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Testing Local Municipality Hiring Procedures and Local Forms of Government: Are Search Engines and Social Media Sites Used to Collect Supplemental Information about Applicants?

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Testing local municipality hiring procedures and local forms of government: Are search engines and social media sites used to collect supplemental information about applicants?

By

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The relationship between the government and the governed is transforming into a digital collaboration of operations. The level of intensity for this collaboration between government and citizens have fallen behind that of the private sector. Web 2.0 tools, otherwise known as social media, internet search engines, and e-Government are now a stimulant for citizens to become informed about their government actions and to also interact with government in order to provide input to elected officials and appointed officials from citizens to the government concerning public policy making and other public concerns. This research seeks to examine the question of whether forms of local government and their hiring practices have any effect on the way local municipalities conduct their background checks using social media and search engines as supplemental information to traditional background checks. The author examines a representative sample of 871 municipalities within the U.S. having a population of 2,500 or greater. The local form of government hiring procedures characteristics of these 871 municipalities are measured using two separate independent variables. The effects of the forms of local government hiring procedures are measured using independent T-tests and

Z-tests for regions selected by the U.S. Census Bureau and population size of these municipalities, municipalities that offer e-Government, and the total forms of e-Government offered.

The first four hypotheses, which are especially central to this dissertation, were all rejected. Local government form, population, and region are not correlated with use of social media and search engines to obtain supplemental information about applicants. There were 448 out of 871 hiring managers in municipalities responding to this survey, 51 percent, that confirm searching social media to find supplemental information about applicants. Characteristics of the hiring managers for this study show a correlation between social media and search engines being used to obtain supplemental information about applicants, however, statistical significance was not obtained for these core hypotheses. Minor hypotheses in this study did prove to show significance between hiring managers and the use of social media and search engines to obtain supplemental information about applicants.

DEDICATION

I first and foremost dedicate this research to the Lord for "the heart of the prudent getteth knowledge; and the ear of the wise seeketh knowledge" Proverbs 18:15, and without his wisdom to discover the guidance, knowledge to complete this task, and the will and strength to endure, I would never have had the ambition or motivation to stay. I would also like to thank my parents Joseph C. Denton and Shelia Denton for their support they have provided for me in order to finish this program and all of the help they have provided in my life. Further, I want to dedicate this to all students who are told they "can't" just as I was. Keep swinging and never give up because when you finish the climb, it is something the negative people can never take away from you and the finish line becomes so much sweeter when you cross it. Just remember, the sweet is never as sweet without the sour.

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I would like to express my sincere gratitude to the many people without whose generous support this dissertation would not have been possible. First, I would like to thank my committee chairman, Dr. P. Edward French, for taking a chance and accepting me into this program. His guidance started years ago, without him knowing, at the University of Tennessee and it is an honor to follow in his footsteps. Dr. French has taken valuable time with me and endured several of my questions and always guided me to the finish line of where we are now. He is without a doubt a true mentor, not for just me, but all students. I would also like to thank Dr. Steve Shaffer for always being a true social scientist and always treating students fair and equal. Dr. Shaffer has helped me more than he will ever know with this dissertation, research methods, and has always given me the information I needed without complicating an extremely complicating process. My appreciation is also given to the other members of my dissertation committee, namely, Dr. Dragan Stanisevski and Dr. Johann Park, for the invaluable aid and direction that they have offered during this process and the classes they have provided for me in preparation for this dissertation process. I would further like to thank Dr. Nicole Lewis of East Tennessee State University for offering her time and advising me in statistical methods for this research. Finally, I would like to thank Mississippi State University for allowing me to pursue my Ph. D. at this great institution of higher learning.

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CHAPTER I

INTRODUCTION

Statement of the Problem

The relationship between the government and the governed is transforming into a digital collaboration of operations. Digital interaction with society is not only a private sector commodity anymore; it is now a necessity for the public sector to interact with citizens. The level of intensity for this collaboration between government and citizens has fallen behind that of the private sector. Web 2.0 tools, otherwise known as social media, search engines and e-Government are now a stimulant for citizens to become informed about their government actions and to also interact with elected government officials, appointed officials, and government departments in an attempt to provide input from citizens to our government concerning public policy making and several other issues. As Thomas Jefferson said to John Adams in 1796, "This I hope will be the age of experiments in government, and that their basis will be founded in principles of honesty, not of mere force", these experiments for government, I suggest, are Web 2.0 tools, e-Government, and the Internet.

Several scholars have researched the potential of Web 2.0 transforming government. Findings from these scholars show that wikis and blogs, which are part of the Web 2.0 phenomena, would allow for the largest interaction between local government and its citizens (Gomes & Sousa, 2012). Blogs can be analogized as a

virtual town meeting for local government to interact and communicate with its citizens. Wikis, conversely, can be used for citizens to provide feedback to local officials concerning community plans and policies (Gomes & Sousa, 2012). Findings among these scholars all share the same common theme; that the tools and practices of Web 2.0 by government can help to improve policy making and delivery of services by government while also promoting adjacent relationships between government and its citizens (Gomes & Sousa, 2012).

Within the past ten years, the world has altered in so far as how people communicate and share information. Web 2.0 technologies have recently exploded with popularity and are continuing to grow exponentially. This exponential growth of Web 2.0 technologies has brought a concern for how these technological tools are used for applicant background searches, particularly in the public sector. Much so that it is not uncommon for hiring managers to search these social media sites, along with internet search engines, for supplemental information pertaining to the applicants for which they are looking to hire.

The growth of technologies over the past decade, such as Web 2.0 tools and search engines, has also brought a concern for the legality of this type of applicant background search and should be a concern for Human Resource Hiring Managers and to the applicants. A few of the most popular Web 2.0 technologies used today are Facebook, Twitter, Reddit, Google+, Linkedin, pinterest, instagram, snapchat, and even independent Wikis, and Blogs. The most popular search engines used for searching names of applicants are Google, Bing, Yahoo, and a growing search engine known as

DuckDuckGo. These are only a few of the social media outlets and search engines available; however, they are often the top used.

This notion of searching social media and search engines for information about applicants is not entirely a brand-new idea. We, as a society, have had this for many years before social media, search engines, or any technology, in the form of local network gossip. Rumors and hearsay are nothing new and before this glorious technological revolution for communication, our society thrived in small communities using word-of-mouth. Small communities especially were and continue to be a very tight network of individuals that talk among themselves about one another. Even back then, people often knew when their buddy was gone out of the house, on vacation, applying for a job, etc.

It seemed that everybody in these small communities knew some things about everybody else, whose family had been in the community for a time; who they were, who their family was, who they associated with and what they were like in general. Hence, social media is not an entirely new thing; we have only digitized that gossip and expanded from a tight local community to a global digital gossip phenomenon. Some of the rumors, gossip and hearsay, are true, while others are not. Some things are hanging between truths, made up entirely, exaggerated, or totally out of context, how gossip worked pre-technology and exactly like social media and internet search engines works today. Today if a stranger were seen hanging around the community, people would notice and immediately commence to posting that information on social media.

As society and these small communities have grown over time, so has the way in which we communicate. It is not so much by word of mouth, however, that still exists.

Larger cities and communities meant that word of mouth was not an easy way to communicate information. Hiring managers both private and public are being forced to transform the way they review and select proper applicants. At first, it was simply an application giving some references. If education was a factor, the applicant sometimes had to submit their educational credentials. Further progressing these hiring procedures, hiring managers started employing the use of third-party background check companies that would check references, check identifying information supplied on the application and various other information about the applicant. As such, it only makes sense that with the progression of technology, along comes the miracle of social media and the Internet that caused a wealth of information to be available with a few clicks of the mouse on a personal computer. Today, that same information has become easier to view via smartphones and tablets.

The Internet and other communications greatly extend the reach and persistence of information, disinformation, and just plain bad information. Today, fewer people grow up knowing others in their community as pre-technological times. There is a growing problem with people placing too much weight, belief and credibility in what they find online, and that, arguably, is a decline of standards in society today as some of this information can not be verified as accurate information. A hiring manager, or any wise, reasonable person, has to use good judgment and rationality in making decisions based on information they receive, whether directly from people, or from any other communications medium, that is included as being accurate information. Technology has changed life greatly, especially in recent years, but people's nature essentially has not changed so much.

Since the explosion of this technology, questions arise, for the public sector, as to whether this notion of using Web 2.0 tools and search engines to research supplemental information about applicants is smart practice and what are the current laws and policies that govern this type of intrusive yet potentially inaccurate background check? Furthermore, are these types of applicant background checks reliable? Is it a reasonable practice for a hiring manager to check Internet search engines, social media, and other freely available sources, since society seems to be openly posting their daily lives and activities with their own free will and without thought of who is reading those posts? By hiring managers doing so, does this create a larger chance of hiring a better employee, more qualified employed, or the best fit employee? These questions, I believe are important to the field of public administration at the local level of government and need to be addressed.

Web 2.0 and search engines have become so embedded with society today, as smartphones and internet connectivity becomes more affordable and readily available, that users of this technology often do not hesitate to share personal information, religion, race, ethnicity, medical conditions, marital status, compromising pictures, and overall status updates of their whereabouts, which unfortunately can be viewed by the public or hiring managers and potentially be evaluated as a personality trait about the potential employee. When an individual applies for a public job, it is the hiring managers' ethical and professional responsibility to the tax payers, to hire the most suitable candidate. This may not necessarily result in the most qualified person as per a resume or similar credentials, but the best fit for the safety, efficient productivity, efficacy, sustained livelihood, and good character standing of the organization. The organization is

entrusting in the hiring managers to use their best judgment, rationality and personal background credentials to do just that, to hire the most suitable candidate, all aspects considered. The Society for Human Resource Management code of Ethics specifically states that hiring managers need, "to positively influence workplace and recruitment practices…". Therefore, hiring managers and human resource professionals are under an ethical oath to use whatever outlet they see fit in order to "positively influence… recruitment practices".

Human Resource managers are usually tasked with recruitment, career advancement, employees motivation and evaluations, all the while also conducting background checks and research about applicants for available job openings. The Internet connectivity has changed the way this type of human resource function can be performed. The Internet connectivity also has changed the way we meet, interview and the ways we evaluate people, and has altered the way employers evaluate prospective employees during the hiring process (Reicher, 2013). With the introduction of Web 2.0 tools and search engines, Human Resource managers now have to add to the mix and deal with what is legal, ethical, moral and normative for seeking out and viewing this type of applicant supplemental background information while continuing the traditional functions of their department. Recent reports suggest there have been many incidences where employers are seeking social media password and login information from job applicants, pre and post employment in order to review the applicants' social behaviors (Wu, 2011).

To date, the vast majority of these studies are conducted for the private sector, which assess the percentage of employers that use social networks and search engines to screen applicants for supplemental information. The estimation is about a fifth to a

quarter of employers are searching job applicants on popular Web 2.0 sites and search engines (Reicher, 2013). These types of Web 2.0 and search engine supplemental background checks can seem unfair by many individuals. Anonymous individuals can post inaccurate information on Web 2.0 outlets and search engines do not take the time to verify accuracy of what has been posted about individuals. Further, Web 2.0 tools also do not verify if the person posting information is indeed the person the information is supposed to be about. Often times, an individual having the same name and information as another, comes back negative that has nothing to do with the other person with the same name. In the worst cases, friends or individuals have posted information about an applicant that was not verified or the applicant is simply unaware that erroneous information has been posted about them and resulting as negative supplemental information.

The term "internet background checks", such as Web 2.0 and search engines, has been defined as and refers to the general circumstance in which employers gather digital information from the Internet about a person or an applicant (Reicher, 2013). Employers, private or public, tend to acquire information about applicants in several ways. Some search for information about the candidates themselves by asking the department responsible for hiring to conduct the search but they do not usually have any authority about the organization. Others tend to hire a third party company to conduct the search for them. Depending on the company or the third party company hired to conduct the search, the information gathered about an applicant can vary dramatically.

Research Issues

Scholars have not yet examined the relationship between local municipality forms of government and their hiring practices' and few studies have even looked at social media and Internet search engine practices for government as a whole, let along local municipal government. Researchers have examined the private sector and how their hiring managers use social media and internet search engines and there have been several publications presenting those findings (Wu, 2011; Elzweig & Peeples, 2009; Fisher, 2011; Goodman, 2010; Karkin, 2013).

There have been other studies focusing on local government and how the form of government at the local level effects certain aspects of the municipality. These research scholars have examined such factors as characteristics of the community, region, size, political influence, and several others dealing with various forms of government in the United States. The quality of municipal services has been linked to what form of government the municipality chooses in some cases (Dye and Garcia, 1978; Sanders, 1979). There have also been studies that focus on the efficiency and effectiveness of the form of government the municipality chooses (Dye and Garcia, 1978; Abney and Lauth, 1986; Rubin, 1988; Hayes and Chang, 1990).

As can be imagined, there have been several scholarly studies that examine the relationship and roles of mayors, city-council, and managers that represent the administration and how they affect policy formulation of the municipality.

To date, however, the laws have not kept up with this trend of applicant background searches using Web 2.0 tools or search engines either for hiring purposes or after being hired, in the private or public sector. Hiring or firing decisions based on

information that is not part of the application process or standard operating procedures, presents a possible charge of unfair inference. Principles of unfair inference prohibit information from witnesses as being considered factual unless it can be shown that the information is relevant and accurate. Not only are employers potentially violating privacy laws, some employers are conducting extensive electronic monitoring of e-mail and Internet use, which also factors into potential violations of privacy laws (Eivazi, 2011).

Overview of Local Government

Form of government, mayor-council and council-manager is the major factor in predicting the hiring practices of the municipalities randomly chosen for this study. As such, clarification of the different forms of government that will be compared and how these forms of government came into existence should be explained. Local government in the United States refers to the governmental jurisdictions that can be found in states and is considered the level below the state government. The predominant forms of local government are counties and municipalities. In addition to these two general purpose forms of local government, there are also many local and regional special-purposes local governments sometimes referred to as special-districts and can include school districts, sanitary, public transportation, water, or even public libraries. When America was settled by Europeans from England, the settlers only drew upon the forms of government they were already familiar with (Adrian, 1988).

Towns, counties, and county-townships were part of these forms of government which have evolved into what we practice today in the United States. The Tenth Amendment to the United States Constitution makes local government a state matter

rather than federal with the exception of special territories and the District of Columbia. The categories for local government are County, Town or Township, Municipal, and Special-Purpose local governments.

County governments are organized local governments that have been authorized in state constitutions and statues and are often viewed as the arms of the state. The county system of government was found heavily in the southern colonies at first because the settlers were farmers and very few were part of a group settlement. Towns or townships are organized and authorized in the state constitutions and statutes to provide general government for a defined area that is usually based on the geographic divisions of the county. During colonization, these town systems were mainly found in the New England colonies (Blair, 1964).

Municipal governments are established to provide general government for a specified area, similar to towns. They generally correspond to a population center rather than different areas within the county. The categories for a municipality are cities, boroughs, towns, and villages with a few exceptions in Alaska, Minnesota, and Wisconsin (Blair, 1964). Special-purpose local governments such as school districts, are also organized local entities that have sufficient administrative and fiscal autonomy to qualify as a separate form of government per the state constitution.

In defining the local forms of municipal government, this study draws those definitions from the International City Management Association (ICMA) that conducts a national Municipal Form of Government survey every five years within the United States. The survey conducted by ICMA looks at the five most common forms of local

government in the United States and are as follows: (DeSantis & Renner, 2002; MacManus & Bullock, 2003).

1. Mayor-council
2. Council-manager
3. Commission
4. Town-meeting
5. Representative-town-meeting

In a longitudinal study conducted by the ICMA up until 2012, 48 percent of municipalities operate under a council-manager form of government, 44 percent operate under a mayor-council, 1.9 percent operate under a commission, 4.7 percent operate under a town-meeting, and 0.9 percent operate under a representative-town-meeting.

The ICMA survey defines the *council-manager plan* as,

> "The council is the governing body of the city, elected by the public, and the manager is hired by the council to carry out the policies it establishes. The mayor is either selected by the council or elected by the people as defined in the city charter" (ICMA, 2012 p. 37).

The *mayor-council plan* is defined as,

> "The mayor or elected executive is designated as the head of the city or county government and elected legislature" (ICMA, 2012 p. 37).

The *commission* plan is defined as,

> "an elected governing board that holds both legislative and executive powers" (ICMA, 2012 p. 37).

The *town meeting plan* is defined as,

> "all qualified voters of the town gather on a given day to elect a board of offices and to make policy decisions" (ICMA, 2012 p. 38).

The *representative town meeting* is defined as,

> "a large number of qualified voters are chosen by the general electorate to represent them in voting, where only those chosen as representative have a direct vote" (ICMA, 2012 p. 38).

The two most dominant of these forms of government are the council-manager and the mayor-council forms. The council-manager form of government closely mimics private organizational structure dealing with the day-to-day operations of the municipality. Most studies conducted by scholars have focused around these two forms of government in order to analyze the affects of the form of government on a variety of variables presented in their research. This author's research will focus on mayor-council and council-manager as stated earlier in this paper.

Recently, scholarly research has demonstrated structural changes in municipalities within the United States and these studies have also shown that there is an increased use of adopting the chief administrative officer (CAO) in the mayor-council form of government with a more direct election of the mayor and an increase in the use of district elections for city council members occurring in recent years, suggesting a more professionalized and current trending staff operation (Ebdon & Brucato Jr, 2000; Frederickson, Brett, & Wood, 2003; MacManus & Bullock, 2003).

Significance of the Study

As with most of the relevant studies of local government within the United States concentrating mainly on the forms of government listed by the ICMA, this study too will use these forms of government listed in the ICMA as a foundation of analysis between the hiring manager's characteristics and the form of government itself. Very little study has been conducted at the local level of government, and no study in the literature

specifically about their hiring practices and procedures has been published. Has the adaptation of Web 2.0 tools and Internet search engines had a significant effect on these procedures? Has the use of Web 2.0 tools and Internet search engines increased the chances of hiring a more reliable employee? Does the mixture of these activities with the current and traditional forms of background checks make a difference?

This study evaluates whether these new tools are being utilized by hiring managers in the different forms of government, specifically the mayor-council and council-manager form of government, based on variables designated to measure respondents' answers to the author's survey. This study is important to public administration because it can provide evidence that professional hiring managers at the local level are more likely to utilize technological tools in a specific form of government in order to make a more informed decision about their hiring of new employees and give these hiring managers a chance to benchmark their own hiring practices with their neighbors, than other regions and governmental stuctures. This study is also beneficial to the applicants themselves because it can provide the detailed information and proof needed that in order to obtain a professional position, one must be mindful about the digital information they have decided to post on a public venue. Previous literature concerning this topic is non-existent for the local level of government. This author expects to find that municipalities with a council-manager form of government, with a population of over 50,000 and within the Northeastern and Western regions of the United States will be utilizing the technological outlets mentioned above in order to hire the best-fit applicant for municipality job-openings.

This study will dramatically enhance the existing literature concerning local government. The analysis will provide practitioners not only with real-world evidence of this practice, but also the structure and benchmarking needed in order to stay current with the explosion of technology being used in society today. The municipalities that are used in this study are from a nationwide pool of municipalities in the United States The author examines the data as a whole and also by regions in order to identify, if any, the effect of regionalism on any of the variables presented. Data are examined to determine whether the council-manager form of government differs from the mayor-council form of government. The author assumes the council-manager form of government offers a more professional approach to running a municipality and will include the use of technological advancements.

Two thousand municipalities with populations 2,500 and greater are surveyed in order to obtain a representative sample from which to make comparison and draw inferences. In these surveys, information concerning each municipality's form of government, municipalities' social-media and Internet search engine uses, and several other regional, education level, political roles, geographical and demographical pieces of key information are collected in order to make the inferences mentioned above. Overall, this study attempts to determine that the council-manager form of government, having better educated leaders, and having less political influences over the day-to-day operations of the municipality makes a difference in how the hiring practices are conducted and if hiring managers are using Web 2.0 tools and Internet search engines as part of their hiring practices. This information will be very important to Public Administration because the data and analysis will provide substantiating evidence for the

field of Public Administration and further show the success of how the council-manager form of government enhances professionalism by utilizing technology.

CHAPTER II

LITERATURE REVIEW

Introduction

This literature review chapter presents a comprehensive discussion of the research in Public Administration and in the private sector that addresses the areas of hiring practices, technology, e-Government and Internet usage that is included in this analysis. Existing literature concerning the relationship between form of government, traditional hiring procedures and technology uses is included, and any relevant literature in the private sector that shows the relationship between hiring managers and their hiring practices has also been included for discussion for a benchmark comparison between the public and private sector. Additional information found in this chapter includes a discussion of current literature regarding e-Government, Internet search engines, Web 2.0 tools and the definition of the Fair Credit Reporting Act. Finally, this chapter also discusses information found on form of government and demographic aspects of municipalities. The information provided in this chapter should assist in clarifying the reader's knowledge of the relationships between the independent variables and the dependent variables included in the author's research analysis and show the need for more research in this area of Public Administration and local municipalities.

Traditional Hiring Practices and their Legal Issues

Human Resource managers are usually occupied with recruitment, career advancement, motivating employees and evaluations. The Internet has changed the way we evaluate people and has altered the way employers evaluate applicants during the hiring process (Reicher, 2013). With the introduction of Web 2.0 tools along with Internet search engines, hiring managers have a valuable tool to assist with hiring the best-fit employee, but also have to be mindful of what is legal and ethical in using these new technological tools for evaluation. To date, there have been many incidences where employers are seeking Facebook, Twitter, and Instagram password and login information from job applicants (Wu, 2011). This behavior has started to become normal practice for public and private organizations especially for hiring school teachers and police officers. (Wu, 2011).

To date, the studies of the private sector assessing the percentage of employers that use social networks and search engines to screen candidates, estimate about a fifth to a quarter of employers are searching job applicants on popular Web 2.0 sites and search engines (Reicher, 2013). These types of Internet background checks can seem unfair and unethical by many individuals. Inaccurate information can be posted by anonymous individuals, search engines do not take the time to verify what has been posted, Web 2.0 tools also do not verify if the person posting information is indeed the person the information is supposed to be about. Often times, individuals have the same name and information comes back that has nothing to do with the other person with the same name. In the worst cases, friends or individuals have posted information about a potential

candidate that was not verified or the potential candidate is simply unaware that erroneous information has been posted about them.

The term "internet background checks" has been defined as and refers to the general circumstance in which employers gather information from the internet about a person or a potential employee (Reicher, 2013). Employers, private or public, tend to acquire information about potential employees in several ways. Some search for information about the candidates themselves by asking the department responsible for hiring to conduct the search, but they do not usually have any authority about the organization. Others tend to hire a third party company to conduct the search for them. Depending on the company or the third party company hired to conduct the search, the information gathered about a potential employee can vary dramatically.

Under the Fair Credit Reporting Act (FCRA), employers must provide to job applicants and employees a disclosure that a consumer report or background checks will be performed, and the employer should obtain the individual's authorization to proceed with the check. If the employer finds any questionable documentation, there is an obligation by the organization conducting the background check, to provide notice to the individual concerning the information found on a background check, to give the applicant the opportunity to take adverse action before the employer makes any decision. Furthermore, the FCRA requires an employer to provide a post-adverse action notice to the potential employee as well.

State and federal laws regulate the traditional forms of pre-employment screening, including credit, criminal, and character background checks. Congress enacted the FCRA in 1970 for investigating not only a consumer's creditworthiness, but also a

consumer's "character" and "general reputation" (U.S.C. § 1681 (a) (2011)). This Act was a response by Congress to address the situations reported as abuses in credit reporting. The next evolution and the need for amending this Act is arguably happening now with the increasing use of Internet and Web 2.0 background checks for investigating potential employees. Though this Act has broad statutory definition of consumer report, allowing the FCRA to account for the new source of character and general reputation information, the Act does not account for the Internet's expansion of access to that information to practically anyone with computer access.

The majority of the provisions of the FCRA apply to consumer reporting agencies that produce consumer reports (15 U.S.C. § 1681a(d), (f)). Because of this, the information that is gathered as part of a hiring committee, special hiring department, or a third-party service falls within the definition of a consumer reporting agency and produces a consumer report is a threshold issue for determining whether the information gatherer must comply with the strict requirements of the FCRA (Reicher, 2013). A consumer-reporting agency is defined as anyone who produces a consumer report while a consumer report is defined as the report produced by a consumer-reporting agency (15 U.S.C. § 1681 (a), (f)). These two definitions suggest that the FCRA applies to only the third parties used for reports and has no weight on employers that choose to use a hiring committee or a special hiring department.

The FCRA defines consumer-reporting agency as, "any person which, for monetary fees, dues, or on a cooperative nonprofit basis, regularly engages in whole or in part in the practice of assembling or evaluating consumer credit information or other information on consumers for the purpose of furnishing consumer reports to third parties,

and which uses any means or facility of interstate commerce for the purpose of preparing or furnishing consumer reports" (U.S.C. Id. § 1681 a(f)).

Conversely, the consumer report is defined as, "any written, oral, or other communication of any information by a consumer reporting agency bearing on a consumer's credit worthiness, credit standing, credit capacity, character, general reputation, personal characteristics, or mode of living which is used or expected to be used or collected in whole or in part for the purpose of serving as a factor in establishing the consumer's eligibility for employment purposes" (Id. § 1681a(d).

The FCRA contains specific requirements for employers that use consumer reporting agencies to obtain credit and background reports for job applicants. An employer must give the applicant or employee a clear and conspicuous written disclosure notifying him or her that a consumer report may be obtained by the employer and obtain the applicant's or employee's prior written consent to the employer's procurement of the consumer report (Coburn, 2014). If an employer intends to take an adverse employment action based in whole or in part on a consumer report, it is required under the FCRA to comply with a two-part notification process by providing the applicant with a "pre-adverse action notice" indicating that the employer intends to take an adverse action based on the contents of that person's consumer report and then provide the applicant with a copy of the report and summary of the consumer's rights under the FCRA. The employer must then provide a separate "adverse action notice" indicating that such action was taken and furnishing certain other information relating to the consumer reporting agency that provided the report and the person's FCRA rights to address the situation (Coburn, 2014).

The applicable section mentioned above that requires disclosure to any third parties in order to qualify a person as a consumer-reporting agency is what should be looked at carefully by hiring managers while gathering and reviewing any information about an applicant's background that has been collected for review of that applicant's employment. It is important because according to the FCRA, if you are not qualified as a third party consumer reporting agency, you are in violation of the regulations set-forth by the FCRA. For example, if a hiring committee has been created in order to staff a position and that hiring committee uses a third party company to narrow down the search for their final candidates and the third party company then uses another company to gather background information that has been certified as a consumer reporting agency under the FCRA guidelines, and gives that information to the third party company that in turn gives the information to the hiring committee, this is a violation because the third party originally hired by the committee has not been certified as a consumer reporting agency under the guidelines set forth by the FCRA guidelines.

One of the biggest expectations that comes from the FCRA guidelines is the expectations of privacy which is also one of the largest concerns about using social media and Internet search engines as a form of supplemental information about applicants. The protections of user information can bring up concerns under the FCRA guidelines because social networking sites and Internet search engines do not take the proper steps to protect the information users share with each other. Debates concerning ownership of the content on social networking sites have generated huge backlash between private individuals and corporations that own these sites.

There has been an increase in lawsuits involving alleged violations of state and federal reporting statutes by employers (Coburn, 2014). These types of lawsuits against employers can result in significant losses and hiring managers need to take the necessary steps to ensure compliance with federal and state consumer reporting laws such as the FCRA (Coburn, 2014). Despite the increasing popularity of social media applicant screening, the practice is a huge subject of disagreement concerning legality and privacy (Ebnet, 2012). Many employers love the use of social media pre-employment screening as it allows them to gather supplemental information that may or may not be used about the applicants for hiring the best match employee. The arguments for and against these practices are sharply divided, especially over the legality of using social media or Internet search engines for supplemental information (Ebnet, 2012). The FCRA only applies to those background checks conducted by third-party screening companies, leaving employers open to search social media and Internet search engines internally without facing the possibility of breaking FCRA regulations. Just as technology is evolving with social media and search engines, so to are the amount of companies that are popping up offering to research job candidates' online activities for employers (Ebnet, 2012). One such company is Social Intelligence founded in 2010 in Santa Barbara, California. This company's services involve scouring the Internet for everything job applicants may have said or done online in the past seven years and then provides employers a specialized social media report detailing an applicant's online activity (Ebnet, 2012).

Important to the fact, when social media pre-employment screening is performed by third parties, they must adhere to FCRA regulations. The loophole still remains that employers performing these searches in house, can avoid any FCRA complaints and

weight the information they have found with traditional background checks. Employers have relied in the past on written applications, questionnaires, interviews, references and traditional background checks during the screening of job applicants. These practices were part of the FCRA list of presumed permissible items with exceptions according to regulations created by FCRA. However, as technology has progressed exponentially, the regulations by the FCRA have become shady when dealing with new types of background checks such as social media and Internet search engines (Ebnet, 2012). Recent judicial review has tightened the ropes on traditional pre-employment screening in an attempt to encompass these new technologies dealing with scrutiny particular to anti-discrimination constraints of TitleVII of the Civil Rights Act of 1964 and the Americans with Disabilities Act (ADA), state arrest records, reporting restrictions of the FCRA, and privacy protections contained in the Fourth Amendment to the United State Constitution (Ebnet, 2012).

Title VII forbids employers from discriminating against applicants based on race, color, religion, sex, or national origin. It does not, however, prohibit application procedures that elicit information concerning a protected clas as long as employment decisions are grounded in legitimate, non-discriminatory actions (Ebnet, 2012). Guidelines implemented by the Equal Employment Opportunity Commission (EEOC) state that interview questions that either directly or indirectly require the disclosure of information concerning protected class status may constitute evidence of discrimination (Griggs v. Duke Power, 401 U.S. 424, 433-34, 1997). Employers often conduct and gather criminal background information about applicant's criminal records during the application process. Criminal background checks are usually permissible as long as the

employment decisions based on an applicant's criminal record are consistent with a business necessity and do not have a disparate impact on a certain class of applicants (Ebnet, 2012).

Since the explosion of social media and users' willingness to openly post their statuses and information, applicants need to be aware of what they post and to take necessary steps of removing posts that may seem unprofessional during the job search. There are numerous stories giving example of how employers are finding information on social media or by using search engines and removing the applicant from the job focus. For example, one applicant did not receive a job offer after the employer linked the applicant to an online advertisement seeking OxyContin (Ebnet, 2012). Several applicants' have posted Facebook profiles that include interests for smoking blunts, sex acts, or even threatening to shoot people, and one employer admitted to removing an otherwise qualified applicant from be considered for any jobs (Ebnet, 2012).

Arguably in these situations, applicants themselves are to blame for posting harmful and informative information about themselves that influenced their consideration by the hiring manager. However, the question still remains about a legal framework being developed that can adequately regulate social media and Internet search engines when conducting pre-employment screening by human resources and hiring managers. Human resource management (HRM), in a professional context, consists of the "effective and efficient management of employees of an organization to achieve the desired objectives" (Aspridis, Kazantzi, & Kyriakou, 2013; Beardwell, Holden, & Claydon, 2004). This definition holds true for a public or private entity. HRM perceives employees similar to other resources such as finance and technology, must be effectively

managed to ensure the best performance for the entire company (Compton, Morrissey, & Nankervis, 2009). That said, the best performance for the entire company also includes those functions of hiring a new employee and performing a background check of that potential employee while maintaining legal bounds and preventing frivolous lawsuits. There will always be a need for hiring new employees and finding effective ways to not only recruit those employees but to also keep the company's liabilities in mind and perform a background check in order to see if there are any potential liabilities with the new hire that could harm the company.

It is all but certain that if you apply for a government position that some form of background check will be conducted against your application responses (Comisky & Zubowicz, 2006). While this type of screening provides security and other benefits to employers, the hiring manager and government entity conducting the check must be aware of what information they can legally seek, who should conduct the check, and how to use the information that is received (Comisky & Zubowicz, 2006). The hiring manager should develop proper procedures and practices regarding background checks to avoid any potential liability that could arise under federal or state laws.

Employers have always been able to obtain written authorization to conduct criminal background checks and obtain reference information about potential employees and stay in check with the FCRA regulations. Most of the time, the criminal background checks are reserved for the top serious candidates because of the cost incurred for doing these types of checks if using a third-party to conduct them. The traditional methods that fall under FCRA are changing, as employers are routinely conducting informal online background checks on people and without the applicant's knowledge (L. Clark &

Roberts, 2010). As mentioned above, the legal and normative issue is when the employers find information they deem "questionable", should they weigh this information with traditional methods and be making hiring decisions based on this information at all. A study of current private human resource professionals regarding their attitudes toward online background checks found that future employees expect employers to check online for information available about them, and these employers also believe that this is an acceptable practice (L. Clark & Roberts, 2010).

The prevailing view about the use of social media sites and search engines as supplemental forms of background checks is that it is acceptable when the information obtained is essential to the job the potential employee is applying for (L. Clark & Roberts, 2010). Under FCRA regulations, the main negative consequence would be when the employer views information online at a social media site about the applicant, finds something they deem unacceptable and simply does not hire the potential employee without finding accurate information first. Since the employer does not notify most potential employees that a social media site search is being conducted on them, which accompanies traditional application materials, legal issues could arise against the hiring manager and the company for which the hiring manager is employed with.

In 2007, the Society of Human Resource Management Survey showed that 50 percent of private human resource professionals ran an Internet search using Google or Yahoo search engines and 15 percent reported checking some form of a social media site with 20 percent of those who conducted the searches saying they have disqualified a candidate based on what they found (Zeidner, 2007). These types of numbers suggest

that privacy issues are to be considered and legal issues could arise under current FCRA regulations.

Another nationwide study in 2011 has shown that human resource managers in the private sector and conducted nationwide are actively reading social network websites in order to find information about candidates so the correct hire can be made (Slovensky & Ross, 2012). A study conducted on private employers reports in the Mid-West and West shows that almost 35 percent of the employers admitted that, after finding content on social networking sites, they chose not to hire an applicant (Haefner, 2009; Smith, 2010). While considering the legality of any information gathered from a social networking site, the traditional forms of information gathering about potential employees must be considered in order to comply with FCRA regulations. With the traditional methods, hiring managers usually relied on such items as cover letters, resumes, the application process, criminal background checks conducted by a third-party, references, and the formal oral interview to make a decision about a candidate (Slovensky & Ross, 2012).

Much of the information that is posted online, whether it be a social media site or a personal website, usually has privacy settings which enable only certain individuals to be able to view content as if it were unprotected (Boyd & Ellison, 2007). Certain protected facts such as age, location, relationship status, as well as political ideologies and pictures are commonly posted and available through social media sites which allows a level of sharing that did not exist before social media sites became popular (Boyd & Ellison, 2007). If hiring managers view this information and weigh it towards any hiring

decisions, it would be a direct violation of FCRA regulations and the Civil Rights Act of 1964.

Today, hiring managers are able to combine these traditional sources with information that is gathered, legally or not, through the candidate posting personal information on social media sites that highlights a personality trait coupled with the professional traits that are highlighted with the traditional forms of information gathering. Often, traditional forms of resumes and cover letters have been found to exaggerate factual information about education or work experience (Hall, 2004). With the abundance of information that can be found on social media sites that have voluntarily been posted by individuals, HR managers believe that these sources provide information about the potential employee that is not reflected upon during the traditional forms gathered during the hiring process and can be cross-referenced for inaccuracies (Slovensky & Ross, 2012). HR managers can compile the social media information found that was voluntarily posted and compare or corroborate the information with the traditional forms such as a resume or application (Brandenburg, 2008).

