**CIVIC CROWDFUNDING AND LOCAL GOVERNMENT: AN EXAMINATION INTO**

**PROJECTS, SCOPE, AND IMPLICATIONS FOR LOCAL GOVERNMENT**

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# ABSTRACT

## CIVIC CROWDFUNDING AND LOCAL GOVERNMENT: AN EXAMINATION INTO PROJECTS, SCOPE, AND IMPLICATIONS FOR LOCAL GOVERNMENT

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Recently, through the development of online technology, civic crowdfunding has emerged as a way in which to connect citizens to community problems and projects. The growth and early success of the field underscores the importance of better understanding civic crowdfunding, how it works, and how it may impact local government. Through a mixed-methods design, this study investigates the growing field of civic crowdfunding in an effort to better understand what types of projects are proposed, where they are proposed, and why some civic crowdfunding proposals may be successful while others are not. Strengths and challenges of civic crowdfunding are discussed, as well as implications for participants, local government, and the growth of the field.

The results highlight several different types of projects being proposed on civic crowdfunding platforms with the most prevalent being sustainability projects. These projects are generally low in cost, non-controversial, and visible within the proposing community. The results further reveal money and engagement to be the most important factors in determining project success. The lower the project goal, the more money raised, and the more individuals participating in a given campaign all have significant impacts on whether a project proposal achieves its funding goal. Finally, implications are discussed and ideas for future research are offered.

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**CHAPTER 1**

**INTRODUCTION**

Local governments today face many challenges regarding public finance, service delivery, and civic engagement that are both new and unique. Many of these issues have either been brought on or magnified in the aftermath of the Great Recession and now pose a number of difficult and necessary questions for local government involving issues that are likely to hang around long after the economic recovery (Martin, Levey, & Cawley, 2012). Should local governments continue the recent trend toward privatization of services, even amidst questionable success, or should it reassert itself "with new models for regional integration, public finance, and service delivery that emphasize a public role?" (Warner, 2010, p. 145). Furthermore, can local government overcome the cultural inertia that has seemingly plagued government innovation in the digital age and design mechanisms to ensure public value amidst new and emerging challenges?

Technological innovations such as Facebook, Twitter, and a series of mobile applications are connecting citizens to their public servants in a number of new and exciting ways; making these questions all the more timely and important (Bryson, Crosby, & Bloomberg, 2014). At the same time there has been a growing movement within the country aimed at greater representation and inclusiveness for all individuals within the process of government. The role of government thus becomes one where the public interest in tantamount and the achievement of values such as fairness and equity become the primary purpose (J. Denhardt & Denhardt, 2003). This refounding movement has been termed the New Public Service. This study looks at this intersection of representativeness and technological innovation by examining civic crowdfunding, a promising recent innovation, through the lens of the New Public Service. Civic crowdfunding and its role as a service delivery mechanism has shown potential to increase public

involvement, create public value, and also address budgetary and finance issues that have plagued local government in recent years (Davies, 2014). This research provides an overview of the field of civic crowdfunding and explains what types of projects are undertaken, what projects are successfully funded, and also what factors lead to successful projects. By examining civic crowdfunding through the lens of the New Public Service, relevant concepts can be applied in order to provide insight into representativeness, engagement, public interest and the creation of public value while also highlighting how these concepts work within the domain of civic crowdfunding and emergent tools and technologies.

"Civic crowdfunding is a sub-type of crowdfunding through which citizens, in collaboration with government, fund projects providing a community service" (Stiver, Barroca, Minocha, Richards, & Roberts, 2014, p. 2). Civic crowdfunding can be conceptualized as the crowdsourcing of fiscal resources to address a particular community need. "Crowdfunding allows founders…to fund their efforts by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries" (Mollick, 2014, p. 2). To date, crowdfunding has been a predominantly private-sector activity, in which ideas and projects are pitched to potential investors through online hubs that circumvent the traditional bank/investor process. The "private" sector crowdfunding described above often hinges on the exchange of a tangible good in return for a donors investment. These types of projects provide incentive for donors through the promise of tangible rewards. Platforms such as GoFundMe, Kickstarter, and IndieGoGo offer networks in which individuals can fundraise project development as well as personal and non-profit causes. Ultimately the success of the project is determined by the public's willingness to invest in it.

The field and the literature are very much in their infancy at this point and attempts at theoretical development are ongoing. This work draws primarily from the domain of New Public Service to provide insight and explanation into civic crowdfunding as a new model of engagement and resource development. The New Public Service calls for a reaffirmation of democratic values through a series of principles organized around the public interest and democratic citizenship (J. Denhardt & Denhardt, 2003). Public administrators should strive for greater civic engagement through the use of tools, practice, and process (Bingham, Nabatchi, & O'Leary, 2005). Civic crowdfunding can be viewed as a product of or further response to network governance and a tool that has the potential to better connect citizens with government and create public value.

As crowdfunding has become more successful over the last few years, local governments have begun to consider it as a potential mechanism by which to fund projects and generate resources that may not otherwise be possible. The term crowdfunding generally refers to private sector enterprise; civic crowdfunding on the other hand is an offshoot that focuses predominantly on community improvement and civic minded projects, proposals can come from any number of actors but the common theme is the development of public assets and creation of public value. Proponents argue that civic crowdfunding is a better, more effective way to connect citizens with government in the 21st century (Davies, 2014). Not only do such platforms increase democratic citizenship and community, they also have the potential to help curb budget shortfalls in cities across the country. Despite the increasing prevalence and potential utility, there remains little attention paid to civic crowdfunding and its viability as an alternative funding mechanism and resource generator for local government in the academic literature.

The purpose of this study is to examine the role of civic crowdfunding in public administration and local government in an attempt to better understand the types of projects that ultimately get funded, where the money comes from, and what makes some projects successful while others fail. Collectively this work contributes to the small, but growing literature on civic crowdfunding, and could have potential positive implications for scholars who are interested in emergent technology and local government, and also for practitioners who are focused on the utilization and viability of crowdfunding as a potential revenue and resource generator. Through the lens of New Public Service, this work also provides insight into how new models of engagement, focusing on responsiveness, public interest, and community inform and advance the knowledge of the field of public administration.

**Research Questions**

In an attempt to better understand the scope, and potential utility of civic crowdfunding projects for local government this study asks the following research questions regarding project type and project success:

**Project Type:** What projects do conveners attempt to fund through civic crowdfunding platforms? What type of projects actually get funded? This refers specifically to the different project categories proposed on each platform. For example, a proposal may be for an infrastructure improvement, an after school program, or a neighborhood cleanup; the possibilities are many, but they can generally be categorized into a select grouping explaining the general purpose. This question not only provides information on the specific projects proposed and funded but also offers insight into the public interest and community responsiveness.

**Project Success:** Defining success as a fully funded project, what factors influence project success? What are the characteristics of both funded and unfunded projects? Answering

the question of project success provides critical information for those interested in a crowdfunding initiative while also revealing information on the interests and preferences of the public.

**Justification for the Study**

To date there has been slow but steadily growing attention in the academic literature given to the subject of crowdfunding; however, when looking at civic crowdfunding specifically this number shrinks considerably. In terms of the existing literature, few have examined crowdfunding from a local government and policy perspective. Much of what has been done is typically small observational case-studies with little theoretical grounding. Some of the reason for this can be attributed to both the newness of the field and also the general diversity and difficulty in gathering empirical data.

A recent study (and one of the first to gather data on civic crowdfunding projects) defined civic crowdfunding projects as something that may "involve either directly or indirectly, the use of government funds, assets or sponsorship, which may include the development of public assets" (Davies, 2014, p. 17). This definition illustrates the complexity and inherent difficulty in defining and differentiating civic crowdfunding projects (and the role of government) from other more general projects. As Davies (2014) highlights, many civic crowdfunding projects are not directly sponsored by local government or its representatives but are termed as such for the development of public assets and public value that they may create. This analysis focuses on these types of projects which directly or indirectly create public value.

To date, Davies (2014) study has been the most comprehensive examination into civic crowdfunding, particularly the potential benefits and challenges associated with it. Davies (2014) collected data across seven general and civic crowdfunding platforms in the United States, South

America, and Europe through platform categorization tags. This included projects convened by individuals, community organizations, non-profits, and local government in an attempt to begin to draw conclusions about project characteristics and opportunities and challenges for civic crowdfunding. Others such as Stiver, Barroca, Minocha, Richards, and Roberts (2014) as well as Zuckerman (2012) have outlined the field, highlighting strengths and weaknesses while laying out a course for future research. This study builds and expands on the work of Davies (2014) and others by examining new theoretical angles in an effort to further explain civic crowdfunding success. Davies (2014) examined platforms across the world, and the focus of this study is uniquely American, offering additional insight into how civic crowdfunding works within the American context. This study also further examines project success than has been previously done by Davies or others. Davies, in perhaps the most thorough examination to date, focused specifically on the size and scope of the field, offering general descriptive statistics and characteristics followed by a series of "edge" case studies.  This study attempts to place the burgeoning field within the public administration literature, and offers a more substantial quantitative analysis and evaluation of the drivers of project succes than has previously been done.

This study examines civic crowdfunding through both a project proposal content analysis as well as a corresponding quantitative analysis in order to both provide an in-depth overview of the field, as well as a look at the specific drivers of project success, which has not been addressed on this scale previously. These methods allow for both a number of empirical findings that impact civic crowdfunding and also have broader implications related to new models of engagement and responsiveness and how they fit within the New Public Service and in the field of public administration. Focusing solely on the American context this study examines projects

convened by community organizations, non-profits, and local government, as well as those that have partnered with public officials and/or their representatives.

By gaining insight into what makes civic crowdfunding projects successful and better understanding the process and the contribution of funds we can better understand and articulate the strengths of successfully funded projects. This knowledge helps to further the academic and professional development of civic crowdfunding. First by examining theoretical linkages to the New Public Service and the field of public administration it provides insight into new modes of representation for the field and not only how it can be informed by existing theory but also how it informs the field as well. Secondly this research provides practitioners information on how to better utilize civic crowdfunding all the while reducing the potential for waste and inefficiency.

**Data and Analysis**

There are no known databases or available existing datasets examining civic crowdfunding. All data are collected directly from the original source platforms and only includes completed projects, specifically projects that have run the course of their funding proposal deadline, including both successfully funded and unsuccessful projects. There are 226 projects that meet the criteria and have been analyzed from the two primary civic crowdfunding platforms, Citizinvestor and ioby. Despite their differences, each platform requires thorough descriptions of the project proposals, goals, timeframes, and other pertinent information.

Content analysis is performed on the platform data to answer the questions of project type and project success. In addition to the content analysis, a quantitative regression analysis is employed to better answer the second research question, the factors influencing project success. The unit of analysis in each case is the specific and individual civic crowdfunding projects.

**Summary**

  As crowdfunding continues to grow in scope and depth across the country the implications and promise for both government and citizens are many. When done successfully, civic crowdfunding has the potential to be an alternative service delivery mechanism for government; one that has the ability to make government more responsive, give citizens greater voice, and fund a number of projects that might otherwise fall by the wayside.

  This research contributes to the growing field by attempting to explain what types of projects are undertaken and what projects are generally funded and whether certain factors lead to successful projects. Potential implications include the creation of public value, increased engagement, and additional insight into how new models of technological innovation may impact local government service delivery.

  The next section of this work provides a review of the literature, highlighting the research problem, detailing the background and development of civic crowdfunding, and also the potential outcomes and implications for government and stakeholders alike. The New Public Service literature, based on the foundation of democratic citizenship is then introduced to provide the underpinning of the theoretical framework used to structure and guide the analysis. A discussion of contemporary challenges for local government follows as well as the potential benefits of civic crowdfunding. Finally, implications are discussed for both administrators and individuals participating in a civic crowdfunding project.

**CHAPTER TWO**

**LITERATURE REVIEW**

With the continued success of crowdfunding platforms, including IndieGoGo and Kickstarter over the last few years, there has been a growing trend in applying the private-sector crowdfunding ideals to public-sector problems. While this innovation has been significant, the potential of utilizing technology to improve responsiveness and service delivery is just beginning to be realized in the public sector (Tapscott & Williams, 2008). Civic crowdfunding has the potential to increase transparency and responsiveness while also upgrading infrastructure and providing community benefit (Brito, 2008; Davies, 2014). This section provides background and context through a review of the extant crowdfunding literature. New Public Service as well as additional literature on civic engagement, public value, and network governance are then introduced and incorporated as the theoretical underpinnings that inform and ground the study in the field of public administration.

**The Wisdom of the Crowd**

The wisdom of the crowd, as James Surowiecki (2005) explains, is the occurrence where under particular circumstances, group intelligence is greater than that of even the smartest members of the crowd. Brabham (2009) refers to the wisdom of the crowd as the result of crowdsourcing, a way in which to utilize the resources of the crowd to create value. A predominantly private sector concept increasingly used in the public sector, crowdsourcing provides a number of potential benefits for public administrators. Crowdsourcing data and information are made possible by the growth of information technology, allowing for the leveraging of the wisdom and resources of the crowd through the linkage of existing institutions

with democratic and collaborative governance processes (Bryson et al., 2014; Tapscott & Williams, 2008).

In an increasingly networked society, collective decision making is imperative (Ansell & Gash, 2007; Conley & Moote, 2003; Leach, Pelkey, & Sabatier, 2002; Margerum, 2002; Thomson, Perry, & Miller, 2009). Collective decision making is essentially the process of group decision making; the old adage two heads are better than one applies here. Having structures in place to promote collective decision making can serve to reduce the risk of fraud and negligence, promote transparency and representation, and simultaneously increase cooperation and participation (Ansell & Gash, 2007; Leach et al., 2002; McNamara, 2012; Thomson et al., 2009). In addition, utilizing the wisdom of the crowd for collective decision making can also increase efficiency while reducing cost (Schwienbacher & Larralde, 2010).

Surowiecki (2005) asserts that group intelligence is almost always superior to that of an individual. While crowdfunding has the potential to leverage group intelligence in a positive manner (much more so in civic crowdfunding projects) in both project convening and funding phases, it can be complicated. Crowdsourcing is a broad term that implies the use of the crowd's wisdom or resources to address an issue. Crowdfunding on the other hand is focused solely on connecting the financial resources of the crowd to a particular issue or need. The two concepts can vary substantially, yet the common theme between both is the reliance on the resources of the crowd.

If designed properly, crowdsourcing can be more democratic due to the lower cost of entry, whereas to participate in a crowdfunding campaign, an interested individual must have available and disposable capital and perhaps little else. In crowdfunding campaigns, other factors come into play such as marketing and technological savvy that can impact influence and support.

Crowdfunding can be a closed environment where other than collectively funding a proposal there may be little other collective impact. Civic crowdfunding, as a traditionally more local, ground-level process does, offer additional ways to utilize collective decision making; yet still it is not guaranteed and requires substantial foresight by convening members in order to design proper feedback channels and involvement opportunities in order to take advantage of the crowds collective wisdom. Ultimately both crowdsourcing and crowdfunding are about utilizing the resources of the crowd, the challenge, however, for civic crowdfunding is how to best incorporate the more democratic principles of crowdsourcing and create a more open environment in which citizens can participate.

**Collective Intelligence and Public Value**

The key to utilizing the crowd's collective intelligence to achieve high level system performance often hinges on the presence of four characteristics within the participants: diversity of opinion, independence, decentralization, and aggregation (Surowiecki, 2005). Collectively these characteristics help to ensure a well-balanced group with high collective intelligence (Surowiecki, 2005) that are better able to solve complex problems (Howe, 2008).

The first characteristic, diversity of opinion highlights the weighing and consideration of all possible solutions to a problem, not simply the status quo in an effort to maximize a groups collective intelligence (Surowiecki, 2005). The second characteristic, independence is important to effective collective decision making for two primary reasons. Independence mitigates the potential that errors in individual judgment will become systemic while also increasing the likelihood for new and different perspective among stakeholders (Surowiecki, 2005). The third characteristic of high level system performance is decentralization. Decentralization affords substantial autonomy and responsibility to individual actors. Decentralization further

"encourages independence and specialization…while still allowing people to coordinate their activities and solve difficult problems" (p. 71). The fourth and final characteristic of high level system performance in group setting is aggregation. Aggregation can increase efficiency by offering more complete information than may otherwise be available to the individual.

Characteristics traditionally equated with productive hierarchical organizations, such as structure, chain of command, authority, cooperation, and cognition, can serve to limit creativity and inhibit the wisdom of the crowd in large networked activities (Surowiecki, 2005). As technology and the various growth and stages of the internet have continued to evolve, it has had a profound effect in reshaping traditional business organization and structure over the last two decades. Now government and other more deeply-ingrained institutions are beginning to show signs of adopting and embracing the possibilities and utilizing the crowd in large and loosely drawn collaborative networks (Bryson et al., 2014). Unlike in traditional organizational structure, many of these networks rely on a number of potential contingencies (Hartley, Sørensen, & Torfing, 2013). Such contingencies "take the focus beyond solely efficiencies in innovation processes toward thinking about the viability and appropriateness of particular innovation strategies" (Hartley et al., 2013, p. 828). A number of factors have contributed to this; chief among them is the growth of the internet as not just a platform for collaborative thought but also a facilitator of such thinking (Brabham, 2008a).

By articulating the interests of the public (something that technology has increasingly allowed for) in a fair and representative manner, administrators are able to achieve what Mark Moore (1995) terms as public value. Public value success and the creation of public value are things that should guide administrative decision making through more responsive and engaging efforts to better provide services demanded by the public (Moore, 1995). Public value can be

thought of as the general equivalent to stakeholder value for the public sector, in which the articulation of the collective interest of the public determines the course of the public sector (Moore, 1995). Public value can be complicated and difficult to measure and assess in a timely manner. As a result, public value is often examined broadly; this is in direct contrast with economic values, which have traditionally driven conversations of resource allocation (Bozeman, 2007). The universe of public values is complex and dynamic, made up of seven core nodal values (in addition to many other less central themes): human dignity, sustainability, citizen involvement, openness, secrecy, integrity, and robustness (Jørgensen, & Bozeman, 2007). Collectively these values make up the core components of public value and also create a number of interesting challenges for organizational design due to their conflicting and contradictory nature (Jørgensen, & Bozeman, 2007).

In the 21st century, creating public value involves more than just the public sector; it requires strong leadership willing to facilitate collaborative partnerships with the business and non-profit communities. It involves shared resources and letting each sector highlight strengths while mitigating weaknesses. For the public sector, this includes "providing the regulatory framework and flexibility needed to make things happen, the private sector providing the investment capital and expertise to develop projects, and the nonprofit sector providing the institutional attractions and creative energy to draw people to a place" (Fisher, 2014, p. 463).

