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Investing in E-Government Services in Local Government Agencies to Increase Citizens
Engagement through Technology

A graduate project submitted in partial fulfillment of the requirements For the degree of Master
of Public Administration in Public Sector Management and Leadership

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Abstract

Investing in E-Government in Local Government Agencies to Increase Transparency, and Citizen Participation

By

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Master of Public Administration Public Sector Management and Leadership

This study investigates the issues of effectiveness of electronic government (e-government) in public sector organizations specifically targeting local government agencies. Evaluating new technology is an important topic in the field of public administration. E-government begins at all levels of government, but it is at the local level where public sector organizations are experiencing the most challenges. The two-phase research study will evaluate the applicants' experience when applying online for public benefits, frontline workers experience when identifying bottlenecks in the approval or denial phase for public benefits, and the regulatory process to investigate e-government policies that local governments are using to optimize techniques when implementing e-government services for stakeholders. The surveys will review current e-government strategies to enhance new technologies for effective public services when participants apply for public benefits online. Findings show there are implications for public administrators who develop e-government services due to the lack of privacy of public information and citizen participation. Government agencies must develop strategies for top-level managers to monitor the effectiveness of using E-government services to communicate effectively with stakeholders.

Introduction

E-government is a complex phenomenon that intersects on various dimensions such as e-information, e-transactions, and e-participation (Manoharan & Ingram, 2018). The concept and practice of e-government are defined using various terms such as digital government, online government, and nowadays with advanced terminologies such as mobile government, ubiquitous government, and smart government (Manoharan & Ingram, 2018). Implementing e-government in an increasing demand for new technology in public services in America is a challenging issue. The challenges in those high technical demands in agencies and citizens are in an environment of budget constraints and political polarization (Tummers & Rocco, 2015). In the political sphere, the adoption of e-government, and its enabling legal structure began to incorporate democratic values (Manoharan & Ingram, 2018). Citizens gained the ability to provide instant feedback on public policies and discuss their opinions online with public officials and other citizens (Manoharan & Ingram, 2018). The public sector has a long history of using information and communication technology (ICT) going back to mainframe operations in the 1970s and microcomputing in the 1990s (Manoharan & Ingram, 2018, p. 56).

Research studies investigate the issues of effectiveness of electronic government (e-government) in public sector organizations specifically in international and U.S. federal government agencies. In today's public organizations, there is limited advancement for government agencies to develop strategies to introduce new interactive technologies, which may affect the delivery of services to stakeholders. Through e-government developments, public organizations seeking to gain efficiency through the simplification and automation of service delivery (Manoharan & Ingram, 2018). The use of the Internet and computers in the field of

public administration is important because this would enable governments to communicate their policies directly to citizens across their jurisdictions (Manoharan & Ingram, 2018).

The research will use closed-ended question surveys for the public, frontline workers, and managers to investigate issues that governments are experiencing with measuring outcomes when implementing e-government services. The questionnaire surveys will analyze current e-government communication technologies that quantify success rates in citizen electronic participation when submitting applications for any public services. Findings show there is a need for public administrators to develop trust in e-government services due to the lack of accountability and citizen participation when implementing e-government services. Government agencies must develop strategies for top-level managers to check the effectiveness of using e-government services to make sure there are no discrepancies in document processing and there is an increase in employee performance. The scope of e-government services considers internal and external environments during the implementation phase. However, some variables are challenging that will end the process of e-government services before it reaches political agendas.

The research analyzes the incremental approaches to the development of e-government services and the implementation in e-government policies. The politics/administration dichotomy has similar theoretical frameworks and arguments about governments establishing e-government services to stakeholders. Traditional frameworks in applying e-government services and a current leadership approach will help government agencies navigate through politics and transparency to make sure that e-government services are effective and efficient. However, there are implications on e-government services that raise concerns on citizen participation due to the lack of trust in using government websites to apply for public assistance or other public services (i.e., IRS tax

filing, immigration applications, and DMV license applications). Attention is given to cyber threats, government efficiency in public services, public-private partnership communication, and better accessibility of public services can result in more accountability in government agencies.

During the Affordable Care Act 's (ACA) first open-enrollment period, frontline workers with job titles such as certified application counselor (CAC) informed citizens how the ACA laws worked (Tummers & Rocco, 2015). E-government services were extensively used during the ACA, which helped an estimated 10.6 million Americans sign up for coverage (Tummers & Rocco, 2015). Frontline workers play a vital role in delivering e-government services to, and interpreting policies for clients. Governments developing e-government policies often mobilize frontline workers, also termed street-level bureaucrats, to help citizens gain access to services (Tummers & Rocco, 2015). The case study in Tummers & Rocco's (2015) article, is an example of the benefits of implementing e-government services in highly populated regions. Stakeholders need to discuss concerns for more effective e-government services, so they understand how to use increasingly complex government-run websites (Tummers & Rocco, 2015).

Public administration research shows the importance of frontline workers implementing effective public services by using e-government services. As technology advances outside of a government agency, there is no research on how frontline workers cope with e-government policies, which are strong technological components (Policies is plural so the verb must be plural) (Tummers & Rocco, 2015). Tummers & Rocco (2015) find a contrasting trending issue with the government not always having the resources to make policies work in a client-centered way. Often, political polarization and slim budgets create barriers to e-government access rather than facilitating it (Tummers & Rocco, 2015). Clients of federal government agencies, such as the U.S. Citizenship and Immigration Services, and Internal Revenue Service have difficulty

navigating through the government websites to input accurate data about their personal information for a tax return or immigration purposes.

