inaccessible Version - Mozilla Firefox

http://www.webaim.org/report/#/http%3A%2F%2Fwww.washington.edu%2Faccesscomputing%2FAU%2Fbefore.html

The following apply to the entire page:

Accessible University

Academics Admissions Visitors

About AU

Welcome!

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horizontal line

Bienvenido!

Accesible Universidad (UA) es una universidad ficticia, y esta es su página de ficción. Esta página está diseñada para demostrar una variedad de común de diseño web que se traducen en problemas de los visitantes con discapacidad no poder acceder al contenido o las características de la página web.

h2? Apply Now! (required fields are in blue)

Name:

Email:

City:

State/Province:

Details

Filter: Full

- Errors (21)
- 4 X Missing alternative text
- 13 X Missing form label
- 4 X Linked image missing alternative text
- Alerts (9)
- 1 X No heading structure
- 3 X Suspicious alternative text
- 2 X A nearby image has the same alternative text

Feedback | Powered by WebAIM