Size and diversity of the population are often critical to network (Howe, 2008) and public value success. In attracting large diverse networks of stakeholders, high levels of social capital are imperative (Ansell & Gash, 2007; Bryson, Crosby, & Middleton-Stone, 2006; Ferreyra & Beard, 2007; Gray, 1985; Innes & Booher, 2003; Mandarano, 2008). Diversity is a trait of the crowd that should be actively sought; the larger and more diverse the network of stakeholders,

the better able the crowd is to come up with appropriate aggregate solutions for the problem (Ansell & Gash, 2007; Brabham, 2009, 2010; Gray, 1989; Seltzer & Mahmoudi, 2012; Surowiecki, 2005).

Creating public value and the articulation of the public interest should not be viewed solely from a macro local government level or as an all or nothing process. The efforts of public managers and other civil servants, such as the librarian according to Moore's (1995), highlight how each individual administrator can create public value within their sphere of influence by being more democratic, transparent, and ultimately creative in their service of the public. Technology has increasingly made this easier through a number of platforms and outlets that bring together opinion, resources, and other materials that can help to create better targeted and ultimately more efficient offerings (Quittner, 2012).

Despite the potential and increasing prevalence of crowdsourcing information, the wisdom of the crowd is something that Surowiecki (2005) notes is often misunderstood or underappreciated. For all of the positives attributed to collective intelligence and the wisdom of the crowd, these new facilitative mechanisms also have the potential to discriminate and oppress in ways not previously possible (Brabham, 2008a). This can lead to what Bozeman (2002) terms as public value failure; specifically in the case of crowdsourcing, when the mechanisms for value aggregation are compromised. Bozeman's (2002) definition highlights the breakdown or lack of sufficient structures and processes necessary to ensure the integrity of the process, information, and true intent of the public resulting in public value failure. In order to protect against this threat and others Clark, Zingale, Logan, and Brudney (2016) caution that a number of measures must be taken before utilizing crowdsourcing as a component of policymaking. These include employing a healthy dose of skepticism and understanding the crowd can and will be wrong;

depoliticizing the crowdsourcing environment through greater efforts at transparency; and overcoming institutional bias in a manner that allows for the organization to best take advantage of the crowd's wisdom. Ultimately public value failure is a legitimate concern in the provision of goods and services through the aggregation of information and resources. Every effort must be made by administrators to ensure the integrity of the process by designing systems and channels that take into account potential concerns and mitigate them to the greatest extent possible.

**Crowdsourcing and Crowdfunding Defined**

Conceptually crowdsourcing is a broad term; it implies the leveraging of the tools, talents, and resources of the crowd to solve any number of problems. Crowdfunding, on the other hand, depends less on the knowledge of the people and more specifically on the size of their pocketbook (Howe, 2008). Crowdsourcing applies in many arenas and can take many different forms but ultimately it describes a form of resource allocation. Crowdfunding on the other hand shares one major similarity in that it too is a way in which to aggregate and distribute resources, albeit solely financial ones. In addition, both areas leverage new forms of technology and networks that have grown significantly in size over the past decade, yet neither are exclusively bound by technological advance. Despite the general similarities there are also substantial divides that exist between crowdsourcing and crowdfunding as the text below begins to discuss.

Crowdsourcing was first referenced in describing the recent increase in open source, collaborative, technology-driven networks by Jeff Howe in a 2006 article for Wired magazine (Brabham, 2008a, 2013; Kleemann, Voß, & Rieder, 2008; Seltzer & Mahmoudi, 2012). In the article, Howe (2006) described emerging online platforms that were springing up as a way to connect entrepreneurs with a talented and often cheap labor force. In a sense it was a modern extension of outsourcing, only technological innovation now permitted entrepreneurs of any size

to not just outsource overseas but to crowdsource globally (Howe, 2006). The process described

by Howe (2006) of connecting businesses with citizens capable of contributing a variety of

resources is one that has grown significantly since the article's initial publication date. It has led

to a book deal for Howe and spurred a number of additional experts and innovations in online

collaborative platforms. As quickly as crowdsourcing has grown, and as commonplace as it may

be now in new media factions, debate remains over what truly constitutes crowdsourcing.

Crowdsourcing is built around leveraging the resources of the crowd to meet a certain

and specific need or demand whether it be public or private. Although the concept is generally

agreed upon, when reviewing the literature it quickly becomes apparent how diverse and

ambiguous many crowdsourcing definitions are. In an attempt to address this, Estellés-Arolas

and González-Ladrón-de-Guevara (2012) reviewed over 200 documents, which contained over

40 distinct definitions of crowdsourcing. With everything taken into consideration, Estellés-

Arolas and González-Ladrón-de-Guevara (2012) concluded that crowdsourcing is:

> A type of participative online activity in which an individual, an
> institution, a non-profit organization, or company proposes to a
> group of individuals of varying knowledge, heterogeneity, and
> number, via a flexible open call, the voluntary undertaking of a
> task. The undertaking of the task, of variable complexity and
> modularity, and in which the crowd should participate bringing
> their work, money, knowledge and/or experience, always entails
> mutual benefit. The user will receive the satisfaction of a given
> type of need, be it economic, social recognition, self-esteem, or the
> development of individual skills, while the crowdsourcer will
> obtain and utilize to their advantage what the user has brought to
> the venture, whose form will depend on the type of activity
> undertaken (p. 197).

The process described above is a mixture of top-down and bottom-up collaboration in

which both the organization and the crowd can both have a direct impact on the process and

outcomes (Brabham, 2013). The process is spurred by online technological innovations and

individual participation; without participation crowdsourcing fails to exist. This is where societal

need and even marketing can play an important role in the crowdsourcing process. There must be enough incentive to make individual participation worthwhile for the process to work (Seltzer & Mahmoudi, 2012).

Crowdsourcing holds many possibilities for innovative product development; however, Seltzer and Mahmoudi (2012) caution that in order to be successful, significant resources need to be dedicated throughout the process by the sponsoring organization and warn that crowdsourcing "is not a substitute for other, more formal channels" of funding and service delivery (p. 9). In order to best utilize the benefits of crowdsourcing data and information, roles, boundaries, and limitations must be acknowledged and understood by those collecting the data (Clark, Zingale, Logan, & Brudney, 2016).

Crowdfunding is about results, an initiative has to sell itself to the funding public; each donation decision regarding a proposal serves as a barometer of public opinion and an indicator of preference revelation. In crowdfunding the primary focus in on raising capital to address whatever issue is being targeted; whereas crowdsourcing focuses on the aggregation of resources that take many different shapes and forms. Crowdfunding also has a greater barrier to entry than crowdsourcing, as capital is the chief requirement to participate. Even then, wealth does not ensure participation, a number of other factors play a role.

This goes back to concerns of public value failure raised earlier regarding crowdsourcing in that if a good or service is designed and produced by one segment of society specifically for that segment is it truly non-exclusive. With regard to crowdfunding this concern and the risk for manipulation can be even greater. Despite these concerns, crowdfunding has a number of potential benefits. By gauging citizens' willingness to pay for particular goods and services through online platforms, it may offer unique insight beyond the more common measures of

voting behavior and citizen surveys in explaining citizen participation and preference and the role that technology is increasingly playing upon them (Robbins & Simonsen, 2002).

Effective public participation hinges on having an informed citizenry (Jordan, Yusuf, Mayer, Mahar, 2016). Increasingly, the use of technology and digital media sources have become a primary source of information exchange between administrators and citizens; the use and embrace of this media has ushered in a new form of "participatory civics" (Zuckerman, 2014). "One of the characteristics of this version of civics is an interest—perhaps a need—for participants to see their impact on the issues they're trying to influence" (Zuckerman, 2014, p. 156).

Both crowdsourcing and crowdfunding fit the bill as new modes of participation that are significantly reliant on technology and digital media; each with the potential to promote more democratic processes by bringing in substantial numbers of the citizenry who may be otherwise disengaged from the traditional political process (Zuckerman, 2014), all the while promoting flatter organizations by bringing individuals directly into the decision making process (Howe, 2008).

The great promise and challenge of taking advantage of collaboration and innovation in government lies in how to best empower the citizenry. Collaboration is a challenge and requires substantial foresight (Mayer & Kenter, 2015). In order to properly engage and take advantage of the benefits and resources of the crowd, it ultimately becomes a matter of organizational design (Noveck, 2009). As is the case with any new technology, especially one that has the potential to connect people in ways previously not possible, there is cause for concern. Critics argue "that opening up channels of participation would create a whole new class of online lobbyists and campaigns that participate to serve their own financial interests," ultimately increasing

corruption and further alienating an already weary citizenry (Noveck, 2009, p. 41). Given such concerns great care must be taken to safeguard against such a scenario by implementing measures that through a combination of design, technology, and delegation both serve and empower citizens for the benefit of all (Noveck, 2009). This can include the incorporation of feedback loops, design sessions, digital and face to face interaction and other methods aimed at increasing transparency and involvement.

This is in line with what Denhardt and Denhardt (2000) call the true responsibility of public servants: "to serve and empower citizens" (p. 549). Public institutions should be both founded and maintained through integrity and responsiveness (R. Denhardt & Denhardt, 2000), two traits imperative to successful crowdfunding projects. Increasingly this level of inclusion and the growing transparent connectivity are accomplished through a number of new civic crowdfunding platforms (Agrawal, Catalini, & Goldfarb, 2013; Belleflamme, Lambert, & Schwienbacher, 2013; Griffin, 2012; Hemer, 2011; Mollick, 2014; Schwienbacher & Larralde, 2010). Ultimately, such platforms have the capability to serve as both an alternative to traditional methods of funding services as well as a way in which to increase democratic citizenship and build trust between the citizenry and the government.

To date, many view crowdfunding as an extension of crowdsourcing; this can partly be attributed to the developmental nature of the literature; however, this by no means discounts the potential utility and growth taking place within the field today (Hemer, 2011; Schwienbacher & Larralde, 2010). As an emerging field, crowdfunding has often been used synonymously with crowdsourcing, and there have been a number of conflicting attempts to define it (Mollick, 2014). Crowdsourcing is the more broad term that applies when utilizing the resources of the

crowd to address an issue. Crowdfunding on the other hand is concerned solely with raising capital.

Griffin (2013) defines crowdfunding as "a means of capital formation that connects entrepreneurs with investors over the internet" (p. 1). In this scenario crowdfunding projects are essentially the property of those creating the proposals and offering the service; in civic crowdfunding joint ownership is more common where those proposing the projects often work more closely with funders on final project details and delivery. Belleflamme, Lambert, and Schwienbacher, (2013) define crowdfunding as "an open call, essentially through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights in order to support initiatives for specific purposes" (p. 8).

Much like with the challenges in defining crowdsourcing, many agree on the general parameters: connecting investors to projects through digital networks and the need for tangible and intangible incentives. Where the disagreement comes in is regarding specific attempts to define crowdfunding. The definitional issue is not unlike the famous quote from Supreme Court Justice Stewart when asked to define pornography, to which he responded, "I know it when I see it" (*Jacobellis v. Ohio 378 U.S. 184*, 1964). This definitional ambiguity is not new or surprising in a developing field and literature; as Mollick (2014) notes, at this stage, definitions may be more limiting than anything.

Ultimately crowdfunding could not exist independently of crowdsourcing. Crowdfunding is an extension of crowdsourcing that looks at one specific resource of the crowd, capital. The recent growth and success of crowdfunding has led to its increased application in a number of different settings. The primary focus of this inquiry is the increasing development of crowdfunding as a potential for alternative funding of service delivery at the local level.

**Crowdfunding, a History**

Crowdfunding is the process of appealing to and leveraging the resources of the crowd to better achieve a particular goal or project (Brabham, 2013). This is typically done through different online platforms in which organizers can "pitch" their ideas to a community of potential investors.

There are four commonly accepted categories of crowdfunding projects: equity, lending, reward, and donation based (Massolution, 2012). Equity-based crowdfunding, where investors receive some sort of compensation or revenue sharing is the most highly regulated and in turn the least common of the four (Massolution, 2012; Mollick, 2013). Lending-based crowdfunding is when investors receive periodic repayments on their initial investment and is typically the business model of micro-lending organizations such as Kiva (Mollick, 2013). Reward-based crowdfunding is one of the more common methods of crowdfunding and often involves the investor receiving some sort of reward for their investment. This reward can range from any number of potential things, from an exclusive album release in private-sector crowdfunding to opportunities to join in on celebratory ribbon-cutting ceremonies in civic crowdfunding (Massolution, 2012; Mollick, 2013). This is the model typically followed by IndieGoGo and Kickstarter. Finally, donation-based crowdfunding (sometimes referred to as the patronage model) is the most commonly used public sector method. It involves investors donating to a cause without the expectation of compensation in return (Belleflamme, Lambert, & Schwienbacher, 2013; Massolution, 2012; Mollick, 2013). In this conception the incentive is often a sense of pride, compassion, or duty but there is rarely a tangible mutual benefit. This is often the type of civic-minded, citizen-led response that follows natural disasters such as Hurricane Katrina or the Indian Ocean Tsunami. Typically this sort of philanthropic giving is

done by individuals to support a community benefit (Baeck & Collins, 2013), and as Lambert and Schwienbacher (2010) highlight, social reputation and status seem to be of greater import than financial reward.

To date many of the projects proposed on crowdfunding platforms have been private-sector enterprise. Crowdfunding platforms in general have experienced a great deal of success and notoriety over the last few years, evidenced by total revenues increasing from around $1 billion in 2010 to $2.7 billion in 2012 (Esposti, 2012) to over $10 billion in 2014. This level of growth coupled with the economic struggles experienced by many localities across the country over the same time has led many cash-strapped local governments to look toward the crowd as a potential means of supplementing their budgets (Fundable, 2015). Civic crowdfunding can be loosely traced back for centuries in America. Much of the public support and financing of the Revolutionary War effort, the funding of the Statue of Liberty pedestal, and the Liberty and War bonds of World War One and Two were crowdfunded. The primary difference with the current incarnation is it is less an issue of pressing need or national emergency as it is one of preference revelation through new and developing technology that while still emerging, offers potential for greater civic engagement and involvement in the business of government (Zuckerman, 2014).

One of the most commonly-cited early examples of civic crowdfunding is Joseph Pulitzer's campaign to fund the Statute of Liberty pedestal. When Bartholdi delivered the statue as a gift from the French, America was in the midst of the reconstruction period following the Civil War. This time was characterized by great economic strife that lasted for much of the remainder of the century. As it was, when the statute was delivered unassembled, it remained that way for some time as stakeholders differed on how to best display it and more prominently how to fund the reconstruction and pedestal needed for proper display. Capitalizing on the

confusion and opportunity, newspaper magnate Joseph Pulitzer took out advertisements in one of his newspapers urging citizens to contribute what they could to help fund and display the monument. With each donation that came in, the donor would be recognized in the subsequent issue of the newspaper. In addition to capitalizing on civic pride, this form of recognition appealed to an individual's extrinsic motivations for supporting the project. Ultimately more than 160,000 individuals contributed donations of at least a dime raising over $100,000 in 1885 (equivalent to more than $2 million in 2015) in a period of less than six months. "If launched today, the campaign would be understood as a quintessential crowdfunding campaign: an initiative that uses a single collection point to raise money from a very large pool of donors pledging amounts from pocket change upwards" (Davies, 2014, p. 33).

Pulitzer's crowdfunding of the Statue of Liberty assembly and pedestal is perhaps one of the largest examples of civic crowdfunding in the country's history (Davies, 2014). In making that statement, it is important to distinguish crowdfunding from traditional donation-based giving. The biggest difference between this example and more common philanthropic giving to campaigns like the United Way or the Red Cross is rooted in the specificity and transparency of the efforts. More traditional fundraising campaigns are often carried out with a broad theme and once the funding period ends, that money is distributed to different causes by the organization as they see fit. In crowdfunding campaigns, there is a much greater degree of transparency because funding requests specifically spell out how all funds will be utilized. This in turn gives potential donors a much more active role (since there are often a number of different ongoing projects) in determining how their money will be spent. This transparency is perhaps one reason why Pulitzer's campaign was so successful; having made more progress in a few months' time than had been accomplished in the entire decade prior. Despite the success of Pulitzer's campaign,

crowdfunding was not viewed as much more than a niche funding strategy until the 1990s with the further advancement of digital technology and the internet (Hemer, 2011).

One of the earliest examples of crowdfunding in the digital age comes from the British rock band Marillion. In an effort to appease American fans requesting a United States tour and not wanting to pay the up-front costs of said tour, the band turned to fans to help fund it. By detailing the proposal on their website and reaching out to fans at concerts, through emails, and through other avenues, the band was able to raise over $60,000 in just a few months; more than enough to finance the requested tour (Marillion, 2014). Perhaps more impressive is that this happened in 1997 at a time when the internet was in its infancy and social media looked very different than it does today.

With the success of Marillion's funding effort other individuals and organizations set out to recreate the band's achievement. First, there was Donors Choose, an online funding platform that connects individuals to teachers and classrooms in need of resources and supplies (Davies, 2014). The platform allows teachers in any district throughout the country to request needed supplies through their online catalogue. Teachers request supplies, state why they are needed and how they will be put to use and appeal to potential funders wanting to help increase educational resources to the nation's children. Once proposed, a representative from Donors Choose contacts the school district to verify and ensure everything checks out before posting the request to their platform. If a project is fully funded over a certain period of time, the supplies are then purchased and delivered to the classroom. If not, no funds are ever debited from the individual donor's account. The platform itself makes money by charging a small service fee on top of donations, and making all purchases funnel through their approved vendors.

Soon after, the emergence of Donors Choose, ArtistShare, SellABand, IndieGoGo, and Kickstarter emerged as potential funding ventures for the creative arts. The latter two have since evolved into open platforms where any creative idea can be pitched to a number of regular contributors and investors. Since the debut of ArtistShare in 2003, crowdfunding platforms have increased in funds each year (Fundable, 2014) with Kickstarter becoming the largest and most successful platform with nearly $1 billion in funds going toward full-term projects since its inception in 2009 (KickStarter, 2014).

With the mainstream success of IndieGoGo and Kickstarter and the passage of the Jumpstart Our Business Startups (JOBS) Act, the support of crowdfunding platforms has received a major boost in recent years. The JOBS Act updated provisions of the nearly 80 year-old Securities Act by easing investment and general solicitation regulations related to small businesses. Under the Securities Act it was illegal to solicit and advertise for startup capital, most startup capital was acquired through traditional banks and other credit and investment firms. Furthermore the sale of securities was strictly forbidden unless previously registered with the Securities and Exchange Commission (Jensen, 2013).