After the 2008 financial crisis, governments decreased their use of technology due to high costs, and reduction in staff. Transparency and accountability to the public that ensures trust in e-government services for Americans were on the rise. Local government agencies can develop capabilities to carry out e-government services and increase participation in other parts of the world. However, researchers argue the limitations on the benefits and performance of e-government services from a policy and client-perspective (Tummers & Rocco, 2015). Citizen participation and democratic values also play a role during the implementation of e-government services in different cultures. National and local governments tend to adapt slowly when it comes to advancements in technology due to the risks involved with distributing government resources.

Literature Review

Historical Trend in E-Government

Since the 1980s, electronic government applications have been adopted by governments around the world. The adoption of new technologies in government was accompanied by legislative changes to regulate their use (Manoharan & Ingram, 2018). For example, in the United States, the federal government passed information technology laws, such as the Paperwork Reduction Act of 1980 and the Computer Security Act of 1987 (Manoharan & Ingram, 2018). Also, the Clinger-Cohen Act of 1996 was passed to encourage the federal government's transition to electronic forms through system-wide digital modernization and strategic planning (Manoharan & Ingram, 2018). Advocates of e-government promise increasing economies of scale in providing government services to citizens, improved citizen participation and democratic values, and enhanced government accountability and transparency (Ahn & Bretschneider, 2011, p. 414). For much of the past two decades, governments across the globe have adopted and expanded to innovative means of delivering government information and services to citizens (G2C), businesses (G2B), and governments (G2G) (Norris & Reddick, 2013, p. 165).

All national governments, nearly all subnational governments, and most local governments of any size have official Web sites through which they deliver information and services electronically, 24 hours per day, seven days per week (Norris & Reddick, 2013, p. 165). Researchers developed many definitions to analyze trends in e-government services. The research on e-government services focuses on experimental studies and case studies from an international and domestic perspective. E-government researchers address the issues with citizen participation, democratic values, and transparency between stakeholders and elected officials.

Researchers examined Information and Communication Technologies (ICT) to focus on personal characteristics that e-government measures when public servants and elected officials deliver public services in different countries. Researchers argue that accountability plays a large role while street-level bureaucrats use e-government services to increase e-participation, address e-government policies, and budget constraints during the process of implementing e-government services.

Case Studies Across the Globe

Buffat (2015) research focuses on similar literature on the impacts of e-government technologies on street-level bureaucracies. Based on Buffat's (2015) curtailment and enablement arguments, there are arguments between the reduction or disappearance of frontline policy discretion and the attention on highlighting how technologies give frontline workers and citizens more resources. Buffat (2015) explains that governments are increasingly using information and communication technologies (ICT). Buffat (2015) defines this topic as 'e-government' or 'e-governance', which mainly refers to the intensive use of electronic tools and applications between public administration and the provision in governmental services. The new web-based technologies are deeply changing the relations between government agencies and citizens through large-scale use of emails for external communications, the rising influence of agencies' websites or the massive development of electronic services for clients (Buffat, 2015, p. 150).

The topic for public service organizations tends to transform into 'digital agencies' through the partial or full digitization of their administrative processes and interactions with citizens. Today, various services are delivered online (e.g. requesting birth certificates or filling in a tax return) (Buffat, 2015, p. 150). The essence of street-level bureaucracies is that they

require people to make decisions about other people (Buffat, 2015, p. 151). Street-level bureaucrats have discretion because the nature of service provision calls for human judgment that cannot be programmed and for which machines cannot substitute (Buffat, 2015, p. 151). Several factors account for this discretionary power: the inadequacy of available resources, the ambiguity in policy goals, the difficulties of managerial control, the structural weakness of clients (Buffat, 2015, p. 151). The ‘digital-era governance’ makes it today relevant to ask if and how ICT would be able to impact the well-established policy discretion of street-level bureaucrats depicted in the literature (Buffat, 2015, p. 151).

For example, a team of researchers visited Gangnam-gu (gu means “district” in Korean) to focus on an experiment when e-government applications to exert political control over the local services bureaucracy (use Ahn & Bretschneider, 2011). The authors find that e-government applications have political properties that are applied effectively by the political leadership as instruments to improve control over the government bureaucracy to enhance essential government accountability and transparency (Ahn & Bretschneider, 2011, p. 414). This case shows how the strategic use of e-government can improve government accountability, responsiveness, and transparency while allowing citizens to directly influence government decision-making (Ahn & Bretschneider, 2011, p. 414). E-government works to create greater political control over the government bureaucracy and its administrators by enhancing accountability to citizens (Ahn & Bretschneider, 2011). This case study contributes to the literature by providing a case example from one of the leaders in e-government – South Korea – that demonstrate the transformative potential of e-government as a channel of citizen participation (Ahn & Bretschneider, 2011).