If a friend on a social media site posts information about an applicant, hiring managers, if viewed, may pay close attention to this information as it could be seen as more truthful because it was not posted by the applicant and could be viewed as less subject to impression that would be seen with traditional references who are usually aware they will be contacted about the potential employee (Goodman, 2010). A survey conducted by Microsoft reports that 43 percent of private employers say they will not hire job candidates based on "inappropriate comments" written by relatives and friends (Goodman, 2010).

Studies have also shown that hiring managers have used social media sites to profile the daily lives of applicants (Slovensky & Ross, 2012). With this logic in mind, a hiring manager could potentially take into account, as a weighted hiring procedure with traditional hiring procedures, and use the applicant's LinkedIn connections that a potential employee has made in this professional social media site, to see if there are any other jobs or information the applicant's might have not listed on the traditional application forms. Other social media sites such as Facebook, Reddit, Google+, or even Twitter could provide hiring manager's with insight of the applicant's hobbies, interests, pictures, and videos showing how the potential employee behaves outside of the work environment and allow for the above mentioned daily life profile made by the hiring manager (Slovensky & Ross, 2012). Using this type of information as part of the weighted final decision of whether to hire the individual or not, is the basis for a legal concern of the organization the hiring manager works for.

An obligation of employers is to keep their employees and any individuals that employer conducts business with safe from any negligent harm. Some of these employers have been involved with legal scrutiny because their employees were involved in some sort of illegal actions. After investigating, it was later discovered that information about the employee that committed illegal actions or behavior was available with a proper background check and has since been termed "negligent hiring" (Karren & Zacharias, 2007). This negligent hiring process states that organizations should conduct reasonable criminal background checks when screening applicants. Failure to do this by the employer could result in a negligent liability suit because the employee is considered an agent of the employer. Hiring managers have interpreted the negligent hiring doctrine

as a necessity to check any social media sites for illegal activities about potential employees as part of the negligent hiring obligation by the employer to conduct a reasonable background check about potential employees that covers public safety issues (Karren & Zacharias, 2007).

With respect to the employer's reasonable responsibility to create a safe working environment under the negligent hiring doctrine, some HR managers have argued that a criminal background check covers the scope of an internet search and social media sites (Slovensky & Ross, 2012). Legal experts have even weighed in and opined that it is probably acceptable for employers to view social network site profiles that are available without any sort of privacy settings turned on (Brandenburg, 2008). However, the law is still emerging on this issue, and the courts have not weighed their opinion on these matters as of yet. For now, it would be wise for HR managers to practice caution concerning the checking of social media sites about potential employees or at least notify the applicants that such social media site searches may be conducted about them so the potential employee realizes the expectation of privacy.

Municipalities and the Adoption of e-Government

Electronic Government (e-Government) is merely the digital interactions between between a citizen and their government (C2G), between governments and government agencies (G2G), government and citizens (G2C), government and employees (G2 E), and between government and businesses (G2B) as categorized by the US General Accounting Office (France, 2006). The point of e-Government, as mentioned above, is to enable anyone visiting a city website to communicate and interact with city employees via the Internet by using a graphical user interface (GUI), instant-messaging (IM), and audio and

video presentations, while taking advantage of the use of technology to enhance the citizens access for the delivery of government services offered.

There have been several scholarly researchers performing studies in the field of Public Administration and evaluating the use and affect of e-Government on governance. The notion in the beginning was to have government operations to become a paperless operation that is customer oriented, leaning toward a more business like approach. Many theorized that, technology, the use of computers and e-Government would assist in taking government entities into this customer based, paperless, and more business like revolution. It is only natural to hypothesize the council-manager form of government, being a more professional form of government, to be the form of government that could achieve this perception. Research dealing with e-Government is still relatively new in nature. We have however, moved from normative models of researching e-Government, into empirical evidence testing the effects of e-Government on governance (Coursey; Norris, 2008).

David Coursey and Donald Norris (2008) examined whether normative models of researching e-Government were accurate or even useful in order to understand the acceptance and development of e-Government. Government entities have fallen behind their private-sector counterparts in adapting technology as a form of the day-to-day operations. The very first government sites started to deliver information and services on the World Wide Web in the mid-1990s and was in todays terms, a crude form (Coursey & Norris, 2008). This nascent research of e-Government is still today sparse in theory and focuses on federal government rather than state and local governments.

The Technology Acceptance Model (TAM) has been widely used when evaluating and researching technological uses in government, including e-Government. TAM is an information systems theory that models how users come to accept and use new technology. This model seemingly is ideal for evaluating e-Government and suggests that when users are presented with new technology, there are several factors that ultimately influence their decision about adopting the new technology including when and if they will use it (Davis, 1989). Fred Davis first defined perceived usefulness (PU) and perceived ease-of-use (PEOU) in his 1989 research of TAM. PU is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). Davis goes on to define PEOU as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989). TAM is the preferred model used by scholars when researching e-Government and providing theoretical explanations of why e-Government has been adopted or not adopted by government entities. (Coursey & Norris, 2008).

The findings from Coursey and Norris show that most local governments (96%) have adopted e-Government as part of their day-to-day operations with little resistance from staff or elected officials. The findings also show that a two-way form of communication is desirable not only for government staff but also for constituents, especially in the form of transactions such as tax payments, fine payments and being able to communicate with officials digitally. The findings did show that few changes could be seen when adopting e-Government when looking at overall cost impacts. The more interesting findings from Coursey and Norris are that e-Government seems to be viewed as an addition rather than a replacement to government offerings as compared to

traditional ways of delivering governmental services. The initial inception of e-Government was to move toward a more paperless and customer friendly and oriented government. E-Government has not accomplished this but has accomplished bridging a communication barrier that was seen in the traditional ways of delivering governmental services to a faster, cleaner, and more convenient way of delivering those services through e-Government (Coursey & Norris, 2008).

Evidence and research have shown that municipal officials are not willing to take full advantage of the interactive features that are brought by using the Internet to bring citizens closer to government by using e-Government (Aikins & Krane, 2010). A study conducted in the Midwestern states found evidence that city officials were hesitant to embrace technology, specifically the Internet in any form, because these particular officials viewed traditional citizen participation more in-touch to Internet-based citizen participation (Aikins & Krane, 2010). Citizen participation has been the crux of many scholarly research articles and has been defined as the citizen's involvement in decision making pertaining to the management of public affairs and service delivery (Langton 1978). The traditional form of citizen participation primarily consists of direct interpersonal contact without the use of the Internet (Aikins, 2010). Some of these traditional forms of citizen participation are public hearing, citizen forums, community meetings or outreach, advisory groups, and direct calls to elected officials. Internet based citizen participation relies heavily on public employees being able to interpret digital communications to appointed and elected officials which sometimes might be diluted or not translated at all.

The e-Government movement has prompted the notion of Government 2.0 and some scholars argue, a new paradigm in the public administration field. Technology has transformed demographics, politics, and even governmental economics (Tapscott, 2007). There has been a transition from monumental government to the government using technology where pluralistic, networked forms of government, today known as e-Government, have become the dominant organizational model for service delivery and policy-making (Tapscott, 2007). The industrial age was viewed as a monopolist era in power for companies controlling oil, railroads and others, however, today technology can distribute power broadly and allow government to leverage innovation such as e-Government and value from the market and civil society (Tapscott, 2007).

Digital government is not just a governmental discipline, it has proven to be an interdisciplinary field flowing into social sciences, political science, psychology, information science and even library science (Roberston, 2010). Research testing the development and diffusion of digital government, or e-Government, shows that e-Government uses information and communication technology to provide citizens with information about which public services are provided from the government entity (Lee, 2011). As mentioned earlier, e-Government in part, was developed and adopted with a vision to improve government performances by bridging the gap between citizens and government. E-Government has become and important instrument for modern governance (Lee, 2011). However, the question still remains, does e-Government allow citizens to shape or even formulate policy decisions? A study conducted over 131 countries show the use of e-Government has been important in shaping the public administration and allowing citizens to participate in policy formation and

implementation (Lee, 2011). These results stand on the foundation that technology can improve the efficiency and effectiveness of public service and also bridge closer the gap that remains between citizens and government. This study looked at explanations these countries gave for developing e-Government services and provided definitive results showing support for further development of e-Government to help citizen participation influence government action in the future.

Several local jurisdictions are establishing service-oriented local governments in order to make public service delivery more effective and thereby increase local government capacity. Studies have shown that accessing information through government Web sites improves citizens' satisfaction with government transparency (Jun, Wang, & Wang, 2014). Citizens' frequent use of government Web sites, partially mediated through their perceptions of transparency, enhances their perceptions of local government capacity for service delivery. Providing public service information on government Web sites indirectly improves perceived service capacity through perceived transparency (Jun et al., 2014). Studies have also shown that development of e-Government's two-way communication function will make it possible to fully reap the benefits of e-Government as a reform strategy leading to service-oriented government (Jun et al., 2014).

The Internet coupled with new technology has become a powerful tool that is being used to reinvent government. It has encouraged transformation from the traditional bureaucratic stages to a more operational cost effective and efficient e-Government era that emphasizes network building, customer/citizen participation and collaboration (Ho, 2002). Governments are transforming e-Government initiatives into a one-stop shop that

allows citizens the opportunity to conduct all forms of interaction with their government (Ho, 2002).

The private sector branded the explosive use of Internet for their customers and this has prompted government to serve citizens in the same electronic manner. This public government initiative is to provide public services and to empower citizens and communities through information technology by using the Internet (Ho, 2002). However, true e-Government is not simply a Web site. Citizens should be able to find the services the need without ever knowing what government agency is providing it (Howard, 2001). Traditionally, citizens often find it confusing trying to figure out what office, department, or person to speak to in person for a specific governmental service. E-Government is intended to take away from this confusion and allow citizens a thorough online navigation portal to use, purchase, or cancel public services (Howard, 2001).

With the e-Government initiative, the purpose was to create a paperless, service-oriented, more effective and efficient way to deliver public services. One study conducted Chinese local government shows that accessing information through e-Government has improved citizens' satisfaction with government and government transparency (Jun, 2014). The same study also shows that citizens, despite having access to Internet, technology, and e-Government, still rely heavily on the use of traditional media to gain knowledge about their local, state, and federal government instead of gathering that information from the government Web site (Jun, 2014). Another study shows that e-Government is an effective reform strategy that can improve administrative efficiency, increase trust in government, and promote democratic governance (Seifert &

Chung, 2009; Welch, Hinnant, & Moon, 2005; Yang & Rho, 2007). The question about government transparency still arises while adapting e-Government initiatives.

Conversely, further studies look at how counties' in the United States have utilized e-Government's three dimensions for success, e-Information, e-Transactions, and e-Participation (Manoharan, 2013). The dimension of e-Information explains the delivery of relevant and sufficient information through effective communication, while e-Transactions involves the efficient and effective transactions between government and citizens and e-Participation looks at the promotion of electronic democracy involving citizen participation (Manoharan, 2013). This study found that 76.5 percent of all counties had established some form of e-Government and that counties with support from their elected officials, had greater success with e-Government operations. One interesting finding from this study was that respondents were having trouble convincing their Information Technology contractors to provide any kind of e-Government services, unlike their municipality counter-parts. This study did show that counties who properly advertised, branded, and had backing from the administration and elected officials, had a much higher rate of success early on in the developmental stages of offering e-Government for counties (Manoharan, 2013).

In the research article by Manoharan in 2013, several questions were explored concerning factors affecting local use of e-Government. First, Manoharan hypothesized that a county with a board of commissioner's form of government will have less sophisticated e-Government practices than a county with a council-administrator form of government. The author finds the variable that was related to form of government was not found to be a significant predictor of counties' e-Government as compared with

municipality's form of government predicting e-Government. This suggests that municipalities with specific forms of government are more likely to support and use e-Government.

Another hypothesis posed by Manoharan in 2013 was that a county and a city with higher budget capacity would have more sophisticated e-Government practices than a county or city with lower budget capacity. The findings show that counties with higher Information Technology budgets did not predict a variance in e-Government as compared with municipalities with higher Information Technology budgets showing higher dedication to e-Government. Further, the study shows that counties and cities providing a greater number of functions were found to provide more sophisticated e-Government practices.

Also hypothesized by Manoharan in 2013, a county or city whose residents have higher education will have more sophisticated e-Government practices than a county or city whose residents have lower education. The study shows that counties and cities with greater percentages of educated residents indeed provided more sophisticated e-Government practices. One explanation for this is that higher educated individuals tend to be elected to the legislative boards and higher levels of technology implications can be expected from the elected officials.

Web 2.0 Tools for Municipalities

Internet-based applications and websites that promote the sharing of user-generated content, communication, and participation on a large scale are the foundation behind the idea of Web 2.0. As mentioned above, social media has taken the world by storm since the early 2000s, and it now accounts for an estimated 28 percent of all time

spent online in the United States as reported by PEW report in 2015. There are several varieties of user-generated applications that make up what is considered social media (Web 2.0). These applications consist of blogs, social networks, and audio podcasts. Recently, social media has gradually become used for marketing, news sources, and even security updates from law enforcement agencies (Rehr, David 2012).

In the late 1990s, users were given the freedom to create their own websites through their Internet Service Providers (ISP). Although at inception, these websites were very crude in detail and were only a one-way form of communication. There was a company in 1997 by the name of Sixdegrees.com that launched a website allowing users to create a profile and add lists of friends, considered to be the first form of social networking (Carr, David 2009). Later, in 2002, Friendster launched what was truly thought of as a social network and commenced with the popularity of social networking that we see today. Within three months, Friendster had gained three million users. Wanting to jump on the bandwagon, other companies ballooned up such as MySpace, LinkedIn, Facebook, Instagram, Flickr, iTunes, Google+, and several others are starting to emerge (Carr, David 2009).

Social media is now known as Web 2.0 tools and is classified in several ways. Web 2.0 tools are any application that allows users to create a profile and build a friend list as part of a social network. Web 2.0 tools consist of think blogs, wikis, and social networking outlets. The most popular and well known is Facebook. Web 2.0 does not have anything to do with Internet connectivity, and Web 2.0 is not a new form of Internet network operating on a separate backbone (Madden & Fox, 2006). The inception of the term Web 2.0 was devised back in 2004 by Dale Dougherty and then picked up for the

masses by O'Reilly Media and MediaLive International (Madden & Fox, 2006). These Web 2.0 tools utilize collective intelligence, provide network-enabled interactive services and give users control over their own data. In other words, the user has control in a two-way form of communication. This is where the outlining differences are found between search engines and Web 2.0 tools. Google, the most popular search engine, does not allow the user to govern over their own data stored on Google's servers. For example, one cannot erase search queries from the Google server. Users are able to contribute content to many search engine applications, but users do not fully control how those search engines use that content (Madden & Fox, 2006).

Blogs, on the other hand, allow users to generate a variety of content for publication on the Internet. WordPress is a very popular website that is devoted to hosting blogs. Forums are also another classification of social media allowing users to opine on a range of topics created. Video and audio podcasts are becoming extremely popular and allow users to record themselves discussing different topics and publishing them for subscribers to listen to, view and even download them to their smartphone, tablets, or computer to listen to or view later. There are also collaborative websites known as "wikis" which allow users to generate informational content on a variety of topics, and the one most popular is Wikipedia.

Web 2.0 tools are intended to function as a core set of practices that apply to common threads and tendencies observed across the many different technologies (Madden & Fox, 2006). This begs the question of where does Web 1.0 end and Web 2.0 begin? This is still a common debate among the technology writers, however; a simple definition will be used for this study. Web 1.0 definitions all have in common a one-way

form of communication. For instance, early e-Government functions only allowed citizens to view digital government and not be able to communicate using any form of digital communication as mentioned above. To simplify this, Web 1.0 is defined as a "one-way form of communication with the customer" (Madden & Fox, 2006).

Facebook, the most popular social media and networking tool in the world, was launched on February 4, 2004 by a Harvard student by the name of Mark Zuckerberg. At inception, it was exclusive only for students of Harvard University. Finally, on September 26, 2006, Facebook opened to everyone and immediately gained hundreds of millions of users. Facebook was the first to perfect users being allowed to build a personal profile that includes pictures and cultural interests, exchange private messages, post thoughts, pictures, videos, and other items. MySpace, launched in August of 2003, was an early version of this idea but never perfected or gained the popularity of Facebook. MySpace still exists today and has an estimated 50 million users. In 2006, we see the rise of Twitter, allowing users to create a small profile, follow users, and post brief message, 140-characters long to be exact. This 140-character restriction is known today as a "Tweet". Jack Dorsey is the brains behind Twitter and has over 200 hundred million users and hundreds of millions of tweets being sent every day.

Twitter has been a significant Web 2.0 tool used for government use allowing people to organize very quickly. It is used to rally people around the world, garner support and interact with voters, and law enforcement are relying heavily on Twitter to report emergency stories. Presidential campaigns are relying heavily as well on Web 2.0 tools. Barack Obama used it immensely during his 2008 and 2012 campaigns. "WE JUST made history," tweeted Barack Obama, shortly after claiming victory in the 2008

US presidential election. The Pew Internet and American Life Project reports that "a record breaking 46% of Americans used the Internet, email or cellphone text messaging to get news about the campaign, share their views and mobilize others."

Peter Daou, an Internet advisor for Hillary Clinton, wrote about the 2008 campaign observing "Virtually every online venue that played a role in the 2008 race provided a platform for public dialogue. Blogs, boards, news sites, YouTube, Twitter, and social networks large and small were inundated with millions of individual comments, the aggregate effect of which was to determine how voters viewed the candidates and the race." Daou is correct that the sum effect of social media helped determine how voters viewed the election both in 2008 and in 2012. (Metzgar, Emily & Maruggi, Albert, 2008).

In 2011, a social media monitoring service, conducted a survey of three-hundred hiring professionals in the private industry to learn if, when, and how they are using social media to screen job applicants (Wu, 2011). From this survey, it was determined that 91% of the recruiters for companies and hiring managers of the companies, stated they have in some form or fashion, used social media and networking web sites to screen potential employees. More importantly, the study revealed that 69% of these same recruiters and hiring managers admitted to denying employment to the desired job applicants over information they found on a social media web site about the applicant (Wu, 2011).

According to Society for Human Resource Management (SHRM), more than one-half, 56 percent, of the organizations interviewed stated they currently use social media websites when recruiting and fact-checking about applicants. This was a

significant increase since 2008, when a little over one-third, 34 percent, of organizations were using these sites as a recruiting and fact-checking tool (SHRM). The Society for Human Resource Management also stated that among the organizations that used social media sites for recruiting and fact-checking, the most utilized social media website in 2011 was Linkedin at 95 percent. This was followed by more than one-half, 58 percent, of respondents using Facebook and 42 percent using Twitter. Of the respondents for SHRM, the consensus was that using social networking websites for recruiting and fact checking is a very effective tool. The percentage of human resource managers who indicated that social networking websites are an efficient way to recruit and fact check for a variety of job levels has more than doubled compared with 2008 (SHRM).

One of the top reasons more than eighty-four percent of hiring managers are using Web 2.0 tools for staffing, recruiting or fact checking is to not only recruit job candidates who might not otherwise apply or be contacted but to also fact check an increasing issue of fluffing resumes. Further reports have also noted hiring managers frown upon individuals that do not participate in social media, particularly LinkedIn. These reports show that hiring mangers believe if you choose not to participate in social media networking, you are either not competent enough to use up-to-date technology or that you have something to hide (Compton et al., 2009).

A study of current private human resource professionals about their attitudes toward online background checks using Web 2.0 tools and Internet search engines found that future employees expect employers to check online for information available about them and these employers also believe that this is an acceptable practice (Clark & Roberts, 2010). This leaves the question, under FCRA, if Web 2.0 and search engines are

to be used as part of the hiring practices to find information about applicants, should employers be required to obtain written authorization as they currently do with formal criminal background checks which also shows public and private information?

In 2007, the Society of Human Resource Management Survey showed that over 50 percent of private human resource professionals ran an Internet search using Google or Yahoo search engines, and 15 percent reported checking some form of a social media site with 20 percent of those who ran the searches said they have disqualified a candidate based on what they found (Zeidner, 2007). Other studies have also shown that hiring managers are actively reading social media sites and performing search engine searches on applicants, in order to potentially find stronger evidence that the best applicant is hired (Slovensky & Ross, 2012). A study conducted on private employers reports that almost 35 percent of the employers admitted to not hiring an applicant after finding questionable content on social media sites searched by the company (Haefner, 2009; Smith, 2010).

The success of Web 2.0 tools has been quickly adopted in society mainly due to their ease of use and fast communication methods (Hotho & Stumme, 2011). The important feature of Web 2.0 tools for government use is the internal drive by users to communicate with government in a bi-directional faction (Karkin, 2013). Web 2.0 tools have been found to provide valuable input through public participation as compared to traditional public relations (Karkin, 2013). When government organizations first started utilizing websites as a form of communication with citizens, there was mainly a one-way relationship due to the limitations of website functionality. With the explosion and adoption of Web 2.0 technologies, this enables a two-way form of communication between government organizations and citizens (Karkin, 2013). Web 2.0 tools have also

given government organizations a widening advantage for information to be disclosed at a greater extent (Karkin, 2013). Since participation is one of the main goals of government, Web 2.0 tools allow this participation to become a little easier. However, the abuse of Web 2.0 tools relying on their accuracy for information remains to be seen (Lopresti, 2013).

Web 2.0 tools have become so attached to our societies day-to-day life that emergency outlets are utilizing Web 2.0 tools as mentioned above. E-mails are slow, inefficient, and one never knows if the audience is paying attention. Emergency crews such as fire response, police forces and others are using Web 2.0 in order to communicate with the citizens in a fast efficient form and also as a way to communicate with volunteers who so often drive the efforts of emergency response teams (Majchrzak & More, 2011). Radio communication and the nightly news are inefficient in comparison to Web 2.0 tools. The combination of Web 2.0 tools and traditional forms of communication have proven to be an effective way to warn citizens of emergencies, and to also communicate with volunteers and regular staff (Majchrzak & More, 2011).

There has also been a boost in Web 2.0 tool utilization by local government. Web 2.0 tools offer great opportunities for governments to "meet the demands and expectations of citizens, to provide value-added services and overcome barriers of reduced public budgets" (Zafiropoulos, Antoniadis, & Vrana, 2014 pg. 338). A recent study in 2014 looked at 27 Greek e-Government Twitter accounts and their 107,107 followers. Their methods used a data mining technique, association rules and two multivariate statistical methods, multidimensional scaling and cluster analysis and proposes the use of a similarity measure, suitable for describing Twitter account

proximity (Zafiropoulos et al., 2014). These findings show that some government agencies are more popular than others regarding the number of followers for the agency. While some citizens follow only one account, several citizens follow several agency accounts (Zafiropoulos et al., 2014).

Yet another study conducted in 2011 examines data of local governments in the United States and their adoption of social media, especially what drives local government to adopt social media and is this drive similar to other adoptions by local government (Reddick & Norris, 2013). The study was conducted by the International City Management Association (ICMA) and targeted local Information Technology Directors (ITD) and Chief Information Officers (CIO). The survey was mailed to all municipal governments with a population of 10,000 and greater and to all county governments of the same size with elected and appointed managers for a total of 4,452 governments. The respondents were also given the opportunity to complete the survey online created by the ICMA group. With a 30 percent return rate, the results found were interesting. For the survey group, there was an adoption rate of social media in the United States of 67.5 percent. Nine out of ten of the respondents had only adopted Facebook as their social media outlet. The major findings were that local governments were using social media only as a one-way form of communication with citizens (Reddick, 2013). This is the exact opposite of what the very definition of Web 2.0 stands for. Two-thirds of the local governments surveyed used Facebook, Twitter, YouTube and others to only post information without giving the citizens an opportunity to communicate back to government officials (Reddick, 2013).

The author of this study offered some advice for local governments concerning the proper use of Web 2.0 tools, and this author agrees officials will have to learn to use these Web 2.0 tools in more interactive ways if they truly want to engage citizens and not officials should not look to Web 2.0 tools to transform either their governments themselves or the relations between their governments and their citizens alone (Reddick & Norris, 2013). The author of this study also offered a very interesting limitation of the study stating it was quantitative in nature and future studies should include more qualitative information from ITOs and CTOs in order to get their views on what is believed to be on the leading edge between social media and government.

Another study conducted in 2013 focuses in on the demand for Web 2.0 tools to be used by governments and if information and communication technologies (ICT) are being operative within government (Karkin, 2013). This study finds that most websites used in government public administration offices still lack the Web 2.0 capability and in order to use Web 2.0, one must connect to them outside of the government agencies website (Karkin, 2013). This finding is important because it shows that government websites are being created by outside contractors and does not give internal personnel usability to add or drop items from the website, thus, forcing the government departments to create separate Web 2.0 tools and potentially confusing the citizens on how to communicate with government using Web 2.0 or through their website (Karkin, 2013).

Internet Search Engines and Municipalities

This author has already pointed out the notion of using search engines to find information is not an entirely brand-new idea. We, as a society, have had this for many years before the digitized versions of search engines we see today. At first, it was in the

form of local gossip, moving up to more elaborate searches using libraries indexes, newspaper searches and others. Today, we now see the modern search engine and a few of the most popular are Google, Bing, Yahoo, DuckDuckGo, and a few other smaller search engine companies. It is important, for this author to clarify exactly what a search engine is and does.

The World Wide Web is a series of connected personal computers, servers, routers, and switches. The Web consists of hundreds of millions of pages that are available to view if the user actually knows the address. Think of this notion no differently than knowing a person's home address. If you know the home address, you can physically go there to conduct whatever business you may have. Web pages have the same physical address and when the user finds the physical address, the user can use the World Wide Web connectivity to physically visit that page. Normally, these addresses range from a variety of obscure and cryptic names given to them by their authors and without knowing them, the user could never find them in all the hundreds of millions of addresses that exist. The Internet search engine attempts to assist in the searching for these pages. Internet search engines are specially designed to help people find information stored on other sites. With the variety of search engines, there are several ways in which they search but all have three basic tasks in common. First, they search the Internet based upon a set criteria of words given by the user. Second, they keep an index of the words they find and where they find them. Third, they allow users to look for words or combinations of words found at that index.

Internet search engines, just like Web 2.0 tools, are also not part of the Internet connectivity. Search engines index millions of Web pages involving a comparable

number of distinct terms (Brin & Page, 1998). Search engines answer millions of queries performed every day. To place the term search engine into perspective, a search engine is like asking a librarian to find some information for you. The librarian then searches the documents within the library and returns with your answer(s). In this analogy, the library's many rooms, aisles, and pathways would be the Internet while the librarian would be the search engine and the books would represent the servers that stored the data.

Search engines have become the key to finding specific information on the World Wide Web. Without this sort of sophistication, it would be nearly impossible to locate any information without knowing the specific address among the hundreds of millions that exist. Search engines usually produce slightly different results and this is from the variation difference in the creation of the search engines. What is important are the three common functions that all search engines shared that are mentioned above. The first actual search engine was developed by Matthew Gray in 1993 and was called "Wandex" and the purpose was merely to measure the size of the World Wide Web.

With the growth and ease of use of these online search engines, so too does the ability of employers to discriminate by using these search engines to find supplemental information about applicants (Millard, 2007). Many employers are making online searches part of their background checks as an informal part of the hiring process (Millard, 2007). Part of the difficulty with using search engines as part of a screening process is that Web pages are considered public information that is posted online for anyone to view. A study conducted by Steven Rothberg, founder of CollegeRecruiter.com, shows that three-quarters of the employers who talk to him say they regularly search online as part of their background checks, which includes blog

content (Millard, 2007). Rothberg mentions that some hiring managers have admitted to him they turned down qualified candidates because they did not like what they saw on a returned search engine result.

The term "Internet background checks" refers to the general phenomenon in which employers gather information from the internet about a person (Reicher, 2013). In most cases, the hiring committee can acquire this information in a variety of ways. They can search the candidates themselves, which would not violate any federal laws. They could delegate the task to a special department which has not decision making authority within the organization, which also would not violate any federal laws. Or, they could contract a third-party to conduct the searches, which federal laws do govern at that point. This means the Internet background check can vary immensely in its thoroughness between the different ways of being carried out.

A 2010 study conducted by Microsoft shows that 80 percent of hiring managers are using search engines to discover information about job applicants. When asked why they do this, hiring manager's response was the research was quick and cheap compared to using a third-party to conduct background searches (Joyce, Susan, 2014). Another study estimates that 91 percent of hiring managers are using search engines to find supplemental information about job applicants (Reicher, 2013).

There are many that consider using Internet search engines at all during the hiring process as characteristically unfair because these checks are usually inaccurate or at least have mixed information about job applicants and they expose the hiring manager to information about the applicant that is privacy protected (Reicher, 2013). In 2006, the Finnish Data Protection Ombudsman outlawed using the Internet to search about

information of potential employees (Reicher, 2013). Even more recent, Senators have gotten involved with hiring practices using the Internet as part of their supplemental information about applicants. Senators Al Franken and Richard Blumenthal wrote a concerning letter to the CEO of Social Intelligence Corporation which is an Internet background screening service, expressing their concerns that this type of background search is crossing a line into personal privacy and applicants were being treated unfairly due to information available by using a search engine (Reicher, 2013).

Scholars agree there are three paradigms of information gathering when talking about internet background checks. These range in degree of separation between the person gathering the information and the person using it in the hiring process (Reicher, 2013). During the first approach, people involved in making the hiring decision research the candidate themselves using search engines, social networks or any other Internet databases they can find (Reicher, 2013). This allows the search committee to research and evaluate whatever information turns up, without any violation of federal law. Secondly, an employee with no hiring decision-making power in the hiring department, researches and puts together a summary of what was found about the applicant. This approach begins to tilt toward the violation of federal law because the information is actually separated from the hiring committee and someone else has performed the research for them, even if it is the same organization. Still, this does not violate federal law, as there were no third-party companies hired to conduct the search. Lastly, the hiring committee hires a consumer reporting agency to conduct the Internet background check for them, compile a brief summary of findings, then submit their findings to the

hiring committee. This approach requires the hiring committee to inform the applicant about the search and get written consent from the applicant (Reicher, 2013).

Max Drucker and Geoff Andrews founded a company by the name of Social Intelligence, based in Santa Barbara, California, specializing in Internet background searches. They use a combination of automated, manual, and multi-tier analysis approaches for gathering and processing information about prospective employees (Reicher, 2013). Social Intelligence reports being contracted by government agencies to perform all their Internet background searches of prospective applicants (Rosen & Ahearn, 2011 – Reicher article). The searches performed for these government agencies include searching public Internet sources, including social media, professional networks, blogs, wikis, video such as YouTube, picture sharing websites and any other database they can reach from the Internet that is open to the public without any privacy securities added to them (Reicher, 2013). After the search is complete, Social Intelligence compiles a detailed report highlighting what they deem objectionable material (Reicher, 2013). Some of this "objectionable material" has been any racists remarks or behavior, explicit photos and video posted, and illegal activity (Karkin, 2013). The report does deliberately omit an applicant's status as a member of a protected class under the equal employment laws (Karkin, 2013).

A news journalist, Mat Honan of Gizmodo, wanted to review the accuracy of this service and went under cover to request a report from Social Intelligence about himself (Honan, 2014). The resulting report turned up truthful and objectionable information about Honan. This detailed report included screen shots of his blogs, public LinkedIn and Facebook profile, an article written by him published in Wired magazine that was

deemed inappropriate, and parts of his personal website that were deemed inappropriate (Honan, 2014). For each of the sources provided in the report by Social Intelligence, there was a score of either "pass" or "negative" and even in some cases included a comment such as "subject admits to use of cocaine as well as LSD" (Millard, 2007). The report on Honan did however block out every part of an image that might reveal Honan's ethnicity, sex, and any other federally protected information the equal rights doctrine (Honan, 2014).

The methods of the newly developed service of online background searches about applicants depend on both federal and state laws that govern the whole information gathering process. Some states have even stricter laws about a person's privacy that includes online background searches while the federal regulations stay the same no matter the state. It is also noteworthy that several state legislatures have taken steps to prevent unauthorized online background searches which include search engines, social media, or any online accessible database (Reicher, 2013). These states are also outlawing requests by employers to applicants for their private password protected areas and as of now include California, Maryland, and Illinois with many state legislatures debating similar legislation (Reicher, 2013).

Another study conducted by Microsoft reported that 70 percent of hiring managers rejected candidates in light of the information reported to them and found by performing an Internet search using Google search engine (Peebles, 2012). This study was conducted in a nationwide survey of private organizations and consisted of 945 hiring managers and focused on negligent hiring practices (Peebles, 2012). This study also shows that conscientious hiring managers that are conducting pre-employment

Internet background searches on a regular basis, are satisfying their duty to hire the best qualified and best-fit aspect of being a hiring managers (Peebles, 2012). However, they are also putting their employers at risk of a libelous claim from applicants. These libelous claims may arise if the protected religion, age, national origin, marital status, medical information or even political affiliation is viewed and is weighted as part of the applicants hiring process (Peebles, 2012).

There is no doubt from the several studies that have been conducted on private hiring managers, they are indeed part of the Googling era to find information about applicants. It is also clear from the literature, the main argument is the hiring managers are only trying to find the best-fit individual for the position and keep their employer safe from any negligent hiring suits by using Google and other Internet search engines to add supplemental information to the hiring procedure of applicants. The law is still in the development stage of what exactly violates privacy laws when performing these Internet background searches, and much research needs to go into the fairness and accuracy of this practice.

One study shows how the Internet provides a powerful tool for reinventing local governments (Ho, 2002). The Internet encourages citizens to transform from the traditional types of interaction with government over to the new and innovative technologically based government called e-Government. This study shows that many cities have already moved and adapted to the new way of doing government through e-Government by using the Internet (Ho, 2002).

Ho provided a paradigm shift away from the traditional bureaucratic paradigm by surveying city Web masters for the 55 most populous cities in the United States. The

survey asked officials about the characteristics of the Web development process and why a city was interested in using Web-based services. The study shows that cities were willing to find convenient and cheap ways to interact with and receive citizen inputs and collaboration with the government. Further, the study shows that officials in these cities were more user-oriented and believed more strongly that the Web is a tool to enhance customer service for citizens. Finally, the study shows that cities have started to move toward the new paradigm of e-Government or web based services as a way to communicate and interact with their citizens by using the Internet (Ho, 2002).

Characteristic Aspects of Municipality Hiring Managers

In addition to the above literature, scholars have also researched the characteristics of individuals in charge of local governments, including the hiring managers. Hiring managers vary in local governments and range from City Managers, City Administrators, Human Resource Managers, Finance Directors, Mayors, Chief Administrative Officers, etc. The literature is not lacking when describing the differences of local forms of government and the people in hiring positions such as the aforementioned.

A study conducted in 1985 shows the median age of the manager of counties and municipalities was 41 years old (Schellinger, 1985). This same study shows that female managers make-up only five percent of the surveys sent out in 1984 (Schellinger, 1985). The education level of managers that participated in this survey are highly education. Eighty-eight percent of the respondents held a bachelor's degree or higher (Schellinger, 1985). The average manager in this study had been in a manager position for an average of four and a half years (Schellinger, 1985).