In an effort to stimulate economic growth, the JOBS Act rolled back these restrictions related to business investments under $1 million dollars, potentially opening the door for greater partnership exchanges and investments in addition to the traditional donation and rewards based models. In addition the JOBS Act allows entrepreneurs to legally solicit and advertise for investors (Jensen, 2013). First, by making it much easier for entrepreneurs to seek investors, it altered the existing finance structure for raising capital. Banks were no longer a necessary part of the equation, and in many cases resources are offered purely as a gift with no expectation of return or interest. Second, after the legislation and rapid growth within the industry, local

government and other civic organizations began to take note and get involved. The resulting organizational shift in these jurisdictions has led to the creation of increasingly flat, responsive, democratic organizations that are gradually more able to bridge budgetary funding gaps by appealing to their constituents through civic crowdfunding projects and platforms (Howe, 2008).

Soon after the passage of the JOBs Act, a number of new niche crowdfunding platforms began to spring up. Hemer (2011) equates this growth to the increased societal acceptance of crowdfunding platforms and the view that crowdfunding can be a legitimate funding stream at best, and a complimentary one at worst for any number of projects. Much of the new growth in the United States has been in civic crowdfunding. Early examples of civic crowdfunding can be found throughout the United Kingdom and a few other countries in Europe with more relaxed funding regulations.

The basic premise of civic crowdfunding is very much the same as the startup and private-sector platforms with the primary discernible difference being that these new platforms focus exclusively on community improvements. Ultimately the successful funding of any one particular project is determined by the public; a fact not lost on those advocating for crowdfunding as a more representative manner with which to allocate goods and services (Davies, 2014). For the most part, the government, or generally a representative of it, is tasked with soliciting input, formulating plans, and estimating budgets required to pitch the proposal. When a project goes "live" on a platform, it remains there for a set period of time during which any interested party can essentially "vote" with their dollars on its potential efficacy (Davies, 2014). If the requested project budget is met, the funds are then charged and distributed to the organizing agency. If a project receives partial funding, typically the local government or

organizing body will have to decide if it wants to make up the difference. If it chooses not to, funds are released back to individual investors.

| Table 1 - Overview of Generic and Civic Crowdfunding | | |
|---|---|---|
| | **Generic Crowdfunding** | **Civic Crowdfunding** |
| **Overview** | Leverages resources of the crowd for a variety of purposes. | Leverages resources of the crowd for community benefit. |
| **Common Uses** | Many, uses from business seed money to creative support and investment. | Parks, Neighborhood Cleanup, Community Investment, and Social Programming. |
| **Scope** | Hundreds of thousands of successfully funded projects over the last few years and more than $5 billion collectively raised in 2014. | Hard to say exactly but the best estimate is thousands of successfully funded projects. |
| **Primary Modes** | Online | Online |
| **Popular Platforms** | Kickstarter, IndieGoGo, GoFundMe | Citizinvestor, ioby, neighbor.ly |
| **Challenges** | Awareness | Buy-in, awareness, legitimacy, representation, and equity. |

Citizinvestor and ioby are two of the more successful civic crowdfunding platforms that have cropped up over the last few years. While there is no single tried and true method, some platforms offer tangible incentives or rewards to the investor beyond mere participation, others highlight community benefit and empowerment through coalitions of stakeholders, while others still, may partner directly with governments and agencies. All are aimed at increasing civic engagement and making community's a better place to live and work.

**The Academic Development of Civic Crowdfunding**

Much like the field itself the academic literature examining crowdfunding is still developing across both disciplines and continents. In 2014 alone, the literature on crowdfunding and particularly civic crowdfunding in America has grown substantially. Prior to this, much of the scholarly effort in the field analyzed the predominantly private-sector startup firms and civic crowdfunding examples from Europe that predated many of the American examples (Belleflamme et al., 2013; Hemer, 2011). Much of the early work examining private-sector crowdfunding has been as disparate as the platforms themselves (Schwienbacher & Larralde, 2010).

**Early Crowdsourcing Literature**

Generally, the crowdfunding literature is cited to have grown out of crowdsourcing work in the early 2000s from James Surowiecki (2005), Jeff Howe (2006; 2008), and Daren Brabham (2008a; 2013), among others (Davies, 2014; Seltzer & Mahmoudi, 2012; Stiver, et al., 2014). Surowiecki (2005) weaves together multiple fields and examples to elucidate the power of collective wisdom in everyday life, while Howe in expanding on his initial article equates crowdsourcing with the future of business in his 2008 book. Writing after both Surowiecki and Howe, Brabham (2013), who had offered a number of papers on different companies employing crowdsourcing techniques, published one of the first books by an academic explaining crowdsourcing, what it is, and what it is not.

**The Beginning of Private Sector Crowdfunding Research**

Soon after, as crowdfunding platforms IndieGoGo and Kickstarter came into existence, a number of studies began to look at crowdfunding as a subset extension of crowdsourcing (Stiver et al., 2014). Much of the early work came from Europe where Schwienbacher and Larralde (2010) took an exploratory look at moving from crowdsourcing to crowdfunding entrepreneurial

ventures. Writing that same year, Lambert and Schwienbacher (2010), based in France and Holland respectively, began to tease out factors relating to the success of crowdfunding projects. They found that most of the money coming in was in the form of donations with only some expectation of a return on investment (Lambert & Schwienbacher, 2010). While not looking exclusively at civic crowdfunding (it had yet to even be coined as such), Lambert and Schwienbacher (2010) found that projects organized and structured as non-profits were substantially more likely to succeed than others. They attribute this finding to the theory of contract failure in which consumers are unable to evaluate the quality of a good or service, potentially incenting the production of lower quality goods produced and sold at a greater profit. Non-profit organizations are generally more trusted and viewed with a greater sense of legitimacy than for profit organizations due to their perceived lack of money-making motivations which can at least partially insulate them from these concerns.

**Civic Crowdfunding as a Tool for Local Government**

Seltzer and Mahmoudi (2012) were among the first to begin to connect crowdsourcing to local government planning as a means of increased citizen participation, innovation, and a way in which to leverage the wisdom of the crowd. The primary challenge is the difficulty in designing systems with which to effectively and efficiently involve the citizenry in the business of government planning (Seltzer & Mahmoudi, 2012), as Stiver et al. (2014) note, civic crowdfunding is a way to do just that.

Stiver et al. (2014) contributed to the academic research by examining civic crowdfunding as a tool for government to increase civic engagement and service delivery. They looked at four civic crowdfunding platforms, reviewing more than 120 projects and social media campaigns. What they found was "civic crowdfunding has great potential for non-financial

benefits such as facilitating networking, and encouraging collaboration between citizens and government" yet academic interest and theoretical development has largely lagged behind (Stiver et al., 2014, p. 2). This is at least partially attributed to the difficulty collecting data across the divergent platforms; in order to begin to address this, Stiver et al. (2014) call for future research to focus on the development of civic crowdfunding through better understanding of platform features, project effectiveness and impact, the funding community, and better synthesizing the existing research.

In the most thorough examination of civic crowdfunding to date, Rodrigo Davies (2014) in his master's thesis collected data from a number of civic and generic crowdfunding platforms, ultimately accumulating a dataset of more than 1,200 successfully funded projects over a five-year period. Davies (2014) examined projects convened by multiple configurations of stakeholders resulting in a large number of disparate but successfully funded projects. Davies (2014) defined civic crowdfunding as "projects that produce some non-rival benefits that serve either the non-excludable public or broad sections of it" (p. 29). In differentiating civic crowdfunding as a sub-field of the more general and more popular generic crowdfunding, Davies (2014) examined the size and scope of civic crowdfunding as well as its characteristics and potential implications through a discussion of project demographics which was then supported by three separate case studies. Davies (2014) study asked six research questions pertaining to the size of the field, the most common projects, the geographic dispersion of projects, the dynamics of large proposals, how participants perceive their work, and how civic crowdfunding may impact traditional institutions. Davies (2014) found that while the field continues to exhibit significant growth there remain great variations in the scope and scale of projects being proposed. The majority of project proposals fall below $10,000 however there are a number of

much larger proposals that skew the data; in addition it varies greatly between the different platforms and countries analyzed (Davies, 2014).

Davies examined the types of projects and the goods and services that they may produce and parsed his sample into 15 specific categories (garden/park, event, education/training, food, environment/wildlife, maintenance/renovation, public art/monuments, technology, organization, facility, streetscape, media, other, sport, and mobility). Of these he found garden/park projects to be proposed more than twice as frequently as all other projects followed by events and education/training programs (Davies, 2014). Following garden/park projects which was found to have a mean request of $14,165 the next five categories all fell below $10,000 for project requests (Davies, 2014).

Regarding location, Davies (2014) found that nearly 50 percent of all proposals came from New York State; the next closest was California with less than 10 percent. Davies (2014) then offered three case studies in an effort to show specific examples of how projects may impact communities as well as local institutions. Ultimately, he concluded that while there is great promise and the field is growing rapidly there is a substantial need for additional research to more fully explore both practical and theoretical opportunities and challenges of the field before it can be utilized to its full advantage.

**The New Public Service**

The New Public Service, described by R. Denhardt and Denhardt (2000) first in an article in *Public Administration Review* and later in extended book form, describes a public service focused on serving rather than steering. Conceptualized as a direct contrast to the market-oriented New Public Management that had been popularized in the early 1990s with the work of Hood (1991) and Osborne and Gaebler (1992). The New Public Service departs from the

prevailing market-oriented, citizens-as-customers approach (under New Public Management) and seeks to "serve and empower citizens" (R. Denhardt & Denhardt, 2000, p. 549).

What J. Denhardt and Denhardt (2003) describe is a rather broad reorientation of the field of public administration through the role of public servants. A reconceptualization grounded in democratic theory that takes a pragmatic, multifaceted approach in answering the challenges of governance. In describing the New Public Service, R. Denhardt and Denhardt (2000) suggest seven practical lessons for public administrators: 1) to serve, rather than steer; 2) public interest is the aim, not the by product; 3) to think strategically while acting democratically; 4) to serve citizens not customers; 5) to understand accountability is not simple; 6) to value people, not just productivity; and 7) to value citizenship and public service above entrepreneurship. Each lesson is meant to be mutually reinforcing rather than mutually exclusive and all are focused on realizing the shared values of the citizenry (R. Denhardt & Denhardt, 2000).

Like the Denhardts, Perry and Buckwalter (2010) view the shifting paradigm of governance as a refounding movement; one in which old debates over public service and democratic citizenship are rehashed with the help of technological and social gains in order to further strengthen the public service of the future. Perry and Buckwalter (2010) see this paradigm shift as both a result of and reaction to political reform, as well a response to a series of influential events, from terrorist attacks, to the recession, to the election of President Obama that have only served to further engage the citizenry and cement the legitimacy of the government and public service. As government and the public service have changed, so too have the characteristics of public servants; increasingly, they show more in common with for profit, non-public servants than commonly thought (Park & Perry, 2013). This speaks as much to the increase in third party governance and the influx and influence of outside actors as it does

changing perceptions, values, and characteristics of the public workforce (Park & Perry, 2013).

In this environment of network governance the role of the government is increasingly that of the

"guarantor of public values", even if they are administered by non-government actors (Bryson et

al., 2014, p. 445). Thus, the foundations of the new public service and public value governance

remain firmly grounded in democratic values (Bryson et al., 2014).

**The New Public Service and Civic Crowdfunding**

As the civic crowdfunding literature continues to grow, there remains a striking lack of

theoretical development. By exploring the growing field of civic crowdfunding through the lens

of New Public Service, it offers a connection explaining the democratic processes of the projects.

This provides context and insight into areas of engagement, citizenship, and the proper role of

administrators in highly networked situations much like those of civic crowdfunding. While civic

crowdfunding also has the potential to explain how new models of engagement focusing on the

public interest, responsiveness, and community work within the New Public Service and the

greater public administration community.

The recent growth of civic crowdfunding can be attributed primarily to a few factors;

first, the increasing prevalence of local government not being able to provide the services that

citizens have grown accustomed to in their communities. Dixon and Dogan (2002) call it

governance failure when due to a lack of administrative capacity, institutional knowledge or

other breakdown, government fails to provide the services citizens come to expect. This has in

turn led to a hollowing of the state where the traditional roles and duties of government are

increasingly filled by third party actors (Milward & Provan, 2000). The resulting transformation

of governance has led to a greater emphasis and need for collaborative networks but has also

created a number of boundary issues between actors (Kettl, 2002).

The entire New Public Service movement and the call for the reorientation of democratic values for a more participative, collaborative, and democratic form of local government (R. Denhardt & Denhardt, 2000) have grown out of the devolution of government and rise of network governance. Civic crowdfunding is one small example of this but also is an example that may be able to add both economic and public value for users and consumers within a community.

The premise of democratic citizenship that undergirds the New Public Service is also the primary foundation of civic crowdfunding projects. These projects are designed to offer public goods and services through more inclusive processes utilizing networks of citizens and officials aimed at understanding and achieving the collective interest. When done successfully they have the ability to create public value through the articulation of the public interest within a community. By exploring the New Public Service themes of citizen engagement, democratic citizenship, and the interplay of multi-sector actors, information can be derived on how these factors work within and influence civic crowdfunding projects and community.

**Citizen Engagement**

Perhaps the most critical element of the New Public Service is responsiveness to the public interest; therefore designing and incorporating strategies to solicit this citizen input is imperative. An active engaged citizenry is viewed as more than a byproduct of engagement strategies, but also as a necessary and welcomed input into administrative processes (Stoker, 2006). Administrators need to be able to work with and alongside citizens, striving for more than just efficiency and effectiveness but also a reorientation of public sector management to create lasting public value (Boyte, 2011). Over the last two decades, technology has increasingly

become a factor in engagement strategies and significantly changed how people interact within the community and beyond, of which civic crowdfunding is a prime example.

More than just a microform of civic engagement, civic crowdfunding broadly reorients engagement into a number of potential "new" avenues that give citizens greater voice in government (Zuckerman, 2014). Zuckerman (2014) argues that the shift to broader and particularly more digital forms of engagement is ultimately a response to a feeling of helplessness and dissatisfaction with partisan politics. These levels of engagement are more prevalent and can have greater impact at the local level than in state or federal politics. One of the primary ways in which to broadly engage citizens in New Public Service that also applies to civic crowdfunding is through the building of multifaceted coalitions in which each member brings different strengths to the group (R. Denhardt & Denhardt, 2000). The assumed motivation of stakeholders in each setting is typically public service or the desire to contribute to and make society a better place (R. Denhardt & Denhardt, 2000). Through this very participation individuals receive gratification and a sense of purpose or duty (Brabham, 2010).

Most civic crowdfunding platforms simply rely on intrinsic motivators and the desire for whatever the extrinsic result of a successfully funded project may bring; however, some platforms suggest adding additional incentives which can be a unique challenge in and of itself (Brabham, 2012). Some of the more common incentives in civic-minded projects also go a long way to spur additional engagement. These typically include openings to further participate in various stages of the planning process, volunteer opportunities, and invitations to special commemorative events (Davies, 2014).

An effective social media presence has become necessary to raise awareness and engage citizens (particularly younger users) who may otherwise not be cognizant of a particular ongoing

project (Gerber, Hui, & Kuo, 2012). Much like the other aspects of New Public Service, high levels of civic engagement and the resulting transparency have many positive benefits when it comes to building trust and social capital within and amongst the community and local government (Brito, 2008). This in turn makes the jobs of the administrators easier and can promote a more inclusive policy process (R. Denhardt & Denhardt, 2000), which is critical to the success of civic crowdfunding campaigns (Seltzer & Mahmoudi, 2012).

**Democratic Citizenship**

Democratic citizenship assumes a broad civic interest amongst individuals within a community over the more traditional narrow self-interests of the citizenry (J. Denhardt & Denhardt, 2003). Citizenship in this conception "implies active involvement in political life"; yet this public interest is often something that administrators must promote and design structures to foster and encourage (J. Denhardt & Denhardt, 2003, p. 29). The rule of government then shifts from one in which free market capitalism dominates structure and decision making to a more collaborative, citizen-centered government in which private and self-interests are increasingly balanced or "checked" by greater "citizen involvement in the governance process" (J. Denhardt & Denhardt, 2003, p. 32).

The prerequisite to democratic citizenship is a citizen-centric administration that designs, promotes, and utilizes structures and channels that foster residential satisfaction and further build citizen involvement (Grillo, Teixeira, & Wilson, 2010). Designing projects in ways that citizens can be active and engaged allows for a more inclusive process in which citizens can play a meaningful role. Civic crowdfunding in its many forms and iterations fits here as a channel through which citizens can impact and affect community. Projects vary greatly and do not always come directly from local government administration. In fact, much of the time they are

proposed by community organizations and activists. This leads to some concern over who gets to determine the collective interests (Peters & Pierre, 1998) that will be articulated through a project proposal.

Like with other recent technological innovations that change the traditional roles between citizens and local government, concern over representation varies between stakeholders; despite this there is little denying the potential these platforms have to increase citizen involvement in any number of governmental functions. Meaningful citizen participation can also be self-sustaining and fostering greater education, involvement, and pride in the community of residence (J. Denhardt & Denhardt, 2003).

**Incorporating Multiple Actors and Sectors**

Although much of the work by administrators is still done within the traditional organizational hierarchy, over the last two decades, there has been an undeniable shift toward network governance or the incorporation of multiple sectors and actors (Agranoff, 2006). This devolution (Kettl, 2002) or hollowing out (Milward & Provan, 2000) of the state has led to an increase in collaborative networks and third party actor service provision. While this creates a number of organizational and potential accountability concerns, it also has one huge benefit: the potential to increasingly address resource shortages through a number of new channels (Agranoff, 2006).

Traditional methods of local government problem solving and service delivery are increasingly evolving with new technology and the incorporation of more actors into the governing process. Traditionally and predominantly much of the revenue of local government comes from regressive taxes such as property and sales tax (Warner, 2010). People increasingly want more services but want to pay fewer taxes. Technology and economic restructuring have

dated existing models of taxation (Warner, 2010). Furthermore the needs of a given district can vary greatly across and even within metropolitan areas and can be significantly impacted by size and structure of each municipal government, which in turn can have numerous potentially adverse impacts on the quality of life of the citizenry (Gyourko & Tracy, 1991; Hochman, Pines, & Thisse, 1995). Coupled with fewer available federal funds and a number of costly maintenance and infrastructure renovation projects that are plaguing much of the country, local governments are left with what Martin et al. (2012) describe as the "new normal", an exceedingly resource-constrained environment.