Baldwin, Gauld, & Goldfinch (2012) developed three inquiries: First, the degree to which e-government is assessed in supporting 'joined-up' government (JUG). JUG is focused on reducing the number of agencies, particularly through the reintegration of policy and operational agencies during the New Public Management (NPM) reforms of the 1990s (Baldwin, Gauld, & Goldfinch, 2012, p. 108). Second, the researchers' canvas views in the degree that e-government measures to promote new ways of working for public servants such as flexible work. Third, the researchers seek public servant views on whether e-government measures are allowing greater 'e-participation' from the public (Baldwin, Gauld, & Goldfinch, 2012, p. 105). The hypotheses focus on added personal characteristics or circumstances – time spent working with technology and e-government initiatives, involvement with policy, and involvement with policy across sectors, which affect whether or not ICT has a positive influence on New Zealand government (Baldwin, Gauld, & Goldfinch, 2012, p. 108).

The research looks specifically at the relationship between these personal and professional characteristics, and perceptions that e-government is transforming the New Zealand government, joining-up government and reducing public agencies, enhancing flexible work practices, building better relationships with the public and facilitating greater public input into the operations of New Zealand government (Baldwin, Gauld, & Goldfinch, 2012, p. 108). Many were generally supportive of the benefits that e-government could bring in terms of access to information, some efficiency gains, and some government co-ordination (Baldwin, Gauld, & Goldfinch, 2012, p. 118). Others noted efficiency gains could be offset by other costs; increased information access could also mean informational overload and consultation; and some were skeptical of the benefits of moveable workspaces and portable technology (Baldwin, Gauld, & Goldfinch, 2012, p. 118).

Theoretical Framework

D'agostino, Schwester, Carrizales, & Melitski (2011) developed a case study with 20 cities in the United States which used a theoretical framework to analyze the implementation of e-government services. D'agostino, et al. (2011) argued that implementing technology in the public sector is due to the socio-technical theory to advance society. The sociotechnical theory is akin to participatory technology management strategies where managers seek to engage citizens, build trust, and increase accountability with government through technology-mediated means (D'agostino, Maria J., Schwester, Richard, Carrizales, Tony, & Melitski, James, 2011, p. 6). The approach to e-government takes on a hierarchical or linear approach that causes several problems: First, similar to Maslow's (1943) *Hierarchy of Needs*, it presumes that agencies must complete one-step in the hierarchy before progressing to the next (D'agostino, Maria J., Schwester, Richard, Carrizales, Tony, & Melitski, James, 2011, p. 5). Mergel, Bretschneider, & Stuart (2013) argued that social media tools during Obama's 2009 presidential directive for the Open Government Initiative were unique in that e-government took a hierarchical approach. The politics/administration dichotomy is similar to the current e-government dilemma which suggests that agencies must master the ability to process online transactions before moving on to engage citizens through online participation in government (D'agostino, Maria J., Schwester, Richard, Carrizales, Tony, & Melitski, James, 2011, p. 5).

Norris & Reddick address the recent trajectory of local e-government in the United States and compare it with the predictions of early e-government writings, using empirical data from two nationwide surveys of e-government among American local governments. Norris & Reddick (2013) argued that their findings indicated that e-government has developed incrementally and is not transformative. The incremental theory applies to public sector information systems, showing

that although computers do have the potential to change organizations, most change is incremental (Norris & Reddick, 2013, p. 165). By 2004, nearly all local governments of any size in the United States had adopted e-government and were mainly providing information and services, along with a limited range of transactions and interactions on their Web sites (Norris & Reddick, 2013, p. 173).

E-governance and Democracy

Communication technologies, such as social networking tools, allow local governments to engage in one and two-way communication with citizens, businesses, and other governments (Li & Feeney, 2014, p. 76). A large number of local governments have adopted and implemented a mixture of e-services and communication technologies to improve managerial efficiency, create democratic potential, and transform government activities and interactions with citizens (Li & Feeney, 2014, p. 76). Lawton & Macaulay (2014) found similar results when investigating citizen participation and good governance. Lawton & Macaulay's (2014) article utilizes Henrik Bang's concepts of "expert citizen" and "everyday maker" to explore citizen participation in local standards committees (Lawton & Macaulay, 2014, p. 75). This article examines how, against a background of localism endorsed by the 2010 coalition government in the United Kingdom, a key component of local integrity and governance was fundamentally altered (Lawton & Macaulay, 2014, p. 75).

The Localism Act 2011 abolished the British local integrity framework, which relied on the participation in local citizens in the policy-making and implementation of local government standards of conduct (Lawton & Macaulay, 2014, p. 75). However, Lawton & Macaulay (2014) findings explained that through participation in the local integrity framework, citizens

transformed from everyday makers into expert citizens whose work had a broad impact on other stakeholders. Lawton & Macaulay's (2014) case studies indicated ways in which committed individuals can seize the opportunity to help shape the legitimacy of their local authority in ways that go beyond the ballot box. Even though Lawton & Macaulay (2014) used the English local integrity framework. Krishnan & Teo (2012) argue that six dimensions are considered for governance — (a) voice and accountability, (b) political stability, (c) government effectiveness, (d) regulatory quality, (e) rule of law, and (f) control of corruption. Krishnan & Teo (2012) use these six dimensions as the national complementary assets that will affect the relationship between information infrastructure and e-government development. Complementary assets are defined as the assets required to attain high levels of e-government development from information infrastructure (Krishnan & Teo, 2012, p. 1931). Governance strongly influences how resources (i.e., information infrastructure) are effectively converted to productivity measures (i.e., e-government development) (Krishnan & Teo, 2012, p. 1931).