Another study showing the characteristics of small city chief executives which fall into the category of hiring managers are overwhelmingly white at 96.2 percent (Folz & French 2004). This same study shows that 93.3 percent of chief executives are male, 62.5 percent hold a master's degree or more and 32.4 percent of them identify as part of the Republican party (Folz & French 2004). On average, these municipalities have experienced a population growth over time and municipalities with population between 2,500 and 25,000 have seen an increase of 16.3 percent by the year 2000 (Folz & French 2004). In the 1990s, around 70 percent of small municipalities gained at least one hundred people (Folz & French 2004).

There is a growing concern of hiring public sector managers with education and no experience as compared to hiring public sector managers with experience in the public sector. Public hiring managers must be skilful in working with many constituents including elected officials, citizens, businesses, and government employees along with being able to make sound hiring decisions (Dougherty, 2015). Excellence in a hiring managers job begins early in the hiring process, even before the job has been posted. Minimum qualifications must be met for specific jobs and the above characteristics of hiring managers shows that education is very important to this process. The big question these hiring managers are faced with is, are recent graduates directly out of school with limited or no practical training sufficient for the needs of the job or not (Dougherty, 2015). This makes it extremely easy and alluring to use the easiest form of fact checking available and today that is the Internet.

There have also been the gender biases when it comes to hiring managers gender. Specifically, females have encountered a glass-ceiling when it comes to the same job and

their male counter-parts being regarded as higher-up and also higher-paid. Numerous studies have examined the effects of social role theory dealing with the negative stereotyping of female managers, which includes low perceived likeability and unwillingness by subordinates to trust them (Pinto, 2015). The number of females in professional roles such as hiring managers has increased in recent years. U.S. Census data reveals that in 2012, over 57 percent of college students were female and their employment in hiring managerial positions across a variety of industries has increased rapidly (Pinto, 2015). The study also shows that jobs where males have traditionally dominated such as architecture, construction, and engineering, have also seen a rise in the number of women moving into high positons with hiring authority (Pinto, 2015).

CHAPTER III

METHODOLOGY

Introduction

The literature discussed in this analysis has focused on forms of government, traditional hiring practices from hiring managers, the inception and adoption of e-Government, defining social media into Web 2.0 tools, what an Internet search engine is and how it can be used by hiring managers, and the characteristics of hiring managers today. There have also been other scholarly research dealing with local form of government, demographic factors in local forms of government and even how e-Government is being utilized in government.

This survey differs from all other research in that it examines several technological aspects of local governments and the adoption of technology as a tool for background searches about applicants, across the United States with populations from 2,500 and above. The survey questions are designed to request very specific information that has provided the evidence to support or to reject the hypotheses suggested by the author concerning the relationship between the independent and dependent variables. All other questions in the survey will provide additional data about hiring practices performed by local government hiring managers. The information previously provided will shed light on the forms of government, Web 2.0 tools, Internet search engines, professionalism in the forms of government and their hiring manager methods, and the

influence technology has on government such as the council-manager form of local government.

Data Sources

This study compares and contrasts, the main two independent variables, of Mayor-Council and Council-Manager forms of government in municipalities with a population of 2,500 and above across the United States that were randomly chosen from the 2012 ICMA Yearbook, and their hiring practices, specifically, if they use social-media (Web 2.0) and search engines to gain supplemental knowledge of applicants. The 2012 ICMA Yearbook lists close to 35,000 local governments, however, all municipalities, cities, towns, and special districts with less than 2,500 populations are excluded from this study. This analysis of local government and hiring practices utilizes data collected by online surveys using SurveyMonkey Inc., and via e-mail responses.

The initial survey was e-mailed to 2000 municipalities of all fifty states in the United States. The fifty states in this survey are divided into the four geographic regions as defined by the U.S. Bureau of the Census during the 2010 census. In order to achieve a random sampling of municipalities this author entered all municipalities with a population of 2,500 and up into an excel spreadsheet and then used an excel algorithm offered by SurveyMonkey located at https://www.surveymonkey.com/blog/en/blog/2012/06/08/random-sample-in-excel/ in order to get a random sample of 2,000 municipalities listed with the 2012 ICMA Yearbook that are from each of the four geographic regions of the U.S. Bureau of the Census. Several columns were created from the municipalities to gain further information about the randomly selected municipality. A column showing the

population, form of government, municipality type, hiring manager, e-mail address, and phone number was created for each municipality. The author obtained the population of each municipality from the 2010 census. The form of government was obtained from the 2012 ICMA Yearbook along with the municipality type. The hiring manager, e-mail address, and phone number were obtained by visiting each municipalities website and finding the listed information for who the hiring manager was, their e-mail address, and their phone number. When this information was not listed on the municipality website, the author would call the municipalities direct phone number and ask for the hiring managers name, e-mail address and phone number.

After 2,000 municipalities' hiring manager email addresses and information had been collected, the author used Microsoft Outlook to create a group of municipalities for mass e-mailing. The survey was then e-mailed to all 2,000 municipalities, along with a letter of explanation regarding the content, Institutional Review board (IRB) approval letter, and a confidentiality statement of the survey participants. A follow up e-mail was then sent to all municipalities that had not responded after two weeks. After two more weeks, the author called the hiring managers who had not responded to the first two waves of e-mails.

Hiring managers were asked to respond to various questions regarding e-Government, hiring practices, social media uses, and various other technology uses. Also, the survey gathered personal information regarding the hiring managers background, education, political ties, and other demographic information. Data was requested to determine the hiring practices of each municipality. The hiring manager was also asked their perceptions of the reliability of social media and search engines. Finally,

other demographic data on each municipality responding to the survey was obtained from the U.S. Census Bureau and the 2012 ICMA Yearbook.

Unit of Analysis

This research study solicited data from two thousand municipalities in the United States with a population between 2,500 and up (See Tables 3.1, 3.2, 3.3 and 3.4). Eight hundred and seventy-one surveys have been returned after two waves of e-mail and one wave of phone calls, and all of these are included in the data set. The overall response rate was 43.55 percent, which is quite respectable given the literature on decreasing response rates nationally.

Table 3.1 Summary of Survey Responses for Municipalities with Council-Manager Form of Government

Council-Manager Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	64	39	12	115
MID-WEST	114	92	25	231
SOUTH	121	86	10	217
NORTH-EAST	49	17	2	68
TOTAL	348	234	49	631

Table 3.2 Summary of Survey Responses for Municipalities with Mayor-Council Form of Government

Mayor-Council Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	19	11	1	31
MID-WEST	59	2	14	75
SOUTH	63	10	0	73
NORTH-EAST	32	22	1	55
TOTAL	180	37	17	234

Table 3.3 Summary of Survey Responses for Municipalities with Commission Form of Government

Mayor-Council Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	0	0	0	0
MID-WEST	2	0	0	2
SOUTH	1	1	0	2
NORTH-EAST	2	0	0	2
TOTAL	5	1	0	6

Table 3.4 Summary of Survey Responses for total Municipalities in Study

Combined Responses	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	83	50	13	146
MID-WEST	175	94	39	308
SOUTH	185	97	10	292
NORTH-EAST	83	39	3	125
TOTAL	526	280	65	871

Seventy-eight variables are the result from these survey responses and used to present information concerning form of government, hiring practices, e-Government use, municipality demographics, hiring manager characteristics, education, and political ties. Variables were also developed to reflect region of the municipality, birth place of hiring managers, social media and Internet search engine dummy variables for each municipality.

Operational Definitions

There were several technical terms used in this analysis and have been defined to provide clarification to the reader that would be required knowledge for the research

design. The following terms have been used in this study and their definitions are as follows:

Mayor-council government – is the form of government responding to the survey where the mayor or elected executive is designated as the head of the city or county government and elected legislatures.

Council-manager government – is the form of government responding to the survey where the council is the governing body of the city, elected by the public, and the manager is hired by the council to carry out the policies it establishes.

Commission is the form of government responding to the survey where and elected governing board that holds both legislative and executive powers.

Hiring manager - is the person responding to the survey that has been given the power to hire new employees for the municipalities that are participating in this study. The hiring manager ranges from the mayor to the city manager, city administrator, finance director, human resources manager, city clerk, or department head.

Social-media (Web 2.0) – any forms of two-way digital communication such as Facebook, Twitter, Google+, Instagram, etc.

Search engine – any webpage developed to search other webpages that are listed on the Internet, such as Google, Bing, or Yahoo.

e-Government – any digital transactions between government and citizens, government and government, or government and businesses.

Dependent Variables

Dependent variables in this research include municipal social media sites being used during hiring process, search engines use during hiring process, municipality

population, municipality region, and municipality e-Government availability. The survey respondents are asked to list all forms of social media used if during the hiring process to find out supplemental information about applicants and the total number of social media sites used by the municipality will be recoded and combined into one variable of either using social media or not. These social media variables will also be evaluated separately to see the most likely used social media site by hiring managers during the background check process. The survey responses are coded as follows: 0) not used any social media sites, 1) used one only, 2) used two or more. Also, the survey respondents are asked to list any search engines they have used to find supplemental information about applicants and the total number of search engines used by municipality hiring managers will also be recoded and combined into one variable of either using search engines or not. Just like social media sites, the variables for search engines will also be evaluated separately to see which search engines hiring mangers are more likely to use during the background check process. The survey responses for this are coded similar to social media as follows: 0) not used any search engines, 1) used one only, 2) used two or more search engines.

The respondents are also asked if they have ever used any social media site to gain supplemental information about applicants and is coded as 0) for no and 1) for yes. The survey respondents are then asked if their municipality offers e-Government and is coded as 0) none, 1) one to five, 2) six to ten, 3) eleven to fourteen. The follow up to this question asks which forms of e-Government the municipality offers and allows the respondent to check all that apply. Each e-Government that is checked is treated as a separate variable to evaluate which e-Government is offered the most and compared to which social media and search engine is utilized the most.

The regions of the municipality and pulled directly from the 2012 ICMA Yearbook and cross-referenced with the U.S. Census Bureau and are coded as follows: 0) Northeast, 1) Midwest, 2) South, 3) West. Population of the municipalities is also obtained from the U.S. Census Bureau and are recoded as 0) 2,500 – 20,000, 1) 20,001 – 50,000, 2) 50,001 – 100,000, and 3) 100,001 and up. Education level of the hiring manager is defined as the highest level or degree of education held by the hiring manager. These survey responses are coded as follows: 0) less than high school, 1) high school diploma/GED, 2), two-year college degree, 3) four-year college degree, 4) Master's degree, 5) Law degree, 6) Doctorate degree, 7) Prefer not to answer.

Independent Variables

The dependent variables previously stated will be used to test the value of form of government as a predictor to whether hiring managers are using Web 2.0 tools and search engines to gain supplemental information about applicants during the hiring process. The following variables are also evaluated in addition to form of government in the Z-test and T-test used with the same dependent variables.

Political Party is the political party affiliation of the hiring manager in the municipality and is coded as follows: 0) Republican, 1) Democrat, 2) Independent, 3) Other, 4) Prefer not to answer. Region born is the region the hiring manager was born according to the U.S. Census Bureau and is coded as follows: 0) Northeast, 1) Midwest, 2) South, 3) West, 4) Other. Income level of the hiring manager responding to the survey and is coded as follows: 0) $0 to $19,999, 1) $20,000 to $39,999, 2) $40,000 to $59,999, 3) $60,000 to $69,999, 4) $70,000 to $99,999, 5) $100,000 and above, 6) Prefer not to say. Population is the actual population of the municipality and no recoding will be

necessary. Tenure is the number of years the hiring manager has served at their current hiring manager position and no recoding is necessary.

Statistical Testing

The study compares and contrasts the council-manager and mayor-council forms of government in municipalities with a sample population between 2,500 and up across the United States classified by the ICMA as either the council-manager or mayor-council form of government. The author uses Statistical Package for the Social Sciences (SPSS) to analyze the relationships between form of government, council-manager and mayor-council, and the dependent variables mentioned above. The author has proposed several hypothesis concerning the two forms of government and the dependent variables. A hypothesis is simply a statement presented that attempts to predict some relationship between an independent variable and a dependent variable (Welch & Comer, 2001). The hypothesis presented shows a theory concerning a relationship between the two variables that are studied for this analysis. The null hypothesis theorizes that no relationship exists between the independent and dependent variables. Conversely, the research hypotheses, sometimes referred to as the alternative hypothesis, predicts there to be a relationship between the independent and dependent variables.

Even though the null hypothesis cannot be proven true, it can be proven false with proper testing. The science of testing hypotheses is based on the logic of falsification, inductive and deduction reasoning (O'Sullivan and Rassel, 1999). For example, if someone claims that all swans are white, confirmatory evidence cannot prove the assertion to be true however, contradictory evidence makes it clear that the claim is invalid and therefore rejecting the null hypothesis. According to deductive reasoning,

disconfirming evidence from the statistical tests are relied upon in order to demonstrate the positivity of the hypothesis by showing the null hypothesis is not positive. By using inductive reasoning, one can establish evidence for causality, eliminating any alternative hypotheses.

Statistical tests of any significance and hypothesis testing rely on disconfirming evidence in order to reveal the fact of the hypothesis (O'Sullivan & Rassel, 1999). When a researcher wants to test a hypothesis, the researcher must select which statistical test to use in order to define the probability that the hypothesis in the population is random and if the relationship can be shown to be random by using the statistical methods, then the null hypothesis can be rejected and the alternative hypothesis can be supported as the truth, showing a relationship does indeed exist between the two variables from the data (O'Sullivan & Rassel, 1999). For this research, the author will only be using a T-test and a Z-test. No statistical regression is needed since there are no predictions in the hypotheses stated.

The difference of the mean test or commonly called the T-test is a statistical tool that assesses whether the means of two groups are statistically different from each other and is appropriately used when the researcher wants to compare the means of two groups (O'Sullivan & Rassell, 1999). By using this type of analysis, the author will be able to draw a conclusion concerning whether or not the two forms of government have different means in contrast to the various dependent variables presented in the hypotheses and the direction is anticipated therefore, the two-tailed T-test will be used for this analysis. By utilizing the T-test, the author will examine the relationship between a nominal level variable and an interval level variable (O'Sullivan & Rassel, 1999). A paired sample T-

test will be used to determine if the two forms of government, council-manager and mayor-council, differ for Web 2.0 use, search engine use, education of hiring manager, and how much e-Government is used per municipality. This analysis will allow the author to draw conclusions about whether or not the dichotomous classifications of council-manager and mayor-council forms of government differ significantly for each of the dependent variables presented and examined for this analysis.

The Z-test is another statistical test where the distribution of the test statistic under the null hypothesis can be approximated by a normal distribution (O'Sullivan & Rassell, 1999). For each significance level, the Z-test has a single critical value which makes the difference and more convenient than the T-test which has separate critical values for each sample size (O'Sullivan & Rasell, 1999). Sample size play an important role in achieving adequate statistical power in significance test which sets two opposing assumptions about the phenomenon of interest (Xiaofend Steven Liu 2010). Significance test and confidence interval are two main procedures essential to empirical research in science and technology while the former is used primarily to find a yes or no answer to a research question, and the latter is computed to measure a population parameter (Xiaofend Steven Liu, 2010). Many statistical tests can be performed as approximate Z-tests when the sample size is large and categorical, such as the data in this authors research. Therefore, the author uses a two proportion Z-test to see if there is a significant difference between the two forms of government, council-manager and mayor-council and their hiring practices of utilizing social media and Internet search engines for supplemental information about applicants.

The general format for a Z-test with two proportions that will be used in this analysis is as follows:

$$Z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\hat{p}(1-\hat{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \tag{3.1}$$

where:

$$z = \frac{\text{observed difference} - \text{expected difference}}{\text{SE for difference}} \tag{3.2}$$

This study primarily uses the Z-test to analyze the relationship between the two main selected independent variables of mayor-council and council-manager forms of government. However, a variety of other descriptive and statistical tools will be used for analysis when deemed appropriate by the author.

Several control variables are analyzed to further examine the relationships between form of government and the education of the hiring manager, the political affiliation, gender of the hiring manager, position of the hiring manager, age and race of the hiring manager. In addition to exploring the relationship between the number of e-Government services, Web 2.0 tools, and search engines utilized by the hiring manager and the municipalities form of government, analysis will be conducted using the same dependent variables and other variables established in the survey data. The author anticipates that region, population of the municipality, education level of the hiring manager, gender and age of the hiring manager will be related to the utilization of using Web 2.0 tools and search engines as part of their hiring practices. Regions are expected to be significant because certain regions utilize the council-manager form of government more than others and the council-manager form of government is viewed as being a more

professional form of government, often referred to as "running the government like a business".

Municipalities with a smaller population may not utilize e-Government, Web 2.0 tools, and search engines as often because their budget is not large enough to employee the help needed to implement technological advancements. Put simply, they do not have the time to employee technology. The anticipation from this data is that council-manager form of government will utilize technology more often than non-council-manager forms of government, therefore, Web 2.0 tools, Internet search engines, e-Government will be used more often. Larger municipalities lead to larger budgets and in these situations, the budget will allow for technological achievements to be used by municipal employees. In these cases, the author expects the hiring manager to not only be more educated but also use technology as a main need for conducting applicant background checks.

Hypotheses one and two deal specifically with form of government and the use of Web 2.0 tools and Internet search engines as a means to gain supplemental information about applicants. Hypothesis one analyzes the council-manager form of government using Web 2.0 tools and Internet search engines more than any other form of local government presented in the 2012 ICMA Yearbook. Hypothesis two analyzes the mayor-council form of government using Web 2.0 tools and Internet search engines more than commission, town meeting, or representative town meeting forms of government. Both council-manager and mayor-council forms of government make up almost 95 percent of the forms of local government listed in the 2012 ICMA Yearbook. Hypotheses three, four, five, six and seven deal with region population, e-Government and social media accounts used by municipalities.

The author anticipates the more e-Government offered by municipalities, the more often hiring managers will use Web 2.0 tools and Internet search engines as a tool to gain supplemental information about applicants. It is noteworthy that all but 3 municipalities that participated in this survey offered at least one form of e-Government for their municipality. Therefore, the author will compare municipalities by looking at the total number of e-Government options available from the municipality with the assumption that the more forms of e-Government offered, the more likely the hiring manager is to use Web 2.0 tools and the Internet search engines for supplemental information about applicants. The available options are as follows:

1. Tax payments
2. Utility payments
3. Fee and fine payments
4. Permit applications
5. Business license and renewals
6. Government record requests
7. Service requests
8. Voter registration
9. Property registration
10. Download forms for manual completion
11. Citizen can communicate with government officials
12. Council agendas and minutes posted
13. Codes and ordinances posted
14. Employment information posted

Advantages and Limitations of the Study

This study dramatically enhances the existing literature concerning municipalities in the United States with a population of 2,500 and above. As of the date this research was conducted, the author has found no occurrences of any scholarly research performed at the local level of government concerning traditional hiring practices and the adoption of Web 2.0 tools and Internet search engines being used as supplemental information about applicants. The analysis the author performs within this study will provide valuable information concerning the current hiring manager practices at the local level, legality of using supplemental information gained from utilizing Web 2.0 tools and Internet search engines about applicants, does the council-manager form of government really perform more professionally as compared to other forms of local government when employing the use of Web. 2.0 tools and Internet search engines, and finally, to give job-seekers valuable information about what hiring managers are looking at concerning their backgrounds, when applying for a local government job. The main focus of this research is to compare and contrast local governments utilizing technology to their advantage when conducting applicant background searches, mainly by initiating searches using Web 2.0 tools and Internet search engines about applicants.

One limitation to this study is the survey was conducted completely by digital means. SurveyMonkey was the preferred method of response by the author, however, the respondents were given the option to return their survey responses via e-mail that was provided in the initial contact asking for participation by the hiring manager of the municipality chosen for the study. By conducting a purely digital survey, researchers cannot truly know if the hiring manager or preferred survey subject, is the one that is

filling out the survey responses. It would be beneficial to be able to call each hiring manager and ask the questions via phone conversation to make sure the researcher is getting the responses from the actual person they are needing data from. This would also be beneficial to get the tone of the answer for certain survey questions, especially if the researcher wanted to fill in the quantitative gaps with a qualitative study, however, time constraints would be problematic for this type of research.

A second possible limitation to this study is the overall response rate the author received. Two-thousand municipalities were randomly chosen and eight hundred seventy-one municipalities responded giving a 44 percent response rate. A researcher always wants to see a very high response rate in order to enhance strength and validity to the research design and a higher response rate could potentially improve any validity questions that might arise from the results. As mentioned, the study does obtain results from 871 municipalities in the United States with a population of 2,500 and above and the municipality regional representations can be seen in tables 3.1, 3.2, and 3.3. Eight hundred and seventy-one municipalities arguably provide the reader with a thorough analysis of municipalities with a population of the same range under this study.

CHAPTER IV

DATA ANALYSIS

Response Rates

In this study, two thousand surveys were e-mailed to a random sample of municipalities within the United States with a population between 2,500 and up. The sample includes 234 (26.9%) municipalities listed as utilizing the mayor-council form of government, 631 (72.4%) municipalities listed as the council-manager form of government, and 6 (.7%) municipalities listed as the commission form of government. For analysis purposes, the commission form of government and mayor-council form of government will be combined and analyzed as non-council-manager variable in SPSS. Table 4.1 gives an overview of the response rates for each form of government that participated for this survey and is in line with the total population under study being 62 percent council-manager and 38 percent being mayor-council.

Table 4.1 Form of Government Frequency

Form of Government	Frequency	Percent
Mayor-Council	234	26.9%
Council-Manager	631	72.4%
Commission	6	.7%
Total	871	100%

The surveys were emailed to respondents in three waves and in the final wave, the respondents were called by phone. Wave one generated 533 returns, wave two generated

272 returns, and the phone wave generated 66 returns for a total of 871 returned surveys. All of the surveys were fully completed and are used for this data. Of the 871 usable returned surveys, 631 (72.4%) are received from the council-manager form of municipalities, 234 (26.9%) are received from the mayor-council form of municipalities, and 6 (.7%) are received from the commission form of municipalities.

The highest percentage of surveys was received from the Midwestern region at 35.4 percent. Individuals in council-manager governments in this region returned 26.5 percent of the surveys. Individuals in the Midwestern non-council-manager governments returned 9 percent of their surveys. Hiring managers in the Northeast council-manager government returned sixty-eight surveys (8%), and hiring manages in the northeast non-council-manager government returned fifty-seven (6.4%). The Mid-West region had a response rate from hiring managers in the council-manager form of government of 26.5 percent, 231 surveys were returned and 9 percent, 77 surveys were returned for the non-council-manager form of government in the Mid-West region. The West region produced 115 surveys (13.2%) being returned from the council-manager form of government and 31 surveys (3.6%) from the non-council-manager form of government in the West region. The overall response rate of forty-four percent is considered adequate to support the findings within the survey analysis proposed by the author.

Demographics of Hiring Managers

Analysis of the survey responses of hiring managers reveal several interesting characteristics as a whole. The average age of hiring managers in both council-manager and non-council-manager form of government falls between ages 35 – 54. Gender does not seem to play a huge role in the characteristics of hiring managers. For non-council-

manager and council-manager form of government, there are more male hiring managers than are female, with males accounting for 53 percent in non-council-manager and 52 percent in council-manager form of government. While females account for 47 percent in non-council-manager and 48 percent in council-manager form of government (See Table 4.2).

Race, however, does seem to play a huge role in determining the characteristics of hiring managers. For non-council-manager form of government, 89 percent of the hiring managers are Caucasian, and only 3 percent African-American, 1 percent Hispance/Latino, 1 percent Asian, 4 percent Other, and 2 percent preferred not to answer this question (See Table 4.2). In the council-manager form of government, 87 percent of hiring managers are Caucasian, 2 percent African-American, 3 percent are Hispanic/Latino, 7 percent Other, and 1 percent preferred not to answer the question (See Table 4.2).

Education level is also an interesting characteristic of hiring manager's in both the non-council-manager and council-manager form of government. In the non-council-manager form of government, 9 percent have at least a two-year college degree while 21 percent have a four-year degree and 55 percent of hiring managers have a Master's degree. Consistent with the national average, only 2 percent holds a Ph.D., and 7 percent hold a law degree. Council-manager form of government education level is comparable with non-council-manager with 53 percent holding a Master's degree, 26 percent have a Bachelor degree, 8 percent have at least two years of college, 2 percent hold a Ph.D., and 4 percent have a law degree.

Political party affiliation for hiring managers in the non-council-manager form of government shows Democrats being 20 percent of hiring managers, Republicans are 27 percent, Independents are 18 percent, Other make-up 30 percent, and 5 percent prefer not to answer. Hiring managers in the council-manager form of government show a political party affiliation for hiring manager's that are Democrats being 21 percent, Republicans are 25 percent, Independents are at 15 percent, Other are 33 percent and 5 percent prefer not to answer. Most hiring managers on average are married. Non-council-manager hiring managers show 68 percent being married, 7 percent single, 18 percent divorced, 3 percent widowed, and 2 percent cohabiting. Hiring managers in the council-manager form of government show 74 percent being married, 9 percent single, 13 percent divorced, 1 percent widowed or cohabiting (See Table 4.2).

Average income level for hiring managers in the council-manager and non-council-manager form of government falls between $70,000 - $99,999. While on average, most hiring managers do have children in both the council-manger and non-council-manager form of government (See Table 4.2). For hiring managers in the council-manager form of government, 39 percent of them grew up within fifty miles of where they work and only 33 percent of hiring managers in non-council-manager form of government grew up within fifty miles of where they live (See Table 4.2).

Table 4.2 Demographic Aspects of Hiring Managers in the United States

Form of Government	Non-Council-Manager	Council-Manager
Age	Average between 35 – 54	Average between 35 - 54
Gender	Male – 53% Female – 47%	Male – 52% Female – 48%
Race	Caucasian – 89% African American – 3% Hispanic/Latino – 1% Asian – 1% Other – 4% Prefer not to answer – 2%	Caucasian – 87% African American – 2% Hispanic/Latino – 3% Asian – 0% Other – 7% Prefer not to answer – 1%
Education Level	2 Year College – 9% 4 Year Degree – 21% Masters – 55% Ph.D. –2% J.D. –7% Prefer not to answer – 7%	2 Year College – 8% 4 Year Degree – 26% Masters – 53% Ph.D. – 2% J.D. – 4% Prefer not to answer – 7%
Political Party Affiliation	Democrat – 20% Republican – 27% Independent –18% Other – 30% Prefer not to answer – 5%	Democrat – 21% Republican – 25% Independent – 15% Other – 33% Prefer not to answer – 5%
Marital Status	Single – 7% Married – 68% Divorced – 18% Widowed – 3% Cohabiting –2% Prefer not to answer – 2%	Single – 9% Married – 74% Divorced – 13% Widowed – 1% Cohabiting –1% Prefer not to answer – 1%
Income	$20,000 - $39,999 – 3% $40,000 - $59,999 – 16% $60,000 - $69,999 – 6% $70,000 - $99,999 – 36% $100,000 – above – 30% Prefer not to answer – 9%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 12% $60,000 - $69,999 – 5% $70,000 - $99,999 – 33% $100,000 – above – 37% Prefer not to answer – 11%
Have Children	Yes – 79% No – 21%	Yes – 83% No – 17%
Grew up within 50 Miles of work	Yes – 33% No – 68%	Yes – 39% No – 61%

Note: Percentages may not equal exactly 100% due to rounding.

The demographic characteristics of the hiring manager of the council-manager and non-council-manager form of government are also examined by the studies four

regions separately. The average age for the non-council-manager hiring manager falls between 55 and 64 while the council-manager hiring managers average age falls between 45 and 54. Gender does not seem to play a huge factor at first glance with 47 percent of hiring manager's that are male and 53 percent that are female in the non-council-manager while 41 percent of hiring managers are males and 59 percent are females in the council-manager form of government (See Table 4.3).

The race of hiring managers in the non-council-manager and council-manager form of government is overwhelmingly Caucasian with 91 percent in non-council-manager and 80 percent being in the council-manager form of government. African-Americans makeup 2 percent of hiring managers in the non-council-manager form of government and 3 percent in the council-manager. Hiring managers in the Hispanic and Latino race makeup 2 percent in the non-council-manager and 4 percent in the council-manager form of government and Asian makeup 4 percent in non-council-manager with 0 percent in the council-manager form of government (See Table 4.3)

Education level of hiring manager is consistent with the overall study, showing a Master's degree held by most hiring managers. There are 63 percent of hiring managers that hold a Master's degree in non-council-manager governments and 47 percent holding a Master's degree in council-manager forms of government. Political party affiliation is mixed for both non-council-manager and council-manager form of government. Twenty-three percent favor the Democrat party, 33 percent Republican, 12 percent Independent, and 32 percent checked other in the non-council-manager governments for hiring managers. The council-manager hiring managers show 16 percent for Democrat party, 27 percent Republican, 16 percent Independent, and 37 percent as other (See Table 4.3).

There are 72 percent of hiring managers that checked married status in the non-council-manager form while 79 percent are married in the council-manager form of government. Nineteen percent of hiring managers are divorced in non-council-manager governments whereas 10 percent are divorced in the council-manager governments. Two percent of hiring managers are single in non-council-manager governments and 7 percent are single in council-manager form of government. There is an equal amount that are cohabiting in both non-council-manager and council-manager governments at 2 percent (See Table 4.3).

Income level for hiring managers in the Northeast is consistent for both the non-council-manager and council-manager forms of government. There are 40 percent of hiring managers in the non-council-manager governments that have an income that falls between $70,000 and $99,999 per year while 37% of hiring managers in the council-manager form of government falls into this category, for a difference of 3 percent. Twenty-five percent of hiring managers in non-council-manager governments show an income of $100,000 and above while 32 percent of hiring managers in the council-manger form of government fall into the same category. A difference of 7 percent for hiring managers making $100,000 or above (See Table 4.3).

The majority of hiring mangers do have children yet the majority do not work within fifty miles of where they were born or grew up. There are 83 percent of hiring managers in non-council-manager governments and 78 percent of hiring managers in council-manager governments that have children. Of which, 68 percent in the non-council-manager and 60 percent in the council-manager form of government did not grow

up or was born within a fifty-mile radius of where they are now employed (See Table 4.3).

Table 4.3 Demographic Aspects of Hiring Managers for Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Average between 55-64	Average between 45-54
Gender	Male – 47% Female – 53%	Male – 41% Female – 59%
Race	Caucasian – 91% African American – 2% Hispanic/Latino – 2% Asian – 4% Prefer not to answer – 2%	Caucasian – 80% African American – 3% Hispanic/Latino – 4% Asian – 0% Other – 13%
Education Level	2 Year College – 4% 4 Year Degree – 18% Masters – 63% Ph.D. –2% J.D. –7%	2 Year College – 7% 4 Year Degree – 28% Masters – 47% Ph.D. – 3% J.D. – 4%
Political Party Affiliation	Democrat – 23% Republican – 33% Independent –12% Other – 32%	Democrat – 16% Republican – 27% Independent – 16% Other – 37%
Marital Status	Single – 2% Married – 72% Divorced – 19% Widowed – 2% Cohabiting –2%	Single – 7% Married – 79% Divorced – 10% Widowed – 0% Cohabiting –2%
Income	$20,000 - $39,999 – 2% $40,000 - $59,999 – 19% $60,000 - $69,999 – 9% $70,000 - $99,999 – 40% $100,000 – above – 25%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 10% $60,000 - $69,999 – 7% $70,000 - $99,999 – 37% $100,000 – above – 32%
Have Children	Yes – 83% No – 18%	Yes – 78% No – 22%
Grew up within 50 Miles of work	Yes – 32% No – 68%	Yes – 40% No – 60%

Note: Percentages may not equal exactly 100% due to rounding.

The Midwest region shows slightly different percentages, however, falls in line with consistency compared to the other regions. The age for the non-council-manager

hiring manager falls between 55 and 64 while the council-manager hiring managers average age falls between 45 and 54. Gender does not seem to play a huge factor at first glance with 54 percent being males and 46 being females in the non-council-manager while 53 percent of hiring managers are males and 47 percent are females in the council-manager form of government (See Table 4.4).

The race of hiring managers in the non-council-manager and council-manager form of government is overwhelmingly Caucasian with 84 percent in non-council-manager and 88 percent being in the council-manager form of government. African-Americans makeup 5 percent of hiring managers in the non-council-manager form of government and 2 percent in the council-manager. Hiring managers in the Hispanic and Latino race makeup 1 percent in the non-council-manager and 3 percent in the council-manager form of government (See Table 4.4).

Education level of hiring manager is consistent with other regions and the overall study, showing a Master's degree held by most hiring managers. There are 61 percent of hiring managers that hold a Master's degree in non-council-manager governments and 54 percent holding a Master's degree in council-manager forms of government. Political party affiliation is mixed for both non-council-manager and council-manager form of government. Twenty percent favor the Democrat party, 27 percent Republican, 21 percent Independent, and 26 percent checked other in the non-council-manager governments for hiring managers. The council-manager hiring managers show 21 percent for Democrat party, 25 percent Republican, 16 percent Independent, and 34 percent as other (See Table 4.4).

There are 70 percent of hiring managers that checked married status in the non-council-manager form while 71 percent are married in the council-manager form of government. Eighteen percent of hiring managers are divorced in non-council-manager governments whereas 15 percent are divorced in the council-manager governments. Eight percent of hiring managers are single in non-council-manager governments and 8 percent are single in council-manager form of government. (See Table 4.4).

Income level for hiring managers in the Northeast is consistent for both the non-council-manager and council-manager forms of government. There are 29 percent of hiring managers in the non-council-manager governments that have an income that falls between $70,000 and $99,999 per year while 34% of hiring managers in the council-manager form of government falls into this category, for a difference of 5 percent. Forty percent of hiring managers in non-council-manager governments show an income of $100,000 and above while 34 percent of hiring managers in the council-manger form of government fall into the same category. A difference of 6 percent for hiring managers making $100,000 or above (See Table 4.4).

The majority of hiring mangers do have children yet being consistent with the nation as a whole and other region's, the majority do not work within fifty miles of where they were born or grew up. There are 78 percent of hiring managers in non-council-manager governments and 83 percent of hiring managers in council-manager governments that have children. Of which, 63 percent in the non-council-manager and 62 percent in the council-manager form of government did not grow up or was born within a fifty-mile radius of where they are now employed (See Table 4.4).

Table 4.4 Demographic Aspects of Hiring Managers for Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 55-64	Range 45-54
Gender	Male – 55% Female – 46%	Male – 53% Female – 47%
Race	Caucasian – 84% African American – 5% Hispanic/Latino – 1% Asian – 0% Other – 5% Prefer not to answer – 4%	Caucasian – 88% African American – 2% Hispanic/Latino – 3% Asian – 0% Other – 7% Prefer not to answer – 1%
Education Level	2 Year College – 9% 4 Year Degree – 21% Masters – 61% Ph.D. 3% J.D. –4%	2 Year College – 7% 4 Year Degree – 25% Masters – 54% Ph.D. – 2% J.D. – 4%
Political Party Affiliation	Democrat – 20% Republican – 27% Independent –21% Other – 26%	Democrat – 21% Republican – 25% Independent – 16% Other – 34%
Marital Status	Single – 8% Married – 70% Divorced – 18% Widowed – 4% Cohabiting –0%	Single – 8% Married – 71% Divorced – 15% Widowed – 2% Cohabiting –2%
Income	$20,000 - $39,999 – 1% $40,000 - $59,999 – 13% $60,000 - $69,999 – 3% $70,000 - $99,999 – 29% $100,000 – above – 40%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 14% $60,000 - $69,999 – 7% $70,000 - $99,999 – 34% $100,000 – above – 34%
Have Children	Yes – 78% No – 22%	Yes – 83% No – 17%
Grew up within 50 Miles of work	Yes – 36% No – 63%	Yes – 38% No – 62%

Note: Percentages may not equal exactly 100% due to rounding.