One way in which to address this growing issue is to begin to rethink local government revenue sources (Warner, 2010). The growth of technology as well as other factors has led to a need to rebuild government capacity by taking a more open and progressive attitude toward potential resource and revenue streams (Warner, 2010). Community engagement is one way in which government and market shortfalls can be addressed (Demediuk et al., 2012). There are a number of mechanisms, such as the coproduction of goods and services that along with crowdfunding begin to fill the engagement gap. In this scenario crowdfunding connects participants with administrators in a way that boosts local engagement and can have a number of additional positive impacts within the community (Demediuk et al., 2012).

Initially civic crowdfunding projects started as a way for enterprising citizens or organizations to pool resources for community improvement. More recently, larger organizations and many local governments have begun turning to crowdfunding as a way to address revenue and funding issues (Davies, 2014).

Hawaii has recently taken this a step further by formally introducing state-wide civic crowdfunding legislation, which would be the first of its kind in the United States. The proposal

points out that crowdfunding would not be an exclusive funding mechanism for local government, but would serve to complement other more traditional funding streams (Public School; Repair and Maintenance; Hawaii 3R's; Crowdfunding; Pilot Program; Appropriation HI BB2631, 2014). By formalizing civic crowdfunding as a funding tool for state and local government, Hawaii would have been better equipped to control the process and ensure representation through new and existing structures. The legislation, however, never made it beyond introduction to the House floor.

While crowdfunding holds potential as a means to supplement revenue streams it also has the potential to shift local government to an increasingly democratic model. In doing so, administrators still retain final authorization and decision making power but citizens may have substantially greater input throughout the process (Cabannes, 2004). By engaging citizens in such a manner, there will be greater potential for discourse between administrators and citizens to stress the need for a more appropriate balance between revenue generation and public service demands (Warner, 2010). Greater engagement also means greater protections against concerns of fraud and manipulation. Furthermore, the more inclusive the process and the more funding sources identified beyond the traditional tax and spend model, then the greater potential quality of life for the citizenry (Warner, 2010; Wright, 2012).

**Contemporary Challenges for Local Government**

At last count there were nearly 90,000 independent local government institutions consisting of counties, municipalities, townships, special districts, and independent school districts across the United States (Barnett, Sheckells, Peterson, & Tydings, 2014). Collectively they carry a debt load of nearly 2 trillion dollars, and with few means to raise revenue outside of taxes, grants, and relying on the state and federal governments, citizens often feel the results of

the shortfall, whether through service cutbacks or other related cost-saving measures (Barnett et al., 2014). Cut backs typically start with services like neighborhood improvements, community upkeep, parks, and other sources of neighborhood pride are the first to go unfunded when the independent local government institutions face financial challenges.

It is not just financial challenges facing local government, but structural challenges as well. The continued shift toward governance and the difficulties in "reconciling the management and accountability challenges of these networks with the bedrock ideas that hierarchical authority has long provided" make for the most difficult challenge facing local government today (Kettl, 2002, p. 129). The combination of these fiscal and structural challenges creates a number of concerns and opportunities for leadership (Agranoff, 2013). To best address such concerns, a number of steps must be taken, including modernizing administration, working to further engage the citizenry in the business of government, and promoting collaborative partnerships (Nalbandian, O'Neill, Michael Wilkes, & Kaufman, 2013).

Modernizing administration in the name of efficiency and effectiveness and still maintaining and promoting democratic processes remains a primary challenge for leadership (Nalbandian et al., 2013). By standardizing and streamlining government structures and services, the goal is to promote "efficient resource utilization and more effective and innovative policy support in the search for credibility, accountability, and improved trust in governing institutions" (Nalbandian, 2005, p. 312). In order to increase administrative capacity, it is imperative that the proper balance is struck between these concerns of accountability, equity, and efficiency (Warner, 2010). In doing so, local governments incorporate and maintain the adaptive tools necessary to successfully operate both inside and outside of government (Agranoff, 2013). Successful local government administrators must be skilled bridge builders having the ability to

connect conflicting techniques by "bridging the gap between political acceptability and administrative sustainability in local communities" (Nalbandian et al., 2013, p. 568). A prime example is the balance needed to both modernize administrative procedures while at the same time promoting and incorporating civic engagement in government. As Nalbandian (2005) points out, modernizing administration by promoting structures based on efficiency and technology is often in direct conflict with promoting citizen engagement and participation; striking this balance and appealing to proponents on each side can be exceedingly difficult.

The challenge of civic engagement is often a double edged sword for administrators; first how to engage and encourage citizen participation can be a challenge unto itself, and also then maintaining an effective balance between administrative modernization and the politics of identity in a way that promotes administrative sustainability and political acceptance (Nalbandian et al., 2013). Overcoming the general disconnect that often exists between local government and the citizenry is yet another challenge that must be addressed by local governments to strengthen understanding, civic engagement, and performance of government (Barnes, 2010). Nalbandian et al. (2013) argue that "citizen engagement is no longer optional it is imperative—and that connecting engagement initiatives to traditional political values and governing processes is an important mark of successful community building" (p. 567). Grillo, Teixeira, and Wilson (2010) equate residential satisfaction with civic engagement, which itself is a manifestation of social capital. By designing institutions and social processes in which citizens can actively participate, local government can also promote more sustainable communities focused on a wide range of social issues that go beyond environmental sustainability (Portney, 2005).

Civic crowdfunding projects offer a way to connect citizens to government through project articulation and development, particularly by highlighting project need and including citizens in the planning process prior to the funding period (Lindsay, 2015; Seltzer & Mahmoudi, 2012). The resulting co-produced services can result in more, higher quality and lower cost services throughout the community (Bovaird, 2007). By properly incenting participation, public awareness can be increased in a manner that promotes transparency, collaboration, and civic engagement (Mergel, 2015b). By collectively identifying problems and developing and articulating project needs within the community, civic crowdfunding can be utilized as a problem-solving mechanism with the ability to supplement the budget while increasing civic engagement (Chieppo, 2012; Seltzer & Mahmoudi, 2012). In this sense, civic crowdfunding can be utilized as a tool to both modernize administration through technological processes and also as a method within which to supplement the budget all the while increasing citizen involvement in the planning process. By encouraging open innovation outside of traditional organizational boundaries, government may be able to leverage the collective intelligence of the crowd to increase capacity in ways otherwise not possible (Mergel & Desouza, 2013).

Another challenge for local government is moving beyond cooperative partnerships to collaborative working arrangements in which partners work on equal footing to achieve common goals (Agranoff & McGuire, 2003). As public organizations become increasingly flat and traditional top down hierarchical command and control is often augmented and even replaced in some instances by network governance, administrators must work to build social capital and foster collaborative working arrangements in an effort to create and maintain public value (Morse, 2010). Ensuring participants are equal ground can be a primary challenge for collaboration conveners (Mayer & Kenter, 2016). The increasing shift toward multi-actor

governance and the continued devolution of public-sector service delivery requires local government professionals to be both willing and skilled in multi-sector partnerships. "The unique value of local government professionals in these multi-sector partnerships centers on recognizing that the strongest bridges are built on solid foundations of public values, values that local government professionals have embraced and should not shy away from advocating" (Nalbandian, 2005, p. 311).

**Civic Crowdfunding, Local Government, and the Community**
**Strengths**

By incorporating civic crowdfunding into local government service delivery and planning, administrators have the potential to expand the traditional role of government, promoting an inclusive process of mutual dialogue and decision making. With civic crowdfunding, government actors have the ability to not only fund more projects on their budgets, but to do so without raising taxes while at the same time increasing civic engagement and goodwill (Bryson et al., 2014; R. Denhardt & Denhardt, 2000). Taking advantage of these co-produced services can have many positive implications for administrators, users, and the community as a whole (Bovaird & Loeffler, 2013) by promoting a more transparent and inclusive government that has the potential to bring a number of individuals directly into the policy process and also addresses a number of contemporary challenges for local government (Stiver et al., 2014; Zuckerman, 2014).

There are several strengths associated with civic crowdfunding. The first is that it promotes democratic citizenship and encourages individuals to take a more active role in their government. This in turn leads to more representation, greater transparency, and decreased chances for fraud or other illicit activities (Miglietta, Parisi, Pessione, & Servato, 2014). The

second major strength is the amount of resources that it can bring into an area of great need (Davies, 2014). While project success may be impacted by the general wealth of the funding community, this is not always the case, as awareness can also play a major role in moving the campaign beyond a geographic boundary (Davies, 2014).

Another strength of civic crowdfunding is that it is a relatively low impact and low harm strategy. If a project gets funded it moves forward; however, if it does not, administrators are typically only out the fees and time that went into planning, which in some cases may be substantially greater than others. In many civic crowdfunding proposals however, very few resources are wasted because projects are typically relatively simple undertakings that have yet to find their way to the budget, or projects in which much of the upfront developmental and planning costs have already been contributed by various groups and civic organizations (Davies, 2014).

In this conception it is important to visualize civic crowdfunding as a complementary tool of local government that administrators and citizens develop together for community improvement. Civic crowdfunding is not a replacement for traditional budgeting and project development structures. As a complementary tool, civic crowdfunding has the potential to finance often difficult to fund pilot programs as well as attract matching federal and private grant money to further address big-picture issues (Lindsay, 2015). Successfully funded projects have the ability to benefit local government as well as the citizens and community. Many of these projects have no limit on their scope, addressing anything from neighborhood cleanups to the community infrastructure. Furthermore, they often allow citizens to be as involved as they want to be in each project (Miglietta et al., 2014). Civic crowdfunding has the potential to create these

unique relationships between citizens and government, providing access and resources to each party for the benefit of the community (De Buysere, Gajda, Kleverlaan, Marom, & Klaes, 2012).

**Concerns**

In addition to the obvious and inherent strengths that civic crowdfunding has, there are a number of concerns that must be at least considered, if not addressed, before crowdfunding can be used by government entities regularly. As is the case in any instance where third-party actors take over some aspect of public service provision, there are a number of questions over the appropriate role of boundaries. Fuzzy boundaries impact government's role, accountability, and decision making; often leading to uncertainty and confusion over the role and responsibility of involved actors (Davies, 2015). As much of civic crowdfunding is done through online networks that must be integrated into traditional systems, service delivery can be greatly impacted. Furthermore, crowdfunding is such a recent innovation and tool for government that to date there just is not much of an example or precedent to follow in designing and integrating crowdfunding into local government on a consistent basis (Miglietta et al., 2014).

One of the primary criticisms of civic crowdfunding as a potential alternative funding mechanism is that the process has the potential to be co-opted by elites (Seltzer & Mahmoudi, 2012). Within this scenario, representation is little more than an illusion because elites leverage their contacts and interests to control the crowdfunding project agenda (Davies, 2014). On one hand the case can be made that any community improvement is better than none; however, it does raise issues of equity that must be considered and accounted for by administrators to ensure that projects that reach the crowdfunding agenda are more than just the pet projects of a select few (Seltzer & Mahmoudi, 2012). This concern is especially true in the local government setting. During the traditional local government budgeting and resource allocation process, elites can

exhibit substantial influence; however they are still constrained by a number of legal checks and balances. As a relatively new innovation and one in which local governments are still trying to figure out how to best incorporate, civic crowdfunding projects may lack the safeguards that more traditional service funding and delivery methods employ to prevent manipulation or cooptation.

Even when representation is assured, not everyone is so eager to extol the virtues of increased civic engagement. Dissidents argue that civic engagement is too bland and too much of it may be more of a hindrance than a help, essentially grinding the already slow moving gears of government to a halt (Berger, 2011). Furthermore, for as much as crowdfunding proponents have advocated for diversity and representativeness, studies have shown that achieving diversity in public organizations remains a work in progress (Broadnax, 2010; Choi, 2009).

Often there is a fine line between diversity, representation, and discrimination, as a recent Supreme Court case illustrates. The case originated in Texas over the statutory power of the 1968 Fair Housing Act and whether the act prevents more than simply overt housing discrimination policies and practices (*Texas Department of Housing and Community Affairs et al. v. Inclusive Communities Project, Inc., et al. 13-1371,* 2015). In a 5-to-4 decision, the Court ruled that the Fair Housing Act not only prevented overt discriminatory practices, but also less obtrusive measures; this essentially includes those identified through data analysis that whether intentional or not, resulted in discriminatory bias (*Texas Department of Housing and Community Affairs et al. v. Inclusive Communities Project, Inc., et al. 13-1371,* 2015). Creating systems that are palatable to all and promoting diversity while mitigating discrimination is an ongoing challenge; particularly as we continue to grow and "evolve as a culture and society" (Broadnax, 2010, S178).

In addition to the concerns over diversity, the increase in it has not necessarily translated into greater executive representation (Mor Barak, 1999). Similar negative impacts have been found when examining ethnic community diversity, which Putnam (2007) has found to have significant negative impacts on levels of civic engagement. This could potentially mean that civic crowdfunding does not work quite as well as proponents would lead others to believe and also that what works in one region or city may be entirely different from what works in another based on regional context and social capital.

Accountability is another potential major issue. As service provision and delivery are further devolved amongst a number of third-party actors and stakeholders the scope and complexity of accountability is increasingly stretched (Mulgan, 2000). Having the proper institutional arrangements in place becomes tantamount to ensuring service and accountability to constituents (Wagner, 2012). This increasing shift toward governance and greater reliance on third-party actors has led to a change in the conceptualization of what accountability truly means (Erkkilä, 2007). Accountability has traditionally been seen as a sense of control or of answerability. However, due to changes in government and structure, increasingly new alternatives are being sought out in lieu of (Erkkilä, 2007) the more traditionally accepted legal, political, bureaucratic, and professional types of accountability (Romzek & Dubnick, 1987). Network dynamics and the resulting complexity make it difficult to evaluate and incorporate traditional types of accountability into devolved governance structures (Koliba, Zia, & Mills, 2011). Increasingly, performance accountability focused on outcomes, and deliberative accountability concerned with public discourse, have become prevalent in the accountability literature as third-party governance has continued to grow (Erkkilä, 2007).

Civic crowdfunding is more concerned with deliberative accountability, particularly as it relates to transparency and trust, both of which have been found to be positively related to citizen satisfaction (Kim & Lee, 2012). A prime example of this in civic crowdfunding is the accountability concerns that stem from communication issues and how communication should be carried out post investment, which can be a major challenge for management (De Buysere et al., 2012). Related, and perhaps an even larger concern, is how to address and differentiate between those who invested in what is or will become a public good and those who did not. This is a particular issue because donor information in most cases is withheld or anonymous. Because every individual citizen in the jurisdiction is a stakeholder, but only small percentages of that faction are actual investors, balancing the concerns of both can become a major challenge that can call into question the legitimacy of governing institutions (Nalbandian et al., 2013).

Ultimately, not everyone is quick to buy-in when it comes to crowdfunding as a potential resource generator for local government. Efforts have to be taken by administrators to safeguard against some of the potential concerns discussed above by continually designing, implementing, and reevaluating attempts geared toward increasing representation, equity, and participation (Davies, 2015). In the end, designing the necessary systems and structures to accentuate the strengths (funding community needs that may otherwise go unfunded and providing otherwise scarce resources) while guarding against the weaknesses (primarily challenges to traditional governance structures) of civic crowdfunding remains one the biggest challenges facing administrators both now and in the future. This is an issue that must be addressed in order for the strengths of civic crowdfunding to overcome its difficulties and become a viable supplemental alternative to traditional-funding mechanisms for local government.

**Implications**

**For Local Government**

Civic crowdfunding has the potential to be a disruptive positive force due to its success as a non-traditional funding mechanism for local government (Mollick, 2014). This early success and continued growth of projects around the country coupled with eased federal regulations have led to an increasing number of local governments turning to crowdfunding to solve local dilemmas. As civic crowdfunding projects become more prevalent and are employed on a wider-scale, such projects have the potential to shake-up local government by altering and impacting the traditional roles and boundaries between citizens and administrators (Nath, 2011).

Designing meaningful public participation processes has long been a challenge for local government administrators (Bryson, Quick, Slotterback, & Crosby, 2013). "Organizations have to find appropriate relationships between the 'entrepreneurial' problem (which strategy to adopt), the 'engineering' problem (which technologies to use), and the 'administrative' problem (which processes and structures to select)" (Boyne & Walker, 2010, p. 188). Designing structures that properly balance out these challenges through processes that operationalize and facilitate engagement can be critical to organizational success (Demediuk, Solli, & Adolfsson, 2012).

One of the primary challenges for administrators in civic crowdfunding projects is figuring out the proper role of citizens in the process (De Buysere et al., 2012), and defining it in a way that maintains the integrity of the process (Mayer, 2016). This is further compounded as support and involvement are likely to vary greatly amongst stakeholders (Miglietta et al., 2014). Designing structures that promote accountability, while minimizing concerns of equity and representation are necessary challenges that administrators must deal with before civic crowdfunding can be used successfully (Parr, 2014; Seltzer & Mahmoudi, 2012). The incorporation of multiple approaches and network actors is often critical, especially early on in

civic crowdfunding projects (Lambert & Schwienbacher, 2010). A multifaceted approach may have the potential to protect against potentially fraudulent (Mollick, 2014) and subversive behavior (Seltzer & Mahmoudi, 2012) by a few "rogue" actors that may have ulterior motives. By designing a series of small decision making hubs on any number of issues it would not only promote more active participation but also mitigate against capture and corruption from more influential actors (Noveck, 2009). Ensuring open lines of communication and promoting frequent dialogue between administration and stakeholders can go a long way in mitigating potential concerns and also building and maintaining social capital (Frey, Lohmeier, Lee, & Tollefson, 2006).

In addition to structural concerns, the use of civic crowdfunding raises a number of decision making implications that local government administrators must weigh and balance before deciding whether to utilize civic crowdfunding in their localities. Primarily they must determine whether civic crowdfunding is an opportunity that can positively impact their communities or whether it is a threat to their view of government, or perhaps an unnecessary headache not worth the time and effort (Davies, 2015). Community participation in government is almost universally praised as a more democratic and effective policy making tool, yet "incorporating citizen input into agency decision making is not a costless process" (Irvin & Stansbury, 2004, pp. 55-56). Decision making is critical at this juncture; government administrators must carefully approach the decision to move forward with civic crowdfunding projects and must consider the potential benefits and risks to their individual communities and goals before moving forward (Davies, 2015). It becomes less about the benefits or drawbacks of community participation (civic crowdfunding is by definition a participative community process)

than it is a decision for administrators as to what degree to value and incorporate citizen participation into the project planning process.

Decision making is highly contextual, different problems require different solutions and understanding and articulating the problem in a way that it can be addressed can often be a particular challenge (Bryson et al., 2013). Bringing in content experts and building multifaceted coalitions can help leadership to address this by properly scaling decisions to problems (Bryson et al., 2013).