Krishnan & Teo (2012) findings show that governance does matter in the context of e-government development. That is, if appropriate governance dimensions are strong, they will stand to leverage the e-government development of member nations (Krishnan & Teo, 2012, p. 1941). Mergel, Bretschneider, & Stuart (2013) show earlier studies during the 2008 presidential elections in the United States and President Barack Obama's Open Government Initiative memo (2009). Mergel, Bretschneider, & Stuart's (2013) research focused on President Obama's speech where he instructed agencies to harness new technologies, so government agencies can use social media tools to leverage bidirectional interactions with citizens. President Obama's goal was to increase government's visibility by sharing data and insights into the decision-making

process to become more transparent, to become more engaging and participatory by reaching previously underrepresented segments of the population, and to include all stakeholders in collaborative processes (Mergel, Bretschneider, & Stuart, 2013, p. 391).

Research Gap

There are studies throughout limited research in e-government and e-governance, that find some of the necessary sociopolitical antecedents to successfully implement new e-participation applications (Ahn & Bretschneider, 2011). Buffat (2015) argues for more empirical research to understand the impacts on information and communications technology (ICT) and frontline discretion. Issues of discretion (power dimension) and accountability (control dimension) in digitized street-level agencies are important for future research efforts (Buffat, 2015, p. 157). Prior research focusing on questions related to the effects of time and network purpose, scope, and leadership necessitates further investigation. Green & Roberts (2010) argue that today's leaders must understand the many designs and implementation issues associated with virtual operation.

Research shows another gap, the lack of empirical studies across cultures in the adoption in e-government services. Grimmelikhuijsen, Porumbescu, Hong, & Im, (2013) suggest that researchers must further investigate similar studies in different countries. This could fill in the gap about how separate cultural dimensions affect transparency and trust in e-government (Grimmelikhuijsen, S., Porumbescu, G., Hong, B., & Im, T, 2013). Transparency is one element of good governance and plays a role in improving governance and decision-making processes (Loretan, 2013). As Loretan (2013) argues, transparency helps prevent corruption, contributes to the legitimacy of actions, and enhances government performance by increasing efficiency.

Transparency does differ among cultures (Grimmelikhuijsen, S., Porumbescu, G., Hong, B., & Im, T, 2013).

Krishnan & Teo (2012) developed research to focus on the contingent role of governance dimensions on the relationship between information infrastructure and e-government development. However, Kim & Lee (2006) suggest that future researchers may want to focus on the nature of knowledge-sharing capabilities and their impacts on employee knowledge-sharing capabilities; motivational factors (i.e., internal and external) and their impact on employee knowledge-sharing capabilities; relationships with recipients and their impact on employee knowledge-sharing capabilities; and knowledge sharing and its impact on organizational performance. Norris & Reddick (2013) argued there is little or no evidence about e-government transforming information and service delivery, or how it has changed relationships between governments and the public. Even though these research gaps are important to consider, there are different dimensions in analyzing the successful outcomes in optimizing e-government and citizen participation, there are few studies on the optimization of e-government in a state or local government perspective in the United States, specifically in the Los Angeles County region.

Research Design

Research Aim

This research aim is to guide public administrators in assessing current practices that can optimize the usability of e-government services for citizens who are applying for CalFresh benefits in the Department of Public Social Services in Los Angeles County.

Research Question

Since government agencies are adopting new technologies more rapidly in recent years, the research question is as follows:

1. What can public administrators do to optimize the eligibility determination process in the Department of Public Social Services for CalFresh benefits?

Research Methods

Research Hypothesis

It is not the intent of this research to find a conclusive result but to explore and gain insight about the recommended techniques to make e-government more useful and to improve the experiences of those applying online for public assistance benefits through the Department of Public Social Services. The researcher will compare the data between the public and frontline workers in the Department of Public Social Services to develop a hypothesis. Based on the above research question, there is one testable hypothesis formulated to help in the data analysis. The research null hypothesis is stated below.

1. Hypothesis: There are no significant factors that hinder the usage of e-government services and current practice for the CalFresh program in the Department of Public Social Services.

Research Methodology

The hypothesis focuses on analyzing the optimization technique that the Department of Public Social Services is using to reduce delays in processing applicants' CalFresh cases. The researcher will gather information from stakeholders about the usability experience and end-to-end process when applying for public benefits online instead of a traditional face-to-face interview. The researcher will use a general approach during this research project to gain knowledge on the public's opinion on the effectiveness of e-government services and the policy-making environment with regards to implementing a sustainable user-friendly website for applicants. The researcher's goal is to develop preliminary recommendations that will help management create a model that is sustainable to encourage stakeholders to apply online for any

type of public assistance benefits. This study will help stakeholders find convenient ways to navigate online to get access to electronic applications and policies that tell applicants about policy changes in the eligibility requirements for public assistance benefits.

A two-phase quantitative approach will be used in collecting information during the online application process for CalFresh Benefits. Phase one will consist of collecting data using survey instruments. Surveys will focus on the usability experience when submitting an online application in the Department of Public Social Services website. An additional survey will be distributed to frontline workers for their feedback on effective ways to optimize computer applications used to complete the end-to-end process used to determine eligibility for applicants CalFresh benefits. Data collected from these two different groups will determine where frontline workers and applicants are experiencing flaws during the online CalFresh application process. Collecting general information from customer and employee surveys will illustrate a need for management to create online updates or new policies that will aid frontline workers by creating an effective flow of end-to-end information needed to determine eligibility.