The South region also shows slightly different percentages, however, falls in line with consistency compared to the other regions. The age for the non-council-manager hiring manager falls between 45 and 54 while the council-manager hiring managers average age falss between 55 and 64. Gender does not seem to play a huge factor with 53

percent being males and 47 being females in the non-council-manager while 54 percent of hiring managers are males and 46 percent are females in the council-manager form of government (See Table 4.5).

The race of hiring managers in the non-council-manager and council-manager form of government is still overwhelmingly Caucasian with 91 percent in non-council-manager and 87 percent being in the council-manager form of government. African-Americans makeup 4 percent of hiring managers in the non-council-manager form of government and 2 percent in the council-manager. Hiring managers in the Hispanic and Latino race makeup 2 percent in the council-manager form of government and 1 percent are Asian (See Table 4.5).

Education level of hiring manager is consistent with other regions and the overall study, again showing a Master's degree held by most hiring managers. There are 51 percent of hiring managers that hold a Master's degree in non-council-manager governments and 50 percent holding a Master's degree in council-manager forms of government. Political party affiliation is mixed for both non-council-manager and council-manager form of government. Thirteen percent favor the Democrat party, 24 percent Republican, 21 percent Independent, and 35 percent checked other in the non-council-manager governments for hiring managers. The council-manager hiring managers show 24 percent for Democrat party, 26 percent Republican, 15 percent Independent, and 28 percent as other (See Table 4.5).

There are 59 percent of hiring managers that checked married status in the non-council-manager form while 72 percent are married in the council-manager form of government. Twenty-one percent of hiring managers are divorced in non-council-

manager governments whereas 14 percent are divorced in the council-manager governments. Thirteen percent of hiring managers are single in non-council-manager governments and 12 percent are single in council-manager form of government. (See Table 4.5).

Income level for hiring managers in the Northeast is consistent for both the non-council-manager and council-manager forms of government. There are 32 percent of hiring managers in the non-council-manager governments that have an income that falls between $70,000 and $99,999 per year while 34% of hiring managers in the council-manager form of government falls into this category, for a difference of 2 percent. Thirty-one percent of hiring managers in non-council-manager governments show an income of $100,000 and above while 42 percent of hiring managers in the council-manger form of government fall into the same category. A difference of 9 percent for hiring managers making $100,000 or above (See Table 4.5).

Again, the majority of hiring mangers do have children yet being consistent with the nation as a whole and other region's, the majority do not work within fifty miles of where they were born or grew up. There are 79 percent of hiring managers in non-council-manager governments and 82 percent of hiring managers in council-manager governments that have children. Of which, 63 percent in the non-council-manager and 62 percent in the council-manager form of government did not grow up or was born within a fifty-mile radius of where they are now employed (See Table 4.5).

Table 4.5 Demographic Aspects of Hiring Managers for South Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Average between 45-54	Average between 55-64
Gender	Male – 53% Female – 47%	Male – 54% Female – 46%
Race	Caucasian – 91% African American – 4% Hispanic/Latino – 0% Asian – 0% Other – 4% Prefer not to answer – 1%	Caucasian – 87% African American – 2% Hispanic/Latino – 3% Asian – 1% Other – 6% Prefer not to answer – 1%
Education Level	2 Year College – 12% 4 Year Degree – 19% Masters – 51% Ph.D. – 1% J.D. – 8%	2 Year College – 11% 4 Year Degree – 26% Masters – 50% Ph.D. – 0% J.D. – 5%
Political Party Affiliation	Democrat – 13% Republican – 24% Independent –21% Other – 35%	Democrat – 24% Republican – 26% Independent – 15% Other – 28%
Marital Status	Single – 13% Married – 59% Divorced – 21% Widowed – 4% Cohabiting – 3%	Single – 12% Married – 72% Divorced – 14% Widowed – 2% Cohabiting –1%
Income	$20,000 - $39,999 – 5% $40,000 - $59,999 – 19% $60,000 - $69,999 – 8% $70,000 - $99,999 – 32% $100,000 – above – 31%	$20,000 - $39,999 – 1% $40,000 - $59,999 – 11% $60,000 - $69,999 – 3% $70,000 - $99,999 – 34% $100,000 – above – 42%
Have Children	Yes – 79% No – 21%	Yes – 82% No – 18%
Grew up within 50 Miles of work	Yes – 37% No – 63%	Yes – 38% No – 62%

Note: Percentages may not equal exactly 100% due to rounding.

The West region also shows slightly different percentages, however, falls in line with consistency compared to the other regions. The age for the non-council-manager hiring manager falls between 55 and 64 while the council-manager hiring managers average age falls between 55 and 64. Gender is slightly different in this region with 61

percent being males and 39 being females in the non-council-manager while 53 percent of hiring managers are males and 47 percent are females in the council-manager form of government (See Table 4.6).

The race of hiring managers in the non-council-manager and council-manager form of government is still overwhelmingly Caucasian with 94 percent in non-council-manager and 90 percent being in the council-manager form of government. African-Americans makeup 2 percent of hiring managers in the council-manager governments and there were no African-Americans for this study in the non-council-manager governments. Hiring managers in the Hispanic and Latino race makeup 3 percent in the council-manager form of government and percent are Asian in the non-council-manager governments (See Table 4.6).

Education level of hiring manager is consistent with other regions and the overall study, again showing a Master's degree held by most hiring managers. There are 45 percent of hiring managers that hold a Master's degree in non-council-manager governments and 61 percent holding a Master's degree in council-manager forms of government. Political party affiliation is mixed for both non-council-manager and council-manager form of government. Twenty-nine percent favor the Democrat party, 23 percent Republican, 16 percent Independent, and 29 percent checked other in the non-council-manager governments for hiring managers. The council-manager hiring managers show 16 percent for Democrat party, 25 percent Republican, 15 percent Independent, and 41 percent as other (See Table 4.6).

There are 81 percent of hiring managers that checked married status in the non-council-manager form while 79 percent are married in the council-manager form of

government. Only 7 percent of hiring managers are divorced in non-council-manager governments whereas 11 percent are divorced in the council-manager governments. Hiring managers that are single in council-manager form of government makeup 6 percent of individuals. (See Table 4.6).

Income level for hiring managers in the Northeast is consistent for both the non-council-manager and council-manager forms of government. There are 45 percent of hiring managers in the non-council-manager governments that have an income that falls between $70,000 and $99,999 per year while 28% of hiring managers in the council-manager form of government falls into this category, for a slightly larger difference than other regions of 17 percent. Nineteen percent of hiring managers in non-council-manager governments show an income of $100,000 and above while 37 percent of hiring managers in the council-manger form of government fall into the same category. A much larger difference of 18 percent for hiring managers making $100,000 or above compared to other regions (See Table 4.6).

Again, the majority of hiring mangers do have children yet being consistent with the nation as a whole and other region's, the majority do not work within fifty miles of where they were born or grew up. There are 81 percent of hiring managers in non-council-manager governments and 88 percent of hiring managers in council-manager governments that have children. Of which, 81 percent in the non-council-manager and 58 percent in the council-manager form of government did not grow up or was born within a fifty-mile radius of where they are now employed (See Table 4.6).

Table 4.6 Demographic Aspects of Hiring Managers for West Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 55-64	Range 55-64
Gender	Male – 61% Female – 39%	Male – 53% Female – 47%
Race	Caucasian – 94% African American – 0% Hispanic/Latino – 0% Asian – 3% Other – 3% Prefer not to answer – 0%	Caucasian – 90% African American – 2% Hispanic/Latino – 3% Asian – 0% Other – 4% Prefer not to answer – 2%
Education Level	2 Year College – 7% 4 Year Degree – 32% Masters – 45% Ph.D. – 3% J.D. – 7%	2 Year College – 4% 4 Year Degree – 25% Masters – 61% Ph.D. – 5% J.D. – 1%
Political Party Affiliation	Democrat – 29% Republican – 23% Independent –16% Other – 29% Prefer not to answer – 4%	Democrat – 16% Republican – 25% Independent – 15% Other – 41% Prefer not to answer – 4%
Marital Status	Single – 0% Married – 81% Divorced – 7% Widowed – 3% Cohabiting – 3% Prefer not to answer – 7%	Single – 6% Married – 79% Divorced – 11% Widowed – 0% Cohabiting –1% Prefer not to answer – 3%
Income	$20,000 - $39,999 – 3% $40,000 - $59,999 – 19% $60,000 - $69,999 – 7% $70,000 - $99,999 – 45% $100,000 – above – 19% Prefer not to answer – 7%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 12% $60,000 - $69,999 – 6% $70,000 - $99,999 – 28% $100,000 – above – 37% Prefer not to answer – 16%
Have Children	Yes – 81% No – 19%	Yes – 88% No – 12%
Grew up within 50 Miles of work	Yes – 19% No – 81%	Yes – 42% No – 58%

Note: Percentages may not equal exactly 100% due to rounding.

As mentioned previously, the hiring managers that participated in this survey could be from several venues within the municipality and are split into Administration

which encompasses the Mayor, City Manager, or City Administrator; the Human Resource Department or Personnel Department, and this author also gave the option of "Other" for individuals that might fall into categories such as Finance Director, City Clerk, etc. As can be seen in Figure 4.1, 67 percent of hiring managers fall into the department of Administration, 32 percent in the Human Resources / Personnel Department, and 1 percent fall into the category of Other (See Table 4.7).

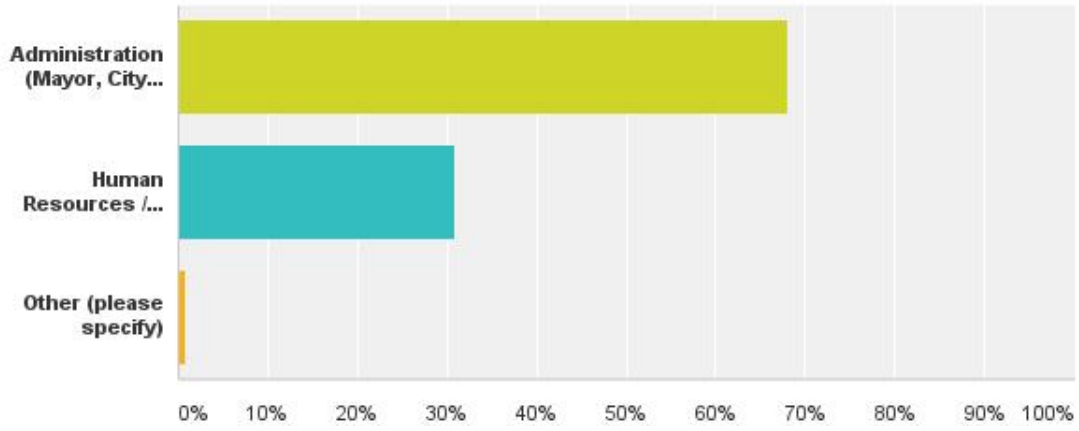

Figure 4.1 Municipality Responding Department Overview

Table 4.7 Municipality Department Response Rate

	N-Size	Percent
Administration (Mayor, CM, CA, etc.)	587	67%
Human Resources / Personnel Department	277	32%
Other	7	1%
Total	871	100%

A regional and non-council-manager versus council-manger look at which department responded to the survey also gives a nice overview of hiring managers and

ultimately their hiring practices for this survey. As can be seen in Table 4.8, 75 percent of the Administration in the non-council-manager government replied to this survey while 62 percent replied in the council-manager form of government. Whereas 25 percent of Human Resources Department replied in the non-council-manager governments and 37 percent in the council-manager form of government replied.

Table 4.8 Departments for Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	75%	62%
Human Resources/Personnel	25%	37%
Other	0%	1%
Total	100%	100%

The Midwest region shows that 66 percent of non-council-manager hiring managers were in the Administration and 63 percent in the council-manager form of government. Human Resources in the non-council-manager governments had a 33 percent response rate and 36 percent from the council-manager form of government. There was 1 percent that responded in both non-council-manager and council-manager, which could fall under the hiring manager as being the City Clerk, Finance Director, etc. (See Table 4.9).

Table 4.9 Departments for Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	66%	63%
Human Resources/Personnel	33%	36%
Other	1%	1%
Total	100%	100%

For the South region, 71 percent of respondents were from the Administration in the non-council-manager governments and 66 percent from the council-manager governments. Human Resources in non-council-manager had a 29 percent response rate and 34 percent in the council-manager government (See Table 4.10).

Table 4.10 Departments for South Region

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	71%	66%
Human Resources/Personnel	29%	34%
Other	0%	0%
Total	100%	100%

The West region shows that 68 percent of Administration responded in non-council-manager governments and 77 percent from council-manger governments. Also, the Human Resources Department had 32 percent respond from the non-council-manager and 23 percent from the council-manager government (See Table 4.11).

Table 4.11 Departments for West Region

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	68%	77%
Human Resources/Personnel	32%	23%
Other	0%	0%
Total	100%	100%

Characteristics of Hiring Managers Use of Technology

For this study, several survey questions were asked and submitted by respondents that gives a general overview of how hiring managers in local municipalities use technology that is available to them in municipalities that are the subject of this research, namely, Web 2.0 tools, e-Government, and Internet search engines. The following will give the reader a broad look at which of these tools are used by hiring managers the most frequent and then show the reader a separate overview of the regions for this study and hiring managers in that regions technology uses. As mentioned previously, municipalities that participated for this study shows a 100 percent response rate for municipalities using some form of e-Government therefore, the author has split the use of e-Government into categories of how many e-Government outlets are available per municipality when running the T-test and Z-test. Figure 4.2 gives a quick overview, as a whole, of the types of e-Government being used by these municipalities.

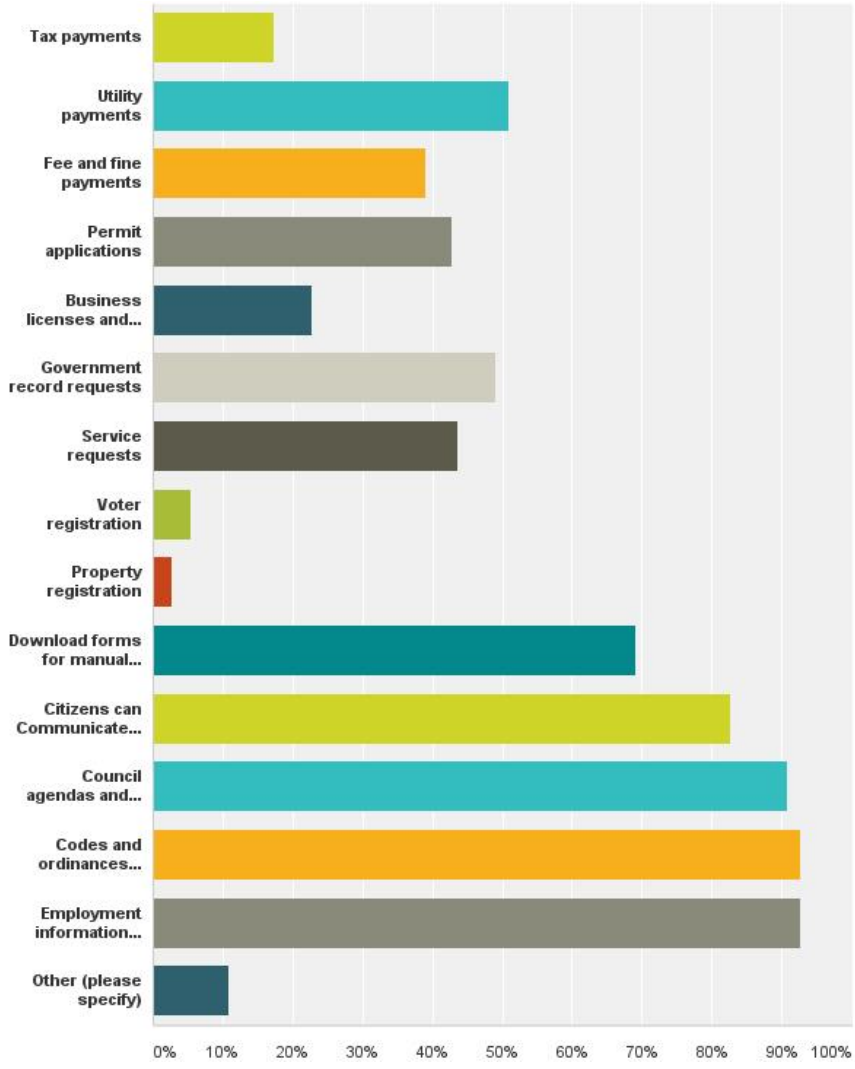

Figure 4.2 Forms of e-Government Offered by Municipalities

When split into regional information, the data stays consistent with the national percentages as a whole. For the northeast region, hiring managers in the non-council-manager governments and the council-manager form of government, show no obvious signs of any deviation from the national average. It is notable that in the council-manager form of government, 62 percent offer government record requests via e-Government, while in the non-council-manager, only 40 percent offer this, a difference of 18 percent

and the only major difference in forms of e-Government offered for the northeast region (See Table 4.12).

Table 4.12 Forms of e-Government Offered in Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	23%	22%
Utility Payments	37%	49%
Fee and Fine Payments	35%	31%
Permit Applications	53%	38%
Business licenses and renewal	16%	29%
Government record requests	40%	62%
Service requests	40%	50%
Voter registration	12%	6%
Property registration	5%	2%
Download Forms	53%	75%
Citizens communicate	81%	71%
Council agendas and minutes	90%	87%
Codes and Ordinances	91%	88%
Employment Information	91%	91%

The Midwest region is also consistent with the national average on forms of e-Government offered by municipalities. Unlike the Northeast region, there are no truly dramatic differences in the non-council-manager and council-manager form of government (See Table 4.13). The South region does however, have a slight difference in utility payments being offered as e-Government between the non-council-manager and council-manager form of government with the non-council-manager at 64 percent and council-manager at 45 percent, a difference of 19 percent. All other forms of e-Government offered in the South region fall in line with the national average (See Table 4.14). The West region also falls in line with the national average of e-Government

being available with the exception of government records can be requested and citizens can communicate with elected officials using e-Government. For the non-council-manager governments, 61 percent can request government records digitally while the council-manager government is only 42 percent, a difference of 19 percent while the national average is only 50 percent (See Table 4.15). Also, in the West region, 68 percent of non-council-manager governments allow citizens to communicate with elected officials and in the council-manager government, 86 percent have that availability while the national average is 79 percent (See Table 4.15).

Table 4.13 Forms of e-Government Offered in Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	9%	16%
Utility Payments	61%	52%
Fee and Fine Payments	46%	36%
Permit Applications	34%	41%
Business licenses and renewal	25%	28%
Government record requests	53%	48%
Service requests	35%	41%
Voter registration	3%	5%
Property registration	0%	2%
Download Forms	70%	72%
Citizens communicate	78%	83%
Council agendas and minutes	90%	91%
Codes and Ordinances	90%	92%
Employment Information	92%	90%

Table 4.14 Forms of e-Government Offered in South Region

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	15%	17%
Utility Payments	64%	45%
Fee and Fine Payments	39%	37%
Permit Applications	43%	37%
Business licenses and renewal	17%	23%
Government record requests	48%	54%
Service requests	45%	41%
Voter registration	4%	6%
Property registration	4%	4%
Download Forms	71%	63%
Citizens communicate	83%	76%
Council agendas and minutes	91%	88%
Codes and Ordinances	91%	89%
Employment Information	89%	92%

Table 4.15 Forms of e-Government Offered in West Region

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	16%	13%
Utility Payments	48%	52%
Fee and Fine Payments	39%	44%
Permit Applications	32%	40%
Business licenses and renewal	13%	23%
Government record requests	61%	42%
Service requests	45%	40%
Voter registration	7%	4%
Property registration	3%	1%
Download Forms	68%	70%
Citizens communicate	68%	86%
Council agendas and minutes	87%	85%
Codes and Ordinances	90%	90%
Employment Information	90%	88%

Internet search engines are also being widely used by hiring managers in order to obtain supplemental information about applicants. In some cases, it is the only venue for which hiring managers choose in order to gain any knowledge about applicants. Figure 4.3 gives a broad overview of how much hiring managers in local municipalities are using Internet search engines and which ones they use most often. When asked how frequent search engines are used to find supplemental information about applicants, 8 percent of hiring managers responded "Always", 24 percent "Most of the time", 33 percent "Seldom", 33 percent responded "Never", and 2 percent preferred not to answer. However, when asked which search engines hiring managers do use when finding supplemental information about applicants, 60 percent responded "Google", 3 percent "Yahoo", 2 percent "Bing", 2 percent "Other" and 33 percent preferred not to answer (See Figure 4.3).

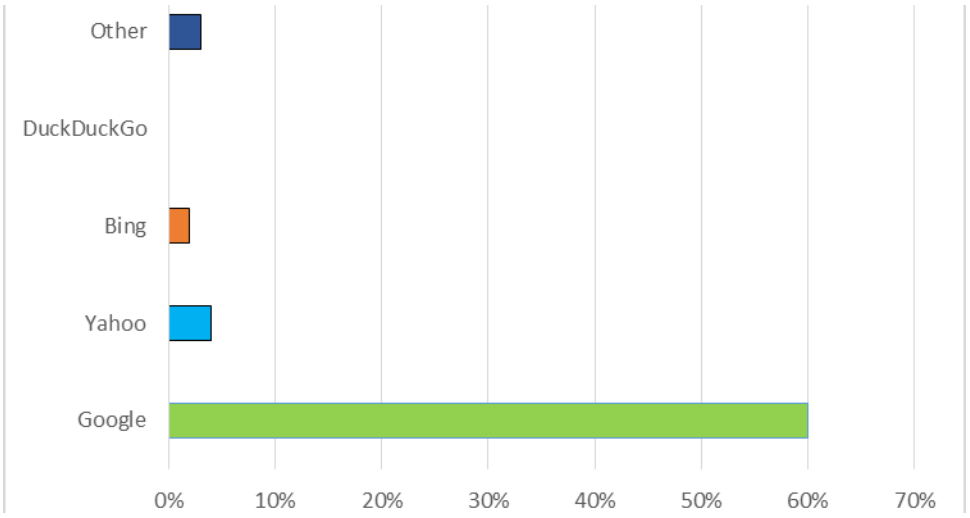

Figure 4.3 Search Engines Used by Hiring Managers

When looking at the four regions and which Internet search engines hiring managers in both the non-council-manager and council-manager governments are using, the numbers are consistent with the national percentages. In the Northeast region, 67 percent in the non-council-manager and 56 percent in the council-manager form of government use Google (See Table 4.16). Yahoo is being used 5 percent of the time in the non-council-manager governments and only 3 percent of the time in the council-manager form. Bing is consistent with Yahoo, and 2 percent in the council-manager form, use a search engine that is "Other" (See Table 4.16).

Table 4.16 Search Engines Used by Hiring Managers in Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Google	67%	56%
Yahoo	5%	3%
Bing	2%	3%
DuckDuckGo	0%	0%
Other	0%	2%

In the Midwest region, 52 percent in the non-council-manager and 58 percent in the council-manager form of government use Google (See Table 4.17). Yahoo is being used 5 percent of the time in the non-council-manager governments and only 4 percent of the time in the council-manager form. Bing is used 1 percent of the time in non-council-manager and 2 percent of the time in council-manager form while 2 percent in the council-manager form, use a search engine that is "Other" and 1 percent in the non-council-manager use "Other" (See Table 4.17).

Table 4.17 Search Engines Used by Hiring Managers in Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Google	52%	58%
Yahoo	5%	4%
Bing	1%	2%
DuckDuckGo	0%	0%
Other	1%	2%

In the South region, 56 percent in the non-council-manager and 61 percent in the council-manager form of government use Google (See Table 4.18). Yahoo is being used 4 percent of the time in the council-manager form. Bing is used 3 percent of the time in non-council-manager and 1 percent of the time in council-manager form while 3 percent in the non-council-manager and council-manager form, use a search engine that is "Other" (See Table 4.18).

Table 4.18 Search Engines Used by Hiring Managers in South Region

Form of Government	Non-Council-Manager	Council-Manager
Google	56%	61%
Yahoo	0%	4%
Bing	3%	1%
DuckDuckGo	0%	0%
Other	3%	3%

Finally, the West region shows hiring managers in the non-council-manager form using Google 61 percent of the time while the council-manager use Google 64 percent of the time. Conversely, Yahoo is used 4 percent of the time in the council-manager form and 3 percent in the non-council-manager form of government. Bing is used 3 percent of the time in non-council-manager and 1 percent in council-manager form while 4 percent

in the council-manager use something other than Google or Yahoo Internet search engines (See Table 4.19).

Table 4.19 Search Engines Used by Hiring Managers in West Region

Form of Government	Non-Council-Manager	Council-Manager
Google	61%	64%
Yahoo	3%	4%
Bing	3%	1%
DuckDuckGo	0%	0%
Other	0%	4%

Social media is also a huge part of this studies hypotheses. Figure 4.4 gives a quick overview of which social media venues are being used by local government hiring managers in the United States (See Figure 4.4). When asked if hiring managers have ever searched any social media for supplemental information about applicants, 52 percent of hiring managers responded they have done so with an interesting difference between gender, males are at 56 percent, above the national average, and females are at 47 percent. When asked the frequency of this type of search, hiring managers responded that 10 percent of the time, they "Always" search, 24 percent "Most of the time", 17 percent "Seldom", and 50 percent said "Never". As a national percentage, when hiring managers in local government do search social media to find information about applicants, 43 percent use Facebook, 14 percent use Twitter, 4 percent Instagram, 2 percent Google+, 25 percent LinkedIn, 1 percent Snapchat, 1 percent MySpace, and 6 percent Other (See Figure 4.4). Both female and male hiring managers are consistent with one another in which social media venues they do look at (See Table 4.20 and Figure 4.4).

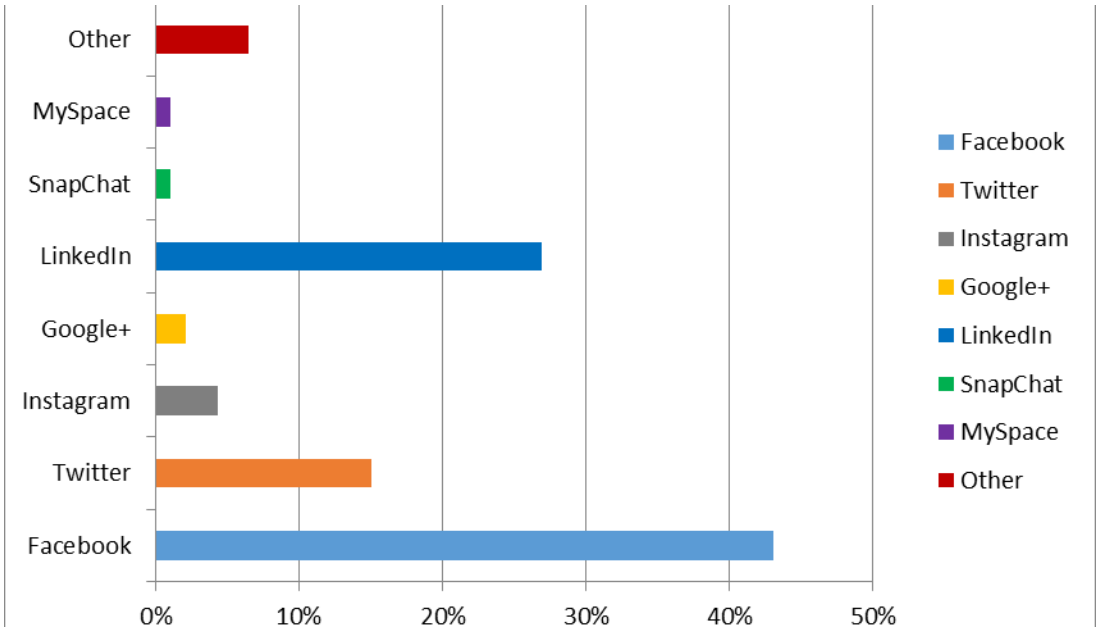

Figure 4.4 Social Media Used by Hiring Managers

Table 4.20 Percentages of Social Media Used by Hiring Managers

	National Average	Female	Male
Facebook	43%	39%	41%
Twitter	14%	12%	16%
Instagram	4%	5%	4%
Google+	2%	2%	2%
LinkedIn	25%	22%	27%
Snapchat	1%	1%	1%
MySpace	1%	1%	1%
Other	6%	7%	5%

When social media usage by hiring managers in local government is viewed by region, there are a few surprises in what form of government and gender seem to be using different venues of social media in order to search for supplemental information about applicants. Table 4.21 shows non-council-manager, council-manager and gender for the Northeast region of the United States. Just as it is in the national average, Facebook is

the overwhelmingly choice used by hiring managers when they search social media for information about applicants.

Non-council-manager governments overall use Facebook 39 percent of the time while council-manager uses Facebook 34 percent of the time. However, female hiring managers in the non-council-manager governments look at Facebook 40 percent of the time and females hiring managers in the council-manager form use Facebook only 33 percent of the time, a difference of 7 percent between forms of government. Male hiring managers in the different forms of government only differ by 1 percent and is not significant (See Table 4.21). LinkedIn is the second most social media outlet searched when looking for information about applicants. Non-council-manager hiring managers look at LinkedIn 28 percent of the time while council-manager hiring managers look at LinkedIn only 18 percent of the time. Again, it is notable that female hiring managers in the non-council-manager governments use LinkedIn 23 percent of the time and female hiring managers in the council-manager government use LinkedIn 18 percent of the time, a difference of 5 percent. Male hiring managers in the non-council-manager governments use LinkedIn 33 percent of the time and male hiring managers in the council-manager government only use LinkedIn 21 percent of the time, a difference of 12 percent. Twitter is the only other significant social media outlet used by hiring managers in the Northeast. Non-council-manager governments use Twitter 19 percent of the time while council-manager use Twitter 13 percent of the time. Female hiring managers in the non-council-manager governments use Twitter 20 percent of the time while female hiring managers in the council-manager government use Twitter 10 percent of the time, a

difference of 10 percent. Male hiring managers in the non-council-manager and council-manager governments only differ by 1 percent (See Table 4.21).

Table 4.21 Social Media Used by Hiring Managers in Northeast Region

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	39%	40%	37%	34%	33%	36%
Twitter	19%	20%	19%	13%	10%	18%
Instagram	9%	13%	4%	4%	3%	7%
Google+	4%	0%	7%	2%	3%	0%
LinkedIn	28%	23%	33%	19%	18%	21%
Snapchat	0%	0%	0%	2%	3%	0%
MySpace	0%	0%	0%	0%	0%	0%
Other	4%	3%	4%	6%	5%	7%

In the Midwest region of the United States, hiring managers in the non-council-manager governments overall use Facebook 36 percent of the time while council-manager uses Facebook 40 percent of the time. However, female hiring managers in the non-council-manager governments only look at Facebook 29 percent of the time and female hiring managers in the council-manager form use Facebook 39 percent of the time, a difference of 10 percent between forms of government and gender. Male hiring managers in the different forms of government only differ by 2 percent and is not significant (See Table 4.22). LinkedIn is the second most social media outlet searched when looking for information about applicants. Non-council-manager hiring managers look at LinkedIn 22 percent of the time while council-manager hiring managers look at LinkedIn 25 percent of the time. Female hiring managers in the non-council-manager governments use LinkedIn 17 percent of the time and female hiring managers in the council-manager government use LinkedIn 25 percent of the time, a difference of 8

percent. Male hiring managers in the non-council-manager governments use LinkedIn 26 percent of the time and male hiring managers in the council-manager government only use LinkedIn 25 percent of the time. Again, Twitter is the only other significant social media outlet used by hiring managers in the Midwest. Non-council-manager governments use Twitter 16 percent of the time while council-manager use Twitter 12 percent of the time. Female hiring managers in the non-council-manager governments use Twitter 9 percent of the time while female hiring managers in the council-manager government use Twitter 12 percent of the time, a difference of 3 percent. Male hiring managers in the non-council-manager use Twitter 21 percent of the time and males in the council-manager government use Twitter 18 percent of the time (See Table 4.22).

Table 4.22 Social Media Used by Hiring Managers in Midwest Region

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	36%	29%	43%	40%	39%	41%
Twitter	16%	9%	21%	15%	12%	18%
Instagram	5%	6%	5%	4%	3%	4%
Google+	1%	0%	2%	1%	1%	2%
LinkedIn	22%	17%	26%	25%	25%	25%
Snapchat	3%	0%	5%	1%	1%	1%
MySpace	0%	0%	0%	0%	1%	2%
Other	49%	9%	10%	5%	7%	2%

In the South region of the United States, non-council-manager governments overall use Facebook 47 percent of the time while council-manager uses Facebook 37 percent of the time. However, Females in the non-council-manager governments look at Facebook 49 percent of the time and Females in the council-manager form use Facebook 38 percent of the time, a difference of 11 percent between forms of government and

female hiring managers. Male hiring managers in the non-council-manager governments use Facebook 45 percent of the time while male hiring managers in the council-manager form, use Facebook 36 percent of the time, a difference of 9 percent. LinkedIn again is the second most social media outlet searched when looking for information about applicants in the South region. Non-council-manager hiring managers look at LinkedIn 32 percent of the time while council-manager hiring managers look at LinkedIn 18 percent of the time. Female hiring managers in the non-council-manager governments use LinkedIn 31 percent of the time and female hiring managers in the council-manager government use LinkedIn 15 percent of the time, a difference of 16 percent. Male hiring managers in the non-council-manager governments use LinkedIn 33 percent of the time and male hiring managers in the council-manager government only use LinkedIn 21 percent of the time. As with the previous regions, Twitter is the only other significant social media outlet used by hiring managers in the South. Non-council-manager governments use Twitter 13 percent of the time while council-manager use Twitter 12 percent of the time. Female hiring managers in the non-council-manager governments use Twitter 14 percent of the time while female hiring managers in the council-manager government use Twitter 7 percent of the time, a difference of 7 percent. Male hiring managers in the non-council-manager use Twitter 13 percent of the time and males in the council-manager government use Twitter 15 percent of the time (See Table 4.23).