Decision making often involves a critical balance in local government policymaking between elected officials (often part-time politicians) and administrative experts (highly knowledgeable, but typically lacking policymaking authority) who collectively combine the knowledge and skills necessary for policymaking (Zhang, Zhang, Lee, & Yang, 2012). Bovaird (2007) among others argue that this process is outdated and that the co-production of services, in which citizens play an increasing role in service production, provides for a more representative and efficient model of production and delivery. Over the past decade in an increasingly resource constrained environment, the call for co-produced services and to further include citizens and also stakeholders, both public and private, into the policymaking process has grown (Ansell & Gash, 2007). This form of collaborative governance utilizes collective wisdom and dialogue between stakeholders in an effort to make policymaking and governance more representative of the public will (Ansell & Gash, 2007). In doing so, systems must be designed and properly planned to integrate the public and crowdsourced data in order to best take advantage of it (Clark, Zingale, Logan, & Brudney, 2016).

One of the primary drivers of this shift in governing has been substantial increases in technology made over the last decade particularly with regard to social media and other new

media platforms that both connect and engage citizens and have the potential to greatly impact the policy-making process; civic crowdfunding as a supplemental tool, has the potential to do just that (Nath, 2011; Zuckerman, 2014). The success of civic crowdfunding has the potential to change the decision making process by bypassing the traditional mechanisms of project development. Due to the broad inclusive nature of civic crowdfunding it has the potential to greatly expand the policy-making process to a number of interested actors, promoting both transparency and representation, and effectively allowing citizens to vote on projects with their resources as they see fit (Seltzer & Mahmoudi, 2012). Civic crowdfunding has the potential to influence the planning and budgeting arms of the policy process for projects both on the crowdfunding agenda and those that are not by bringing new revenue streams into the community (Lindsay, 2015),

Civic crowdfunding can also provide insight to citizen preferences. Citizen participation does have the ability to reveal citizen preferences and in turn positively impact public good provision (Robbins & Simonsen, 2002). The idea of preference revelation dates back at least to the work of Tiebout (1956) more than a half century ago. Tiebout (1956) suggested that in general local governments are inefficient and have little incentive to offer particular services to citizens. The solution to increasing efficiency is public choice. Assuming citizens have both perfect mobility and perfect information, as well as behave in a rational, self-interested manner, they should in theory be able to move to jurisdictions that offer more of the services they seek, thereby revealing their preferences (Ostrom, Tiebout, & Warren, 1961; Tiebout, 1956).

Much of the study of preference revelation and the role of citizens in resource allocation has been limited primarily to the examination of voting behavior, a crude and simplistic practice (Robbins & Simonsen, 2002), and citizen satisfaction surveys (Wilson, 1983). Recent

technological advances and the increasing incorporation of them into government have begun to allow for more dynamic understandings and evaluations of citizen preference revelation (Aron, Sundararajan, & Viswanathan, 2006).

Literature from another form of preference revelation that increases participation and community development, participatory budgeting, indicates that local government officials will the need to determine the pros and cons and level of institutionalism. In other words, they need to determine how formal should the ties be to government and how much reponsibility should citizens have (Cabannes, 2004).

Preference, when articulated by enough people often leads to service delivery, something that has changed of late due to the Great Recession of 2008. Spurred by the housing bubble burst and a national bank crisis; local government has been experiencing and adjusting to a "new normal," one in which finances, employment, and services are more constrained than at any other time in recent American history (Martin et al., 2012). In an environment that was already being impacted by local government decentralization, local government capacity for dealing effectively with policy issues, particularly when competing with business enterprises, has resulted in a conflicting system of service provision and delivery (Wagner, 2011). One of the main reasons for the breakdown is the different values between sectors and the continual evolution of public service values; the private sector values efficiency, while the public sector is predicated on service and the public interest (Van Wart, 1998).

As a response to the recent "new normal" brought on by the Great Recession, as well as citizens' increasing demands for transparency and sustainability, civic crowdfunding has increasingly been turned to as a means with which to make decisions of public expenditures (Miglietta et al., 2014). In addition to better incorporating the public into governmental decision

making, crowdfunding can potentially be a tool that local government can utilize to augment traditional tax and spend service delivery mechanisms (Seltzer & Mahmoudi, 2012). By increasing responsiveness and giving citizens a more active role and louder voice in public service delivery, crowdfunding produces a number of beneficial results for the public sphere and local government administration (Davies, 2015).

**For Citizens**

As discussed earlier, civic crowdfunding has the potential to give citizens greater voice than they are accustomed to through the traditional channels of government (Chieppo, 2012). As citizens are the primary target for resource generation in civic crowdfunding they maintain a unique relationship collaborating with planners and decision makers to influence and direct policy (Seltzer & Mahmoudi, 2012). In turn, this promotes a more open, transparent, and democratic government that has the potential to solve the resource issues of government, meet the demands and expectations of citizens, and increase social capital (Miglietta et al., 2014).

A potential issue with these new structures and relationships created by civic crowdfunding platforms is that of accountability. The primary challenge is how to deal with the changing nature of accountability associated with crowdfunding, as roles and boundaries begin to change and blur. Representation and access may present another dilemma for administration as local government should ensure representation but access may be affected by technological savvy, financial resources, and other factors. Further understanding these roles and expectations, especially as they relate to the citizens, is critical to the development of the field and the acceptance of civic crowdfunding as a potential alternative funding mechanism for local government.

**The Characteristics of a Successful Civic Crowdfunding Campaign**

**Wide Spread Project Appeal**

Proposing projects that are non-controversial and offer widespread appeal can be critical to garnering the support necessary within a community to successfully fund proposals. Wide spread project appeal can increase participation provided there is a proper balance of incentive and public interest (Gajda & Koliba, 2007; Imperial, 2005). This often starts with political leadership articulating, encouraging, and empowering citizens to play a role in local government (R. Denhardt & Denhardt, 2000). Strategic planning and the leveraging of information technologies can be a particularly effective way in which to increase participation among potential stakeholders (Ketokivi & Castañer, 2004; Yang & Melitski, 2007). Emerging social media is another opportunity that offers promise for administrators to increase participation by making information dissemination easier and more convenient for citizens (Bryson et al., 2013).

There is no particular set number of engaged individuals required for a successfully funded venture but for large-scale crowdfunded initiatives it is generally accepted that hundreds or even thousands of participants are required to ensure a true representative of the population (Davies, 2014). Funded projects with relatively small donor bases run the risk of being accused of "using the term crowdfunding as a gimmick, rather than an indication of broad-based participation" (Davies, 2014, p. 30); yet many of the proposed projects are smaller in scale.

By building in multiple mechanisms that promote crowdfunding initiatives, project conveners are more likely to increase participation and realize funding goals while mitigating other concerns. These levels of wide spread project appeal are often seen in the number of involved stakeholders in the projects convening. By articulating demand and exhibiting how the initiative fills a resource need, projects are more likely to reach a large audience and

consequentially increase project knowledge and success while mitigating concerns of fraud and abuse (Davies, 2014; Mollick, 2014).

**Multifaceted Marketing Approach**

The need to "get the word out", promote, and "hype" a campaign cannot be overstated, and "aggressive marketing and public relations plans" are particularly critical in the early stages of crowdfunding projects (Brabham, 2009, p. 256; Lambert and Schwienbacher, 2010). The key is not simply to raise money, but also to raise awareness (Mariotti, 2014).  As Brabham (2009) states "these tactics should include both mainstream marketing and public relations campaigns (e.g. press releases, paid advertising, public service announcements), as well as alternative strategies (e.g. viral marketing through social networking sites, guerilla marketing, image events)" (Brabham, 2009, p. 256). By promoting the campaign through multiple media platforms, the goal is to create excitement for the project and to create a vibrant and active crowdfunding community as rapidly as possible (Brabham, 2009; Hemer, 2011). This can create a particular challenge for local government, often already operating in a constrained environment when compared to the private sector. Yet increasingly a growing number of resources are being allocated to digital and social media presence within the public sector, whether through in-house application or other innovative and collaborative relationships with external stakeholders (Mergel, 2015a).

When done well, crowdfunding platforms "allow people to overcome offline barriers to market transactions… [and] reduce market frictions associated with geographic distance" (Agrawal, Catalini, & Goldfarb, 2013, p. 3). Crowdfunding problems and proposals are usually contained within a local jurisdiction. However, it is possible to expand the footprint of the initiative by engaging individuals who live outside of the area (such as former residents,

philanthropic minded people, etc.) by executing a broad approach to the campaign and problem description (Baeck & Collins, 2013). This can typically be done by running social media campaigns in conjunction with the crowdfunding platform and in turn linking and advertising each network together (Best, Neiss, & Jones, 2012). This broad based marketing strategy, incorporating multiple networks and modalities also promotes transparency and in turn reduces the likelihood of fraud (Best et al., 2012).

**Mutual Awareness**

Perhaps the largest observable distinction between new online crowdfunding ventures and traditional donation-based giving is mutual awareness of donors (Davies, 2014). What this refers to differs significantly from traditional donation-based philanthropy, where the donor has little say in how the funds are allocated or even awareness to what the funds are used for. Mutual awareness relating to crowdfunding highlights the inclusiveness of the process. At any point in time potential investors can review the project scope and goals to determine if it is something they want to support as well as track the progress of the funding effort and see exactly how their donation has impacted the campaign. In online crowdfunding projects, all donations are public which helps to increase transparency and responsiveness and at the same time mitigate potential for misuse of funds to an extent (Brito, 2008; Mollick, 2014). Donors can choose to remain anonymous or can attach their name to the amount given for all to see. In either case, this strategy helps to increase awareness in addition to building a sense of community that unites all donors (Davies, 2014). More often however, donors fail to self-identify and the platforms do not release this information. This typically results in a project proposal that lists the donation amounts and individual names as reported, allowing for the computation of mean donations and

number of donors, yet providing little concrete information about where the funding is actually coming from.

**Mutual Benefit**

Mutual benefit strikes at individual motivation and the necessary incentive structures that must be in place for organizations to reach their desired ends; "without mutual benefits, information will not lead to collaboration" (Thomson & Perry, 2006, p. 27). For citizens these motivations are non-economic, and for organizations involved in crowdfunding ventures, motivations are almost solely based on raising capital for project development.

In the majority of crowdfunding scenarios monies are raised through a donation or patronage model in which funds are pledged in a philanthropic manner to support a community goal or benefit (Belleflamme, Lambert, & Schwienbacher, 2013; Massolution, 2012; Mollick, 2013). These models allow for mutual benefit and crowdfunding initiatives of "variable complexity and modularity…always entails mutual benefit" (Estelles-Arolas & Gonzalez-Ladron-de-Guevara, 2012, p. 195). By making participation worthwhile for citizens, municipalities are able to provide a form of benefit for constituents, all the while utilizing the citizens' resources to accomplish the goals of the local government (Imbroscio, 2013; Seltzer & Mahmoudi, 2013). This unique access situation for citizens and the minimal cost fundraising for municipalities provides an unparalleled source of capital and a "real opportunity to apply leverage where all other formal financial services fail" (De Buysere et al., 2012, p. 19).

**Participation**

Participation is one of the primary conditions of a successful crowdfunding campaign, the more people who participate the more successful the proposal (Davies, 2014). Proposing the right projects, projects that appeal to the broadest segments of the local population can be

imperative to bringing in the most possible donors. Research has found that gratification often comes from participation (Brabham, 2010). Many of the larger and more popular platforms do very little to encourage community (targeted contributors) engagement, but most of the smaller civically orientated platforms take advantage of it (Davies, 2014). Community engagement and community engagement processes also have the ability to increase project transparency and build trust and social capital between individual funders and the organizing body (Brito, 2008). In situations characterized by high levels of social capital and trust, administrators are increasingly able to address public interest while working toward addressing the shared goals of the community (R. Denhardt & Denhardt, 2000).

In civic crowdfunding projects, participants often are viewed as members rather than stakeholders (as the whole of the community is a stakeholder) (Schwienbacher & Larralde, 2010). When done effectively, participation and community engagement can be a useful technique for planners to promote a more inclusive planning and policy-making process that is both representative and equitable (Ansell & Gash, 2007; Seltzer & Mahmoudi, 2012).

**Real Time Updates**

The prevalence of social media and the connectivity of crowdfunding platforms make the ability to tell a story in real time an important part of the process. Research has shown that frequent updates and real time storytelling have been linked to successfully funded campaigns (Davies, 2014); yet some projects still offer little in the way of progress reports and status updates.

Frequent updates can serve to increase and promote open lines of communication and in turn help to further build social capital (Frey et al., 2006; Noonan, McCall, Zheng, & Erickson, 2012; Thomson & Perry, 2006; Thomson et al., 2009). Promoting a broad vision that can be

reinforced and updated through frequent communication also allows for greater boundary spanning amongst stakeholders and more trust in the process (Ferreyra & Beard, 2007). Frequent updates and semi-open lines of communication are an often overlooked in today's world of almost constant connection with technology but remain a vitally important component of successful crowdfunding initiatives (Davies, 2014).

**Rewards**

Reward-based crowdfunding, one of the four commonly accepted types of crowdfunding projects, highlights consumer motivation (Esposti, 2012; Mollick, 2014). These motivations are either extrinsic, where a consumer is actively seeking a tangible benefit, or intrinsic when the activity itself is self-fulfilling (Kleemann et al., 2008). Many of the larger crowdfunding platforms, i.e. Kickstarter and IndieGoGo follow an extrinsic rewards based model in which there is generally some sort of exchange between crowdfunder and crowdfundee.

Most civic crowdfunding sites such as Citizinvestor and ioby focus on the donation or patronage model of crowdfunding. Under this model consumers donate time, money or other resources with little to no expectation of tangible return (Belleflamme et al., 2013; Esposti, 2012; Mollick, 2014). Donation giving can be done for a number of reasons; studies have found donation-based support to be fun and rewarding to intrinsically motivated people (Brabham, 2008b; Kleemann et al., 2008). Some individuals feel it is their civic duty, some want to support particular community projects (Baeck & Collins, 2013), while others participate for entirely selfish reasons as a way to directly impact the future of their community in any manner they see fit (Bovaird & Loeffler, 2012; Kleemann et al., 2008). Whatever the motivation, it generally falls into one of five dimensions of public value: user, community, environmental, social, or political value that spurs individual participation in the coproduction of services (Bovaird & Loeffler,

2012). In any case, the coproduction of services is a dynamic process in which citizens transform the service, and in turn, "they are themselves transformed by the service" (Brandsen & Pestoff, 2006, p. 496). These relationships have the potential to increase trust in government and promote greater levels of engagement through the use of technological innovation (Clark, Brudney, & Jang, 2013).

**Visible Problems**

Visible problems involve identifying a need that the community can support; they are often rooted at the grassroots level and flow upward to local government administration to which crowdfunding is conceptualized as a problem-solving mechanism for administrators (Brabham, 2008; Estelles-Arolas & Gonzalez-Ladron-de-Guevara, 2012). Brabham (2008) calls it "an emerging, successful, alternative business model… [that] is a legitimate, complex, problem-solving model" (p. 76).

One of the most important aspects of addressing visible problems in community-wide issues is the matter of presentation, both how the issue is defined, as well as how it is presented on the crowdfunding platform (Seltzer & Mahmoudi, 2013). If a project is overly complex or presented in a manner where it is difficult for potential funders to see a direct benefit, the odds of funding become that much more difficult. Generally the more technical expertise required within a project, the more challenging it may be to garner public support (Seltzer & Mahmoudi, 2013). Because many crowdfunding platforms are of the all-or-nothing variety it is highly critical that municipalities take care to focus on issue definition and properly align the problem with an appropriate response.

## CHAPTER THREE

## METHODOLOGY

**Research Methodology**

The purpose of this study is to examine the role of civic crowdfunding in public administration and local government in an attempt to better understand the types of projects that ultimately get funded, where the money comes from, and what makes some projects successful while others fail. Because there are no known or accessible databases indexing the information required to address the research questions, all data are collected directly from the original source platforms. The unit of analysis in each research question is the individual, unique crowdfunding project proposal.

To best address the above issues, this research utilizes both qualitative and quantitative methodologies. The qualitative analysis provides insight on project type and proposal characteristics. The quantitative analysis focuses on project success through the analysis of multiple regression models. The remainder of this chapter discusses the methodology used in the analysis; first outlining the qualitative methodology section including the purpose, research question and hypotheses, data collection, and overview of the analysis. The following section addresses the quantitative methodology section, beginning with the purpose of the research, research question and hypotheses, data collection, and overview of the analysis. Finally, study limitations and delimitations are discussed.

**Qualitative Analysis Methodology**

The qualitative analysis methodology utilizes a directed document content analysis (Hsieh & Shannon, 2005) to address the first research question and related hypotheses. A directed approach begins with a relevant theory or research findings for initial coding (Hsieh &

Shannon, 2005). This approach utilizes the New Public Service and emerging crowdfunding literature as a guideline for initial coding. The incorporation of this literature informs the study and allows the researcher to better identify meanings and summarize patterns from the collected textural data. This is particularly useful in identifying and addressing both the types of projects that are proposed and the characteristics of those projects as well as how they fit within the concepts of the New Public Service.

**Research Question and Hypotheses**

*Project Type*: What projects do conveners attempt to fund through civic crowdfunding platforms? What projects actually get funded?

Davies (2014), in the most comprehensive analysis of civic crowdfunding to date reviewed seven platforms including generic and civic as well as American and international platforms. In his analysis, Davies' (2014) utilized a fifteen category typology of project classification; this included: garden/park, event, education/training, food, environment/wildlife, maintenance/renovation, public art/monuments, technology, organization, facility, streetscape, media, other, sport, and mobility project proposals. When examining the category of projects most frequently proposed across the seven disparate platforms, garden and park projects were found to have been proposed much more frequently than all other categories. This hypothesis tests Davies (2014) findings and highlights the most frequently proposed categories across the reviewed platforms. This study measured this hypothesis by tallying the accumulated codes in an effort to compare the results of the content analysis categorization. This exercise provides insight into the public interest and the types of projects citizens choose to support.

- ***Hypothesis 1**: Garden and park projects are the most frequently proposed project categories.*

The second hypothesis is an indicator of public interest as it relates to the projects being proposed as well as the projects that are most often fully funded. Of particular interest is whether the projects being proposed are funded at or near the same rate; in other words, whether the conveners are proposing the kinds of projects that are most likely to be successful. While this hypothesis deals with project success, the primary focus is on the types of projects being proposed and the role that the different categorizations and projects may play in project funding. This hypothesis is measured by comparing the results of the content analysis coding exercise in order to determine the most frequently proposed project categories and how successful the proposals are by category.