Phase two will consist of gathering secondary data by using the Department of Public Social Services databases. The database will offer data on the application caseloads in different district offices in Los Angeles County. In this phase, the researcher will select two district offices that have high-volume caseloads and analyze both offices' online application process. The database consists of a spreadsheet that shows the number of days a case is in a worker's inventory before approval or denial of benefits.

The Department of Public Social Services offers in-person interviews or online guidance for a step-by-step process for determining eligibility for CalFresh Benefits. Applicants will be encouraged to use online services when they face commuting or financial challenges, applicants

have the option to use online services to apply for CalFresh benefits. Phase one will overlap phase two in the beginning stages so the researcher can analyze the secondary data between both district offices. Participation by subjects is voluntary and they can withdraw from completing the surveys. The secondary data will develop a general overview for the researcher to determine if the applicants are receiving CalFresh benefits within 30 - 45 days (CalFresh E-policy, dpss.lacounty.gov).

The quantitative analysis will focus on current practices that management has employed to handle a high-volume caseload across district offices in the Department of Public Social Services. Throughout the online application process for CalFresh benefits, applicants have access to different communication methods through telephone, email, and mail. Developing a two-phase process will allow the researcher to control the study and narrow the outcomes when technology trends impact e-government operations. Handling large amounts of data brings challenges to public sector agencies due to budget constraints that limit new technologies to meet applicant demands. Studying the CalFresh process will show ways in which managers can meet stakeholder's demands while maximizing agency resources. General approaches incorporated in these two phases will help managers develop a general overview to deploy preliminary recommendations to other national, state, or local government social service agencies with goal of improving citizen participation through a more virtual experience. The two-phase process will explore projected results that will build trust and transparent e-government services for the public.

E-government is a complex phenomenon that intersects various dimensions such as e-information, e-transaction, and e-participation (Manoharan & Ingrams, 2018). This two-phase study will track trends by using statistical analysis to understand the growth in e-government

services in Los Angeles County. To understand that growth, Manoharan & Ingrams (2018) suggest that a three-stage model can analyze the adoption and the next evolution of the types of e-government tools used by local governments to improve and advance their e-government services. The two-phase study uses benchmarks from earlier case studies in the literature review to understand implementation issues and enhance the opportunities for new technologies to take on a transformative approach and not an incremental approach. One explanation about e-government tools is that innovations drives certain attributes of government capacity that have been mostly fixed and permanent (Manoharan & Ingrams, 2018). Those e-government tools in government capacities include the technological resources that create an environment for citizens to adapt to e-government technology (Manoharan & Ingrams, 2018).

Study Variables

The study variables are grouped into two broad categories: Independent and dependent variables. The dependent variable for this study is the e-government service (CalFresh) and the current practices DPSS management is optimizing for interactive service delivery for the CalFresh program (Johnson, 2015). The independent variables include the applicant and worker feedback from survey questionnaires, the accessibility using the DPSS database, and the reliability using the CalFresh digital platform (Johnson, 2015).

Population Sample

The research will a sample size that focuses on the Department of Public Social Services staff and residents of Los Angeles County. The Department of Public Social Services has 31 district offices that give CalFresh benefit services (Office Locations, dpss.lacounty.gov). The

researcher has randomly selected two district offices that process high volumes of CalFresh cases. The randomly selected district offices are District 14 (Civic Center) in Downtown Los Angeles and District 5 (Belvedere) in East Los Angeles. The researcher will select one random unit in the Civic Center office and one random unit in the Belvedere office. These random worker units consist of about 7 – 8 frontline workers per unit in each office. The researcher will track the applicants that are applying with those two units to assess the CalFresh end-to-end applications process. The sample size will be 150 applicants as a representative sample for the Los Angeles County population.

Data Collection

The researcher will collect data from two high volume process district offices by using the Department of Public Social Services CalFresh database. Receiving an approval or denial notice from the CalFresh program takes about 30 - 45 days (CalFresh E-policy, dpss.lacounty.gov). However, if the researcher finds a CalFresh case in a worker's inventory for more than 45 days the research will look further to determine cases are prolonged for more than 45 days. The researcher will use CalFresh cases to develop a statistical trend that will inform managers on the many possibilities to where the end-to-end process could improve.

The purpose of using a survey as a tool is to analyze the usability experience and case processing interaction between the public and frontline workers. The surveys will ask for customer feedback when applicants complete the application process for CalFresh Benefits. If the applicant decides to apply online for CalFresh benefits then this is an opportunity for the researcher to analyze the end-to-end process for any bottlenecks during the application process. Frontline workers will also be asked to complete a survey so that managers know where constant

technological issues impede case processing. Together, the surveys being collected from both subjects will give information to improve online services for the CalFresh program.

Collecting quantitative data will form a general benchmark for managers to understand the public and frontline workers' perspectives on using devices to communicate with each other. Since e-government services have increased over the decades, government agencies are shifting towards more user-friendly websites to inform and increase citizen participation. This study will guide managers in the development of new user-interfaces and policies to protect personal information and encourage the public to trust the online application process for public assistance benefits. Groeneveld (2015) states that 57.1% of researchers use quantitative research to select topics on e-government and information technology.