Table 4.23 Social Media Used by Hiring Managers in South Region

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	47%	49%	45%	37%	38%	36%
Twitter	13%	14%	13%	12%	7%	15%
Instagram	7%	11%	3%	3%	3%	3%
Google+	3%	3%	3%	1%	1%	2%
LinkedIn	32%	31%	33%	18%	15%	21%
Snapchat	0%	0%	0%	1%	0%	2%
MySpace	0%	0%	0%	1%	1%	2%
Other	4%	0%	8%	6%	6%	5%

In the West region of the United States, non-council-manager governments overall use Facebook 39 percent of the time while council-manager uses Facebook 34 percent of the time, both consistent with the national average. However, female hiring manager's in the non-council-manager governments look at Facebook 17 percent of the time and female hiring manager's in the council-manager form use Facebook 46 percent of the time, a difference of 29 percent between forms of government and female hiring managers and not in line with the national average for female hiring managers using Facebook. Male hiring managers in the non-council-manager governments use Facebook 47 percent of the time while male hiring managers in the council-manager form, use Facebook 46 percent of the time, a difference of only 1 percent. LinkedIn again is the second most social media outlet searched when looking for information about applicants in the West region. Non-council-manager hiring managers look at LinkedIn 28 percent of the time while council-manager hiring managers look at LinkedIn 19 percent of the time. Female hiring managers in the non-council-manager governments use LinkedIn 8 percent of the time and female hiring managers in the council-manager government use

LinkedIn 30 percent of the time, a difference of 22 percent. Male hiring managers in the non-council-manager governments use LinkedIn 37 percent of the time and male hiring managers in the council-manager government only use LinkedIn 36 percent of the time. As with all other regions, Twitter is the only other significant social media outlet used by hiring managers in the West. Non-council-manager governments use Twitter 19 percent of the time while council-manager use Twitter 13 percent of the time. Female hiring managers in the non-council-manager governments use Twitter 17 percent of the time while female hiring managers in the council-manager government use Twitter 19 percent of the time, a difference of only 2 percent. Male hiring managers in the non-council-manager use Twitter 11 percent of the time and males in the council-manager government use Twitter 15 percent of the time (See Table 4.24).

Table 4.24 Social Media Used by Hiring Managers in West Region

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	39%	17%	47%	34%	46%	51%
Twitter	19%	17%	11%	13%	19%	15%
Instagram	9%	0%	5%	4%	7%	3%
Google+	4%	0%	0%	2%	7%	0%
LinkedIn	28%	8%	37%	19%	30%	36%
Snapchat	0%	0%	0%	2%	2%	0%
MySpace	0%	8%	0%	0%	2%	0%
Other	4%	0%	0%	6%	13%	3%

Overview of Analysis

For each of the seven hypotheses tested within this study, the form of local government, specifically mayor-council and council-manager, for each municipality is captured and analyzed as two separate independent variables. These two independent

variables represent a nominal dichotomous variable of mayor-council and council-manager forms of government. The author will analyze the nominal dichotomous variable for each municipality using both a two group mean comparison T-test and a two proportion Z-test analysis for each dependent variable. These tests will allow the author to determine if there are any statistically significant difference in the mean of the categories of mayor-council and council-manager and also to determine the direction and significance of the relationship between the independent and dependent variables as well as explaining the proportion of the variance in the dependent variable that might be related to the independent variables.

By conducting a T-test, the author will be able to show the average of the values between both independent variables in this study and the supposed average of the larger population the data was drawn from. Further, a T-test will show the standard deviation of the data values and the exact number of values in the data sample. The number of values in the data sample, minus one, will show the degrees of freedom of the data sample.

Finally, the author analyzes the independent variables using a Z-test allowing the author to draw conclusions about how many standard deviations from the mean the results are. The Z-test is appropriate for this study because the sample size is above 30 and it follows the standard normal distribution under the null hypothesis, otherwise, a T-test would be the only appropriate test. The Z-test will also allow the author to determine whether the predictor variables in the data have a significant effect on the response where the null hypothesis states that the predictor is not significant.

Hypothesis One

Hypothesis one proposes that municipalities with a council-manager form of government are more likely to use Web 2.0 tools and Internet search engines to gather supplemental information about applicants than other forms of municipal governments. The author anticipates that council-managers being a more professional structured form of government, with more educated hiring managers will therefore utilize the technological tools at their disposal, namely Web 2.0 tools and Internet search engines. Table 4.25 provides a breakdown by form of government regarding Web 2.0 tools and Internet search engines used by hiring managers (See Table 4.25).

Table 4.25 Forms of Government use of Web 2.0 Tools and Search Engines

	Non-Council-Manager	Council-Manager
N-size	240	631
Search Social Media	122 (51%)	326 (52%)
Used Search Engine	151 (63%)	420 (67%)

T-Test Analysis Comparing Social Media Use

Analysis of the data using the Two Group Mean Comparison T-Test for social media (See Table 4.26) show that the mean of hiring managers using social media to gain supplemental information about applicants in the non-council-manager form of governments are at .51 and the council-manager form of government are .52, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 240 non-council-manager municipalities responding to the survey is 51% and the percentage level of hiring managers searching social media of the 631 council-manager municipalities responding to the survey is 52%.

Analysis results in a t-statistic of -.219 at 869 degrees of freedom. The resulting significance is .827 which is higher than .05 therefore resulting in a not statistically significant relationship between hiring managers in the non-council-manager and council-manager governments using social media to find supplemental information about applicants (See Table 4.26).

Table 4.26 Two Group Means Comparison T-Test Using Social Media

Government Form	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Council-Manager	240	.51	-.219	869	.827
Council-Manager	631	.52			

T-Tests Analysis Comparing Internet Search Engines

Analysis of the data using the Two Group Mean Comparison T-Test for Internet search engines (See Table 4.27) show that mean of hiring managers using Internet search engines to gain supplemental information about applicants in the non-council-manager form of governments are at .63 and the council-manager form of government are .67, there is not a statistically significant difference between the two. The percentage level of hiring managers using Internet search engines of the 240 non-council-manager municipalities responding to the survey is 63% and the percentage level of hiring managers searching social media of the 631 council-manager municipalities responding to the survey is 67%. Analysis results in a t-statistic of -1.011 at 869 degrees of freedom. The resulting significance is .312 which is higher than .05 therefore resulting in a not statistically significant relationship between hiring managers in the non-council-manager

and council-manager governments using social media to find supplemental information about applicants (See Table 4.27).

Table 4.27 Two Group Means Comparison T-Test Comparing Internet Search Engines

Government Form	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Council-Manager	240	.63	-1.011	869	.312
Council-Manager	631	.67			

Z-Test Analysis Comparing Form of Government and Social Media

Table 4.28 shows the results from a Two Proportion Z-Test between the two forms of government and hiring managers using social media for hiring purposes. A chi-square test was performed and no relationship was found between the non-council-manager and council-manager form of governments. As can be seen in Table 4.28, the Pearson's Chi-Square X(1) value is .048 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .827. Therefore, there is no significant difference between hiring managers using social media to find supplemental information about applicants in either the non-council-manager or council-manager form of government. The gamma value is .017 which shows the strength of association between the variables is very weak (See Table 4.28 and Figure 4.5).

Table 4.28 Two Proportion Z-Test Analysis Comparing Social Media

Government Form	Search Social Media	N-Size	Total	
Non-Council-Manager	27%	122	240	
Council-Manager	73%	326	631	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.048	.827	1	.017

Z-Test Analysis Comparing Form of Government and Internet Search Engines

Table 4.29 shows the results from a Two Proportion Z-Test between the two forms of government and hiring managers using Internet search engines for hiring purposes. A chi-square test was performed and no relationship was found between the non-council-manager and council-manager form of governments. As can be seen in Table 5.23, the Pearson's Chi-Square X(1) value is 1.023 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .312. Therefore, there is no significant difference between hiring managers using Internet search engines to find supplemental information about applicants in either the non-council-manager or council-manager form of government. The gamma value is .080 which shows the strength of association between the variables is very weak (See Table 4.29).

Table 4.29 Two Proportion Z-Test Analysis Comparing Internet Search Engines

Government Form	Internet Search Engines	N-Size	Total	
Non-Council-Manager	26%	151	240	
Council-Manager	74%	420	631	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.023	.312	1	.080

Findings for Hypothesis One

In the analysis that uses the independent variable form of government against the dependent variables of social media and search engines used by hiring managers in the aforementioned forms of government, the author finds that none of the research variables have a statistically significant relationship which would allow us to reject the null hypothesis. The Two Group Mean T-Test indicates no statistically significant difference between the non-council-manager and council-manager municipalities against the use of social media or Internet search engines by hiring managers. Likewise, the Z-Test analysis produced no statistically significant differences between the two types of municipalities and social media or Internet search engines used by hiring managers. Therefore, the author cannot reject the null hypothesis in any of the above statistical formulas. The data do not demonstrate that hiring managers use of social media or Internet search engines to find supplemental information about applicants in municipalities are different depending on how the municipality's institutional form is classified for this research.

Hypothesis Two

Hypothesis two proposes that municipalities with more than 50,000 people in the population, are more likely to gather supplemental information about applicants using Web 2.0 tools and Internet search engines than municipalities with less than 50,000 people in the population. The author anticipates that as population rises past 50,000 in municipalities, so will the budget for hiring managers in human resource departments and allow human resource and hiring department to employee more help, giving the actual hiring manager more time to utilize Web 2.0 searches and Internet search engines in

order to gain supplemental information about applicants. The author also anticipates that municipalities with a population of over 50,000 and a larger budget will allow for more educated hiring mangers to be employed that are technological minded in the areas of Web tools and Internet search engines.

T-Test and Z-Test Analysis Comparing Population, Web 2.0, and Search Engines

Analysis of the data using the Two Group Mean Comparison T-Test controlling for population size and social media (See Table 4.30) show that the mean of hiring managers using social media to gain supplemental information about applicants in populations of 49,999 and under are .52 and for population sizes that are 50,000 and above are .45, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 783 in population sizes of 49,999 and under responding to the survey is 52% and the percentage level of hiring managers searching social media of the 88 in population sizes of 50,000 and above responding to the survey is 45%. Analysis results in a t-statistic of 1.184 at 869 degrees of freedom. The resulting significance is .237 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not statistically significant relationship between hiring managers in populations of 49,999 and under and 50,000 and above using social media to find supplemental information about applicants (See Table 4.30).

Table 4.30 Two Group Means T-Test Comparing Population and Social Media

Population Size	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
49,999 and Under	783	.52	1.184	869	.237
50,000 and Above	88	.45			

Analysis of the data using the Two Group Mean Comparison T-Test controlling for population size and Internet search engine uses (See Table 4.31) show that the average percentage of hiring managers using Internet search engines to gain supplemental information about applicants in populations of 49,999 and under are .66 and for population sizes that are 50,000 and above are .65, there is not a statistically significant difference between the two. The percentage level of hiring managers using Internet search engines of the 783 in population sizes of 49,999 and under responding to the survey is 66% and the percentage level of hiring managers using Internet search engines of the 88 in population sizes of 50,000 and above responding to the survey is 65%. Analysis results in a t-statistic of .163 at 869 degrees of freedom. The resulting significance is .870 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not statistically significant relationship between hiring managers in populations of 49,999 and under and 50,000 and above using Internet search engines to find supplemental information about applicants (See Table 3.31).

Table 4.31 Two Group Means T-Test Comparing Population and Internet Search Engines

Population Size	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
49,999 and Under	783	.66	.163	869	.870
50,000 and Above	88	.65			

Z-Test Analysis Comparing Population and Social Media

Table 4.32 shows the results from a Two Proportion Z-Test between the two forms of government and hiring managers searching social media for hiring purposes. A chi-square test was performed and no relationship was found between populations under 49,999 and above 50,000. The Pearson's Chi-Square X(1) value is 1.402 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .236. Therefore, there is no significant difference between hiring managers searching social media to find supplemental information about applicants in either population under or above 50,000. The gamma value is -.133 which shows the strength of association between the variables is very weak (See Table 4.32).

Table 4.32 Two Proportion Z-Test Analysis Comparing Population and Social Media

Population Size	Search Social Media	N-Size	Total	
49,999 and under	92%	408	783	
50,000 and above	9%	40	88	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.402	.236	1	-.133

Z-Test Analysis Comparing Population and Internet Search Engines

Table 4.33 shows the results from a Two Proportion Z-Test between populations in municipalities under 50,000 and over 50,000 and hiring managers searching social media for information about applicants. A chi-square test was performed and no relationship was found between populations under 49,999 and above 50,000. As can be seen in Table 4.33, the Pearson's Chi-Square X(1) value is .027 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .870. Therefore, there is no significant difference between hiring managers searching social media to find supplemental information about applicants in either population under or above 50,000. The gamma value is -.019 which shows the strength of association between the variables are very weak (See Table 4.33 and Figure 4.8).

Table 4.33 Two Proportion Z-Test Analysis Comparing Population and Internet Search Engines

Population Size	Used Internet Search Engine	N-Size	Total	
49,999 and under	90%	514	783	
50,000 and above	10%	57	88	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.027	.870	1	-.019

Findings for Hypothesis Two

In the analysis that uses the independent variable of population under 50,000 and populations over 50,000 against the dependent variable of social media and search engines used by hiring managers in the aforementioned population sizes, the author finds that none of the research variables have a statistically significant relationship which

would allow us to reject the null hypothesis. The Two Group Mean T-Test indicates no statistically significant difference between populations under 50,000 and over 50,000 against the use of social media or Internet search engines by hiring managers. Likewise, the Z-Test analysis produced no statistically significant differences between the two population sizes and social media or Internet search engines used by hiring managers. Therefore, the author cannot reject the null hypothesis in any of the above statistical formulas. The data do not demonstrate that hiring managers use of social media or Internet search engines to find supplemental information about applicants in municipalities are different depending on how size of population is classified for this research.

Hypothesis Three

Hypothesis three proposes that hiring managers in municipalities located in the western region, are more likely to gather supplemental information about applicants using Web 2.0 tools and Internet search engines than hiring managers in municipalities located in the Midwest, South, or Northeastern regions. The author anticipates that population of municipalities in the West region are higher and therefore will have a larger budget in order to hire educated hiring mangers that are technically minded managers which will conduct Web 2.0 searches and Internet search engines in order to gain supplemental information about applicants. The author also anticipates that municipalities in the West have broader access to Internet and technology, allowing hiring managers to utilize technological tools such as Web 2.0 tools and Internet search engines during the application process.

T-Test Analysis Comparing West Region and Social Media

Analysis of the data using the Two Group Mean Comparison T-Test controlling for West region and social media (See Table 4.34) show the mean of hiring managers using social media to gain supplemental information about applicants in the Non-West-Regions are .51 and for the West Region are .54, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 725 in the Non-West-Region responding to the survey is 51 percent and the percentage level of hiring managers searching social media of the 146 in West-Region responding to the survey is 54 percent. Analysis results in a t-statistic of -.708 at 869 degrees of freedom. The resulting significance is .479 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not statistically significant relationship between hiring managers in the Non-West-Region and West-Region using social media to find supplemental information about applicants (See Table 4.34).

Table 4.34 Two Group Means T-Test Comparing Region and Social Media

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-West Region	725	.51	-.708	869	.479
West Region	146	.54			

T-Test Analysis Comparing West Region and Internet Search Engine

Analysis of the data using the Two Group Mean Comparison T-Test controlling for West region and Internet search engines (See Table 4.35) show that the average percentage of hiring managers using Internet search engines to gain supplemental

information about applicants in the Non-West-Regions are .65 and for the West Region are .70, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 725 in the Non-West-Region responding to the survey is 65 percent and the percentage level of hiring managers searching social media of the 146 in West-Region responding to the survey is 70 percent. Analysis results in a t-statistic of -1.200 at 869 degrees of freedom. The resulting significance is .231 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not statistically significant relationship between hiring managers in the Non-West-Region and West-Region using Internet search engines to find supplemental information about applicants (See Table 4.35).

Table 4.35 Two Group Means T-Test Comparing Region and Internet Search Engines

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-West Region	725	.65	-1.200	869	.231
West Region	146	.70			

Z-Test Analysis Comparing Region and Social Media

Table 4.36 shows the results from a Two Proportion Z-Test between the regions of municipalities and hiring managers searching social media for hiring purposes. A chi-square test was performed and no relationship was found between the West region and all other regions in the United States. As can be seen in Table 5.42, the Pearson's Chi-Square X(1) value is .502 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .479. Therefore, there is no significant difference between hiring managers

searching social media to find supplemental information about applicants between the West region and all other regions in the United States. The gamma value is .064 which shows the strength of association between the variables is very weak (See Table 4.36).

Table 4.36 Two Proportion Z-Test Analysis Comparing Population and Social Media

Region	Search Social Media	N-Size	Total	
Non-West Region	82%	369	725	
West Region	18%	79	146	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.502	.479	1	.064

Z-Test Analysis Comparing Region and Search Engines

Table 4.37 shows the results from a Two Proportion Z-Test between the regions of municipalities and hiring managers using Internet search engines for hiring purposes. A chi-square test was performed and no relationship was found between the West region and all other regions in the United States. As can be seen in Table 4.37, the Pearson's Chi-Square X(1) value is 1.440 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .230. Therefore, there is no significant difference between hiring managers using Internet search engines to find supplemental information about applicants between the West region and all other regions in the United States. The gamma value is .117 which shows the strength of association between the variables is very weak (See Table 4.37).

Table 4.37 Two Proportion Z-Test Analysis Comparing Region and Internet Search Engines

Region	Used Internet Search Engine	N-Size	Total	
Non-West Region	82%	469	725	
West Region	18%	102	146	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.440	.230	1	.117

Findings for Hypothesis Three

In the analysis that uses the independent variable of non-west-region and west region against the dependent variable of social media and search engines used by hiring managers in the aforementioned regions, the author finds that none of the research variables have a statistically significant relationship which would allow us to reject the null hypothesis. The Two Group Mean T-Test indicates no statistically significant difference between municipalities located in non-west-regions and west region against the use of social media or Internet search engines by hiring managers. Likewise, the Z-Test analysis produced no statistically significant differences between the two region variables and social media or Internet search engines used by hiring managers. Therefore, the author cannot reject the null hypothesis in any of the above statistical formulas. The data do not demonstrate that hiring managers use of social media or Internet search engines to find supplemental information about applicants in municipalities are different depending on where the municipality is classified for this research.

Hypothesis Four

Hypothesis four proposes that hiring managers in municipalities located in the Northeastern region, are more likely to gather supplemental information about applicants using Web 2.0 tools and Internet search engines than hiring managers in municipalities located in the Midwest or South regions. The author anticipates that population of municipalities in the Northeastern region are higher and therefore will have a larger budget in order to hire educated hiring mangers that are technically minded managers which will conduct Web 2.0 searches and Internet search engines in order to gain supplemental information about applicants. The author also anticipates that municipalities in the Northeastern region have broader access to Internet and technology, allowing hiring managers to utilize technological tools such as Web 2.0 tools and Internet search engines during the application process.

T-Test Analysis Comparing Northeast Region and Social Media

Analysis of the data using the Two Group Mean Comparison T-Test controlling for Northeast region and social media (See Table 4.38) show the mean of hiring managers using social media to gain supplemental information about applicants in the Non-Northeast-Regions are .51 and for the Northeast Region is .51, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 746 in the Non-Northeast-Region responding to the survey is 51 percent and the percentage level of hiring managers searching social media of the 125 in Northeast-Region responding to the survey is 51 percent. Analysis results in a t-statistic of .057at 869 degrees of freedom. The resulting significance is .955 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not

statistically significant relationship between hiring managers in the Non-Northeast-Region and Northeast-Region using social media to find supplemental information about applicants (See Table 4.38).

Table 4.38 Two Group Means T-Test Comparing Northeast Region and Social Media

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Northeast-Region	746	.51	.057	869	.955
Northeast Region	125	.51			

T-Test Analysis Comparing Northeast Region and Internet Search Engine

Analysis of the data using the Two Group Mean Comparison T-Test controlling for Northeast region and Internet search engines (See Table 4.39) show that the mean of hiring managers using Internet search engines to gain supplemental information about applicants in the Non-Northeast-Regions are .65 and for the Northeast Region is .68, there is not a statistically significant difference between the two. The percentage level of hiring managers searching social media of the 746 in the Non-Northeast-Region responding to the survey is 65 percent and the percentage level of hiring managers searching social media of the 125 in Northeast-Region responding to the survey is 68 percent. Analysis results in a t-statistic of -.621 at 869 degrees of freedom. The resulting significance is .535 which is higher than .05, the set 95 percent confidence level, therefore resulting in a not statistically significant relationship between hiring managers in the Non-Northeast-Region and Northeast-Region using Internet search engines to find supplemental information about applicants (See Table 4.39).

Table 4.39 Two Group Means T-Test Comparing Northeast Region and Internet Search Engines

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Northeast-Region	746	.65	-.621	869	.535
Northeast Region	125	.68			

Z-Test Analysis Comparing Northeast Region and Social Media

Table 4.40 shows the results from a Two Proportion Z-Test between the regions of municipalities and hiring managers searching social media for hiring purposes. A chi-square test was performed and no relationship was found between the Northeast region and non-Northeast regions in the United States. As can be seen in Table 4.40, the Pearson's Chi-Square X(1) value is .003 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .955. Therefore, there is no significant difference between hiring managers searching social media to find supplemental information about applicants between the Northeast region and the non-Northeast regions in the United States. The Gamma value is -.005 which shows the strength of association between the variables is very weak (See Table 4.40).

Table 4.40 Two Proportion Z-Test Analysis Comparing Northeast Region and Social Media

Region	Search Social Media	N-Size	Total	
Non-Northeast Region	86%	384	746	
Northeast Region	14%	64	125	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.003	.955	1	-.005

Z-Test Analysis Comparing Northeast Region and Internet Search Engines

Table 4.41 shows the results from a Two Proportion Z-Test between the regions of municipalities and hiring managers searching social media for hiring purposes. A chi-square test was performed and no relationship was found between the Northeast region and the Midwest and South regions in the United States. As can be seen in Table 4.41, the Pearson's Chi-Square X(1) value is .003 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .955. Therefore, there is no significant difference between hiring managers searching social media to find supplemental information about applicants between the Northeast region and the Midwest and South regions in the United States. The gamma .064 which shows the strength of association between the variables is very weak (See Table 4.41).

Table 4.41 Two Proportion Z-Test Analysis Comparing Northeast Region and Internet Search Engines

Region	Internet Search Engine	N-Size	Total	
Non-Northeast Region	85%	486	746	
Northeast Region	15%	86	125	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.386	.535	1	.064

Findings for Hypothesis Four

In the analysis that uses the independent variable of non-northeast-region and northeast region against the dependent variable of social media and search engines used by hiring managers in the aforementioned regions, the author finds that none of the research variables have a statistically significant relationship which would allow us to reject the null hypothesis. The Two Group Mean T-Test indicates no statistically significant difference between municipalities located in non-northeast regions and northeast region against the use of social media or Internet search engines by hiring managers. Likewise, the Z-Test analysis produced no statistically significant differences between the two region variables and social media or Internet search engines used by hiring managers. Therefore, the author cannot reject the null hypothesis in any of the above statistical formulas. The data do not demonstrate that hiring managers use of social media or Internet search engines to find supplemental information about applicants in municipalities in the northeast region are different depending on where the municipality is classified for this research.

Hypothesis Five

Hypothesis five proposes that hiring managers are more likely to use Web 2.0 tools and search engines, depending on the form of e-Government offered by municipalities. The author anticipates that when the form of e-Government offered is communicative to elected officials or department managers, Web 2.0 tools and Internet search engines will be utilized more often by hiring managers. Previous charts in this study show that on average, certain forms of e-Government offered by municipalities are more popular between municipalities compared to each other.

Hypothesis 5 Test for Tax Payments and Social Media Reliance

Table 4.42 shows the results from a Two Proportion Z-Test between the municipalities that offer tax payments online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer tax payments online and hiring managers using social media to search for supplemental information about applicants. Table 4.42 shows that 63 percent of hiring managers in municipalities that offer tax payments online as e-Government do search social media for supplemental information about applicants, compared to 49 percent of hiring managers in municipalities that do not offer tax payments online as e-Government. Table 4.42 also shows, the Pearson's Chi-Square X(1) value is 8.846 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .003 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer tax payments online as e-Government and social media to find supplemental

information about applicants (See Table 4.42). The gamma value is .275, which suggests the relationship is weak (See Table 4.42).

A T-Test analysis of whether municipalities that offer tax payments options through e-Government differ from those that do not offer tax payments through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered tax payments by e-Government had a .63 mean of likelihood of using social media searches on their applicants, while municipalities not offering tax payments by e-Government had only a .49 mean of likelihood of using social media searches. This mean difference in the dependent variable of .14 resulted in a t-statistic of -2.986 at 869 degrees of freedom. The percentage level of hiring managers searching social media for supplemental information about applicants and of the 51 in the municipalities that do not offer tax payments as e-Government and responding to the survey is 12 percent and the percentage level of hiring managers searching social media of the 87 in the municipalities that do offer tax payments as e-Government and responding to the survey is 19 percent. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer tax payments as e-Government and using social media to find supplemental information about applicants.

Table 4.42 Two Proportion Z-Test Analysis Comparing Tax Payments and Social Media

		Tax Payments		Total	
		No	Yes		
Searched Social Media	No	372 (51%)	51 (37%)	423 (49%)	
	Yes	361 (49%)	87 (63%)	448 (51%)	
Total		733 (100%)	138 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		8.846	.003	1	.275

Note: Columns may not equal 100 percent due to rounding.

Hypothesis 5 Test for Utility Payments and Social Media Reliance

Table 4.43 shows the results from a Two Proportion Z-Test between the municipalities that offer utility payments online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer utility payments online and hiring managers using social media to search for supplemental information about applicants. Table 4.43 shows that 52 percent of hiring managers in municipalities that offer utility payments online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer utility payments online as e-Government search social media 51 percent of the time. Table 4.43 also shows, the Pearson's Chi-Square X(1) value is .133 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .716 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer utility payments online as e-Government and social media to find supplemental information about applicants (See

Table 4.43). The gamma value is .025, which suggests the relationship is very weak (See Table 4.43).

A T-Test analysis of whether municipalities that offer utility payments options through e-Government differ from those that do not offer utility payments through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered utility payments by e-Government had a .52 mean of likelihood of using social media searches on their applicants, while municipalities not offering utility payments by e-Government had only a .51 mean of likelihood of using social media searches. This mean difference in the dependent variable of .1 resulted in a t-statistic of -.364 at 869 degrees of freedom. The percentage level of hiring managers searching social media for supplemental information about applicants and of the 211 in the municipalities that do not offer utility payments as e-Government and responding to the survey is 50 percent and the percentage level of hiring managers searching social media of the 229 in the municipalities that do offer utility payments as e-Government and responding to the survey is 51 percent. These results show there is not a statistically significant relationship between hiring managers in municipalities that do and do not offer utility payments as e-Government and using social media to find supplemental information about applicants.

Table 4.43 Two Proportion Z-Test Analysis Comparing Utility Payments and Social Media

		Utility Payments		Total	
		No	Yes		
Searched Social Media	No	212 (49%)	211 (48%)	423 (49%)	
	Yes	219 (51%)	229 (52%)	448 (51%)	
Total		431 (100%)	440 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.133	.716	1	.025

Note: Columns may not equal 100 percent due to rounding.

Hypothesis 5 Test for Fee/Fine Payments and Social Media Reliance

Table 4.44 shows the results from a Two Proportion Z-Test between the municipalities that offer fee and fine payments online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer fee and fine payments online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.44 shows that 53 percent of hiring managers in municipalities that offer fee and fine payments online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer fee and fine payments online as e-Government search social media 50 percent of the time. Table 4.44 also shows, the Pearson's Chi-Square X(1) value is .645 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .422 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer fee and fine payments online as e-Government and social media to find

supplemental information about applicants (See Table 4.44). The gamma value is .056, which suggests the relationship is very weak (See Table 4.44).

A T-Test analysis of whether municipalities that offer fee and payments options through e-Government differ from those that do not offer fee and fine payments through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered fee and fine payments by e-Government had a .53 mean of likelihood of using social media searches on their applicants, while municipalities not offering fee and fine payments by e-Government had only a .50 mean of likelihood of using social media searches. This mean difference in the dependent variable of .3 resulted in a t-statistic of -.802 at 869 degrees of freedom. These results do not show a statistically significant relationship between hiring managers in municipalities that do and do not offer tax payments as e-Government and using social media to find supplemental information about applicants.

Table 4.44 Two Proportion Z-Test Analysis Comparing Fee/Fine Payments and Social Media

		Fee/Fine Payments		Total
		No	Yes	
Searched Social Media	No	268 (50%)	155 (47%)	423 (49%)
	Yes	272 (50%)	176(53%)	448 (51%)
Total		540 (100%)	331 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.645	.422	1	.056

Note: Columns may not equal 100 percent due to rounding.

Hypothesis 5 Test for Permit Applications and Social Media Reliance

Table 4.45 shows the results from a Two Proportion Z-Test between the municipalities that offer permit applications online as e-Government and hiring managers

searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer permit applications online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.45 shows that 53 percent of hiring managers in municipalities that offer permit applications online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer permit applications payments online as e-Government search social media 50 percent of the time. Table 4.45 also shows, the Pearson's Chi-Square X(1) value is .298 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .585 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer permit applications online as e-Government and social media to find supplemental information about applicants (See Table 4.45). The gamma value is .056, which suggests the relationship is very weak (See Table 4.45).

A T-Test analysis of whether municipalities that offer permit applications option through e-Government differ from those that do not offer permit applications through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered permit applications by e-Government had a .50 mean of likelihood of using social media searches on their applicants, while municipalities not offering permit applications by e-Government had only a .52 mean of likelihood of using social media searches. This mean difference in the dependent variable of .2 resulted in a t-statistic of .545 at 869 degrees of freedom. The percentage

level of hiring managers searching social media for supplemental information about applicants and of the 171 in the municipalities that do not offer permit applications as e-Government and responding to the survey is 40 percent and the percentage level of hiring managers searching social media of the 173 in the municipalities that do offer permit applications as e-Government and responding to the survey is 39 percent. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer permit applications as e-Government and using social media to find supplemental information about applicants.

Table 4.45 Two Proportion Z-Test Analysis Comparing Permit Applications and Social Media

		Permit Applications		Total
		No	Yes	
Searched Social Media	No	268 (50%)	155 (47%)	423 (49%)
	Yes	272 (50%)	176 (53%)	448 (51%)
Total		540 (100%)	331 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.645	.422	1	.056

Note: Columns may not equal 100 percent due to rounding.

Hypothesis 5 Test for Business License Renewal and Social Media Reliance

Table 4.46 shows the results from a Two Proportion Z-Test between the municipalities that offer business licenses and renewal online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer business licenses and renewal online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.46 shows that 47 percent of hiring managers in municipalities that offer business licenses and

renewal online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer business licenses and renewal online as e-Government search social media 53 percent of the time. Table 5.84 also shows, the Pearson's Chi-Square X(1) value is 2.042 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .153 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer business licenses and renewal online as e-Government and social media to find supplemental information about applicants (See Table 4.46). The gamma value is -.114, which suggests the relationship is very weak (See Table 4.46).

A T-Test analysis of whether municipalities that offer business license renewal option through e-Government differ from those that do not offer permit applications through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered business license renewal by e-Government had a .47 mean of likelihood of using social media searches on their applicants, while municipalities not offering business license by e-Government had a .53 mean of likelihood of using social media searches. This mean difference in the dependent variable of .6 resulted in a t-statistic of 1.429 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer business license renewal as e-Government and using social media to find supplemental information about applicants.

Table 4.46 Two Proportion Z-Test Analysis Comparing Business License Renewal and Social media

		License Renewal		Total	
		No	Yes		
Searched Social Media	No	314 (47%)	109 (53%)	423 (49%)	
	Yes	351 (53%)	97(47%)	448 (51%)	
Total		665 (100%)	206 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		2.042	.153	1	-.114

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Government Records Request and Social Media Reliance

Table 4.47 shows the results from a Two Proportion Z-Test between the municipalities that offer government records requests online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer government records requests online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.47 shows that 50 percent of hiring managers in municipalities that offer government records requests online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer government records requests online as e-Government search social media 53 percent of the time. Table 4.47 also shows, the Pearson's Chi-Square X(1) value is 1.110 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .292 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer government records requests online as e-

Government and social media to find supplemental information about applicants (See Table 4.47). The gamma value is -.071, which suggests the relationship is very weak (See Table 4.47).

A T-Test analysis of whether municipalities that offer records request option through e-Government differ from those that do not offer records request option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered records request option by e-Government had a .50 mean of likelihood of using social media searches on their applicants, while municipalities not offering records request option by e-Government had a .53 mean of likelihood of using social media searches. This mean difference in the dependent variable of .3 resulted in a t-statistic of 1.053 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer records requests as e-Government and using social media to find supplemental information about applicants.

Table 4.47 Two Proportion Z-Test Analysis Comparing Records Request and Social Media

		Request Records		Total
		No	Yes	
Searched Social Media	No	203 (47%)	220 (50%)	423 (49%)
	Yes	231 (53%)	217 (50%)	448 (51%)
	Total	434 (100%)	437 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.110	.292	1	-.071

Hypothesis 5 Test for Service Request and Social Media Reliance

Table 4.50 shows the results from a Two Proportion Z-Test between the municipalities that offer service requests online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer service requests online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.48 shows that 70 percent of hiring managers in municipalities that offer service requests online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer service requests online as e-Government search social media 39 percent of the time. Table 4.48 also shows, the Pearson's Chi-Square X(1) value is 80.805 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer service requests online as e-Government and social media to find supplemental information about applicants (See Table 4.48). The gamma value is .568, which suggests the relationship is moderately strong (See Table 4.48).

A T-Test analysis of whether municipalities that offer service request option through e-Government differ from those that do not offer records request option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered service request option by e-Government had a .70 mean of likelihood of using social media searches on their

applicants, while municipalities not offering records request option by e-Government had only a .39 mean of likelihood of using social media searches. This mean difference in the dependent variable of .31 resulted in a t-statistic of -9.427 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer service request option as e-Government and using social media to find supplemental information about applicants.

Table 4.48 Two Proportion Z-Test Analysis Comparing Service Requests and Social Media

		Service Requests		Total	
		No	Yes		
Searched Social Media	No	313 (61%)	110 (31%)	423 (49%)	
	Yes	197 (39%)	251 (70%)	448 (51%)	
Total		510 (100%)	361 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		80.805	.000	1	.568

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Voter Registration and Social Media Reliance

Table 4.49 shows the results from a Two Proportion Z-Test between the municipalities that offer voter registration online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer voter registration online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.49 shows that 65 percent of hiring managers in municipalities that offer voter registration online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer voter registration online as e-Government search social

media 51 percent of the time. Table 4.49 also shows, the Pearson's Chi-Square X(1) value is 3.693 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .055 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer voter registration online as e-Government and social media to find supplemental information about applicants (See Table 4.49). However, the author points out the p-value of the chi-square test is .055 and is arguably close to the significant level of .05. The gamma value is .292, which suggests the relationship is still weak (See Table 4.49).

A T-Test analysis of whether municipalities that offer voter registration option through e-Government differ from those that do not offer voter registration through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered voter registration option by e-Government had a .65 mean of likelihood of using social media searches on their applicants, while municipalities not offering voter registration option by e-Government had only a .51 mean of likelihood of using social media searches. This mean difference in the dependent variable of .14 resulted in a t-statistic of -1.924 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer voter registration option as e-Government and using social media to find supplemental information about applicants. However, the author would like to point out that a resulting significance of .055 is approaching significance at the 95 percent confidence level.