- ***Hypothesis 2:*** *The most frequently proposed project categories are also the project types that are most likely to be successfully funded.*

**Data Collection**

The data for the study are collected through the review of completed project documents and proposals from two of the most prominent American-based civic crowdfunding platforms. Completed projects refer to those that have exhausted their funding duration, regardless of whether fully funded or not. In addition to the successfully funded project information, data have been collected from each platform on the indexed campaigns that failed to meet the funding threshold. These data allow for further comparison between characteristics of funded and unfunded campaigns as well as the likelihood of success of civic crowdfunding projects of different origins and in different regions. Additional demographic data have been collected from the United States Census Bureau (2016). The platform data were collected over the summer and fall of 2015 and utilize a sampling frame from April 2012 through November 2015. The

beginning of this timeframe coincides with the passage of the JOBS Act for reasons previously discussed.

This study uses two civic crowdfunding platforms, Citizinvestor and ioby. They are two of the most prominent platforms and are dedicated solely to civic crowdfunding projects promoting civic engagement through neighborhood improvement. Citizinvestor started in 2012 and has enjoyed a fair amount of media recognition over the subsequent years due to the platform's innovation and success in funding projects throughout the country. Citizinvestor is a for-profit organization that connects citizens to community improvement projects and ideas throughout the United States. Despite the for-profit status, Citizinvestor has partnered with a number of local governments, big (Philadelphia, PA) and small (Central Falls, RI), to promote and fund projects that focus on community improvement. In the proposals that partner directly with local government various stakeholders typically work through a community development office or similar entity in order to solicit input and develop proposals. Oversight, development, and project updates are typically then handled through the office convening the project in conjunction with other stakeholders. In instances where proposals are not directly partnered to local cities or government, community leaders propose projects which in the majority of cases still require some level of local government consent, approval, or permitting. These projects, after vetted, are officially launched on the platform with an established number of days for the campaign to reach its funding goal. After the deadline passes, if the proposal has reached its goal, the funds, which to this point are held by Citizinvestor, are released to the project convener. If the proposal does not achieve its monetary goals, the raised funds are released back to the donors. This analysis examines 53 projects proposed on the platform between 2012 and 2015.

ioby (In Our Back Yards) first launched in New York City in 2009. Much like Citizinvestor, ioby focuses on civic-oriented community improvement projects. While Citizinvestor attempted to partner with local governments, ioby took a slightly different approach by expanding in targeted cities across the country and building coalitions with community leaders and organizations in those areas. Projects on ioby tend to be a smaller in scope than those on Citizinvestor, and there are substantially more due at least in part to the fact that the platform had been around and established prior to the sampling-frame window. This analysis examines 173 project proposals made on ioby between 2012 and 2015.

While there are some differences between the platforms pertaining to the number of projects, and the regional approaches; a number of commonalities exist across the two platforms used for the content analysis. These include project descriptions and proposals, which are essentially the main text and the pitch of each proposal to potential investors, and project goals and timeframes, which set forth the period in which the project must be funded. The analysis examines the combined 226 successful and unsuccessful project proposals across the two reviewed platforms.

**Overview of the Qualitative Analysis**

In order to answer the first research question on project type and also identify meaning and themes from the reviewed documents that further inform the quantitative analysis, an in-depth content analysis has been performed on the 226 project proposals of completed projects across the two civic crowdfunding platforms. Content analysis is a research technique in which through careful review, interpretive meaning can be inferred from textural data (Hsieh & Shannon, 2005). Systematic and objective, content analysis is a method of analysis that "allows the researcher to test theoretical issues to enhance understanding of the data" (Elo & Kyngas,

2008, p. 108). By distilling a substantial amount of communications and textural data into a series of emergent and theoretically driven categories, content analysis can provide for a broad description of the phenomenon under investigation (Elo & Kyngas, 2008). The imposed structure and the data coding process serves to coherently summarize the vast number of differing project proposals into much more easily digestible micro-categories and variables that can be used to address the first research question on project type.

The content analysis utilized in this design follows Krippendorff's (2012) six commonly accepted technique procedures: design, unitizing, sampling, coding, drawing inferences, and validation. These sequential steps provide a structural method for simplifying large bodies of textural data into more manageable categories aimed at understanding and explaining the phenomenon of interest (Krippendorff, 2012). While there is no universally accepted method for performing content analysis (Weber, 1990), the six commonly accepted steps listed above provide for a general process map that structures the analysis.

The first step in the content analysis is conceptual design and defining the context (Krippendorff, 2012). By analyzing the data through the lens of New Public Service and extant civic crowdfunding literature, we can begin to make inferences about the observations and the linkages between the New Public Service and the success of civic crowdfunding project proposals. In addition to the empirical information collected on civic crowdfunding projects, this technique allows for the investigation of theoretical linkages that serve to inform the potential successes and failures of civic crowdfunding projects; particularly as it pertains to the effectiveness of platform engagement as well as the public interest and responsiveness.

Unitizing, the second step in the content analysis, refers to the definition and identification of units of analysis in the data (Krippendorff, 2012). In this case, project proposals

across the two crowdfunding platforms examining both successful and unsuccessful (as defined by funding level) civic crowdfunding projects completed between April 2012 and July 2015 are being utilized for the analysis. . Specific project proposals, both funded and unfunded, were selected for inclusion from the two platforms provided proposals had completed their established number of days for the funding period.

Sampling in content analysis is less about drawing representative samples and more about reducing the potential for organizational bias (Krippendorff, 2012). While measuring organizational bias in these projects without access to accounting records and financial documents is exceedingly difficult; the inclusion of a number of demographic statistics allows for discussion and insight into the role and impact of regional wealth, education, and poverty levels on the success or failure rates of different proposals.

The fourth step, coding, involves counting and comparing the emergent patterns and themes from the directed content analysis and the guiding literature. A directed content analysis starts with a theory, the New Public Service that provides guidance for the initial codes, additional bodies of literature including crowdfunding, collaboration, and civic engagement literature provide additional context. The goal is to begin to build a theoretical framework that serves to inform the study of civic crowdfunding. By utilizing a directed analysis, a number of themes have already been identified through the literature as critical to the success of civic crowdfunding programs. These themes, which include: broad project appeal, a multifaceted marketing approach, mutual awareness, mutual benefit, participation, real-time updates, rewards, and visible problems, make up initial coding classifications.

Coding started first with the Citizinvestor platform before moving onto the ioby project proposals. The coding was a straightforward exercise done by highlighting and coding existing

themes. Upon completion, codes were tallied and notes were reviewed. This resulted in the inclusion of an additional emergent variable, that of matched funds within the projects. Project proposals were then recoded to account for the additional selection.

Upon finishing the recoding, each of the themes from the analysis are counted and compared in a manner that allows for interpretation of contextual meaning and comparison. In order to ensure reliability a second rater was asked to participate in the process of cross-checking the data (Creswell, 2012). This process known as inter-rater reliability serves as a means in which to check and verify accuracy of coding as well as providing an opportunity for additional refinement to increase the consistency and reliability of the qualitative analysis (Creswell, 2012). The third party was provided a copy of the codebook (see Appendix I) as well as a randomly selected, 10 percent sub-sample of the data to code (De Swert, 2012). This amounted to 23 randomly selected cases across both platforms. In order to test for coding reliability Miles and Huberman's (1994) 0.70 reliability threshold was employed. This measure compares the author coding with those derived by a third party rater with the use of the provided codebook. Miles and Huberman (1994) argue that as long as 70 percent of the codes are the same, the coding can be considered to be sufficiently reliable. Utilizing Miles and Huberman's (1994) 0.70 as the acceptable threshold, discrepancies were reviewed, tallied, and computed to have a 94.8 reliability score across the reviewed 23 case sub sample. The high rate of reliability offers sufficient confidence in the reliability and validity of the coding process necessary in order to proceed to the analysis stage.

The next step, drawing inferences, is the most important step in content analysis (Krippendorff, 2012). This step involves connecting coded variables back to the constructs and phenomena of interest in order to address the research questions. The frequency within which the

coded variables appear across each reviewed project proposal determines the level of attention they receive within the analysis (Krippendorff, 2012). For the first research question on project type, an overview addresses the general process and findings of the content analysis as it relates to general project type and demographic statistics. From here the hypotheses are addressed examining the frequency within which projects are proposed and how successful they ultimately are as well as how likely conveners are to propose projects that are likely to be successful. This in turn leads in to a discussion of the potential implications of the findings and what they may mean for civic crowdfunding as well as broader concepts within the domain of public administration.

The final step of the content analysis is also the most challenging: validating the results (Krippendorff, 2012). Because the technique is based on inference and not direct observation, a strong theoretical grounding in the literature is necessary to help further validate and make sense of the results (Krippendorff, 2012). Validation is attempted through discussion of the implications and conclusions addressing each research question and attempting to tie them back to the theoretical grounding by examining the potential impacts that the results reveal, not just for the field but also on a broader level and how it may affect the discipline.

As a technique that has been characterized as flexible, fluid, and more art than science, content analysis is not without its critics (Weber, 1990). Directed content analysis may lead to bias and overreliance on existing theoretical constructs which in turn may minimize acknowledgement of emergent themes (Hsieh & Shannon, 2005). This weakness is also the main strength of the directed approach; specifically that existing theory can be supplemented and extended in a manner that can be particularly useful in developing fields (Hsieh & Shannon, 2005), much like civic crowdfunding.

**Quantitative Analysis Methodology**

The quantitative analysis methodology examines project success and failure as defined by the funding levels of project proposals. The second research question on project success and the subsequent hypotheses are addressed through an analysis examining characteristics from the literature as well as emergent trends from the first research question to answer the question of what characteristics lead to both project funding success and failure. This analysis includes a core set of independent variables along with two different dependent variable models (See Figure 1).

**Figure 1 - Full Model(s) and Equation**
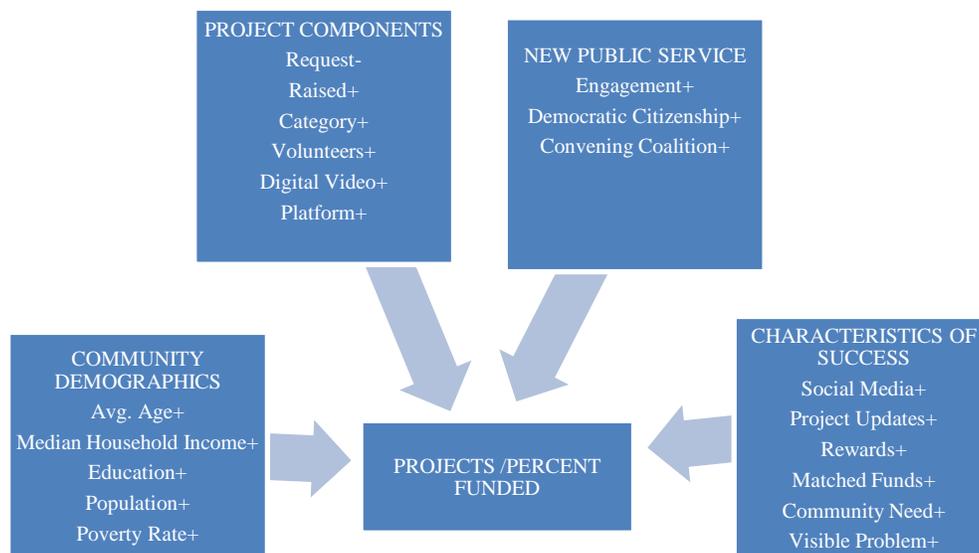


$$Projects/Percent\ Funded = Community\ Demographics\ (+Avg.Age + \\ Median\ Household\ Income + Education + Population - Poverty\ Rate) + \\ Project\ Components(+Category - Request + Raised + Volunteers + \\ Digital\ Video + Platform) + New\ Public\ Service(+Engagement + \\ Democratic\ Citizenship + Convening\ Coalition) + \\ Characteristics\ of\ Success(+Social\ Media + Project\ Updates + Rewards + \\ Fund\ Matching + Community\ Need + Visible\ Problems)$$

The first model explores fully funded projects as the dependent variable; the second model examines the percentage of funding achieved in project proposals as the dependent variable (see Figure 1). The two separate models highlight the impact of the independent variables on project success and also on the degree of success as measured by the percentage funded.

**Research Question and Hypotheses**

*Project Success:* Understanding project success can provide information on the effectiveness of new forms of engagement, such as civic crowdfunding while also revealing citizen interest and preference. In looking at success as a fully funded project, what factors influence project success?  What are the characteristics of both funded and unfunded projects? Hypotheses 3-5 explore project success through the New Public Service concepts of democratic citizenship, engagement, and the presence multi-sectoral conveners. The remaining hypotheses 6 and 7 look at success through the project components of pricing and proposal category.

The third hypothesis explores the importance of incorporating multiple sectors and actors. Agranoff (2006) highlights the importance of incorporating multi-sectoral stakeholders as a means to address increasingly common resource shortages and concerns. The third hypothesis explores this point by examining the impacts of multiple sectors and actors on project success. By rethinking local government revenue streams and turning to new innovative measures such as crowdfunding, it is theorized that the incorporation of multiple actors and sectors at the convening level will have a positive impact on overall success due to the resource networks that these actors bring to the table (Demediuk et al., 2012).

- *Hypothesis 3*: *Project proposals convened by coalitions have a greater impact on project success than those offered by a single convener.*

This fourth hypothesis explores the link between project success and engagement by examining the number of participants in a given crowdfunding campaign and the impact it has on project success. In an increasingly networked society an active, engaged citizenry is critical to collaborative governance and effective representation (Stoker, 2006). Digital and online engagement have taken on progressively more importance in recent years as society and government become increasingly connected (Zuckerman, 2014); therefore it is theorized that the more engaged a donor base a proposal has the more likely it is to be successful.

- ***Hypothesis 4***: *The greater engaged the public is in a given crowdfunding campaign, the more likely a project is to be successfully funded.*

Utilizing voter turnout as a proxy measure for the New Public Service concept of democratic citizenship, this hypothesis explores the impact of voter turnout at a county level on project success. Presuming democratic citizenship implies active interest and involvement within community governance (J. Denhardt & Denhardt, 2003) it is theorized that the more politically involved a citizenry within a proposal jurisdiction the more likely project success. In this study a jurisdiction refers specifically to the zip code and corresponding boundary lines where a project is proposed. This offers a way in which to classify and quantify the characteristics of areas where projects are proposed.

- ***Hypothesis 5***: *Project success is greater in areas where democratic citizenship is more prevalent.*

A recent study revealed that the median civic crowdfunding project funding request is $2,099.00 (Davies, 2014). This hypothesis explores whether as project pricing requests increase, the likelihood of project funding decreases. This allows for the exploration of the funding gap

and whether there may be an optimum minimum and maximum request level as well as whether or not it is a linear relationship between pricing and success.

- ***Hypothesis 6***: *Project pricing requests have a negative relationship with project success.*

Davies (2014) work explored the different proposals across a number of platforms and where they fit within a set of predetermined categories. This question expands upon the existing literature and findings from the qualitative analysis. In order to examine the impact of project type broadly as well as alleviate potential issues of small sample sizes within a given segment, each proposal has been reclassified into one of two categories, that of provided services or structural/building improvements. These two categories offer a way in which to naturally divide project proposals among services and structural building and improvement projects that allow for easier and more valid (due to small sample size mitigation) comparison.

- ***Hypothesis 7***: *The type of project proposal impacts the overall likelihood of success of a given proposal.*

**Data Collection**

In examining project success, data collected from the content analysis, including prior theoretical constructs and additional emergent themes are examined in two separate models in order to answer the hypotheses of the second research question. The independent variables are a combination of those that emerged from the qualitative analysis, as well as previously identified variables of interest from the literature. Regional demographic statistics drawn from the United States Census Bureau add additional context to the analysis. Explanations and measures of variables can be found in Table 2, with descriptive statistics of the independent variables following in Table 3. The two dependent variable models include successfully funded projects or

projects reaching or exceeding 100 percent of funding goals; the percentage funded of projects is

what percentage of a project's funding goal was actually realized. The information for this

variable was collected during the content analysis, and computed by dividing the amount realized

by the amount requested for a given project proposal.

| Table 2 - Variables and Measures | | |
|---|---|---|
| **Variables** | **Measure** | **Hypothesis** |
| **Dependent Variables** | | |
| **Percent Funded** | Continuous variable indicating the percent above or below a project request that a project was funded at. | H3 |
| **Project Success** | Dichotomous variable measuring project funding below 100% of the initial request as unsuccessful and anything at or above as successful. | H4, H5, H6, H7 |
| **Project Components** | | |
| **Digital Video** | Binary variable indicating whether digital video was used in the project proposal. | Control |
| **Volunteers** | Binary variable indicating whether the proposal requested volunteer assistance. | Control |
| **Request** | Continuous variable indicating the initial monetary project request amount. | H6 |
| **Raised** | Continuous variable indicating the total monetary amount collected within the fundraising duration. | Control |
| **Platform:** <br>   **Citizinvestor** <br><br><br>   **ioby** | <br> Binary variable indicating whether a project was proposed on the Citizinvestor platform. <br><br> Binary variable indicating whether a project was proposed on the ioby platform. | Control |
| **Category:** <br>   **Built Environment** <br><br><br>   **Services** | <br> Binary variable indicating whether a project proposal is for a structural improvement or built environment project. <br><br> Binary variable indicating whether a project proposal is for a service, education, or training project. | H1, H2, H7 |
| **New Public Service** | | |

| Table 2 - Variables and Measures | | |
|---|---|---|
| **Engagement** | Continuous variable indicating the number of investors in a specific project proposal. | H4 |
| **Democratic Citizenship** | Continuous variable indicating the percent of voter turnout among voting age citizens by county in the 2012 Presidential election. | H5 |
| **Coalition** | Binary variable indicating the presence of multiple convening stakeholders. | H3 |
| **Characteristics of Success** | | |
| **Project Updates** | Binary variable indicating whether a project proposal was updated throughout the funding duration. | Control |
| **Social Media** | Binary variable indicating whether a proposal utilized social media during the funding campaign. | Control |
| **Visible Problems** | Binary variable indicating whether a project proposal links to a visible problem within the community. | Control |
| **Community Need** | Binary variable indicating whether a proposal highlights and addresses an existing community need. | Control |
| **Rewards** | Binary variable indicating whether a proposal offered rewards to donors. | Control |
| **Matched Funds** | Binary variable indicating whether a proposal offered to match donor funds. | Control |
| **Community Demographics** | | |
| **Median Household Income** | Continuous variable indicating the median household income where a project is proposed. | Control |
| **Median Age** | Continuous variable indicating the median age of citizens within the jurisdiction of where a project is proposed. | Control |
| **Poverty Rate (Percentage)** | Continuous variable indicating the percentage of those in poverty within the jurisdiction of where a project is proposed. | Control |
| **Education (Percentage Population with Bachelor's Degree and Beyond)** | Continuous variable indicating the percentage of the population with a bachelor's degree or greater within the jurisdiction where a project is proposed. | Control |
| **Population** | Continuous variable indicating the total population within the jurisdiction of where a project is proposed. | Control |