Surveying the Public and DPSS Workers

A survey questionnaire will collect data from 150 random applicants applying for CalFresh benefits. The survey questionnaire will ask 8 - 10 general questions about the usability experience when applicants complete the process. A survey questionnaire will be given to the random sample of frontline workers focusing on the end-to-end approval process. The survey questionnaire will ask 8 - 10 general questions about the responsiveness of internal computer applications when frontline workers process high-volume caseload in the Civic Center and Belvedere district office. The survey will use a scoring method based on the Likert scale, which will range from (1 = very effective to 5 = not very effective). The survey questionnaires can check the subjects during the end-to-end process so that if there are any discrepancies in regards to the technology systems being used, managers will have feedback from the public and frontline workers.

The unit of analysis for the survey questionnaire will focus on the effectiveness, user-friendly experience, and citizen participation rates using the CalFresh online application. The survey questionnaire process will find how the Department handles transactional results to recommend improvements for delivering better access to online services. Collecting data from the surveys will find possible trends that will tell the Department of Public Social Services where to invest in new technologies that create a sustainable automated application process for the benefit of the public. The transition to new technologies in DPSS is challenging because the Department uses incremental steps to adapt to public needs. The surveys will show where applicants are getting access to the internet and their perception about customer service during the transition to an online application system.

Secondary Data Collection

The study will use the Department of Public Social Services CalFresh application results to compare case turnaround of the two district offices. The data warehouse from the Department of Public Social Services consists of spreadsheets that include the monthly caseloads of the frontline workers who are approving or denying CalFresh benefits. The data will provide a general overview of a random selection of two district offices from each agency. There are similarities in both district offices when considering the size and data sharing for determining eligibility for CalFresh benefits. Comparing these two district offices is possible because the Department of Public Social Services manages about 1.3 million CalFresh cases for Los Angeles County residents (DPSS Annual Report, dpss.lacounty.gov, 2016).

Results from comparing district offices in the Department of Public Social Services will give insight on possibilities for investing in technologies that could increase citizen participation

and build trust in management leading to the development of more interactive websites. When the Department of Public Social Services determines CalFresh eligibility, frontline workers can retrieve personal data from federal and state government agencies to verify each applicants' need for public assistance services. Frontline workers must use e-government resources to retrieve personal information about an applicant to find any discrepancies during the CalFresh application process because workers can make referrals for applicants that need other DPSS programs. The significant data brings an opportunity for DPSS to carry out innovative strategies to improve website accessibility for CalFresh applicants. Increasing the effectiveness of e-government services will connect many local Californians to develop trust in procedures when frontline workers are determining benefit payments (Azmi, Ang, & Talib, 2016). Simplifying official systems and procedures of e-government services lead to faster service delivery to citizens (Azmi, Ang, & Talib, 2016).

Data Analysis

In this section, the analysis seeks to quantitatively assess the variables that hinders current practices managers use to create an effective e-government service to the public. The associations between the public and workers managing the end-to-end CalFresh application process will be analyzed using descriptive statistics. Descriptive data are collected in earlier sections to provide context for researchers to explore the Department of Public Social Services growth in adopting e-government services. The data that the researcher collects will apply a rate analysis, to measure the number of occurrences that an applicant applies for CalFresh benefits (Johnson, 2015). Using rates is useful when comparing apples-to-apples especially when the units being compared for analysis vary in size (Johnson, 2015). For example, in this research

study, one Department is comparing two random units that are processing random applicants for CalFresh benefits. Understanding the rates that a sample applies for CalFresh benefits will help managers use the surveys and secondary data from both district offices to see the efficiency in recommending applicants to apply online instead of doing a face-to-face interview.

Issues and Concerns

The lack of resources is a concern because it affects the sample size used for statistical analysis calculations. Using a quantitative approach to collect data in a large database from two large district offices is challenging for a single researcher because the data sets may not give a truly generalized outcome. Surveying and collecting secondary data across Los Angeles County from specific departments may result in stronger findings. This robust sample size will allow the researcher to track the end-to-end process of both agencies. Randomly selecting two district offices from both agencies could introduce some bias in measuring e-government services. Those biases can result in managers thinking that the agencies' websites are meeting the needs in referring applicants to the right services or that frontline workers feel confident in the technology used for timely case processing.

Additionally, distributing online surveys is time-consuming and requires persistence to get a high response rate. Groeneveld (2015) states that questionnaires could be used to collect data, but only based on assumptions about how individual perceptions can represent collective viewpoints. Also, developing a two-phase study is challenging because the decision-making process is complicated, and performing system maintenance for online services may intervene with the study. Statistical data may help managers make recommendations for optimizing the delivery of e-government services to the public, reiterate existing policies, or create new policies

for the public. However, the researcher may experience negative outcomes by not receiving the response rate needed to continue the statistical analysis portion.

Another factor in this research study is the precision in selecting a sample size. The precision in the statistical data may result in inaccurate probabilities in a cause-and-effect study. Applicants and workers may not be truthful when answering surveys. In the research, results may have errors that have nothing to do with probabilities of error associated with a random sample (Johnson, 2015). The researcher in this study may experience nonsampling errors from questions and responses that create unreliable data (Johnson, 2015). In this study, the researcher is limited to drawing only general conclusions about a large population in Los Angeles County (Johnson, 2015).