Table 4.49 Two Proportion Z-Test Analysis Comparing Voter Registration and Social Media

		Voter Registration		Total	
		No	Yes		
Searched Social Media	No	407 (49%)	16 (35%)	423 (49%)	
	Yes	418 (51%)	30 (65%)	448 (51%)	
Total		825 (100%)	46 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		79.239	.055	1	.292

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Property Registration and Social Media Reliance

Table 4.50 shows the results from a Two Proportion Z-Test between the municipalities that offer property registration online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer property registration online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.50 shows that 70 percent of hiring managers in municipalities that offer property registration online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer property registration online as e-Government search social media 56 percent of the time. Table 4.50 also shows, the Pearson's Chi-Square X(1) value is 3.109 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .078 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer property registration online as e-Government and social media to find

supplemental information about applicants (See Table 4.50). However, the author would like to note the p-value of the chi-square test is .078 and is like voter registration, arguably close to the significant level of .05. The gamma value is .375, which suggests the relationship is still weak but stronger than voter registration (See Table 4.50).

A T-Test analysis of whether municipalities that offer property registration option through e-Government differ from those that do not offer property registration option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered property registration option by e-Government had a .70 mean of likelihood of using social media searches on their applicants, while municipalities not offering property registration option by e-Government had only a .51 mean of likelihood of using social media searches. This mean difference in the dependent variable of .19 resulted in a t-statistic of -1.764 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer property registration option as e-Government and using social media to find supplemental information about applicants.

Table 4.50 Two Proportion Z-Test Analysis Comparing Property Registration and Social Media

		Property Registration		Total	
		No	Yes		
Searched Social Media	No	416 (49%)	7 (30%)	423 (49%)	
	Yes	432 (51%)	16 (70%)	448 (51%)	
Total		848 (100%)	23 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		3.109	.078	1	.375

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Manually Downloading Forms and Social Media Reliance

Table 4.51 shows the results from a Two Proportion Z-Test between the municipalities that offer manually downloading forms online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer manually downloading forms online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.51 shows that 51 percent of hiring managers in municipalities that offer manually downloading forms online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer manually downloading forms online as e-Government search social media 52 percent of the time. Table 4.51 also shows, the Pearson's Chi-Square X(1) value is .132 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .717 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer manually downloading forms as e-Government and social media to find supplemental information about applicants (See Table 4.51). The gamma value is -.026, which suggests the relationship is very weak (See Table 4.51).

A T-Test analysis of whether municipalities that offer manually downloading forms option through e-Government differ from those that do not offer manually downloading forms option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered manually downloading forms option by e-Government had a .51 mean of likelihood of

using social media searches on their applicants, while municipalities not offering manually downloading forms option by e-Government had a .52 mean of likelihood of using social media searches. This mean difference in the dependent variable of .1 resulted in a t-statistic of .362 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer manually downloading forms option as e-Government and using social media to find supplemental information about applicants.

Table 4.51 Two Proportion Z-Test Analysis Comparing Manual Download of Forms and Social Media

		Download Forms		Total	
		No	Yes		
Searched Social Media	No	133 (48%)	290 (49%)	423 (49%)	
	Yes	146 (52%)	302 (51%)	448 (51%)	
	Total	279 (100%)	592 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.132	.717	1	-.026

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Citizen Communication Method and Social Media Reliance

Table 4.52 shows the results from a Two Proportion Z-Test between the municipalities that offer citizens communicating with officials online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer citizens communicating with officials online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.52 shows that 58 percent of hiring managers in municipalities that offer citizens communicating with officials online as e-Government do search social

media for supplemental information about applicants while hiring managers in municipalities that do not offer citizens communicating with officials online as e-Government search social media 25 percent of the time. Table 4.52 also shows, the Pearson's Chi-Square X(1) value is 62.366 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer citizens communicating with officials as e-Government and social media to find supplemental information about applicants (See Table 4.52). The gamma value is .612, which suggests the relationship is very strong (See Table 4.52).

A T-Test analysis of whether municipalities that offer communication with official's option through e-Government differ from those that do not offer communication with official's option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered communication with official's option by e-Government had a .58 mean of likelihood of using social media searches on their applicants, while municipalities not offering communication with official's option by e-Government had a .25 mean of likelihood of using social media searches. This mean difference in the dependent variable of .33 resulted in a t-statistic of -8.187 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer communication with official's option as e-Government and using social media to find supplemental information about applicants.

Table 4.52 Two Proportion Z-Test Analysis Comparing Citizens Communicating with Officials and Social Media

		Citizens Communicate		Total	
		No	Yes		
Searched Social Media	No	134 (75%)	289 (42%)	423 (49%)	
	Yes	45 (25%)	403 (58%)	448 (51%)	
Total		179 (100%)	692 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		62.366	.000	1	.612

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Council Agenda/Minutes and Social Media Reliance

Table 4.53 shows the results from a Two Proportion Z-Test between the municipalities that offer council agendas and minutes online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer council agendas and minutes online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.53 shows that 54 percent of hiring managers in municipalities that offer council agendas and minutes online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer council agendas and minutes online as e-Government search social media 29 percent of the time. Table 4.53 also shows, the Pearson's Chi-Square X(1) value is 21.923 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer council agendas and minutes as e-Government and social media

to find supplemental information about applicants (See Table 4.53). The gamma value is .483, which suggests the relationship is moderately strong (See Table 4.53).

A T-Test analysis of whether municipalities that offer council agendas and minutes option through e-Government differ from those that do not offer council agendas and minutes option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered council agendas and minutes option by e-Government had a .54 mean of likelihood of using social media searches on their applicants, while municipalities not offering council agendas and minutes option by e-Government had a .29 mean of likelihood of using social media searches. This mean difference in the dependent variable of .25 resulted in a t-statistic of -4.737 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer council agendas and minutes option as e-Government and using social media to find supplemental information about applicants.

Table 4.53 Two Proportion Z-Test Analysis Comparing Council Agenda/Minutes and Social Media

		Agenda/Minutes		Total	
		No	Yes		
Searched Social Media	No	70 (71%)	353 (46%)	423 (49%)	
	Yes	29 (29%)	419 (54%)	448 (51%)	
Total		99 (100%)	772 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		21.923	.000	1	.483

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Codes/Ordinance Online and Social Media Reliance

Table 4.54 shows the results from a Two Proportion Z-Test between the municipalities that offer codes and ordinances online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer codes and ordinances online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.54 shows that 55 percent of hiring managers in municipalities that offer codes and ordinances online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer codes and ordinances online as e-Government search social media 17 percent of the time. Table 4.54 also shows, the Pearson's Chi-Square X(1) value is 44.990 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer codes and ordinances as e-Government and social media to find supplemental information about applicants (See Table 4.54). The gamma value is .720, which suggests the relationship is very strong (See Table 4.54).

A T-Test analysis of whether municipalities that offer codes and ordinances option through e-Government differ from those that do not offer codes and ordinances option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered codes and ordinances option by e-Government had a .55 mean of likelihood of using social media searches on

their applicants, while municipalities not offering codes and ordinances option by e-Government had a .17 mean of likelihood of using social media searches. This mean difference in the dependent variable of .38 resulted in a t-statistic of -6.880 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer codes and ordinances option as e-Government and using social media to find supplemental information about applicants.

Table 4.54 Two Proportion Z-Test Analysis Comparing Codes/Ordinances and Social Media

		Codes/Ordinances		Total	
		No	Yes		
Searched Social Media	No	70 (83%)	353 (45%)	423 (49%)	
	Yes	14 (17%)	434 (55%)	448 (51%)	
Total		84 (100%)	787 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		44.990	.000	1	.720

Hypothesis 5 Test for Employment Information and Social Media Reliance

Table 4.55 shows the results from a Two Proportion Z-Test between the municipalities that offer employment information online as e-Government and hiring managers searching social media for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer employment information online as e-Government and hiring managers using social media to search for supplemental information about applicants. Table 4.55 shows that 51 percent of hiring managers in municipalities that offer employment information online as e-Government do search social media for supplemental information about applicants while hiring managers in municipalities that do not offer employment information online

as e-Government search social media 51 percent of the time. Table 4.55 also shows, the Pearson's Chi-Square X(1) value is .002 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .967 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer employment information as e-Government and social media to find supplemental information about applicants (See Table 4.55). The gamma value is .005, which suggests the relationship is very weak (See Table 4.55).

A T-Test analysis of whether municipalities that offer employment information option through e-Government differ from those that do not offer employment information option through e-Government in terms of their use of social media searches for their applicants did indeed find differences. Municipalities that offered employment information option by e-Government had a .51 mean of likelihood of using social media searches on their applicants, while municipalities not offering employment information option by e-Government had a .51 mean of likelihood of using social media searches. This mean difference in the dependent variable of .0 resulted in a t-statistic of -.041 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer employment information option as e-Government and using social media to find supplemental information about applicants.

Table 4.55 Two Proportion Z-Test Analysis Comparing Employment Information and Internet Search Engines

		Employment Info		Total	
		No	Yes		
Used Internet Search Engine	No	40 (49%)	383 (49%)	423 (49%)	
	Yes	42 (51%)	406 (51%)	448 (51%)	
Total		82 (100%)	789 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.003	.967	1	.005

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Tax Payments and Search Engine Reliance

Table 4.56 shows the results from a Two Proportion Z-Test between the municipalities that offer tax payments online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer tax payments online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.56 also shows, the Pearson's Chi-Square X(1) value is 2.163 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .141 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer tax payments as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.56). The gamma value is .148, which suggests the relationship is very weak (See Table 4.56).

A T-Test analysis of whether municipalities that offer tax payment option through e-Government differ from those that do not offer tax payment option through e-

Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered tax payment option by e-Government had a .71 mean of likelihood of using search engine queries on their applicants, while municipalities not offering tax payment option by e-Government had a .65 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .06 resulted in a t-statistic of -1.471 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer tax payment option as e-Government and using search engines to find supplemental information about applicants.

Table 4.56 Two Proportion Z-Text Analyses Comparing Tax Payments and Search Engines

		Tax Payments		Total	
		No	Yes		
Used Internet Search Engine	No	260 (36%)	40 (29%)	300 (34%)	
	Yes	473 (65%)	98 (71%)	571 (66%)	
Total		733 (100%)	138 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		2.163	.141	1	.148

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Utility Payments and Search Engine Reliance

Table 4.57 shows the results from a Two Proportion Z-Test between the municipalities that offer utility payments online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer utility payments online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.57 also shows, the

Pearson's Chi-Square X(1) value is 5.504 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .019 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer utility payments as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.57). The gamma value is -.166, which suggests the relationship is very weak (See Table 4.57).

A T-Test analysis of whether municipalities that offer utility payment option through e-Government differ from those that do not offer utility payment option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered utility payment option by e-Government had a .62 mean of likelihood of using search engine queries on their applicants, while municipalities not offering utility payment option by e-Government had a .69 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .7 resulted in a t-statistic of 2.351 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer utility payment option as e-Government and using search engines to find supplemental information about applicants, but in opposite of hypothesized direction.

Table 4.57 Two Proportion Z-Test Analysis Comparing Utility Payments and Search Engines

		Utility Payments		Total	
		No	Yes		
Used Internet Search Engine	No	132 (31%)	168 (38%)	300 (34%)	
	Yes	299 (70%)	272 (62%)	571 (66%)	
Total		431 (100%)	440 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		5.504	.019	1	-.166

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Fee/Fine Payments and Search Engine Reliance

Table 4.58 shows the results from a Two Proportion Z-Test between the municipalities that offer fee and fine payments online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer fee and fine payments online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.58 also shows, the Pearson's Chi-Square X(1) value is 7.796 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .005 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer fee and fine payments as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.58). The gamma value is .206, which suggests the relationship is moderately weak (See Table 4.58).

A T-Test analysis of whether municipalities that offer fee and fine payment option through e-Government differ from those that do not offer fee and fine payment option

through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered fee and fine payment option by e-Government had a .71 mean of likelihood of using search engine queries on their applicants, while municipalities not offering fee and fine payment option by e-Government had a .62 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .09 resulted in a t-statistic of -2.802 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer fee and fine payment option as e-Government and using search engines to find supplemental information about applicants.

Table 4.58 Two Proportion Z-Test Analysis Comparing Fee/Fine Payments and Search Engines

		Fee/Fine Payments		Total	
		No	Yes		
Used Internet Search Engine	No	205 (38%)	95 (29%)	300 (34%)	
	Yes	335 (62%)	236 (71%)	571 (66%)	
Total		540 (100%)	331 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		7.796	.005	1	.206

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Permit Applications and Search Engine Reliance

Table 4.59 shows the results from a Two Proportion Z-Test between the municipalities that offer permit applications online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer permit applications online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.59 also shows, the

Pearson's Chi-Square X(1) value is .005 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .944 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer permit applications as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.59). The gamma value is .005, which suggests the relationship is very weak (See Table 4.59).

A T-Test analysis of whether municipalities that offer permit application option through e-Government differ from those that do not offer permit application option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered permit application option by e-Government had a .66 mean of likelihood of using search engine queries on their applicants, while municipalities not offering permit application option by e-Government had a .65 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .01 resulted in a t-statistic of -.071 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer permit application option as e-Government and using search engines to find supplemental information about applicants.

Table 4.59 Two Proportion Z-Test Analysis Comparing Permit Applications and Search Engines

		Permit Applications		Total	
		No	Yes		
Used Internet Search Engine	No	182 (35%)	118 (34%)	300 (34%)	
	Yes	345 (66%)	226 (66%)	571 (66%)	
Total		527 (100%)	344 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.005	.944	1	.005

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Business License Renewal and Search Engine Reliance

Table 4.60 shows the results from a Two Proportion Z-Test between the municipalities that offer business license and renewal online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer business license and renewal online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.60 also shows, the Pearson's Chi-Square X(1) value is 6.375 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .012 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer business license and renewal as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.60). The gamma value is -.203, which suggests the relationship is very weak (See Table 4.60).

A T-Test analysis of whether municipalities that offer business licenses and renewal option through e-Government differ from those that do not offer business

licenses and renewal option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered business licenses and renewal option by e-Government had a .58 mean of likelihood of using search engine queries on their applicants, while municipalities not offering business licenses and renewal option by e-Government had a .68 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .10 resulted in a t-statistic of 2.531 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer business licenses and renewal option as e-Government and using search engines to find supplemental information about applicants, but in opposite direction.

Table 4.60 Two Proportion Z-Test Analysis Comparing Business License/Renewal and Search Engines

		License/Renewal		Total
		No	Yes	
Used Internet Search Engine	No	214 (32%)	86 (42%)	300 (34%)
	Yes	451 (68%)	120 (58%)	571 (66%)
Total		665 (100%)	206 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	6.375	.012	1	-.203

Hypothesis 5 Test for Government Records Requests and Search Engine Reliance

Table 4.61 shows the results from a Two Proportion Z-Test between the municipalities that offer government records requests online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer government records requests online as e-Government and hiring managers using

Internet search engines to search for supplemental information about applicants. Table 4.61 also shows, the Pearson's Chi-Square X(1) value is .612 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .434 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer government records requests as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.61). The gamma value is -.056, which suggests the relationship is very weak (See Table 4.61).

A T-Test analysis of whether municipalities that offer records request option through e-Government differ from those that do not offer records request option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered records request option by e-Government had a .64 mean of likelihood of using search engine queries on their applicants, while municipalities not offering tax payment option by e-Government had a .67 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .03 resulted in a t-statistic of .781 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer records request option as e-Government and using search engines to find supplemental information about applicants.

Table 4.61 Two Proportion Z-Test Analysis Comparing Government Records Requests and Search Engines

		Records Request		Total	
		No	Yes		
Used Internet Search Engine	No	144 (33%)	156 (36%)	300 (34%)	
	Yes	290 (67%)	281 (64%)	571 (66%)	
Total		434 (100%)	437 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.612	.434	1	-.056

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Service Requests and Search Engine Reliance

Table 4.62 shows the results from a Two Proportion Z-Test between the municipalities that offer service requests online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer service requests online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.62 also shows, the Pearson's Chi-Square X(1) value is 29.212 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer service requests as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.62). The gamma value is .386, which suggests the relationship is weak but getting stronger (See Table 4.62).

A T-Test analysis of whether municipalities that offer service requests option through e-Government differ from those that do not offer service requests option through

e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered service requests option by e-Government had a .76 mean of likelihood of using search engine queries on their applicants, while municipalities not offering service requests option by e-Government had a .58 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .18 resulted in a t-statistic of -5.491 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer service requests option as e-Government and using search engines to find supplemental information about applicants.

Table 4.62 Two Proportion Z-Test Analysis Comparing Service Requests and Search Engines

		Service Requests		Total
		No	Yes	
Used Internet Search Engine	No	213 (42%)	87 (24%)	300 (34%)
	Yes	297 (58%)	274 (76%)	571 (66%)
Total		510 (100%)	361 (100%)	871 (100%)
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		29.212	.000	1	.386

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Voter Registration and Search Engine Reliance

Table 4.63 shows the results from a Two Proportion Z-Test between the municipalities that offer voter registration online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer voter registration online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.63 also shows, the

Pearson's Chi-Square X(1) value is 6.254 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .012 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer voter registration as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.63). The gamma value is .445, which suggests the relationship is moderately strong (See Table 4.63).

A T-Test analysis of whether municipalities that offer voter registration option through e-Government differ from those that do not offer voter registration option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered voter registration option by e-Government had a .83 mean of likelihood of using search engine queries on their applicants, while municipalities not offering voter registration option by e-Government had a .65 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .18 resulted in a t-statistic of -2.507 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer voter registration option as e-Government and using search engines to find supplemental information about applicants.

Table 4.63 Two Proportion Z-Test Analysis Comparing Voter Registration and Search Engines

		Voter Registration		Total	
		No	Yes		
Used Internet Search Engines	No	292 (35%)	8 (17%)	300 (34%)	
	Yes	533 (65%)	38 (83%)	571 (66%)	
Total		825 (100%)	46 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		6.254	.012	1	.445

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Property Registration and Search Engine Reliance

Table 4.64 shows the results from a Two Proportion Z-Test between the municipalities that offer property registration online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was not found between municipalities that offer property registration online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.64 also shows, the Pearson's Chi-Square X(1) value is .168 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .682 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer property registration as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.64). The gamma value is .094, which suggests the relationship is very weak (See Table 4.64).

A T-Test analysis of whether municipalities that offer property registration option through e-Government differ from those that do not offer property registration option

through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered property registration option by e-Government had a .70 mean of likelihood of using search engine queries on their applicants, while municipalities not offering property registration option by e-Government had a .65 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .05 resulted in a t-statistic of -.410 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer property registration option as e-Government and using search engines to find supplemental information about applicants.

Table 4.64 Two Proportion Z-Test Analysis Comparing Property Registration and Search Engines

		Property Registration		Total	
		No	Yes		
Used Internet Search Engine	No	293 (35%)	7 (30%)	300 (34%)	
	Yes	555 (65%)	16 (70%)	571 (66%)	
Total		848 (100%)	23 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.168	.682	1	.094

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Manually Download Forms and Search Engine Reliance

Table 4.65 shows the results from a Two Proportion Z-Test between the municipalities that offer manually downloading forms online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was not found between municipalities that offer manually downloading forms online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table

4.65 also shows, the Pearson's Chi-Square X(1) value is .028 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .867 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer manually downloading forms as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.65). The gamma value is -.013, which suggests the relationship is very weak (See Table 4.65).

A T-Test analysis of whether municipalities that offer manually downloading forms option through e-Government differ from those that do not offer manually downloading forms option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered manually downloading forms option by e-Government had a .65 mean of likelihood of using search engine queries on their applicants, while municipalities not offering manually downloading forms option by e-Government had a .66 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .01 resulted in a t-statistic of .167 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer manually downloading forms option as e-Government and using search engines to find supplemental information about applicants.

Table 4.65 Two Proportion Z-Test Analysis Comparing Manually Downloading Forms and Search Engines

		Download Forms		Total	
		No	Yes		
Used Internet Search Engine	No	95 (34%)	205 (35%)	300 (34%)	
	Yes	184 (66%)	387 (65%)	571 (66%)	
Total		279 (100%)	592 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.028	.867	1	-.013

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Citizen Communication and Search Engine Reliance

Table 4.66 shows the results from a Two Proportion Z-Test between the municipalities that offer citizens communicating with officials online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer citizens communicating with officials online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.66 also shows, the Pearson's Chi-Square X(1) value is 20.007 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer citizens communicating with officials as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.66). The gamma value is .360, which suggests the relationship is moderately strong (See Table 4.66).

A T-Test analysis of whether municipalities that offer citizens communicating with official's option through e-Government differ from those that do not offer citizens communicating with official's option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered citizens communicating with official's option by e-Government had a .69 mean of likelihood of using search engine queries on their applicants, while municipalities not offering citizens communicating with official's option by e-Government had a .51 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .18 resulted in a t-statistic of -4.520 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer citizens communicating with official's option as e-Government and using search engines to find supplemental information about applicants.

Table 4.66 Two Proportion Z-Test Comparing Citizens Communicating with Officials and Search Engines

		Communication		Total	
		No	Yes		
Used Internet Search Engine	No	87 (49%)	213 (31%)	300 (34%)	
	Yes	92 (51%)	479 (69%)	571 (66%)	
Total		179 (100%)	692 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		20.007	.000	1	.360

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Council Agenda/Minutes and Search Engine Reliance

Table 4.67 shows the results from a Two Proportion Z-Test between the municipalities that offer council agenda and minutes online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-

square test was performed and a relationship was found between municipalities that offer council agenda and minutes online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.67 also shows, the Pearson's Chi-Square X(1) value is 22.049 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer council agenda and minutes as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.67). The gamma value is .458, which suggests the relationship is fairly strong (See Table 4.67).

A T-Test analysis of whether municipalities that offer council agendas and minutes option through e-Government differ from those that do not offer council agendas and minutes option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered council minutes and agendas option by e-Government had a .68 mean of likelihood of using search engine queries on their applicants, while municipalities not offering council minutes and agendas option by e-Government had a .44 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .24 resulted in a t-statistic of -4.751 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer council minutes and agendas option as e-Government and using search engines to find supplemental information about applicants.

Table 4.67 Two Proportion Z-Test Analysis Comparing Council Agenda/Minutes and Search Engines

		Agenda/Minutes		Total	
		No	Yes		
Used Internet Search Engine	No	55 (56%)	245 (32%)	300 (34%)	
	Yes	44 (44%)	527 (68%)	571 (66%)	
Total		99 (100%)	772 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		22.049	.000	1	.458

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Codes/Ordinances Online and Search Engine Reliance

Table 4.68 shows the results from a Two Proportion Z-Test between the municipalities that offer codes and ordinances online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and a relationship was found between municipalities that offer codes and ordinances online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table 4.68 also shows, the Pearson's Chi-Square X(1) value is 19.048 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .000 which is less than .05, the set 95 percent confidence level, therefore rejecting the null hypothesis and resulting in there being a statistically significant relationship between hiring managers in municipalities that do and do not offer codes and ordinances as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.68). The gamma value is .457, which suggests the relationship is fairly strong (See Table 4.68).

A T-Test analysis of whether municipalities that offer codes and ordinances option through e-Government differ from those that do not offer codes and ordinances

option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered codes and ordinances option by e-Government had a .68 mean of likelihood of using search engine queries on their applicants, while municipalities not offering codes and ordinances option by e-Government had a .44 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .24 resulted in a t-statistic of -4.408 at 869 degrees of freedom. These results show a statistically significant relationship between hiring managers in municipalities that do and do not offer codes and ordinances option as e-Government and using search engines to find supplemental information about applicants.

Table 4.68 Two Proportion Z-Test Analysis Comparing Codes/Ordinances and Search Engines

		Codes/Ordinances		Total
		No	Yes	
Used Internet Search Engine	No	47 (56%)	253 (32%)	300 (34%)
	Yes	37 (44%)	534 (68%)	571 (66%)
Total		84 (100%)	787 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	19.048	.000	1	.457

Note: Column totals may not equal 100 percent due to rounding.

Hypothesis 5 Test for Employment Information and Search Engine Reliance

Table 4.69 shows the results from a Two Proportion Z-Test between the municipalities that offer employment information online as e-Government and hiring managers Internet search engines for supplemental information about applicants. A chi-square test was performed and no relationship was found between municipalities that offer employment information online as e-Government and hiring managers using Internet search engines to search for supplemental information about applicants. Table

4.69 also shows, the Pearson's Chi-Square X(1) value is 1.349 and the degree of freedom is 1. The P-value for the Pearson Chi-Square is .245 which is greater than .05, the set 95 percent confidence level, therefore accepting the null hypothesis and resulting in there not being a statistically significant relationship between hiring managers in municipalities that do and do not offer employment information as e-Government and using Internet search engines to find supplemental information about applicants (See Table 4.69). The gamma value is .137, which suggests the relationship is weak (See Table 4.69).

A T-Test analysis of whether municipalities that offer employment information option through e-Government differ from those that do not offer employment information option through e-Government in terms of their use of search engine queries for their applicants did indeed find differences. Municipalities that offered employment information option by e-Government had a .66 mean of likelihood of using search engine queries on their applicants, while municipalities not offering employment information option by e-Government had a .60 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .06 resulted in a t-statistic of -1.161 at 869 degrees of freedom. These results show no statistically significant relationship between hiring managers in municipalities that do and do not offer employment information option as e-Government and using search engines to find supplemental information about applicants.

Table 4.69 Two Proportion Z-Test Analysis Comparing Employment Information and Search Engines

		Employment Info		Total	
		No	Yes		
Used Internet Search Engine	No	33 (40%)	267 (34%)	300 (34%)	
	Yes	49 (60%)	522 (66%)	571 (66%)	
Total		82 (100%)	789 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		1.349	.245	1	.137

Note: Column totals may not equal 100 percent due to rounding.

Findings for Hypothesis Five

In the analysis that uses the independent variable of each e-Government form against the dependent variables of searching social media and using Internet search engines by hiring managers in the aforementioned municipalities, the author finds that the research variables do have a statistically significant relationship in several of the statistical test which does allow us to reject the null hypothesis. For each form of e-Government, a T-test and a Z-test was ran independently in order to observe the relationship between the forms of e-Government and hiring managers use of social media and Internet search engines in municipalities.

T-test and Z-test results both show a p-value of .003, 97 percent significance level, for municipalities that offer citizens the option to pay for taxes online as e-Government and hiring managers in that municipality using social media to acquire supplemental information about applicants. The same is true for service requests being offered by municipalities online as e-Government and hiring mangers in those municipalities using social media and Internet search engines to find supplemental

information about applicants. After running the T-test and Z-test, the p-value is .000 suggesting a 99 percent significance between the two.

Voter registration was another strong variable that shows strong correlation between being offered as a form of e-Government by municipalities and hiring managers in those municipalities also using social media and Internet search engines to find supplemental information about applicants however, not significant at the 95 % confidence level. T-test and Z-test both show a p-value of .055 which is not significant for this research. However, the author points out that .055 is nearing the 95 percent significance level for social media being used by hiring managers.

Citizens being able to contact their elected officials online as e-Government also shows strong correlation of a .000 p-value, 99 percent confidence, for both the T-test and Z-test when ran against hiring managers in those municipalities that use both social media and Internet search engines to find supplemental information about candidates. Council agendas and minutes, along with codes and ordinances being available online as e-Government, both show a strong p-value of .000, 99 percent confidence, when ran against hiring mangers in those municipalities that use both social media and Internet search engines to find supplemental information about candidates. Comparing and contrasting forms of e-Government and municipality hiring practices performed by hiring managers showed several interesting correlations and valuable information that could be used by hiring mangers and applicants when searching for jobs.

Hypothesis Six

Hypothesis six proposes that hiring mangers in municipalities that offer six or more forms of e-Government, are more likely to use social media and Internet search

engines to find supplemental information about applicants than municipalities that offer less than six forms of e-Government. The author anticipates that larger municipalities offering more advanced forms of e-Government, who responded to the survey, will likely employee hiring managers that are searching social media and Internet search engines in order to find further and supplemental information about applicants.

T-Test and Z-Test Comparing Number of e-Government Offered and Social Media

My hypothesis said that hiring mangers in municipalities that offer six or more forms of e-Government, are more likely to use social media and Internet search engines to find supplemental information about applicants than municipalities that offer less than six forms of e-Government. This hypothesis was upheld with 56 percent of municipalities using 6 or more forms of e-Government reported using social media searches of applicants, compared to only 35 percent of municipalities that used only 5 or fewer forms of e-Government. Further analysis of this hypothesis in a chi-square test shows the significance level of .000 which is less than the 95 percent confidence level used for this study and therefore validates this hypothesis being upheld and rejecting the null hypothesis (See Table 4.71).

A T-Test analysis of whether municipalities that offer 6 or more forms of e-Government differ from those that do not offer 6 or more forms of e-Government in terms of their use of social media searches for their applicants did show differences. Municipalities that offered 6 or more forms of e-Government had a .55 mean of likelihood of using social media searches on their applicants, while municipalities offering less than 6 forms of e-Government had a .35 mean of likelihood of using social media queries. This mean difference in the dependent variable of .20 resulted in a t-

statistic of -4.796 at 869 degrees of freedom. These results show a statistically significant relationship between municipalities that offer 6 or more forms of e-Government than municipalities offering 6 or less forms of e-Government and using social media to find supplemental information about applicants (See Table 4.70).

Table 4.70 Two Group Independent Sample T-Test Comparing Total Forms of e-Government Offered and Social Media

e-Government	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Less than 6	175	.35	-4.796	869	.000
6 or More	696	.55			

Table 4.71 Two Proportion Z-Test Analysis Comparing Total Forms of e-Government Offered and Social Media

		Number of e-Government		Total	
		Less than 6	6 or More		
Searched Social Media	No	113 (65%)	310 (45%)	423 (49%)	
	Yes	62 (35%)	386 (56%)	448 (51%)	
Total		175(100%)	696 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		22.463	.000	1	.388

Note: Column totals may not equal 100 percent due to rounding.

T-Test and Z-Test Comparing Number of e-Government Offered and Search Engines

My hypothesis stated that hiring mangers in municipalities that offer six or more forms of e-Government, are more likely to use social media and Internet search engines to find supplemental information about applicants than municipalities that offer less than six forms of e-Government. This hypothesis was upheld with 68 percent of

municipalities using 6 or more forms of e-Government reported using search engine queries of applicants, compared to only 55 percent of municipalities that used only 5 or fewer forms of e-Government. Further analysis of this hypothesis in a chi-square test shows a significance level of .001 which is less than the 95 percent confidence level used for this study and therefore validates this hypothesis being upheld and rejecting the null hypothesis (See Table 4.73).

A T-Test analysis of whether municipalities that offer 6 or more forms of e-Government differ from those that do not offer 6 or more forms of e-Government in terms of their use of search engine queries for their applicants did show differences. Municipalities that offered 6 or more forms of e-Government had a .68 mean of likelihood of using search engine queries on their applicants, while municipalities offering less than 6 forms of e-Government had a .55 mean of likelihood of using search engine queries. This mean difference in the dependent variable of .13 resulted in a t-statistic of -3.350 at 869 degrees of freedom. These results show a statistically significant relationship between municipalities that offer 6 or more forms of e-Government than municipalities offering 6 or less forms of e-Government and using search engines to find supplemental information about applicants (See Table 4.72).

Table 4.72 Two Group Means T-Test Comparing Total Forms of e-Government Offered and Search Engines

e-Government	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Less than 6	175	.55	-3.350	869	.001
6 or More	696	.68			

Table 4.73 Two Proportion Z-Test Analysis Comparing Total Forms of e-Government Offered and Search Engines

		Number of e-Government		Total	
		Less than 6	6 or More		
Used Search Engines	No	79 (45%)	221 (32%)	300 (34%)	
	Yes	96 (55%)	475 (68%)	571 (66%)	
Total		175 (100%)	696 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		11.104	.001	1	.278

Note: Column totals may not equal 100 percent due to rounding.

Findings for Hypothesis Six

In the analysis that uses the independent variable of total forms of e-Government against the dependent variables of searching social media and using Internet search engines by hiring managers in the aforementioned municipalities, the author finds that the research variables do have a statistically significant relationship in several of the statistical test which does allow us to reject the null hypothesis. For the total forms of e-Government, a T-test and a Z-test was conducted independently in order to observe the relationship between the total forms of e-Government and hiring managers use of social media and Internet search engines in municipalities.

T-test and Z-test results both show a p-value of .001, for municipalities that offer 6 or more forms of e-Government when hiring managers are using social media to find supplemental information about applicants. The same is true for hiring managers that are using search engines to find supplemental information about applicants. Comparing and contrasting total forms of e-Government and municipality hiring practices performed by hiring managers showed several interesting correlations and valuable information that could be used by hiring mangers and applicants when searching for jobs.

CHAPTER V

CONCLUSION

Discussion of Findings

In recent years, social media and Internet search engines have become extremely popular and are continuing to grow at an alarming exponential rate. Much so that it is now not that uncommon to hear of hiring managers utilizing the search function of social media sites and Internet search engines in order to gain supplemental information about applicants. Communication methods have changed for society as a whole because of social media, the Internet, and the availability to the mass society of technology as a whole. Social media has now become the norm of social interaction. Users of social media share personal information, religion, race, ethnicity, medical condition, marital status, pictures, and status updates, which unfortunately can be viewed by hiring mangers and evaluated as personality traits of the individuals posting them. To date, there have been several incidences where employers are seeking Facebook passwords and login information from job applicants (James Wu, 2011).

In 2011, a social media monitoring service conducted a survey of three-hundred (300) hiring professionals in the private industry to learn if, when, and how they are using social media to screen job applicants (James Wu, Reppler.com 2011). The study shows that 91 percent of the recruiters for companies and hiring managers of the companies, stated they have in some form or fashion, used social media and search engines to screen

potential employees. The study furthered showed that 69 percent of the same recruiters and hiring managers admitted to denying employment to the desired job applicants over information they found on social media about the applicants that was not appropriate (James Wu, Reppler.com 2011).

Recent data shows that some employers have demanded that applicants provide the company with their Facebook username and password in order to be considered for the position applied for (Stern, 2012). The American Civil Liberties Union (ACLU) has opined on the matter and has openly voiced this behavior from hiring managers is an invasion of privacy to insist on looking at people's private Facebook pages as a condition of employment or consideration in an application process and that people are entitled to their private lives (Crump, ACLU). Other scholars have also weighed in on this practice saying it undermines the privacy expectations and the security of both the user and the user's friends and potentially exposes the employer who seeks this access to unanticipated legal liability (Egan, 2012).

The intent of this study is to test whether these documented actions from hiring managers are taking place in municipalities within the United States and to determine the condition of the municipality for which these actions are more likely to occur. The author tests these effects using two primary independent research variables of council-manager and non-council-manager form of government and a number of e-Government independent variables along with operationalized dependent variables. The two independent variable of council-manager and non-council-manager are tested. First, the author tests these two independent variables with the hiring managers of these municipalities using social media to search for additional information about applicants.

Second, the author tests the same against hiring managers in these municipalities that use Internet search engines to find supplemental information about applicants in all fifty states.

Several variables of importance assisted the author in evaluating the distinctions between the various classifications designated for this study including several technological terms usually reserved for fields outside of policy and administration. First, Web 2.0 tools, which has been described in detail, is the two-way communication between users and is commonly called social media but also can encompass e-Government, another technical term that is a two-way communication between government and users. Internet search engine was also a core terminology used for this study and also has been described in detail. The author believes this technology is heavily used in all forms of government and this analysis contributes significantly to the overall progress and knowledge of local government administration and shows the need for scholars to focus on technology and government in future research endeavor.

Form of Government, Web 2.0, Internet Search Engines, and Hiring Managers

Hypothesis 1 – Municipalities with a council-manager form of government are more likely to use Web 2.0 tools and Internet search engines to gather supplemental information about applicants than any other form of municipal government.