## Overview of Quantitative Analysis

| Table 3 - Descriptive Statistics | | | | |
|---|---|---|---|---|
| **Independent Variables** | **Mean** | **Standard Deviation** | **Min.** | **Max.** |
| **Dependent Variables** | | | | |
| **Percent Funded** | 78.02 | 40.43 | 0 | 208 |
| **Project Success** | .56 | .50 | 0 | 1 |
| **Project Components** | | | | |
| **Digital Video** | .20 | .40 | 0 | 1 |
| **Volunteers** | .40 | .49 | 0 | 1 |
| **Request** | 9,712.26 | 29,363.43 | 40 | 293,000 |
| **Raised** | 4,565.12 | 15,704.31 | 0 | 187,330 |
| **Platform:** | | | | |
|    **Citizinvestor** | .23 | .42 | 0 | 1 |
|    **Ioby** | .77 | .42 | 0 | 1 |
| **Category:** | | | | |
| **Built Environment** | .63 | .48 | 0 | 1 |
| **Services** | .37 | .48 | 0 | 1 |
|    **Art/Culture** | .12 | .33 | 0 | 1 |
|    **Community Grants** | .17 | .37 | 0 | 1 |
|    **Education** | .11 | .31 | 0 | 1 |
|    **Greening** | .08 | .26 | 0 | 1 |
|    **Libraries** | .03 | .17 | 0 | 1 |
|    **Nbhd. Improvements** | .08 | .26 | 0 | 1 |
|    **Parks** | .06 | .24 | 0 | 1 |
|    **Public Health** | .06 | .24 | 0 | 1 |
|    **Recycling** | .01 | .09 | 0 | 1 |
|    **Sustainability** | .21 | .41 | 0 | 1 |
|    **Walkability/Cycling** | .08 | .27 | 0 | 1 |
| **New Public Service** | | | | |
| **Engagement** | 27.36 | 30.69 | 0 | 262 |
| **Democratic Citizenship** | 34.62 | 9.79 | 22 | 84 |
| **Coalition** | .36 | .48 | 0 | 1 |
| **Characteristics of Success** | | | | |
| **Updates** | .53 | .50 | 0 | 1 |
| **Visible Problems** | .13 | .34 | 0 | 1 |
| **Community Need** | .51 | .50 | 0 | 1 |
| **Social Media** | .98 | .13 | 0 | 1 |
| **Rewards** | .04 | .21 | 0 | 1 |
| **Matched Funds** | .04 | .21 | 0 | 1 |
| **Community Demographics** | | | | |
| **Median Household Income** | 50,284.28 | 14,725.36 | 26,095.0 | 114,574.0 |
| **Median Age** | 35.69 | 5.32 | 23.0 | 65.1 |
| **Poverty Rate (Percentage)** | 21.33 | 6.51 | 2.1 | 39.8 |
| **Education (Percentage Population with Bachelor's Degree and Beyond)** | 33.06 | 9.96 | 5.1 | 76.4 |
| **Population** | 39,631.88 | 24,903.76 | 192 | 101,572 |

The quantitative analysis employs both OLS and logistic regression analyses in order to examine the impact that the explanatory variables have on both the percentage of the project funded (OLS) and overall project success (logistic). The results of each analysis are discussed together for Hypotheses 3 through 7.

The OLS regression (the full model equation is listed below) utilizes percentage funded as the dependent variable and the existing and emergent themes as the independent variables. The percentage variable ranges from 0, if a campaign receives no funding, to 208 percent funded in the case of one particular project that received substantially more than had been requested (see Table 3). This dependent variable assesses the degree of impact the independent variables exhibit on percentage of project success. The logistic regression analysis examines the binary dependent variable of whether projects are fully funded and the factors that contribute to project success. Results including significant variables and factors contributing to project success and failure follow in discussion.

**Limitations and Delimitations**

The primary limitation of the study is the lack of secondary data and the discrepancies across networks and platforms regarding what data are kept and made available. This has been addressed as best possible by revisiting each of the crowdfunding platforms every month in an effort to capture and preserve what data are reported. While all reviewed are categorized as civic platforms or given the civic project tag, in a field this new, definitions and operations tend to vary from one platform to the next. This can make data collection and analysis difficult, especially when comparing data in the aggregate. Every effort has been made to address this by acknowledging wherever appropriate any potential problems with missing data, having a third

party cross-check collected data, as well as highlighting how missing or limited data may have impacted particular segments of the analysis.

Delimitations of the study include the focus on two crowdfunding platforms for analysis. These two platforms were selected after careful review of projects and scope in an effort to collect as much relevant and fruitful data in the American context of civic crowdfunding as possible. By selecting only two and looking solely at American proposals, the results may be potentially limited because the number of platforms is continually increasing and a fair amount of work has been done to date in Western Europe. After some deliberation it was determined that further expanding data sources would provide limited additional utility as many are small scale platforms that support even more niche projects. Obviously, this is not the case in the decision to exclude Kickstarter from the analysis. The decision to exclude Kickstarter and other large scale platforms such as GoFundMe and IndieGoGo was made primarily due to the fact that the majority of proposals on the platforms are privately proposed and have little to do with civic issues. Of those that do address civic issues, the vast majority are individually sponsored efforts. Finally, the decision was made in sticking with the American context to sacrifice the potential for additional data in order to have results more applicable to the current situation and climate here in the United States.

**CHAPTER FOUR**

**RESEARCH RESULTS AND FINDINGS**

This chapter details the research results and findings of the mixed methods analysis. The chapter starts by discussing the qualitative analysis results, first providing an overview of the findings as they relate to project type, project success, and other general demographic statistics and findings. Next, the results of the content analysis addressing the first research question and hypotheses as well as potential implications and what they reveal for crowdfunding and public administration are discussed. The qualitative analysis results are followed by a discussion of the quantitative findings used in addressing the second research question on factors of success and the implications for the field and the discipline.

**Qualitative Analysis Results**

**Overview by Platform**

This analysis utilized 226 combined project proposals from civic crowdfunding platforms Citizinvestor and ioby between 2012 and 2015. All projects are civically oriented but not necessarily proposed by or directly involving government actors. That said, the vast majority require a minimum of government cooperation or approval for permitting, zoning, and construction among other things. Of the 226 analyzed proposals, 53 came from Citizinvestor, with the remaining 173 coming from ioby. The 226 project proposals account for all proposed projects on each platform within the given timeframe. The reason for the difference between the two is that ioby was launched in 2009 and had already gained traction and built up a network within the field. On the other hand, Citizinvestor was just entering the field and working to build its network and increase social capital amongst potential localities and investors in 2012.

| Table 4 - Platform Demographics | | | |
|---|---|---|---|
| | **Citizinvestor** | **ioby** | **Combined** |
| **Projects** | 53 | 173 | 226 |
| **Fully Funded Projects** | 25 | 102 | 127 |
| **Avg. # Donors** | 24 | 28 | 27 |
| **Success Rate** | 47% | 59% | 56% |
| **Avg. Request** | $29,270 | $3,721 | $9,712 |
| **Avg. Funded Project** | $11,594 | $2,412 | $4,565 |
| **Standard Deviation of Requested Funds** | 56,158.86 | 4,521.02 | 29,364.43 |
| **Standard Deviation of Raised Funds** | 31,168.88 | 3,004.15 | 15,704.31 |
| **Request Min/Max** | 270/293,000 | 40/27,639 | 40/293,000 |
| **Raised Min/Max** | 0/187,330 | 45/26,865 | 0/187,330 |
| **Most Frequently Proposed Category** | Parks | Sustainability/Gardens | Sustainability/Gardens |
| **Highest Percentage Funded Category** | Walkability/Cycling | Public Health | Libraries |
| **Most Successful** | Parks | Community Grants Sustainability/Gardens | Community Grants Sustainability/Gardens |
| **Most Unsuccessful** | Greening | Sustainability/Gardens | Sustainability/Gardens |

Table 4 displays the platform demographics of Citizinvestor and ioby, both platforms are similar with regard to the mean number of investors in a given project with 24 per Citizinvestor proposal and 28 for each ioby proposal (see Table 4). A chi-square test of the categorical dependent variable, project success, reveals that there is not a statistically significant relationship between platforms and project success ($Chi^2$(1)=2.29, $p$=0.13). In order to further examine platform differences, an independent t-test examining the percent funded dependent variable was run ($t$(224)=4.77, $p$=<.001). Projects proposed on ioby have a statistically significant higher funding percentage (84.8% ± 2.77%) than those proposed on Citizinvestor (55.91% ± 6.17%).

These results are further born out when examining success rate across the two platforms; Citizinvestor has a 47-percent project success rate among analyzed project proposals whereas ioby's is much higher at 59-percent. When looking at the mean requests and successful projects, the success rate differential makes some sense due to the differences between the platforms in

project funding requests, with the mean Citizinvestor request being roughly eight times more than those on ioby, $29,270 and $3,721, respectively. The numbers continue to skew, albeit not quite as heavily, when examining the mean fully funded projects between the platforms; on Citizinvestor the mean is $11,594 compared to $2,412 on ioby; when combined, the mean funded proposal is $4,565. Citizinvestor has nine requests of more than $40,000, five of which exceed $100,000 while the highest project request on ioby is less than $28,000.

Some of the discrepancy between the pricing requests and funding on the two platforms can be explained by outliers, such as those mentioned above, yet there is more to it. The project pricing is much higher across the board on Citizinvestor than it is on ioby, a discrepancy not easily explained by platform fees. Citizinvestor charges an eight percent service fee to the total raised sum while ioby requires a $35 platform fee along with a three percent service charge also on the final raised amount. Some of the pricing different can perhaps be explained by the most frequently proposed project categories and how they differ across platforms. On Citizinvestor, the most commonly proposed and funded project category is that of parks; typically a much larger and costly endeavor that has a greater community reach and benefit than the smaller-scale projects. On ioby sustainability/gardens programs take the top spot; these are typically small-scale proposals geared toward neighborhood projects.

**Project Proposal Categories**

In an effort to provide insight into public interest and community responsiveness as it relates to project type, this research question asks what types of projects conveners attempt to fund through civic crowdfunding platforms and what types of projects actually get funded, specifically looking at project categories. Each analyzed platform (Citizinvestor and ioby) categorize individual project proposals, and while the majority of categories overlap, there was

some merging necessary in order to categorize all projects across the two platforms. Across the two platforms, each project was assigned into one of eleven distinct categories. The categories include: Art/Culture, Community Grants, Education, Greening, Libraries, Neighborhood Improvements, Parks, Public Health, Recycling, Sustainability, and Walkability/Cycling. A full list of the eleven categories along with descriptions and examples can be found in Table 5.

| Table 5 - Project Type Descriptions and Examples | | |
|---|---|---|
| **Category** | **Description** | **Example** |
| **Art/Culture** | Art/culture projects increase community beautification while attempting to raise pride within the local community. These projects can range greatly in pricing requests. | Community murals, sculptures, memorials and similar projects. |
| **Community Grants** | Community grants projects are typically one time fundraisers designed to raise awareness for a particular issue. They are usually relatively small scale and often feature community involvement beyond just monetary donation. | These projects can be wide-ranging, encompassing anything from a cookout to setup a neighborhood watch program to community hack a thons to spur local innovation. |
| **Education** | Educational project proposals highlight a particular learning gap or educational need within segments of a community and set about addressing it. | These projects highlight learning in general and can exist on many different levels from formal supplements to school curriculums to teaching skills and trades to unemployed members of the community. |
| **Greening** | Greening projects are designed to transform mostly urban or neglected spaces into areas of community pride through the cleaning and "greening" of the space. | Typical greening projects include flower or tree planting in formerly neglected areas of the community. |
| **Libraries** | Library project proposals highlight the need for increased community literacy. | Library projects range from large scale supplements to community libraries and programs to micro neighborhood little free libraries. |
| **Neighborhood Improvements** | Neighborhood improvement projects address some particular issue within a community. They are often small scale projects that rely on the help of volunteers in addition to fundraising. | Neighborhood improvement proposals typically address blight within a community through cleanups and the formation of community associations. |
| **Parks** | Park proposals highlight the need for community recreational space. | Proposals vary from traditional parks to skate and dog parks. |

| Table 5 - Project Type Descriptions and Examples | | |
|---|---|---|
| | | |
| **Public Health** | Public health programs focus on community health needs within the community. These programs can vary in size and scope. | Public health programs can vary. In some instances they seek to address a community need where segments of the population (such as the homeless) may not have access to standard preventative healthcare and measures that others take for granted. In other case it may be classes on nutrition and the benefits of maintaining an active lifestyle. |
| **Recycling** | Recycling programs attempt to build community pride by both cleaning up neglected areas and also showing how conservation techniques make both a community and environmental difference. | One way in which recycling is highlighted is through a community art show in which participants make and design clothing entirely out of recycled materials. |
| **Sustainability** | Sustainability programs are often broad in scope and highlight community need and impact. By nature these programs are inclusive; volunteer oriented, and meant to be long lasting. | These programs often focus on sustainable food sources within the community from gardens to micro-farms and food co-ops. |
| **Walkability/Cycling** | Walkability/cycling programs are often large scale and fairly expensive proposals that highlight the health and environmental benefits of having such a space and infrastructure. | Examples of these programs come in the form of increased walking and biking trails within the community. |

| Table 6 - Projects by Category | | | |
|---|---|---|---|
| | **Rank** | **Total** | **Percent** |
| **Sustainability** | 1 | 47 | .21 |
| **Community Grants** | 2 | 38 | .17 |
| **Art/Culture** | 3 | 28 | .12 |
| **Education** | 4 | 24 | .11 |
| **Walkability/Cycling** | 5 | 18 | .08 |
| **Greening** | 6 | 17 | .07 |
| **Neighborhood Improvements** | 6 | 17 | .07 |
| **Parks** | 8 | 14 | .06 |
| **Public Health** | 8 | 14 | .06 |
| **Libraries** | 10 | 7 | .03 |
| **Recycling** | 11 | 2 | .01 |
| n=226 | | | |

The most frequently proposed project type across the two platforms is sustainability, with 47 total project proposals comprising 21 percent of the total observed projects (see Table 6). Sustainability projects include community gardening initiatives, urban farms, food co-ops, and composting efforts geared at reducing the environmental footprint of the participating communities. Community grants are the second most frequently proposed category with 38 total projects, comprising 17 percent of all observed projects (see Table 6). The third most frequently proposed projects are art/culture oriented with 12 percent of the total project proposals and 28 proposals between the two platforms (see Table 6). Many of these projects focus on public art, such as murals, sculptures, and other public displays, aimed at increasing a sense of pride and identity within the participating communities.

Educational programs are the fourth most frequently proposed of the observed project categories comprising 11 percent of total proposals and 24 total projects across both platforms (see Table 6). Following educational programs for the fifth most requested proposals are walkability/cycling requests (see Table 6). Walkability/cycling requests highlight community need for walking and cycling trails, as well as other related aspects, such as bike racks and air stations. Neighborhood improvements and community greening efforts also both make up roughly 8 percent of proposed projects (see Table 6). Neighborhood improvements primarily focus on cleanup initiatives, while greening efforts are often community beautification programs planting trees and flowers in formerly neglected public spaces. Parks and public health programs tie for the 8th most requested proposals across the two platforms (see Table 6). Parks range from new construction of playgrounds and skate parks to augmenting existing structures. Public health programs typically focus on providing assistance to at risk local populations through the provision of goods and services. Following parks and public health requests are proposals for

libraries and recycling programs that collectively total fewer than four percent of all project requests (see Table 6). Library programs include fundraising drives for local libraries, as well as construction costs and requests for local tiny libraries. Recycling programs highlight specific opportunities and projects for used material to increase conservation within proposing communities.

While sustainability projects are the most frequently offered it is far from equal between the two platforms. The vast majority (45 of 47) of the sustainability projects come from the ioby platform (see Table 7). A potential explanation could be the platform's residence in New York City and its early focus on local projects before branching out across the country. Sustainability projects seem to be of particular interest in areas like New York City that are highly developed and have substantial wealth within the region.

Community grants have a much more even distribution comprising 17 percent of proposals on both Citizinvestor and ioby respectively (see Table 7). Community grants can take on a variety of project proposals from community fundraisers and festivals to interpreter and informational programs. The commonality being that most of the community grants proposals are for short-term projects that often have a specific start and end date, not temporary as much as targeted.

In looking at each platform individually, education programs make up 11 percent of Citizinvestor proposals and 10 percent of those done on ioby (see Table 7). These proposals often focus on supplementary school or education programs, as well as different community education and training efforts. Following education programs as the next most often proposed are walkability/cycling requests. These requests have an equal rate across both platforms making up 8 percent of requests on both Citizinvestor and ioby (see Table 7).

| Table 7 - Category by Platform | | | | |
|---|---|---|---|---|
| | **Citizinvestor** | **ioby** | **Combined** | |
| | **Total** | **Total** | **Total** | **Percent** |
| **Art/Culture** | 9 | 19 | 28 | 12% |
| **Community Grants** | 9 | 29 | 38 | 17% |
| **Education** | 6 | 18 | 24 | 11% |
| **Greening** | 2 | 15 | 17 | 8% |
| **Libraries** | 3 | 4 | 7 | 3% |
| **Neighborhood Imp.** | 6 | 11 | 17 | 8% |
| **Parks** | 12 | 2 | 14 | 6% |
| **Public Health** | 0 | 14 | 14 | 6% |
| **Recycling** | 0 | 2 | 2 | <1% |
| **Sustainability** | 2 | 45 | 47 | 21% |
| **Walkability/Cycling** | 4 | 14 | 18 | 8% |
| **Total** | 53 | 173 | 226 | |

When looking at neighborhood improvement proposals across the two platforms, it skews slightly more toward Citizinvestor while ioby tends to favor community greening efforts (see Table 7). Park requests on the other hand come almost exclusively from ioby (12 of 14 projects) while all 14 public health proposals are found on the Citizinvestor platform (see Table 7).

The content analysis and the resulting scoring of the project proposals into one of the eleven individual categories highlights the popularity and frequency of particular project proposal categories over others. In addition, this exercise allows for addressing each of the hypotheses by further examining project categories to gain additional insight into the frequency with which some proposals may be offered over others.

**Platforms**

As illustrated in Table 8, there were 226 proposals in the analysis, and 127 projects were fully funded resulting in a 56 percent rate of proposal success across the two platforms. This indicates that slightly more than half of all proposed projects are successfully funded. Of the 127 fully funded proposals, 25 came from Citizinvestor and 28 of the 99 unsuccessful proposals

originated on the platform for a 47 percent success rate of Citizinvestor proposals (see Table 8).