Discussion

Projected Results

The projected results in this study will offer a general overview of the effectiveness in the end-to-end process when determining eligibility requirements through online interactions. Since DPSS aids about 1.3 million in CalFresh applicants, this study will offer a possible opportunity to create new metrics to measure the successes and failures in the usability experience for applicants. The willingness of subjects to take part will help managers in DPSS understand different optimization techniques to introduce updated features for the online application website. The analyzed data will give a general insight on identifying factors that may or may not hinder the applicant's usage of the CalFresh online application. Data about the workers' experiences in determining eligibility will create other alternatives for more efficient turnaround for case processing. Frontline workers are informed about certain techniques that can build trust for the public and help managers get a better overview of the Department's operations.

Preliminary Recommendations

Quantitative research is commonly used for e-government and information technology topics in public administration. Understanding the general data in the end-to-end process for CalFresh benefits is important because this study will be a starting point for the next research phase will focus on. In this study, researchers can use qualitative research approaches such as focus groups or semi-structured interviews to gain different perspectives on applicant's experiences applying for CalFresh online. This detailed interview guide is a broad approach, but workers and managers will be able to extract rich data to allow for more clarifications on how to

optimize e-government services to the public. This type of research will give feedback about the complex process between the public and workers in DPSS.

Contributions

E-government services are important for communicating and informing the public in ways that will be valuable in the future. As the government continues to strengthen its efforts to meet the needs of the public, this study is only the beginning in bridging the gap for government agencies to use a transformative approach to introducing new interactive technologies for efficient governance. Findings of the effectiveness in e-government service delivery will help departments improve data storage and methods for monitoring online applications for any type of service (i.e., public assistance, tax filing, driver's license applications, and citizenship applications). Managing big data in government is a new trend, but challenging due to budget or policy constraints that could impact the public or government operations. This study will give new observations that other researchers may use for quantitative or qualitative approaches for other e-government topics.

Ethical Considerations

This research study focuses on general aspects of e-government efficiencies in the provision of online services. The study also considers ways in which managers monitor employee relationships with applicants during the end-to-end process for CalFresh benefits. Ethical considerations are important in e-government services because workers are utilizing confidential information for CalFresh eligibility. Building trust with stakeholders using e-government services is a complex issue because local government agencies need to create easy

access to online services to the public. The complexities researching private lives and placing accountability in public administration raise ethical issues for the researcher that finds challenges in using proper guidelines for research studies. Ethical disclosures made before conducting a survey will ensure that applicants are comfortable sharing their knowledge making the way for increasing the demand for and approving the use of e-government services. McNabb (2018) states that researchers have a moral responsibility that goes far beyond adhering to the letter of laws and policies.

Therefore, ethics are important when researchers are using human subjects to understand their perceptions and feedback when implementing public programs. Also, participants are held accountable for following ethical guidelines about giving the correct information during the application process. There are possibilities that unethical applicants' give inaccurate information to qualify for CalFresh benefits. If the researcher is able to address those challenges, monitoring the application process will give better insight into why certain data sets are invalid for conducting descriptive statistical analysis reports. However, the statistical analysis does not consider any moral standards in these situations. The research must focus on a qualitative research method that includes perceptions of norms in society to develop recommendations for better feedback loops and optimization techniques for e-government services (McNabb, 2018).

This research will allow all levels of staff and participants to give important information that will lead to better delivery of online services or changes in policies to help the government increase the transparency in e-government services. The ethics in this study focuses on participant ethics, which involves rights ethics. Rights ethics is often defined as a person's entitlement to something (McNabb, 2018). This research study also includes professional ethics, which involves utilitarian ethics. The distribution in CalFresh Benefits follows a utilitarian

approach based on implementing the “right” action or policy that will result in the greatest benefit (or lowest cost) to society (McNabb, 2018). In the CalFresh application process, Department managers follow modern cost-benefit analysis based on principles that carry out e-government policies to optimize cash payment services for applicants receiving CalFresh. The utilitarian approach supports the value of efficiency and a resolution in public administration dilemmas (McNabb, 2018). The researcher will develop ethical standards to test the cost-benefits of introducing new optimization techniques for managers monitoring the effectiveness in introducing a digital platform that is convenient for applicants wanting easier access for other public assistance programs that are not in the virtual phases.

Conclusion

Evaluating and optimizing e-government services is imperative for improving the delivery of services to help government interactions with citizens, businesses and other government agencies (Tsohou, et al., 2013). Considering the amount of information and communications technology (ICT) investments made by national governments, as well as their inherent potential for transforming public services, e-government evaluation is essential for government agencies wanting to underpinned the complexities in bringing technological awareness to the public (Tsohou, et al., 2013). The complexities involved in the e-government evaluation process derive mostly from multiple stakeholders and relevant political, social, and financial interests (Tsohou, et al., 2013).

There are difficulties in quantifying the capacity in building sustainable e-government services in the medium and long terms because there are possibilities in the lack of interest from senior management. This research will help scholars in understanding a new structure to enable seamless access to information and flawless flow in data processing for better integration of e-government services at the state and local government level. Investing in e-government services will increase public-private partnerships for better access to online services in other geographic areas where there is a lack of citizen participation.

This research has attempted to see different research methods during the end-to-end application process for CalFresh benefits. The research study revealed several challenges that warrant further research to develop new e-government topics when local government agencies want to integrate e-government systems to manage other public programs. Future theoretical research can focus on a model that could develop future contributions to analyzing service delivery policies for e-government services (Caillier, 2010). Once there is an understanding of

the data collection, samples, and methodologies when analyzing e-government services, government agencies will be able to implement cost-effective services that ensure accountability with the public.