There have not been any studies conducted to date concerning local government hiring manager practices and the use of Web 2.0 tools and Internet search engines. However, there have been several studies conducted looking at private business hiring manager practices and the use of Web 2.0 tools and Internet search engines. Most of the studies come to the same conclusion that hiring managers do indeed search social media

and use Internet search engines in order to gain supplemental information about applicants during the hiring process. The author would like to point out again that these studies are for private businesses only and do not reflect the hiring practices utilized by hiring managers at the local level of government.

This research expected form of government to be significant factor on the practices of local government hiring managers. Specifically, the author anticipated and hypothesized that council-manager form of local government and their hiring managers would utilize technological tools more often, such as Web 2.0 tools and Internet search engines because of the way council-manager government is structured. Council-manager is setup to be a professional form that mirrors the private business structure. Therefore, keeping in line with what the literature says about hiring managers in the private business, the author expected to find the same characteristics among hiring managers in the council-manager form of government that are also using Web 2.0 tools and Internet search engines to find supplemental information about applicants.

The author tested social media and Internet search engines as separate variables. The author also recoded the variable, non-council-manager, to engulf all other forms of local government in this study except the council-manager form of government due to the low response from the commission, town-meeting, and representative town-meeting forms of government. Analysis results from the T-test comparing the council-manager and non-council-manager form of government show no relationship between hiring managers in these municipalities and them using Web 2.0 tools or Internet search engines to gain supplemental information about applicants. Hiring managers in council-manager form of government use social media 52 percent of the time to gain supplemental

information about applicants. Whereas hiring managers in the non-council-manager governments use social media 51 percent of the time to gain supplemental information about applicants. The two-tailed significance level is .827, not close to the 95 percent confidence level this author needed to justify showing a statistical significance between form of government and hiring managers searching social media for supplemental information about applicants.

Further T-test analysis between the form of government and hiring managers using Internet search engines to find supplemental information about applicants turned out also to be not fruitful, however, there is a stronger relationship between hiring managers that use Internet search engines than social media to find supplemental information about applicants and forms of government. Hiring managers in the council-manager form of government use Internet search engines 67 percent of the time to find supplemental information about applicants while hiring managers in the non-council-manager form of government use Internet search engines 63 percent of the time. The two-tailed significance level is .312, not statistically significant at the .005 level for hiring managers using Internet search engines to find supplemental information about applicants and the forms of government.

The Z-test was also performed comparing forms of government and if hiring managers in those governments use social media or Internet search engines to gain supplemental information about applicants in order to gain the chi-square and gamma significance between the two. Findings show no relationship between council-manager and non-council-manager form of government and the hiring managers using social media or Internet search engines to find supplemental information about applicants. The

Z-test does show that hiring managers in the council-manager form of government search social media 73 percent of the time and use Internet search engines 74 percent of the time in order to find supplemental information about applicants. However, the p-value of .827 and .312 are greater than .05, therefore showing no statistical significance between the two. Gamma for the Z-test was also very low suggesting any relationship would be extremely weak.

Population, Web 2.0 Tools, Internet Search Engines, and Hiring Managers

Hypothesis 2 – Municipalities with more than 50,000 people in the population, are more likely to gather supplemental information about applicants using Web 2.0 tools and Internet search engines than municipalities with less than 50,000 people in the population.

Studies by scholars in the past show that large populations in municipalities produce a larger tax base and therefore tend to be more capable of offering higher technological advancements. Most of the studies focus on population and municipality services offered. The author hypothesizes that as the population rises, tax base rise giving the municipality the means to employee professional hiring managers that are knowledgeable of technology achievements and able to use those tools for hiring practices.

Results found in this study have varied from the author's hypotheses, especially form of government and population being a predictor for hiring managers using social media and Internet search engines in order to gather supplemental information about applicants. T-test and Z-test were conducted in order to compare population size of municipalities and the hiring managers that are employed for those municipalities' hiring

practices of searching social media and Internet search engines in order to gain supplemental information about applicants. The T-test analysis comparing population size of municipalities above 50,000 and the hiring managers searching social media, show that 45 percent use social media as a means to gain supplemental information about applicants where hiring managers in populations under 50,000 use search social media 52 percent of the time. Analysis results were not significant for the T-test or the Z-test. The two-tailed significance p-value was .237 for both tests suggesting no significant relationship exists between the two. Overall, the data do not support hypothesis two but does show the percentage level of hiring managers in populations less than 49,999, are more likely to search social media for supplemental information about applicants.

When performing the T-test and Z-test comparing population size and the number of hiring managers using Internet search engines in order to gain supplemental information about applicants, the results were the same as social media, no statistical relationship exists. Hiring managers in populations of 50,000 or more will use Internet search engines only 10 percent of the time where hiring managers in populations under 50,000 use Internet search engines 90 percent of the time. However, a two-tailed significance p-value of .870 shows that no statistical significance exists between the two data.

Region, Web 2.0 Tools, Internet Search Engines, and Hiring Managers

Hypothesis 3 – Hiring managers in municipalities located in the western region, are more likely to use Web 2.0 tools and Internet search engines to gather supplemental information about applicants than hiring managers in municipalities located in the Midwest, South, or Northeastern regions.

Hypothesis 4_– Hiring managers in municipalities located in the Northeastern region, are more likely to use Web 2.0 tools and Internet search engines to gather supplemental information about applicants than hiring managers in municipalities located in the Southern and Midwest region.

Studies by scholars in the past concerning municipalities and regions have mainly focused on size of municipalities per region, form of government of municipalities per region, and types of services offered by municipalities per region (French & Folz, 2004). The author hypothesized that municipalities located in certain regions of the United States would likely employee hiring managers that use Web 2.0 tools and Internet search engines to find supplemental information about applicants more often than other regions in the United States. The west region is the likely candidate for this hypothesis being as the most council-manager forms of government exist within the west region and hirer populations also exist in the west region. Next, the author anticipated that municipalities in the northeastern region would also be likely to employee hiring managers that use Web 2.0 tools and Internet search engines to find supplemental information about applicants more often than in the South or Midwest regions due to the northeast having a higher population and a mixture of council-manager and mayor-council municipality forms of government.

Analysis of the data for both the West region and the Northeast region were similar in findings. Using the Two Group Mean Comparison T-Test controlling for West region and hiring managers that use social media in this region to find supplemental information about applicants show that 51 percent of hiring managers are using social media to gain supplemental information about applicants the West region and the

Northeast region was almost a mirror for results. Further analysis shows a two-tailed significance p-value of .479 which is greater than .05, the set 95 percent confidence level, therefore resulting in there not being a statistically significant relationship between hiring managers in the Non-West-Region and West-Region using social media to find supplemental information about applicants. The Northeast region also shows no statistical significance between hiring managers compared with other regions. The same holds true for hiring managers in the West and Northeast region using Internet search engines to find supplemental information about applicants as social media use. Hiring managers in the West region do use Internet search engines to find supplemental information about applicants 70 percent of the time, however, the two-tailed significance p-value is .231 suggesting there is not a relationship between hiring managers in the West and other regions. Northeast region hiring managers fell in line with the same results showing no difference between hiring managers in the Northeast and other regions.

Z-tests controlling for hiring managers in the West and using social media or Internet search engines to find supplemental information about applicants also show no relationship exists between the West and other regions. A chi-square p-value for hiring manager in the West using social media to find supplemental information about applicants is .479 while the p-value for the same using Internet search engines is .230. Both cases show no relationship between hiring managers in the West and other regions using social media or Internet search engines to find supplemental information about applicants. The West and Northeast region both produced similar results showing no statistical differences between hiring managers when compared to other regions.

e-Government and Hiring Managers

Several scholars have researched the various uses of e-Government and the impact it has made for communication and collaboration between government and citizens. Scholars even suggest stages municipalities should take in order to develop an online presence of e-Government. Research shows in order to develop a fully functional e-Government, municipalities can use a four-stage model for completion (Layne & Lee, 2001). Layne and Lee are able to show that e-Government is an evolutionary phenomenon must be implemented in order to successfully interact with the technological backgrounds of its citizens. The point in e-Government is to make government a one-stop service center where citizens can find and utilize the information needed in a clear manner. The horizontal integration of the stage four will assist in improving those efforts (Layne & Lee, 2001).

Hypothesis 5 and 6 – compare e-Government offered separately and as a whole with hiring managers using Web 2.0 tools and Internet search engines to find supplemental information about applicants. Hypothesis 5 – Hiring managers are more likely to use Web 2.0 tools and search engines, depending on the form of e-Government offered by municipalities. As it turns out, e-Government is the most interesting and fruitful predictor on a hiring manager's characteristics between municipalities. T-test and Z-test results both show a p-value of .003, 97 percent significance level, for municipalities that offer citizens the option to pay for taxes online as e-Government and hiring managers in that municipality using social media and Internet search engines to acquire supplemental information about applicants. The same is true for service requests being offered by municipalities online as e-Government and hiring mangers in those

municipalities using social media and Internet search engines to find supplemental information about applicants. After running the T-test and Z-test, the p-value is .000 suggesting a 99 percent significance between the two.

Voter registration was another strong variable that shows strong correlation between being offered as a form of e-Government by municipalities and hiring managers in those municipalities also using social media and Internet search engines to find supplemental information about applicants however, not significant at the 95 % confidence level. T-test and Z-test both show a p-value of .055 which is not significant for this research, however, the author points out that .055 is nearing the 95 percent significance level.

Citizens being able to contact their elected officials online as e-Government also shows strong correlation of a .000 p-value, 99 percent confidence, for both the T-test and Z-test when ran against hiring managers in those municipalities that use both social media and Internet search engines to find supplemental information about candidates. Council agendas and minutes, along with codes and ordinances being available online as e-Government, both show a strong p-value of .000, 99 percent confidence, when ran against hiring mangers in those municipalities that use both social media and Internet search engines to find supplemental information about candidates. Comparing and contrasting forms of e-Government and municipality hiring practices performed by hiring managers showed several interesting correlations and valuable information that could be used by hiring mangers and applicants when searching for jobs. Overall, hypothesis five holds true and further research needs to be conducted in this area.

Hypothesis 6 – Hiring managers in municipalities that offer six or more forms of e-Government, are more likely to use social media and Internet search engines to find supplemental information about applicants than municipalities that offer less than six forms of e-Government.

Results conducted using a T-test confirm that on average, hiring managers that search social media and use Internet search engines to find supplemental information about applicants in municipalities offer at least six forms of e-Government are more likely to use Web 2.0 tools and Internet search engines. The resulting analyses for both T-test and Z-test show the two-tailed significance p-value is .000 which suggests a 99 percent confidence level that a relationship exists between hiring managers in municipalities that offer at least six forms of e-Government and those municipalities that do not.

The author found that when comparing hiring managers in the council-manager form of government against the total number of e-Governments offered online in the aforementioned municipalities, findings show the research variables do have a statistically significant relationship which does allow us to reject the null hypothesis. It is notable that in both council-manager and non-council-manager form of government, that average number of e-Government forms offered online is seven, which falls in line with hypothesis six. It is also notable that in council-manager forms of government, 71 percent offer at least seven forms of e-Government online while in the non-council-manager form of government, only 29 percent offer at least seven forms of e-Government online. Hiring managers in the council-manager form of government that offer at least six forms of e-Government online are more likely to use social media and Internet search

engines in order to gain supplemental information about applicants. This was another interesting find by this research and the author feels that further research in this area is also needed.

Social Media Pages, Web 2.0 Tools, and Internet Search Engines

Analysis results show that when municipalities do have a social media page, hiring mangers in those municipalities are indeed more likely to use social media and Internet search engines to find supplemental information about applicants. T-test for municipalities that have a social media page and their hiring managers use social media to search for supplemental information about applicants show there is not a statistical significance between the two. However, T-test for municipalities that have a social media page and their hiring manager use Internet search engines to find supplemental information about applicants do show a statistical significance with a p-value of .006. Z-tests also show that municipalities that have a social media page and their hiring manager use social media to search for supplemental information about applicants do not have a statistical significance between the two while hiring manager that use Internet search engines to find supplemental information about applicants does show a statistical significance. The data does demonstrate that hiring managers use of Internet search engines to find supplemental information about applicants in municipalities that already have a social media page setup is statistically significant and therefore author rejected the null hypothesis.

Policy Implications and Recommendations

This studies main intention was to determine that hiring characteristics of hiring managers in local municipalities. Specifically, the intent was to show when local municipality hiring managers would use Web 2.0 tools and Internet search engines to gain supplemental information about applicants during the hiring process. The two major forms of local government were used, compared and contrasted. Forms of e-Government offered by municipalities were also compared and contrasted, along with region and population of municipalities. The auther further looked at municipalities that already were involved with social media by having a social media page of their own already in process. As a total, these hypotheses attempted to show the characteristics of local municipality hiring managers and the conditions for which they would be more likely to look at Web 2.0 tools and Internet search engines to find supplemental information about applicants.

The data in this study has shown several characteristics for which one could look at hiring managers and make an educated guess on when they would use these tools. When looking at the characteristics of the hiring managers that participated in this study, an overwhelming number of them possessed a Master's degree. Both female and male hiring managers responded to this survey almost equally while their average age was between 45-64. Almost 70 percent of the hiring managers that responded were in the administration under the category of Mayor, City Manager, or City Administrator. The author would like to point out a shortcoming in the survey which did not give the respondent the option to distinguish between titles. For this reason, the author was

unable to perform a statistical analysis on job title, rather, only for department. Future research should look at the characteristics of each job title this research has produced.

The majority of hiring managers responding to this survey identified as part of the Republican party and were married. The average yearly salary for responding hiring mangers was between $70,000 and $99,999 per year and the majority also had children. Interestingly, over 60 percent of the responding hiring managers did not grow up within 50 miles of where they work. Of the hiring managers that responded, 60 percent of them used Google to search for supplemental information about applicants when using an Internet search engine. This falls in line with the national average of everyone using Google as the main search engine for information.

Facebook was the number one choice by hiring managers when searching social media for supplemental information about applicants with 43 percent using Facebook. Again, this falls in line with the national average that most people use Facebook as their preferred social media outlet with Twitter gaining daily. The author anticipated that form of local municipality government would play a bigger part of predicting how hiring managers would perform during the hiring process and as it turns out, form of local government did not matter with the council-manger and non-council-manager form of government almost being equal in how their hiring manager use social media and Internet search engines.

The author found that forms of e-Government offered by municipalities to be the most important factor in predicting hiring manager characteristics within the selected municipalities. The most common forms of e-Government offered were citizens being able to communicate with elected and non-elected officials online, council agendas and

minutes posted, codes and ordinances posted, and employment information being available online as a form of e-Government. Future studies should focus on hiring policies and forms of e-Government offered to citizens.

This analysis has accomplished several of the goals outlined in Chapter One. Data has been examined using statistical algorithms measuring hiring manager practices, forms of government, population, region, social media, Internet search engines, and e-Government. This data has tested whether hiring managers in local municipalities under certain situations, will use social media and Internet search engines more often than not. While not every variable tested in this study provided evidence that form of government made a difference, substantial evidence on four of the eight areas examined has emerged with a much larger picture emerging from forms of e-Government and hiring practices by local hiring managers. Overall, this study has examined local municipalities in the United State with a population of 2,500 and above and provided valuable information about the hiring practices of the hiring managers in those municipalities while also enhancing literature concerning the uses of social media and Internet search engines by local hiring managers in the United States at the municipal level.

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APPENDIX A

SURVEY INSTRUMENT

Please circle or fill in your answer. Answer the following questions as completely and accurately as possible. All responses are **strictly confidential** and will be used only for the authors' dissertation research.

1. Name of City or Town _____
   State_____

2. Please indicate the name of your department:
   a. Administration (Mayor, City Manager, City Administrator, etc.)
   b. Human Resources / Personnel (HR Director, etc.)
   c. Other (please list)
      _____

3. Has the municipality you work for, created a social media site specifically for the city (e.g. Facebook, Twitter, Reddit, Google+, Linkedin, etc.)?
   a. Yes
   b. No

4. If yes to question 3, what year did the municipality create their social media site (N/A if you are unsure) _____?

5. How many years have you worked for this city? _____ years

6. Are you employed:
   a. Full-Time
   b. Part-Time

7. Please indicate the average number of hours per week you work in your current position. ____hrs/wk

8. How long have you been at your current position? _____ years _____months

9. Are you classified as a department head, manager, or supervisor?
    a. Yes
    b. No

10. Are you a member of a professional society (e.g. ASPA, ICMA, ACPA, etc.)?
    a. Yes
    b. No

11. Which form of e-Government does your municipality currently offer online (circle all that apply)?
    a. Tax payments
    b. Utility payments
    c. Fee and fine payments
    d. Permit applications
    e. Business licenses and renewals
    f. Government record requests
    g. Service requests
    h. Voter registration
    i. Property registration
    j. Download forms for manual completion
    k. Citizens can Communicate with government officials
    l. Council agendas and minutes posted
    m. Codes and ordinances posted
    n. Employment information posted
    o. None

12. Does your municipality use a third-party company to conduct criminal background checks?
    a. Yes
    b. No

13. Do you inform applicants that a criminal background check must be completed before final hiring decisions are made, if applicable to the position applied for?
    a. Yes
    b. No
    c. N/A (if answered no in question 12)

14. Have you ever conducted a search for information about an applicant by searching social media (e.g. Facebook, Twitter, Reddit, Google+, Linkedin, etc.)?
    a. Yes
    b. No

15. Do you inform applicants that you will be conducting a social media search for information about them during the hiring process?
    a. Yes
    b. No

16. If you answered "Yes" to question 14, which social media site did you search? (list all that apply)_____

17. How frequently do you conduct a search for information about an applicant by searching social media? (skip if answered "No" to question 14)
    a. Always
    b. Most of the time
    c. Seldom
    d. Never

18. Do you consider searching social media sites for information about applicants, a reliable source of information about the applicant(s)?
    a. Yes
    b. No

19. Have you ever required applicants to inform you about social media sites they are signed up for?
    a. Yes
    b. No

20. Would you be more likely, less likely or just as likely to conduct a search for information about an applicant if you did not know them personally?
    a. More Likely
    b. The same
    c. Less Likely

21. Have you instructed another employee or a third-party company to conduct a social media search for information about an applicant before hiring them?
    a. Yes
    b. No

22. Have you ever denied an applicant a job, due to what was discovered during a social media search for information about that applicant?
    a. Yes
    b. No

23. Do you weigh information found about an applicant during a social media search, the same, more heavily, or less heavily as you would traditional application materials (e.g. resume, transcripts, oral interview, work history, etc.)?
    a. Same
    b. More Heavily
    c. Less Heavily

24. Have you ever used an Internet search engine to find out information about an applicant (e.g. google, yahoo, bing, etc.)?
    a. Yes
    b. No

25. If you answered, "Yes" to question 24, which search engine did you use?
    a. Google
    b. Yahoo
    c. Bing
    d. DuckDuckGo
    e. Other

26. How frequent do you use an Internet search engine to find out information about an applicant? (Skip if you answered "No" to question 24)
    a. Always
    b. Most of the time
    c. Seldom
    d. Never

27. Please indicate whether you strongly agree, agree, are neutral, disagree, or strongly disagree with the following statements, “Meaningful public service is very important to me.”
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

28. I consider public service my civic duty.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

29. It is my duty to hire the most qualified applicant for the position available.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

30. It is my duty to hire the best-fit applicant for the position available.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

31. Hiring the most qualified applicant leads to better work performance.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

32. Hiring the best-fit applicant leads to better work performance.
    a. Strongly Agree
    b. Agree
    c. Neutral
    d. Disagree
    e. Strongly Disagree

33. What is your age range?
    a. 24 or younger
    b. 25 to 34
    c. 35-44
    d. 45-54
    e. 55-64
    f. 65 or older

34. What is your gender?
    a. Male
    b. Female

35. What state were you born in? _____

36. How many years have you resided in the current state you work in?
    _____

37. Did you grow up within a 50-mile radius of where you currently work?
    a. Yes
    b. No

38. What is your race?
    a. Caucasian/White
    b. African-American/Black
    c. Hispanic/Latino/Mexican
    d. Asian
    e. Native American
    f. Other
    g. Prefer not to answer

39. Which political party do you most identify with?
    a. Republican
    b. Democrat
    c. Independent
    d. Other
    e. Prefer not to answer

40. Are you a military veteran?
    a. Yes
    b. No

41. What is your highest level of educational attainment?
    a. Less than high school diploma
    b. High school diploma/GED
    c. 2 Year college degree
    d. 4 Year college degree
    e. Master's degree
    f. Law degree
    g. Doctorate degree (Ph.D, M.D., Ed.D.)
    h. Prefer not to answer

42. What is your current marital status?
    a. Single
    b. Married
    c. Widowed
    d. Cohabiting
    e. Divorced

43. Do you have any children?
    a. Yes
    b. No

44. What is your annual salary level?
    a. $0 to $19,999
    b. $20,000 to $39,999
    c. $40,000 to $59,999
    d. $60,000 to $69,999
    e. $70,000 to $99,999
    f. $100,000 and above
    g. Prefer not to answer

Informed Consent Form for Participation in Research

Title of Research Study: Testing Local Municipality Hiring Procedures and Local Forms of Government: Are Search Engines and Social Media Sites Used to Collect Supplemental Information About Applicants?

Researchers: Joe Denton, Mississippi State University, Doctoral Candidate, Public Policy and Administration

Procedures: You have been selected to participate in a research study about local municipality hiring procedures. This research project is being conducted by Joe Denton, doctoral candidate, of Mississippi State University in the department of Political Science and Public Administration as a dissertation project and is funded by Joe Denton as his dissertation project. The objective of this research project is to attempt to understand if and why local municipalities are using social media sites and search engines to obtain supplemental information about applicants for jobs. This research is being conducted nation wide and consists of 1500 randomly chosen municipalities. The survey is being given to the hiring managers of all the municipalities that were randomly chosen. If you choose to participate, the survey will take about 10 minutes to complete and will be a tremendous help in assisting me in my completion of a dissertation.

There are no known risks if you decide to participate in this research study, nor are there any costs for participating in the study. The information you provide will help me understand local hiring procedures today. The information collected may also benefit you as a hiring manager as well, but what I learn from this study should provide general hiring procedure information for

applicants, employers, companies, and other researchers. As a doctoral candidate, I would please ask that you take the time to help me by answering the survey questions submitted.

This survey is confidential. If you choose to participate, do not write your name on the questionnaire. Nothing you say on the questionnaire will in any way be shared with or influence your present or future employment with your municipality.

Your participation in this study is voluntary. If you choose to participate, please email me your answers to the address given below or click on this website and fill out the questionnaire there.

The Mississippi State University IRB has reviewed my request to conduct this project. Again, this would be a tremendous help to me as a doctoral candidate working on a dissertation, so please, help me by taking the time to answering the survey questions given.

Questions

If you have any questions about this research project, please feel free to contact Joe Denton at (865) 242-7160 or jwd238@pspa.msstate.edu.

Voluntary Participation

Please understand that your **participation is voluntary.** Your **refusal to participate will involve no penalty or loss** of benefits to which you are otherwise entitled. You **may discontinue your participation** at any time without penalty or loss of benefits.

Please take all the time you need to read through this document and decide whether you would like to participate in this research study.

If you decide to participate, your completion of the research procedures indicates your consent.

Please keep this form for your records.

APPENDIX B

CODEBOOK

1. City Name

2. State

3. Pop2012 = Population for 2010 Census

4. PopulationRecoded

    0. Population of 49,999 and under
    1. Population of 50,000 and above

5. FormGovt = Form of Government

    0. Mayor-Council
    1. Council-Manager
    2. Commission
    3. Town Meeting
    4. Representative Town Meeting

6. FormGovtRecoded = Recoded the five forms of government to fall into this category

    0. Non-Council-Manager
    1. Council-Manager

7. MunType = Type of municipality per the ICMA Yearbook

    0. Borough
    1. City
    2. District
    3. Plantation
    4. Town
    5. Township
    6. Village

8. Region

    0. Northeast
    1. Midwest
    2. South
    3. West

9. RegionWest

    0. Non-West Region
    1. West Region

10. RegionNE

    0. Non-Northeast Region
    1. Northeast Region

11. Q2 = Name of department

    0. Administration (Mayor, CM, CA)
    1. Human Resources/Personnel
    2. Other

12. Q3 = Has municipality created social media page

    0. Does not have social media site
    1. Does have social media site

13. Q4 = Year created social media site

    0. 2008
    1. 2009
    2. 2010
    3. 2011
    4. 2012
    5. 2013
    6. 2014
    7. 2015
    8. NA

14. Q5 = How many years worked for municipality

15. Q6 = Employ Status

    0. Part-Time
    1. Full-Time

16. Q7 = Hours worked per week

17. Q8 = Length at current position

18. Q9 = Are you a department head

    0. No
    1. Yes

19. Q10 = Are you a member of a professional society

    0. No
    1. Yes

20. Q11 = Do you offer e-Government

    0. No
    1. Yes

21. TotaleGov = total number of e-Government offered by municipality

    0. 0 forms of eGov
    1. 1 form of eGov
    2. 2 forms of eGov
    3. 3 forms of eGov
    4. 4 forms of eGov
    5. 5 forms of eGov
    6. 6 forms of eGov
    7. 7 forms of eGov
    8. 8 forms of eGov
    9. 9 forms of eGov
    10. 10 forms of eGov
    11. 11 forms of eGov
    12. 12 forms of eGov
    13. 13 forms of eGov
    14. 14 forms of eGov

22. Q11Tax = tax payments offered as e-Government

    0. No
    1. Yes

23. Q11Utility – utility payments offered as e-Government

    0. No
    1. Yes

24. Q11FeeFine – fee and fine offered as e-Government

    0. No
    1. Yes

25. Q11Permit = permit renewal as e-Government

    0. No
    1. Yes

26. Q11BusLic = business license as e-Government

    0. No
    1. Yes

27. Q11GovtRecRec = request government records online

    0. No
    1. Yes

28. Q11ServiceReg = report a service request online

    0. No
    1. Yes

29. Q11VoterReg = register to vote online

    0. No
    1. Yes

30. Q11PropReg = register property online

    0. No
    1. Yes

31. Q11DLForms = manually download forms online

    0. No
    1. Yes

32. Q11CMOfficials = citizens can communicate with officials

    0. No
    1. Yes

33. Q11AgendaMin = post council agenda and minutes online

    0. No
    1. Yes

34. Q11Codes = post codes and ordinances online

    0. No
    1. Yes

35. Q11Emplyment = post employment information online

    0. No
    1. Yes

36. Q11None = no forms of e-Government available

    0. No
    1. Yes

37. Q12 = Does municipality use third-party to conduct background checks

    0. No
    1. Yes

38. Q13 = do yo inform applicants about background checks

    0. No
    1. Yes

39. Q14 = Have you searched social media about applicants

    0. No
    1. Yes

40. Q15 = Did you inform applicants about social media search

    0. No
    1. Yes

41. Q16FB = searched facebook

    0. No
    1. Yes

42. Q16TW = search twitter

    0. No
    1. Yes

43. Q16Instagram = searched Instagram

    0. No
    1. Yes

44. Q16Gplus = searched google +

    0. No
    1. Yes

45. Q16LinkedIn = searched LinkedIn

    0. No
    1. Yes

46. Q16Snapchat = searched snapchat

    0. No
    1. Yes

47. Q16MySpace = search myspace

    0. No
    1. Yes

48. Q16Other = searched something other than listed

    0. No
    1. Yes

49. Q17 = How frequent do you search social media

    0. Always
    1. Most of the time
    2. Seldom
    3. Never

50. Q18 = Do you consider social media reliable source

    0. No
    1. Yes

51. Q19 = Have you required applicants to give username and password for social media

    0. No
    1. Yes

52. Q20 = Would you search social media if you knew applicant

    0. More likely
    1. The same
    2. Less likely

53. Q21 = third party conduct social media search

    0. No
    1. Yes

54. Q22 = Have you denied applicant job over social media

    0. No
    1. Yes

55. Q23 = How do you weigh social media

    0. Same
    1. More heavily
    2. Less heavily

56. Q24 = Have you used Internet search engine for applicants

    0. No
    1. Yes

57. Q25Google = used google

    0. No
    1. Yes

58. Q25Yahoo = used yahoo

0. No
1. Yes

59. Q25Bing = used bing

0. No
1. Yes

60. Q25DDG = used duckduckgo

0. No
1. Yes

61. Q25Other = used something other than listed

0. No
1. Yes

62. Q26 = How frequent do you search Internet

0. Always
1. Most of the time
2. Seldom
3. Never

63. Q27 = public service importance

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

64. Q28 = public service duty

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

65. Q29 = duty to hire qualified applicant

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

66. Q30 = duty to hire best fit

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

67. Q31= best hire means best work

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

68. Q32 = best equals best performance

0. Strongly agree
1. Agree
2. Neutral
3. Disagree
4. Strongly disagree

69. Q33 = age

0. 24 or younger
1. 25 to 34
2. 35 – 44
3. 45 – 54
4. 55 – 64
5. 65 or older

70. Q34 = gender

0. Female
1. Male

71. Q35 = State born in?

72. Q36 = years resided in your state

73. Q37 = did you grow up within 50 miles of work

    0. No
    1. Yes

74. Q38 = race

    0. Caucasian/White
    1. African-American/Black
    2. Hispanic/Latino/Mexican
    3. Asian
    4. Native American
    5. Other
    6. Perfer not to answer

75. Q39 = political party

    0. Republican
    1. Democrat
    2. Independent
    3. Other
    4. Prefer not to answer

76. Q40 = military veteran

    0. No
    1. Yes

77. Q41 = education

    0. Less than high school
    1. High school diploma/GED
    2. 2 year college degree
    3. 4 year college degree
    4. Master's degree
    5. Law degree

78. Q42 = marital status

0. Single
1. Married
2. Widowed
3. Cohabiting
4. Divorced
5. Prefer not to answer

79. Q43 = have children

0. No
1. Yes

80. Q44 = salary

0. 0-19,999
1. 20,000 – 39,999
2. 40,000 – 59,999
3. 60,000 -69,999
4. 70,000 – 99,999
5. 100,000 – above
6. prefer not to answer

APPENDIX C

RESPONSE TABLES

Table C.1 Summary of Survey Responses for Municipalities with Council-Manager Form of Government

Council-Manager Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	64	39	12	115
MID-WEST	114	92	25	231
SOUTH	121	86	10	217
NORTH-EAST	49	17	2	68
TOTAL	348	234	49	631

Table C.2 Summary of Survey Responses for Municipalities with Mayor-Council Form of Government

Mayor-Council Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	19	11	1	31
MID-WEST	59	2	14	75
SOUTH	63	10	0	73
NORTH-EAST	32	22	1	55
TOTAL	180	37	17	234

Table C.3 Summary of Survey Responses for Municipalities with Commission Form of Government

Mayor-Council Form	Wave 1	Wave 2	Phone Calls	TOTAL RESPONSES
WEST	0	0	0	0
MID-WEST	2	0	0	2
SOUTH	1	1	0	2
NORTH-EAST	2	0	0	2
TOTAL	5	1	0	6

Table C.4 Frequency Total of Forms of Government

Form of Government	Frequency	Percent
Mayor-Council	234	26.9%
Council-Manager	631	72.4%
Commission	6	.7%
Total	871	100%

Table C.5 Demographic Aspects of Hiring Managers

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 35 – 54	Range 35 - 54
Gender	Male – 15% Female – 13%	Male – 38% Female – 35%
Race	Caucasian – 25% African American – 1% Hispanic/Latino – 0% Asian – 0% Other – 1% Prefer not to answer – 1%	Caucasian – 63% African American – 1% Hispanic/Latino – 2% Asian – 0% Other – 5% Prefer not to answer – 1%
Education Level	2 Year College – 2% 4 Year Degree – 6% Masters – 16% Ph.D. –1% J.D. –2%	2 Year College – 6% 4 Year Degree – 19% Masters – 39% Ph.D. – 2% J.D. – 3%
Political Party Affiliation	Democrat – 5% Republican – 8% Independent –5% Other – 8% Prefer not to answer – 1%	Democrat – 15% Republican – 26% Independent – 11% Other – 24% Prefer not to answer – 4%
Marital Status	Single – 2% Married – 19% Divorced – 5% Widowed – 1% Cohabiting –1%	Single – 6% Married – 54% Divorced – 10% Widowed – 1% Cohabiting –1%
Income	$20,000 - $39,999 – 1% $40,000 - $59,999 – 5% $60,000 - $69,999 – 2% $70,000 - $99,999 – 10% $100,000 – above – 9%	$20,000 - $39,999 – 1% $40,000 - $59,999 – 9% $60,000 - $69,999 – 4% $70,000 - $99,999 – 24% $100,000 – above – 27%
Have Children	Yes – 6% No – 22%	Yes – 12% No – 60%
Grew up within 50 Miles of work	Yes – 18% No – 9%	Yes – 44% No – 28%

Table C.6 Characteristic Aspects of Hiring Managers Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 55-64	Range 45-54
Gender	Male – 47% Female – 53%	Male – 41% Female – 59%
Race	Caucasian – 91% African American – 2% Hispanic/Latino – 2% Asian – 4% Prefer not to answer – 2%	Caucasian – 80% African American – 3% Hispanic/Latino – 4% Asian – 0% Other – 13%
Education Level	2 Year College – 4% 4 Year Degree – 18% Masters – 63% Ph.D. –2% J.D. –7%	2 Year College – 7% 4 Year Degree – 28% Masters – 47% Ph.D. – 3% J.D. – 4%
Political Party Affiliation	Democrat – 23% Republican – 33% Independent –12% Other – 32%	Democrat – 16% Republican – 27% Independent – 16% Other – 37%
Marital Status	Single – 2% Married – 72% Divorced – 19% Widowed – 2% Cohabiting –2%	Single – 7% Married – 79% Divorced – 10% Widowed – 0% Cohabiting –2%
Income	$20,000 - $39,999 – 2% $40,000 - $59,999 – 19% $60,000 - $69,999 – 9% $70,000 - $99,999 – 40% $100,000 – above – 25%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 10% $60,000 - $69,999 – 7% $70,000 - $99,999 – 37% $100,000 – above – 32%
Have Children	Yes – 83% No – 18%	Yes – 78% No – 22%
Grew up within 50 Miles of work	Yes – 32% No – 68%	Yes – 40% No – 60%

Table C.7 Characteristic Aspects of Hiring Managers in Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 55-64	Range 45-54
Gender	Male – 55% Female – 46%	Male – 53% Female – 47%
Race	Caucasian – 84% African American – 5% Hispanic/Latino – 1% Asian – 0% Other – 5% Prefer not to answer – 4%	Caucasian – 88% African American – 2% Hispanic/Latino – 3% Asian – 0% Other – 7% Prefer not to answer – 1%
Education Level	2 Year College – 9% 4 Year Degree – 21% Masters – 61% Ph.D. 3% J.D. –4%	2 Year College – 7% 4 Year Degree – 25% Masters – 54% Ph.D. – 2% J.D. – 4%
Political Party Affiliation	Democrat – 20% Republican – 27% Independent –21% Other – 26%	Democrat – 21% Republican – 25% Independent – 16% Other – 34%
Marital Status	Single – 8% Married – 70% Divorced – 18% Widowed – 4% Cohabiting –0%	Single – 8% Married – 71% Divorced – 15% Widowed – 2% Cohabiting –2%
Income	$20,000 - $39,999 – 1% $40,000 - $59,999 – 13% $60,000 - $69,999 – 3% $70,000 - $99,999 – 29% $100,000 – above – 40%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 14% $60,000 - $69,999 – 7% $70,000 - $99,999 – 34% $100,000 – above – 34%
Have Children	Yes – 78% No – 22%	Yes – 83% No – 17%
Grew up within 50 Miles of work	Yes – 36% No – 63%	Yes – 38% No – 62%