References

- Ahn, M., & Bretschneider, S. (2011). Politics of e-government: E-government and the political control of bureaucracy. *71*(3), 414-424.
- Alhyari, Salah, Alazab, Moutaz, Venkatraman, Sitalakshmi, Alazab, Mamoun, & Alazab, Ammar. (2013). Performance evaluation of e-government services using a balanced scorecard. *Benchmarking: An International Journal*, *20*(4), 512-536.
- Azmi, A., Ang, Y., & Talib, S. (2016). Trust and justice in the adoption of a welfare e-payment system. *Transforming Government: People, Process and Policy*, *10*(3), 391-410.
- Baldwin, J., Gauld, R., & Goldfinch, S. (2012). What Public Servants Really Think of E-Government. *Public Management Review*, *14*(1), 105-127.
- Buffat, A. (2015). Street-Level Bureaucracy and E-Government. *Public Management Review*, *17*(1), 149-161.
- Caillier, J. (2010). Factors Affecting Job Performance in Public Agencies. *Public Performance & Management Review*, *34*(2), 139-165.
- Dawes, S., Cresswell, A., & Pardo, T. (2009). From “Need to Know” to “Need to Share”: Tangled Problems, Information Boundaries, and the Building of Public Sector Knowledge Networks. *Public Administration Review*, *69*(3), 392-402.
- D'agostino, Maria J., Schwester, Richard, Carrizales, Tony, & Melitski, James. (2011). A study of e-government and e-governance: An empirical examination of municipal websites. (Report). *Public Administration Quarterly*, *35*(1), 3-25.
- Feeney, M., & Welch, E. (2016). Technology–Task Coupling: Exploring Social Media Use and Managerial Perceptions of E-Government. *The American Review of Public Administration*, *46*(2), 162-179.
- Green, D., & Roberts, G. (2010). Personnel Implications of Public Sector Virtual Organizations. *Public Personnel Management*, *39*(1), 47-57.
- Groeneveld, S., Tummers, Bronkhorst, Ashikali, & Van Thiel. (2015). Quantitative Methods in Public Administration: Their Use and Development Through Time. *International Public Management Journal*, *18*(1), 61-86.
- Houston, D., & Delevan, S. (1990). Public Administration Research: An Assessment of Journal Publications. *Public Administration Review*, *50*(6), 674.
- Johnson, G. (2015). *Research methods for public administrators*. London: Routledge.

- Kim, S., & Lee, H. (2006). The Impact of Organizational Context and Information Technology on Employee Knowledge-Sharing Capabilities. *Public Administration Review*, 66(3), 370-385.
- Krishnan, S., & Teo, T. (2012). Moderating effects of governance on information infrastructure and e-government development. *Journal of the American Society for Information Science and Technology*, 63(10), 1929-1946.
- Lawton, A., & Macaulay, M. (2014). Localism in Practice: Investigating Citizen Participation and Good Governance in Local Government Standards of Conduct. *Public Administration Review*, 74(1), 75-83.
- Lawton, J. (2016). Four Critical Success Factors to Effectively Managing Data as an Asset. *The Journal of Government Financial Management*, 65(3), 34-39.
- Loretan, R. (2013). Commentary: Transparency and Trust in Government from the Vantage Point of the International Institute of Administrative Sciences. *Public Administration Review*, 73(4), 586-587.
- Los Angeles County Department of Public Social Services. (n.d.). Retrieved from <http://dpss.lacounty.gov/wps/portal/dpss>
- Li, M., & Feeney, M. (2014). Adoption of Electronic Technologies in Local U.S. Governments: Distinguishing Between E-Services and Communication Technologies. *The American Review of Public Administration*, 44(1), 75-91.
- Manoharan, A., & Ingrams, A. (2018). Conceptualizing E-Government from Local Government Perspectives. *State and Local Government Review*, 50(1), 56-66.
- Manoharan, A., & Mcquiston, J. (2016). Technology and Pedagogy: Information Technology Competencies in Public Administration and Public Policy Programs. *Journal of Public Affairs Education*, 22(2), 175-186.
- McNabb, D. (2017). *Research methods for public administration and nonprofit management* (Fourth ed.).
- Mergel, Ines, & Bretschneider, Stuart I. (2013). A Three-Stage Adoption Process for Social Media Use in Government. *Public Administration Review*, 73(3), 390-400.
- Norris, D., & Reddick, C. (2013). Local E-Government in the United States: Transformation or Incremental Change? *Public Administration Review*, 73(1), 165.
- Porumbescu, G. (2016). Linking public sector social media and e-government website use to trust in government. *Government Information Quarterly*, *Government Information Quarterly*.

- Rotchanakitumnuai, S. (2013). The governance evidence of e-government procurement. *Transforming Government: People, Process and Policy*, 7(3), 309-321.
- Tummers, L., & Rocco, P. (2015). Serving Clients When the Server Crashes: How Frontline Workers Cope with E-Government Challenges. *Public Administration Review*, 75(6), 817-827.
- Tsohou, A., Lee, H., Irani, Z., Weerakkody, V., Osman, I., Anouze, A., & Medeni, T. (2013). Proposing a reference process model for the citizen-centric evaluation of e-government services. *Transforming Government: People, Process and Policy*, 7(2), 240-255.