Table C.8 Characteristic Aspects of Hiring Managers in South Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 45-54	Range 55-64
Gender	Male – 53% Female – 47%	Male – 54% Female – 46%
Race	Caucasian – 91% African American – 4% Hispanic/Latino – 0% Asian – 0% Other – 4% Prefer not to answer – 1%	Caucasian – 87% African American – 2% Hispanic/Latino – 3% Asian – 1% Other – 6% Prefer not to answer – 1%
Education Level	2 Year College – 12% 4 Year Degree – 19% Masters – 51% Ph.D. – 1% J.D. – 8%	2 Year College – 11% 4 Year Degree – 26% Masters – 50% Ph.D. – 0% J.D. – 5%
Political Party Affiliation	Democrat – 13% Republican – 24% Independent –21% Other – 35%	Democrat – 24% Republican – 26% Independent – 15% Other – 28%
Marital Status	Single – 13% Married – 59% Divorced – 21% Widowed – 4% Cohabiting – 3%	Single – 12% Married – 72% Divorced – 14% Widowed – 2% Cohabiting –1%
Income	$20,000 - $39,999 – 5% $40,000 - $59,999 – 19% $60,000 - $69,999 – 8% $70,000 - $99,999 – 32% $100,000 – above – 31%	$20,000 - $39,999 – 1% $40,000 - $59,999 – 11% $60,000 - $69,999 – 3% $70,000 - $99,999 – 34% $100,000 – above – 42%
Have Children	Yes – 79% No – 21%	Yes – 82% No – 18%
Grew up within 50 Miles of work	Yes – 37% No – 63%	Yes – 38% No – 62%

Table C.9 Characteristic Aspects of Hiring Managers in West Region

Form of Government	Non-Council-Manager	Council-Manager
Age	Range 55-64	Range 55-64
Gender	Male – 61% Female – 39%	Male – 53% Female – 47%
Race	Caucasian – 94% African American – 0% Hispanic/Latino – 0% Asian – 3% Other – 3% Prefer not to answer – 0%	Caucasian – 90% African American – 2% Hispanic/Latino – 3% Asian – 0% Other – 4% Prefer not to answer – 2%
Education Level	2 Year College – 7% 4 Year Degree – 32% Masters – 45% Ph.D. – 3% J.D. – 7%	2 Year College – 4% 4 Year Degree – 25% Masters – 61% Ph.D. – 5% J.D. – 1%
Political Party Affiliation	Democrat – 29% Republican – 23% Independent –16% Other – 29%	Democrat – 16% Republican – 25% Independent – 15% Other – 41%
Marital Status	Single – 0% Married – 81% Divorced – 7% Widowed – 3% Cohabiting – 3%	Single – 6% Married – 79% Divorced – 11% Widowed – 0% Cohabiting –1%
Income	$20,000 - $39,999 – 3% $40,000 - $59,999 – 19% $60,000 - $69,999 – 7% $70,000 - $99,999 – 45% $100,000 – above – 19%	$20,000 - $39,999 – 2% $40,000 - $59,999 – 12% $60,000 - $69,999 – 6% $70,000 - $99,999 – 28% $100,000 – above – 37%
Have Children	Yes – 81% No – 19%	Yes – 88% No – 12%
Grew up within 50 Miles of work	Yes – 19% No – 81%	Yes – 42% No – 58%

Table C.10 Municipality Department Response Rate

	N-Size	Percent
Administration (Mayor, CM, CA, etc.)	587	67%
Human Resources / Personnel Department	277	32%
Other	7	1%
Total	871	100%

Table C.11 Northeast Region Departments

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	75%	62%
Human Resources/Personnel	25%	37%
Other	0%	1%
Total	100%	100%

Table C.12 Midwest Region Departments

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	66%	63%
Human Resources/Personnel	33%	36%
Other	1%	1%
Total	100%	100%

Table C.13 South Region Departments

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	71%	66%
Human Resources/Personnel	29%	34%
Other	0%	0%
Total	100%	100%

Table C.14 West Region Departments

Form of Government	Non-Council-Manager	Council-Manager
Administration (Mayor, City Manager, City Administrator)	68%	77%
Human Resources/Personnel	32%	23%
Other	0%	0%
Total	100%	100%

Table C.15 Northeast Forms of e-Government Offered

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	23%	22%
Utility Payments	37%	49%
Fee and Fine Payments	35%	31%
Permit Applications	53%	38%
Business licenses and renewal	16%	29%
Government record requests	40%	62%
Service requests	40%	50%
Voter registration	12%	6%
Property registration	5%	2%
Download Forms	53%	75%
Citizens communicate	81%	71%
Council agendas and minutes	90%	87%
Codes and Ordinances	91%	88%
Employment Information	91%	91%

Table C.16 Midwest Forms of e-Government Offered

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	9%	16%
Utility Payments	61%	52%
Fee and Fine Payments	46%	36%
Permit Applications	34%	41%
Business licenses and renewal	25%	28%
Government record requests	53%	48%
Service requests	35%	41%
Voter registration	3%	5%
Property registration	0%	2%
Download Forms	70%	72%
Citizens communicate	78%	83%
Council agendas and minutes	90%	91%
Codes and Ordinances	90%	92%
Employment Information	92%	90%

Table C.17 South Forms of e-Government Offered

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	15%	17%
Utility Payments	64%	45%
Fee and Fine Payments	39%	37%
Permit Applications	43%	37%
Business licenses and renewal	17%	23%
Government record requests	48%	54%
Service requests	45%	41%
Voter registration	4%	6%
Property registration	4%	4%
Download Forms	71%	63%
Citizens communicate	83%	76%
Council agendas and minutes	91%	88%
Codes and Ordinances	91%	89%
Employment Information	89%	92%

Table C.18 West Forms of e-Government Offered

Form of Government	Non-Council-Manager	Council-Manager
Tax Payments	16%	13%
Utility Payments	48%	52%
Fee and Fine Payments	39%	44%
Permit Applications	32%	40%
Business licenses and renewal	13%	23%
Government record requests	61%	42%
Service requests	45%	40%
Voter registration	7%	4%
Property registration	3%	1%
Download Forms	68%	70%
Citizens communicate	68%	86%
Council agendas and minutes	87%	85%
Codes and Ordinances	90%	90%
Employment Information	90%	88%

Table C.19 Search Engines Used Northeast Region

Form of Government	Non-Council-Manager	Council-Manager
Google	67%	56%
Yahoo	5%	3%
Bing	2%	3%
DuckDuckGo	0%	0%
Other	0%	2%

Table C.20 Search Engines Used Midwest Region

Form of Government	Non-Council-Manager	Council-Manager
Google	52%	58%
Yahoo	5%	4%
Bing	1%	2%
DuckDuckGo	0%	0%
Other	1%	2%

Table C.21 Search Engines Used South Region

Form of Government	Non-Council-Manager	Council-Manager
Google	56%	61%
Yahoo	0%	4%
Bing	3%	1%
DuckDuckGo	0%	0%
Other	3%	3%

Table C.22 Search Engines Used West Region

Form of Government	Non-Council-Manager	Council-Manager
Google	61%	64%
Yahoo	3%	4%
Bing	3%	1%
DuckDuckGo	0%	0%
Other	0%	4%

Table C.23 Percentages of Social Media Used by Hiring Managers

	National Average	Female	Male
Facebook	43%	39%	41%
Twitter	14%	12%	16%
Instagram	4%	5%	4%
Google+	2%	2%	2%
LinkedIn	25%	22%	27%
Snapchat	1%	1%	1%
MySpace	1%	1%	1%
Other	6%	7%	5%

Table C.24 Social Media Used in Northeast

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	39%	40%	37%	34%	33%	36%
Twitter	19%	20%	19%	13%	10%	18%
Instagram	9%	13%	4%	4%	3%	7%
Google+	4%	0%	7%	2%	3%	0%
LinkedIn	28%	23%	33%	19%	18%	21%
Snapchat	0%	0%	0%	2%	3%	0%
MySpace	0%	0%	0%	0%	0%	0%
Other	4%	3%	4%	6%	5%	7%

Table C.25 Social Media Used in Midwest

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	36%	29%	43%	40%	39%	41%
Twitter	16%	9%	21%	15%	12%	18%
Instagram	5%	6%	5%	4%	3%	4%
Google+	1%	0%	2%	1%	1%	2%
LinkedIn	22%	17%	26%	25%	25%	25%
Snapchat	3%	0%	5%	1%	1%	1%
MySpace	0%	0%	0%	0%	1%	2%
Other	49%	9%	10%	5%	7%	2%

Table C.26 Social Media Used in South

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	47%	49%	45%	37%	38%	36%
Twitter	13%	14%	13%	12%	7%	15%
Instagram	7%	11%	3%	3%	3%	3%
Google+	3%	3%	3%	1%	1%	2%
LinkedIn	32%	31%	33%	18%	15%	21%
Snapchat	0%	0%	0%	1%	0%	2%
MySpace	0%	0%	0%	1%	1%	2%
Other	4%	0%	8%	6%	6%	5%

Table C.27 Social Media Used in West

Form of Government	Non-Council-Manager	Female	Male	Council-Manager	Female	Male
Facebook	39%	17%	47%	34%	46%	51%
Twitter	19%	17%	11%	13%	19%	15%
Instagram	9%	0%	5%	4%	7%	3%
Google+	4%	0%	0%	2%	7%	0%
LinkedIn	28%	8%	37%	19%	30%	36%
Snapchat	0%	0%	0%	2%	2%	0%
MySpace	0%	8%	0%	0%	2%	0%
Other	4%	0%	0%	6%	13%	3%

Table C.28 Web 2.0 Tools and Internet Search Engine Usage

	Non-Council-Manager	Council-Manager
N-size	240	631
Search Social Media	122 (51%)	326 (52%)
Used Internet Search Engine	151 (63%)	420 (67%)

Table C.29 Two Group Means Comparison T-Test for Social Media

Government Form	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Council-Manager	240	.51	-.219	869	.827
Council-Manager	631	.52			

Table C.30 Two Group Means Comparison T-Test for Search Engines

Government Form	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Council-Manager	240	.63	-1.011	869	.312

Table C.31 Two Proportion Z-Test for Social Media

Government Form	Search Social Media	N-Size	Total	
Non-Council-Manager	27%	122	240	
Council-Manager	73%	326	631	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.048	.827	1	.017

Table C.32 Two Proportion Z-Test Analysis Comparing Internet Search Engines

Government Form	Internet Search Engines	N-Size	Total	
Non-Council-Manager	26%	151	240	
Council-Manager	74%	420	631	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.023	.312	1	.080

Table C.33 Two Proportion Z-Test for Search Engines

Population Size	Used Internet Search Engine	N-Size	Total	
49,999 and under	90%	514	783	
50,000 and above	10%	57	88	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.027	.870	1	-.019

Table C.34 Two Group Means T-Test Comparing Population and Social Media

Population Size	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
49,999 and Under	783	.52	1.184	869	.237
50,000 and Above	88	.45			

Table C.35 Two Group Means T-Test Comparing Population and Internet Search Engines

Population Size	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
49,999 and Under	783	.66	.163	869	.870
50,000 and Above	88	.65			

Table C.36 Two Proportion Z-Test Analysis Comparing Population and Social Media

Population Size	Search Social Media	N-Size	Total	
49,999 and under	92%	408	783	
50,000 and above	9%	40	88	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.402	.236	1	-.133

Table C.37 Two Proportion Z-Test Analysis Comparing Population and Internet Search Engines

Population Size	Used Internet Search Engine	N-Size	Total	
49,999 and under	90%	514	783	
50,000 and above	10%	57	88	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.027	.870	1	-.019

Table C.38 Two Group Means Comparison T-Test by Region and Social Media

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-West Region	725	.51	-.708	869	.479
West Region	146	.54			

Table C.39 Two Group Means Comparison T-Test by Region and Search Engines

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-West Region	725	.65	-1.200	869	.231
West Region	146	.70			

Table C.40 Two Proportion Z-Test Analysis Comparing Region and Social Media

Region	Search Social Media	N-Size	Total	
Non-West Region	82%	369	725	
West Region	18%	79	146	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.502	.479	1	.064

Table C.41 Two Proportion Z-Test Analysis Comparing Region and Search Engines

Region	Used Internet Search Engine	N-Size	Total	
Non-West Region	82%	469	725	
West Region	18%	102	146	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	1.440	.230	1	.117

Table C.42 Two Group Means Comparison T-Test Comparing Northeast and Internet Search Engines

Region	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Non-Northeast-Region	746	.65	-.621	869	.535
Northeast Region	125	.68			

Table C.43 Two Proportion Z-Test Analysis Comparing Northeast and Social Media

Region	Search Social Media	N-Size	Total	
Non-Northeast Region	86%	384	746	
Northeast Region	14%	64	125	
Total	100%	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.003	.955	1	-.005

Table C.44 Two Proportion Z-Test Analysis Comparing Northeast Region and Search Engines

Region	Internet Search Engine	N-Size	Total	
Non-Northeast Region	85%	486	746	
Northeast Region	15%	86	125	
Total	100%	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	.386	.535	1	.064

Table C.45 Two Proportion Z-Test Analysis Comparing Tax Payments and Social Media

		Tax Payments		Total	
		No	Yes		
Searched Social Media	No	372 (51%)	51 (37%)	423 (49%)	
	Yes	361 (49%)	87 (63%)	448 (51%)	
Total		733 (100%)	138 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		8.846	.003	1	.275

Table C.46 Two Proportion Z-Test Analysis Comparing Utility Payments and Social Media

		Utility Payments		Total	
		No	Yes		
Searched Social Media	No	212 (50%)	211 (50%)	423 (49%)	
	Yes	219 (49%)	229 (51%)	448 (51%)	
Total		431 (100%)	440 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.133	.716	1	.025

Table C.47 Two Proportion Z-Test Analysis for Fee/Fine Payments and Social Media

		Fee/Fine Payments		Total	
		No	Yes		
Searched Social Media	No	268 (50%)	155 (47%)	423 (49%)	
	Yes	272 (50%)	176(53%)	448 (51%)	
Total		540 (100%)	331 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.645	.422	1	.056

Table C.48 Two Proportion Z-Test Analysis for Permit Applications and Social Media

		Permit Applications		Total	
		No	Yes		
Searched Social Media	No	268 (48%)	155 (50%)	423 (49%)	
	Yes	272 (52%)	176 (50%)	448 (51%)	
Total		540 (100%)	331 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.645	.422	1	.056

Table C.49 Two Proportion Z-Test Analysis for Business License Renewal and Social Media

		License Renewal		Total	
		No	Yes		
Searched Social Media	No	314 (47%)	109 (53%)	423 (49%)	
	Yes	351 (53%)	97(47%)	448 (51%)	
Total		665 (100%)	206 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		2.042	.153	1	-.114

Table C.50 Two Proportion Z-Test Analysis Comparing Service Requests and Social Media

		Service Request		Total	
		No	Yes		
Searched Social Media	No	203 (47%)	220 (50%)	423 (49%)	
	Yes	231 (53%)	217 (50%)	448 (51%)	
Total		434 (100%)	437 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		1.110	.292	1	-.071

Table C.51 Two Proportion Z-Test for Voter Registration and Social Media

		Voter Registration		Total	
		No	Yes		
Searched Social Media	No	407 (49%)	16 (35%)	423 (49%)	
	Yes	418 (51%)	30 (65%)	448 (51%)	
Total		825 (100%)	46 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma

Table C.52 Two Proportion Z-Test Analysis for Property Registration and Social Media

		Property Registration		Total	
		No	Yes		
Searched Social Media	No	416 (49%)	7 (30%)	423 (49%)	
	Yes	432 (51%)	16 (70%)	448 (51%)	
Total		848 (100%)	23 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		3.109	.078	1	.375

Table C.53 Two Proportion Z-Test Analysis Comparing Manual Download of Forms and Social Media

		Download Forms		Total	
		No	Yes		
Searched Social Media	No	133 (48%)	290 (49%)	423 (49%)	
	Yes	146 (52%)	302 (51%)	448 (51%)	
Total		279 (100%)	592 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.132	.717	1	-.026

Table C.54 Two Proportion Z-Test Analysis Comparing Citizens Communicating with Officials and Social Media

		Citizens Communicate		Total	
		No	Yes		
Searched Social Media	No	134 (75%)	289 (42%)	423 (49%)	
	Yes	45 (25%)	403 (58%)	448 (51%)	
Total		179 (100%)	692 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		62.366	.000	1	.612

Table C.55 Two Proportion Z-Test Analysis for Council Agendas/Minutes and Social Media

		Agenda/Minutes		Total	
		No	Yes		
Searched Social Media	No	70 (71%)	353 (46%)	423 (49%)	
	Yes	29 (29%)	419 (54%)	448 (51%)	
Total		99 (100%)	772 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		21.923	.000	1	.483

Table C.56 Z-Test Codes/Ordinances and Social Media

		Codes/Ordinances		Total	
		No	Yes		
Searched Social Media	No	70 (83%)	353 (45%)	423 (49%)	
	Yes	14 (17%)	434 (55%)	448 (51%)	
Total		84 (100%)	787 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		44.990	.000	1	.720

Table C.57 Z-Test Employment Information and Social Media

		Employment Info		Total	
		No	Yes		
Searched Social Media	No	40 (49%)	383 (49%)	423 (49%)	
	Yes	42 (51%)	406 (52%)	448 (51%)	
Total		82 (100%)	789 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.003	.967	1	.005

Table C.58 Z-Test Tax Payments and Search Engine

		Tax Payments		Total	
		No	Yes		
Searched Social Media	No	260 (36%)	40 (29%)	300 (34%)	
	Yes	83 (65%)	17 (71%)	571 (66%)	
Total		733 (100%)	138 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		2.163	.141	1	.148

Table C.59 Z-Test Utility Payments and Search Engine

		Utility Payments		Total	
		No	Yes		
Searched Social Media	No	132 (31%)	168 (38%)	300 (34%)	
	Yes	299 (70%)	272 (62%)	571 (66%)	
Total		431 (100%)	440 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		5.504	.019	1	-.166

Table C.60 Z-Test Fine/Fee Payments and Search Engines

		Fee/Fine Payments		Total	
		No	Yes		
Searched Social Media	No	205 (38%)	95 (29%)	300 (34%)	
	Yes	335 (62%)	236 (71%)	571 (66%)	
Total		540 (100%)	331 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		7.796	.005	1	.206

Table C.61 Z-Test Permit Applications and Search Engines

		Permit Applications		Total	
		No	Yes		
Searched Social Media	No	182 (35%)	118 (34%)	300 (34%)	
	Yes	345 (66%)	226 (66%)	571 (66%)	
Total		527 (100%)	344 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.005	.944	1	.005

Table C.62 Z-Test Business License and Search Engine

		License/Renewal		Total	
		No	Yes		
Searched Social Media	No	214 (32%)	86 (42%)	300 (34%)	
	Yes	451 (68%)	120 (58%)	571 (66%)	
Total		665 (100%)	206 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		6.375	.012	1	-.203

Table C.63 Z-Test Request Records and Search Engines

		Records Request		Total	
		No	Yes		
Searched Social Media	No	144 (33%)	156 (36%)	300 (34%)	
	Yes	290 (67%)	281 (64%)	571 (66%)	
Total		434 (100%)	437 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.612	.434	1	-.056

Table C.64 Z-Test Service Request and Search Engines

		Service Requests		Total	
		No	Yes		
Searched Social Media	No	213 (42%)	87 (24%)	300 (34%)	
	Yes	297 (58%)	274 (76%)	571 (66%)	
Total		510 (100%)	361 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		29.212	.000	1	.386

Table C.65 Z-Test Voter Registration and Search Engines

		Voter Registration		Total	
		No	Yes		
Searched Social Media	No	292 (35%)	8 (17%)	300 (34%)	
	Yes	533 (65%)	38 (83%)	571 (66%)	
Total		825 (100%)	46 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		6.254	.012	1	.445

Table C.66 Z-Test Property Registration and Search Engines

		Property Registration		Total	
		No	Yes		
Searched Social Media	No	293 (35%)	7 (30%)	300 (34%)	
	Yes	555 (65%)	16 (70%)	571 (66%)	
Total		848 (100%)	23 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.168	.682	1	.094

Table C.67 Z-Test Download Forms and Search Engines

		Download Forms		Total	
		No	Yes		
Searched Social Media	No	95 (34%)	205 (35%)	300 (34%)	
	Yes	184 (66%)	387 (65%)	571 (66%)	
Total		279 (100%)	592 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		.028	.867	1	-.013

Table C.68 Z-Test Citizens Communicate and Social Media

		Communication		Total	
		No	Yes		
Searched Social Media	No	87 (49%)	213 (31%)	300 (34%)	
	Yes	92 (51%)	479 (69%)	571 (66%)	
Total		179 (100%)	692 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		20.007	.000	1	.360

Table C.69 Z-Test Council Agenda/Minutes and Search Engines

		Agenda/Minutes		Total	
		No	Yes		
Searched Social Media	No	55 (56%)	245 (32%)	300 (34%)	
	Yes	44 (44%)	527 (68%)	571 (66%)	
Total		99 (100%)	772 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		22.049	.000	1	.458

Table C.70 Z-Test Codes/Ordinances and Search Engines

		Codes/Ordinances		Total	
		No	Yes		
Searched Social Media	No	47 (56%)	253 (32%)	300 (34%)	
	Yes	37 (44%)	534 (68%)	571 (66%)	
Total		84 (100%)	787 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		19.048	.000	1	.457

Table C.71 Z-Test Employment Information and Search Engines

		Employment Info		Total	
		No	Yes		
Searched Social Media	No	33 (40%)	267 (34%)	300 (34%)	
	Yes	49 (60%)	522 (66%)	571 (66%)	
Total		82 (100%)	789 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		1.349	.245	1	.137

Table C.72 Two Group Independent Sample T-Test comparing Total Forms of e-Government Offered and Social Media

e-Government	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Less than 6	175	.35	-4.796	869	.000
6 or More	696	.55			

Table C.73 Two Proportion Z-Test Analysis Comparing Total Forms of e-Government Offered and Social Media

		Number of e-Government		Total
		Less than 6	6 or More	
Searched Social Media	No	113 (65%)	310 (45%)	423 (49%)
	Yes	62 (35%)	386 (56%)	448 (51%)
Total		175(100%)	696 (100%)	871 (100%)

Chi-Square Test	X(1) Value	P-Value	df	Gamma
	22.463	.000	1	.388

Table C.74 Two Group Means T-Test Comparing Total Forms of e-Government Offered and Search Engines

e-Government	N	MEAN	T	Degrees of freedom	Significance (2-tailed)
Less than 6	175	.55	-3.350	869	.001
6 or More	696	.68			

Table C.75 Two Proportion Z-Test Analysis Comparing Total Forms of e-Government Offered and Search Engines

		Number of e-Government		Total	
		Less than 6	6 or More		
Used Search Engines	No	79 (45%)	221 (32%)	300 (34%)	
	Yes	96 (55%)	475 (68%)	571 (66%)	
Total		175 (100%)	696 (100%)	871 (100%)	
Chi-Square Test		X(1) Value	P-Value	df	Gamma
		11.104	.001	1	.278

Table C.76 T-Test Comparing Forms of Government and eGovernment

Searched Social Media		N	MEAN	T	Degrees of freedom	Significance (2-tailed)
# of e-Government Offered	Yes	423	6.43	-6.212	869	.000
	No	448	7.23			

Table C.77 T-Test Comparing Forms of Government and Search Engine

Used Search Engine		N	MEAN	T	Degrees of freedom	Significance (2-tailed)
# of e-Government Offered	Yes	300	6.49	-3.825	869	.000
	No	571	7.02			

Table C.78 Z-Test Comparing e-Government and Social Media

# e-Government Offered	Search Social Media		Total	
	No	Yes		
0	3 (100%)	0 (0%)	3	
1	10 (100%)	0 (0%)	10	
2	20 (100%)	0 (0%)	20	
3	19 (83%)	4 (17%)	23	
4	20 (67%)	10 (33%)	30	
5	41 (46%)	48 (54%)	89	
6	62 (42%)	86 (58%)	148	
7	112 (50%)	112 (50%)	224	
8	78 (44%)	101 (56%)	179	
9	36 (45%)	44 (55%)	80	
10	20 (39%)	32 (62%)	52	
11	2 (20%)	8 (80%)	10	
12	0 (0%)	3 (100%)	3	
Total	423	448	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	63.017	.000	12	.205

Table C.79 Z-Test Comparing e-Government and Search Engines

# e-Government Offered	Internet Search Engine		Total	
	No	Yes		
0	2 (67%)	1 (33%)	3	
1	8 (80%)	2 (20%)	10	
2	15 (75%)	5 (25%)	20	
3	12 (52%)	11 (48%)	23	
4	14 (47%)	16 (53%)	30	
5	28 (32%)	61 (69%)	89	
6	43 (29%)	105 (71%)	148	
7	68 (30%)	156 (70%)	224	
8	63 (35%)	116 (65%)	179	
9	32 (40%)	48 (60%)	80	
10	13 (25%)	39 (75%)	52	
11	2 (20%)	8 (80%)	10	
12	0 (0%)	3 (100%)	3	
Total	300	571	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	39.931	.000	12	.105

Table C.80 T-Test Comparing Council-Manager and e-Government

Form of Government		N	MEAN	T	Degrees of freedom	Significance (2-tailed)
# of e-Government Offered	Non-Council-Manager	240	6.84	-.425	869	.978

Table C.81 Z-Test Comparing Form of Government and e-Government

# e-Government Offered	Form of Government		Total	
	Non-Council-Manager	Council-Manager		
0	0 (0%)	3 (100%)	3	
1	2 (20%)	8 (80%)	10	
2	6 (30%)	14 (70%)	20	
3	5 (22%)	18 (78%)	23	
4	11 (37%)	19 (63%)	30	
5	30 (34%)	59 (66%)	89	
6	33 (22%)	115 (78%)	148	
7	64 (29%)	160 (71%)	224	
8	49 (27%)	130 (71%)	179	
9	24 (30%)	56 (70%)	80	
10	13 (25%)	39 (75%)	52	
11	2 (20%)	8 (80%)	10	
12	1 (33%)	2 (68%)	3	
Total	240	631	871	
Chi-Square Test	X(1) Value	P-Value	df	Gamma
	7.726	.806	12	.006

APPENDIX D

RESPONSE GRAPHS

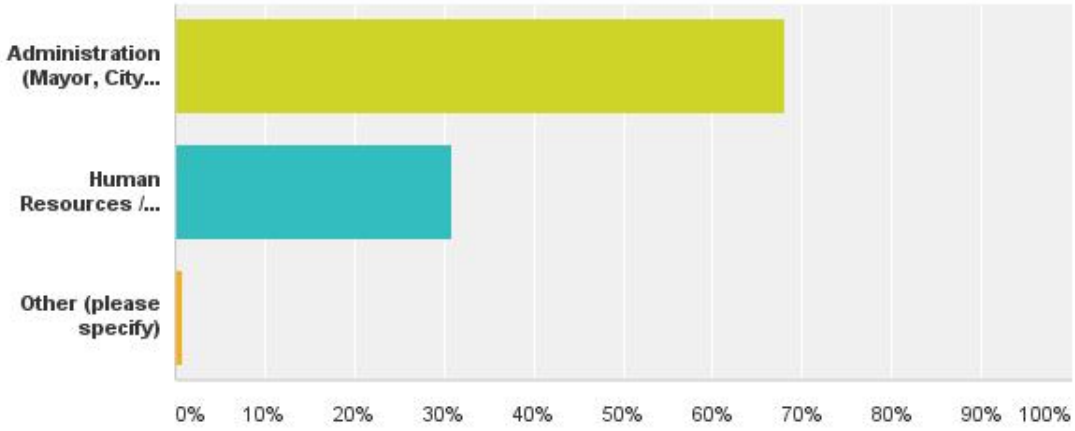

Figure D.1 Summary of Survey Graphs

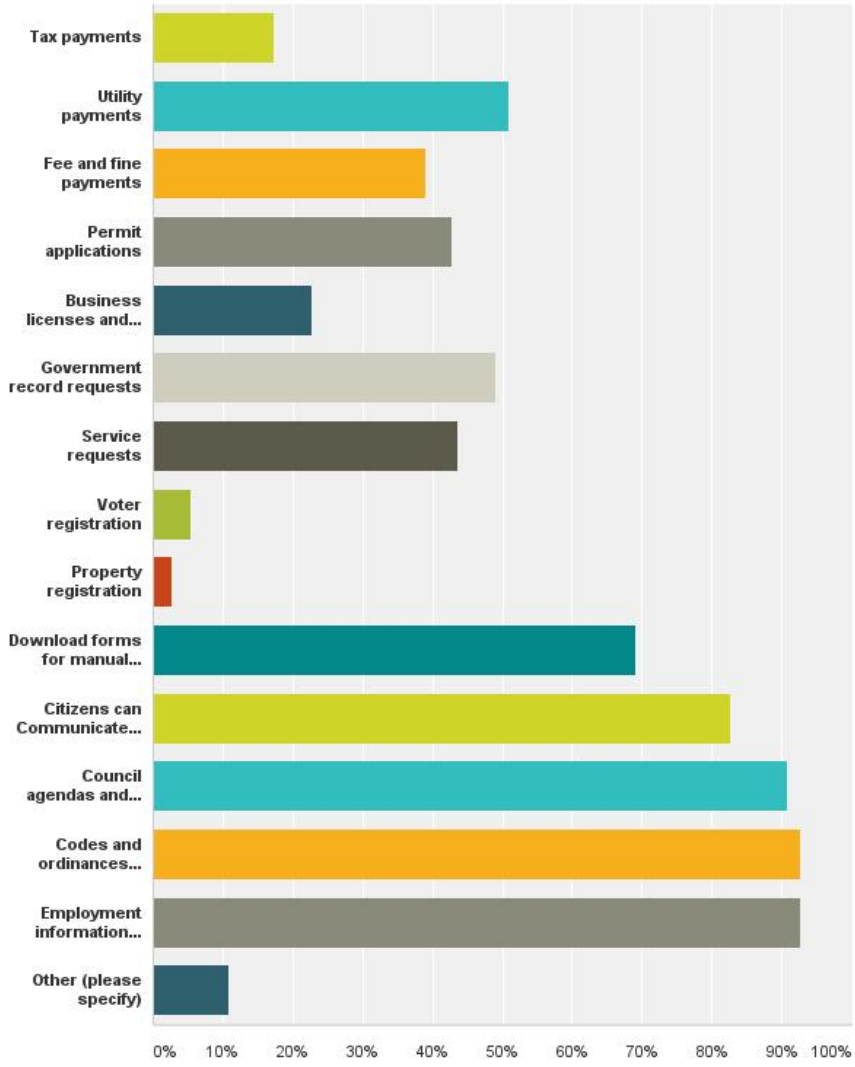

Figure D.2 Forms of e-Government Offered

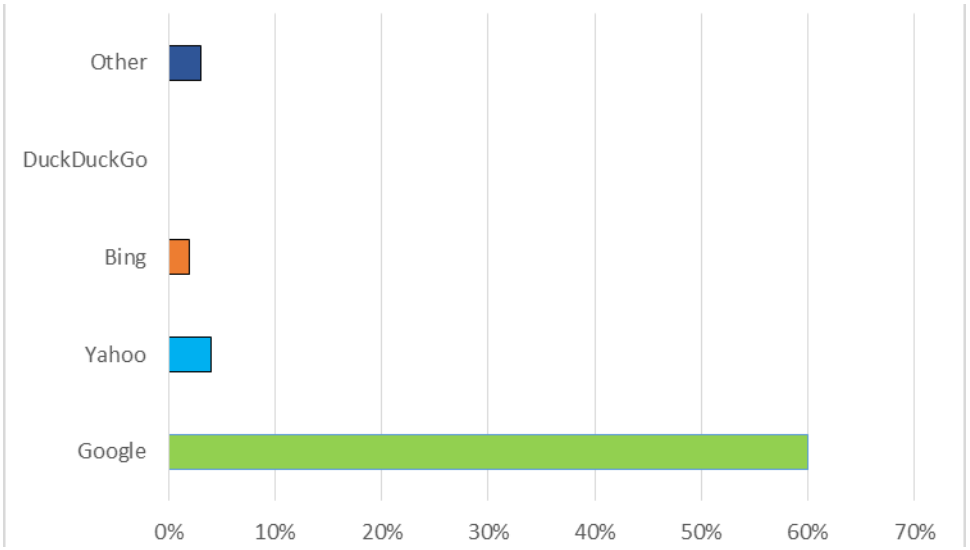

Figure D.3 Search Engines Used by Hiring Managers

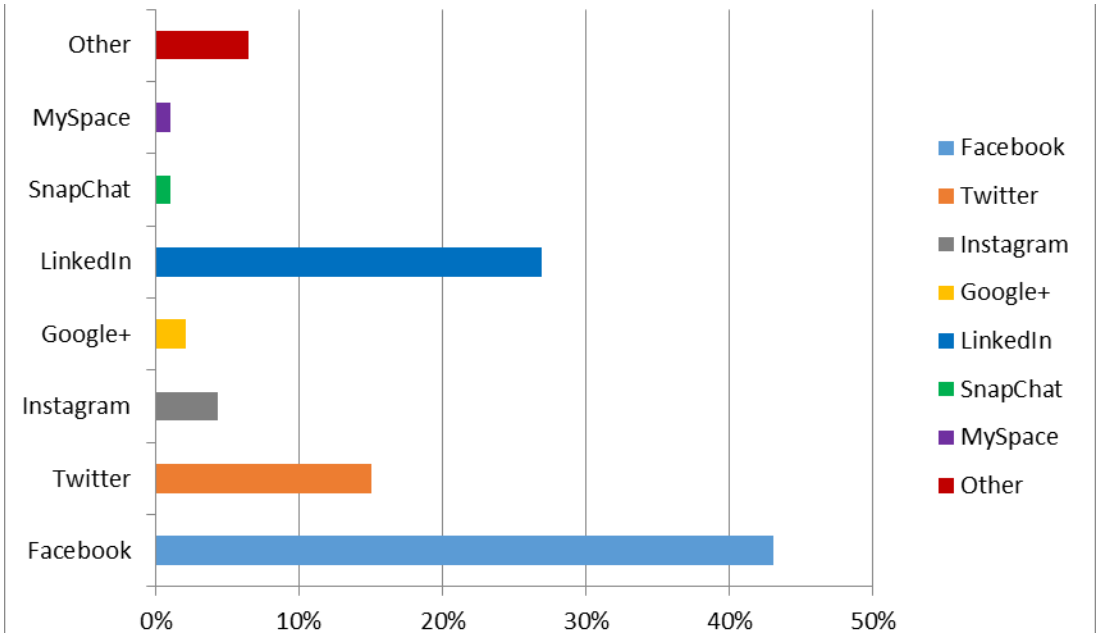

Figure D.4 Social Media Used by Hiring Managers