There were 173 projects proposed on ioby within the time frame, and 102 were fully funded

while 71 were not, a nearly 59 percent project success rate on the platform (see Table 8). A chi-

square test examining the project success dependent variable found a lack of statistical difference

between platforms and project success ($Chi^2$ (1)=2.29, $p$=0.13).

Of the unsuccessful proposals, twelve received at least 80 percent of their initial funding

request; that is, twelve percent of the unsuccessful proposals or roughly five percent of all

proposals, which indicates that most projects that are close to reaching their funding goal are able

to attain the requisite support, and unfunded projects as a whole are typically receiving much less

support. An independent t-test confirms the differences between the platforms related to funding

percentage ($t$(224)=4.77, $p$=<.001). Projects proposed on ioby have a statistically significant

higher funding percentage (84.8% ± 2.77%) than those proposed on Citizinvestor (55.91% ±

6.17%). This finding suggests that while the platforms share many similarities, there are enough

differences to significantly impact funding levels.

| Table 8 - Successful Projects by Platform | | | |
|---|---|---|---|
| | **Citizinvestor** | **ioby** | **Total** |
| **Successful** | 25 | 102 | 127 |
| **Unsuccessful** | 28 | 71 | 99 |
| **Total** | 53 | 173 | 226 |

**Community Demographics**

In addition to platforms and categories, a number of community demographics can

provide further insight into the success of civic crowdfunding proposals, which as Figure 2

highlights can vary by locality, state, and region. The majority of project proposals and successes

can be found in the northeast, particularly in the New York metropolitan area. The Midwest and

southern regions along with the west coast of the country are also fairly well represented, while the Great Plains and the rocky mountain region appear to be less popular with both proposals and overall project successes.

**Figure 2 - Geographic Distribution of Project Proposals and Successes**
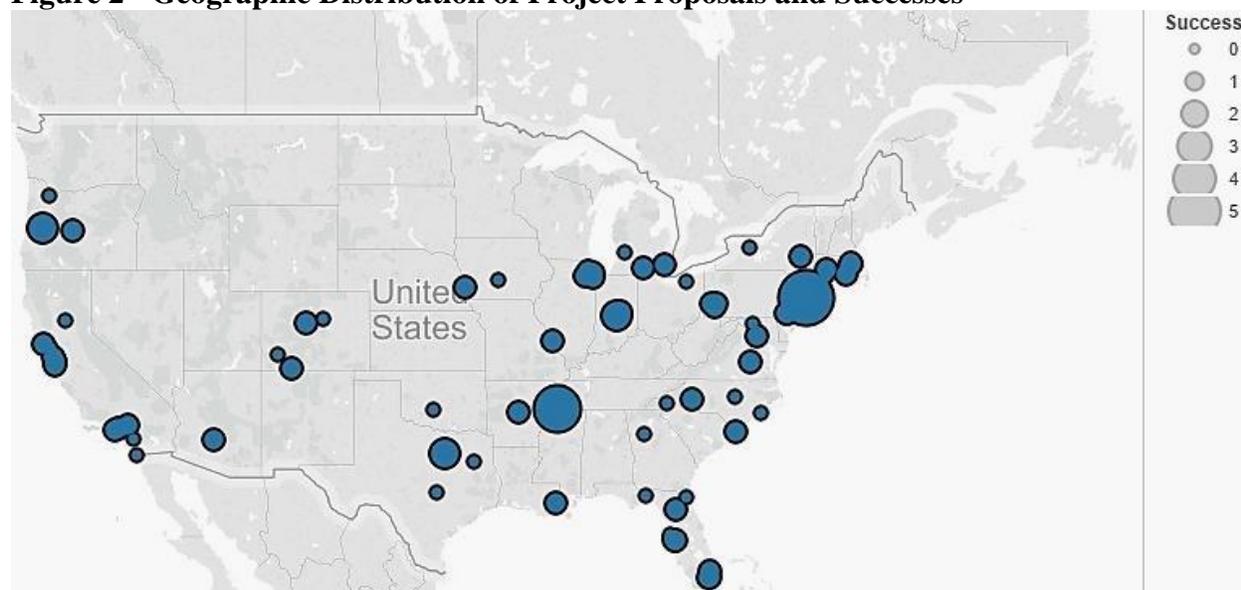


| Table 9 - Regional Project Success | | | | |
|---|---|---|---|---|
| **Region** | **Division** | **Fully Funded Projects** | **Total Projects Proposed** | **Percent Successfully Funded** |
| **West** | | 14 | 28 | 50% |
| | Mountain | 3 | 6 | 50% |
| | Pacific | 11 | 22 | 50% |
| **South** | | 35 | 64 | 55% |
| | South Atlantic | 10 | 27 | 37% |
| | East South Central | 21 | 29 | 72% |
| | West South Central | 4 | 8 | 50% |
| **Northeast** | | 68 | 114 | 60% |
| | New England | 4 | 10 | 40% |
| | Mid-Atlantic | 64 | 104 | 62% |
| **Midwest** | | 10 | 19 | 53% |
| | East North Central | 8 | 16 | 50% |
| | West North Central | 2 | 3 | 67% |
| Note: Regional and Divisional Classification from the United States Census Bureau | | | | |

Illustration of the project success by region can be found in Table 9. Here we find that more than half of all proposals (114) come from the northeast region, in particular the mid-Atlantic area. As discussed earlier, there are a few potential reasons for this, not the least of which is the presence and influence of ioby as a startup in the region. Despite the much greater number of proposals in the mid-Atlantic division and northeast region, the overall success rate, while the highest, does not vary much from the three other regions across the country. The second most fully-funded proposals are found in southern region of the country. The east south central division in particular, encompassing the states of Alabama, Kentucky, Mississippi, and Tennessee, exhibits the highest overall success rates across the nine divisions, with more than 70 percent of proposed projects being fully funded. Conversely, the lowest percentage of fully-funded projects is also found in the southern region, the south Atlantic division specifically. The south Atlantic division covers much of the central Atlantic coast and beyond with the states of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia comprising it. Across these eight states, 27 projects were proposed with only 10 reaching their funding goals resulting in a 37 percent success rate within the division. Some of the disparity between the two regions can be chalked up to the types of projects proposed within each region. The east south-central region has the highest success rate, a percentage buoyed by a number of small and repeat project proposals in urban areas with high population densities. The south Atlantic division on the other hand has the lowest success rate, which can be partially attributed to a number of high dollar unsuccessful proposals coming from Florida. The only other regional division with less than 50 percent success is New England with 40 percent. What may be most striking about this is not necessarily the lack of success of proposals in New England and the south Atlantic, but the overall success across the other divisions where projects range

from 50 to 72 percent successfully funded and on a broader level across regions as all four regions fall between 50 and 60 percent success rates.

Beyond simply location, a number of local and regional demographic factors go into project success in a particular area. This includes the size of a jurisdiction in which the project is proposed. Prior research has found that the majority of donations come from within the proposal's jurisdiction (DeSisto, personal communication, January 22, 2016). There are a number of potential reasons why this may be, but it makes intuitive sense that the larger a jurisdiction in terms of population, the better chance at success it may have.

The 226 project proposals used in this analysis come from 159 unique jurisdictions across the country. These proposal jurisdictions range in population from 192 in Loma Mar, California to just over 101,000 citizens in Brooklyn, New York. The mean population of a jurisdiction in which a proposal is offered is 39,458, and the standard deviation is 24,985; it is important to note that the population sizes in many cases do not reflect the overall size of a city but simply the specific jurisdiction within a proposing city. For example, proposals originating in Brooklyn come from an area of more than 100,000 citizens despite Brooklyn being located within the domain of New York City, which has a population of more than 8 million. The focus on the local jurisdiction as opposed to the city is done in order to utilize a more precise measure of population where projects are being proposed.

For the sake of comparison of success rate by population, the project proposals were split into 10,000 citizen population segments (see Table 10). Perhaps the most interesting finding from this exercise is the general size of localities that propose crowdfunding projects. Out of all reviewed proposals, the majority of proposals come from areas with 60,000 or fewer people.

Each population segment from 0-10,000 to 40,001-50,000 has at least 12 fully funded project proposals and a success rate ranging from 50 to 76 percent. Moving beyond the mid-range localities into larger proposing jurisdictions, the number of fully funded projects drops off substantially with no more than 6 fully funded projects in the reviewed segments ranging from jurisdictions with 60,001 to 110,000 individuals.

| Table 10 - Success Rate by Population | | |
|---|---|---|
| **Population** | **Fully Funded Proposals** | **Success Rate** |
| **0-10,000** | 12 | 60% |
| **10,001-20,000** | 20 | 57% |
| **20,001-30,000** | 23 | 53% |
| **30,001-40,000** | 19 | 54% |
| **40,001-50,000** | 13 | 50% |
| **50,001-60,000** | 19 | 76% |
| **60,001-70,000** | 2 | 22% |
| **70,001-80,000** | 6 | 55% |
| **80,001-90,000** | 5 | 50% |
| **90,001-100,000** | 2 | 66% |
| **100,001-110,000** | 6 | 75% |

Somewhat surprisingly, the number of successful proposals drops off as localities get larger; potentially suggesting that there is less need in larger populations for the types of projects prevalent on civic crowdfunding platforms than there are in smaller population segments where resources may be fewer or more constrained. Despite the drop in overall successful projects as population numbers increase, the success rates remain strong in the larger jurisdictions signifying that civic crowdfunding may perhaps be an underutilized resource in larger communities.

| Table 11 - Success Rate by Median Household Income | | |
|---|---|---|
| **Median Household Income (In USD)** | **Fully Funded Proposals** | **Success Rate** |
| 0-20,000 | 0 | 0 |
| 20,001-40,000 | 33 | 60% |
| 40,001-60,000 | 79 | 57% |
| 60,001-80,000 | 4 | 29% |
| 80,001-100,000 | 2 | 40% |
| 100,001-120,000 | 3 | 60% |

The concern that civic crowdfunding may be simply a tool of community action for the wealthy does not really bear out when examining median household income by proposing jurisdictions (see Table 11). When looking at the median household income across proposal jurisdiction the mean is $50,284.28, with a standard deviation of $14,725.36 and a range between $26,095 and $114,574 (see Table 2 above). The vast majority of fully funded proposals come from jurisdictions where the median household income is between $20,001 and $60,000. Broken down further, the lowest median household income bracket to register, $20,001 to $40,000 has fully funded 33 project proposals with a 60 percent success rate. The next bracket, $40,001 to $60,000 has fully funded 79 proposals, with a 57 percent success rate while no other income bracket has more than four fully funded project proposals. By looking at solely median household income at a surface level, civic crowdfunding proposal success would seem to be a middle class endeavor.

To gain additional insight into community demographics and the role they play, we can examine the community poverty rate within proposing jurisdictions and compare it with the other capacity measures detailed above. The poverty rate variable measures the percentage of the

proposing jurisdictions population that is living under the federally established poverty line of $24,300 for a family of four in 2016 (HealthCare.gov, 2016).

| Table 12 - Success Rate by Poverty Rate within Proposal Jurisdictions | | |
|---|---|---|
| Poverty Rate | Fully Funded Proposals | Success Rate |
| 0-5% | 2 | 50% |
| 5.1-10% | 5 | 42% |
| 10.1-15% | 3 | 25% |
| 15.1-20% | 6 | 40% |
| 20.1-25% | 71 | 60% |
| 25.1-30% | 28 | 65% |
| 30.1-35% | 3 | 38% |
| 35.1-40% | 3 | 60% |

The mean poverty rate within the analyzed jurisdictions is 21 percent with a standard deviation of 6.5 and a range of 2.1 percent in East Grand Rapids, Michigan to 39.8 percent in Detroit, Michigan (see Table 2). Grouping the proposing jurisdictions into increasing five percent poverty rate brackets reveals that the vast majority of project proposals come from jurisdictions with poverty rates between 20 and 30 percent (see Table 12). For comparison, the national poverty rate in 2014 was 14.8 percent (United States Census Bureau, 2016). Yet within this threshold, projects are also quite likely to be fully funded with a success rate between 60 and 65 percent. Once again the sheer number of project proposals in New York City, New York and to a lesser extent Memphis, Tennessee exerts a substantial amount of influence on the total numbers in Table 12. Each city has a poverty rate well over the national average, yet when excluding the two cities from this table, the results look rather similar with the 20.1-25% bracket still being the most proposed and funded while being followed closely by the 25.1-30% bracket.

When taken collectively with the other community demographic measures, these results illustrate a portrait of the communities that propose and fund civic crowdfunding campaigns. These communities are often medium sized with populations of up to 60,000 citizens. Community affluence plays a part in project success as evidenced by median housing value, but success is certainly not limited to just the affluent jurisdictions. The near 60 percent proposal success rates in communities where the median household income is between $20,001 and $60,000 (see Table 12) highlights a point that is further solidified by the frequency with which projects are proposed and fully funded in areas above the national poverty rate, highlighting the idea that civic crowdfunding projects may be filling a critical community need gap.

**Characteristics of Success**

The literature highlights a number of characteristics deemed to be important aspects critical to projects gaining support and funding. These characteristics include project updates, the use of social media to promote project proposals, visible problems, community need, rewards, and matched funds. By reviewing these characteristics at a broad level and looking both at the success of projects utilizing them as well as those which do not, this exercise reveals a number of interesting trends and findings discussed below.  Only slightly more than half of all analyzed proposals offered project updates to donors. Of the 226 reviewed projects, 120 or 53 percent updated their proposal pages at least one time during the fundraising duration (see Table 13). Of the 120 proposals that updated project pages, 69 (58 percent) were a part of fully funded projects. When looking at projects that did not update proposals, 106 in total, there were still 58 fully funded projects for a success rate of 55 percent. This number is down from the number of successful projects updating project pages, but ultimately there is little difference on the surface looking at proposals that offer updates and those that do not.

As far as social media presence, it has practically become a prerequisite to hosting a campaign on one of the analyzed platforms. While usage rates vary, almost all analyzed projects at least link to social media pages and platforms as a way to further connect and advertise their proposals. In total 222 of the 226 project proposals incorporate social media into their proposals, 125 of these were fully funded resulting in a 56 percent success rate (see Table 14).

When looking at project proposals that specifically raise and address visible problems within the community, there are 30 projects matching this criterion, of those 22 were fully funded for a success rate of 70 percent (see Table 13). Of the 196 proposals that did not address visible problems within their project descriptions, there were 106 fully funded projects, for a 54 percent success rate. While the number of projects specifically addressing visible problems is small, little more than 13 percent of all proposals, they were roughly 16 percent more likely to be fully funded.

In examining projects that raise and address needs within the community in their proposals, 116 address community need while 110 fail to do so (see Table 13). Out of the projects highlighting community need, 66 were fully funded compared to 61 funded of the projects not addressing community need. The resulting success rates of 57 percent for projects addressing community need and 55 percent for those failing to, indicates minimal difference among analyzed projects with regard to community need in project proposal descriptions.

The use of rewards ranging from meet and greets and greater inclusion opportunities as an additional incentive for donation received little attention in the analyzed project proposals with only 10 total projects including rewards into their proposals. Of those ten, six were successfully funded (see Table 13). Interestingly, the usage of matched funds as an additional incentive received similarly low attention within the analyzed proposals.

| Table 13 - The Usage and Success of Project Characteristics | | | |
|---|---|---|---|
| **Characteristics** | **Not Funded** | **Fully Funded** | **Success Rate** |
| **Project Updates +** | 51 | 69 | 58% |
| **Project Updates -** | 48 | 58 | 55% |
| **Social Media Usage +** | 97 | 125 | 56% |
| **Social Media Usage -** | 2 | 2 | 50% |
| **Visible Problems +** | 9 | 21 | 70% |
| **Visible Problems -** | 90 | 106 | 54% |
| **Community Need +** | 50 | 66 | 57% |
| **Community Need -** | 49 | 61 | 55% |
| **Rewards +** | 4 | 6 | 60% |
| **Rewards -** | 95 | 121 | 56% |
| **Matched Funds +** | 4 | 6 | 60% |
| **Matched Funds -** | 95 | 121 | 56% |
| *Indicates statistical difference at 0.05 using Chi Square and Fisher's Exact Tests. | | | |

Only 10 reviewed proposals offered fund matching, six of the ten were fully funded
resulting in a 60 percent success rate. Across the 226 reviewed proposals, there were 216 that did
not utilize either rewards or fund matching respectively. This resulted in a 56 percent proposal
funding rate amongst projects that did not incorporate rewards or fund matching into proposals
respectively. While the success rate is slightly lower than those incorporating the characteristics,
the disparity in the total number of proposals utilizing rewards and matched funds renders the
difference irrelevant.

**Project Components**

Project components, such as the usage of digital video, in a platform proposal while more
successful than not seem to have a negligible impact on overall project success. A total of 46
project proposals used digital video in their pitches to potential donors. These videos typically
run between one and four minutes and are imbedded directly into the project proposal and can
easily be shared and linked across social media platforms. Interestingly when looking across
proposals that took advantage of digital video, 46 in total, 24 were fully funded resulting in a 52

percent success rate (see Table 14). Yet when looking at the 180 proposals that did not use any video in the project proposal, 103 were fully funded for a 57 percent success rate.

Another component that some projects choose to employ as both an inclusion incentive and in some cases a critical and necessary aspect of a projects success is the call for volunteers. A little more than 40 percent of all project proposals requested volunteer assistance with some form of the projects formulation and implementation. Of these 91 proposals requesting volunteer assistance, 55 were fully funded for an above average 60 percent success rate (see Table 14). There are both more proposals and fully funded projects not utilizing volunteers than there are that do yet these projects are roughly seven percent less successful when it comes to fully funded projects.

| Table 14 - The Usage and Success of Select Project Components | | | |
|---|---|---|---|
| **Components** | **Not Funded** | **Fully Funded** | **Success Rate** |
| **Digital Video +** | 46 | 24 | 52% |
| **Digital Video -** | 180 | 103 | 57% |
| **Volunteers +** | 91 | 55 | 60% |
| **Volunteers -** | 135 | 72 | 53% |
| *Indicates statistical difference at 0.05 using Chi Square and Fisher's Exact Tests. | | | |

Perhaps the most obvious and critical component of project success is the number of donors within a given campaign. The more donors, the greater engaged the citizenry is in the project development and success. The expectation is a linear one, in that the more donors, the more successful a campaign would be. While this mostly holds true, there remain some interesting findings in the overview of success rate by the number of individuals engaged in a given campaign (see Figure 3). The mean number of investors per project is 27, and the standard deviation is 31, with both numbers inflated by the range of 0 to 263 (see Table 2).

**Figure 3 - Donor Success Rate**
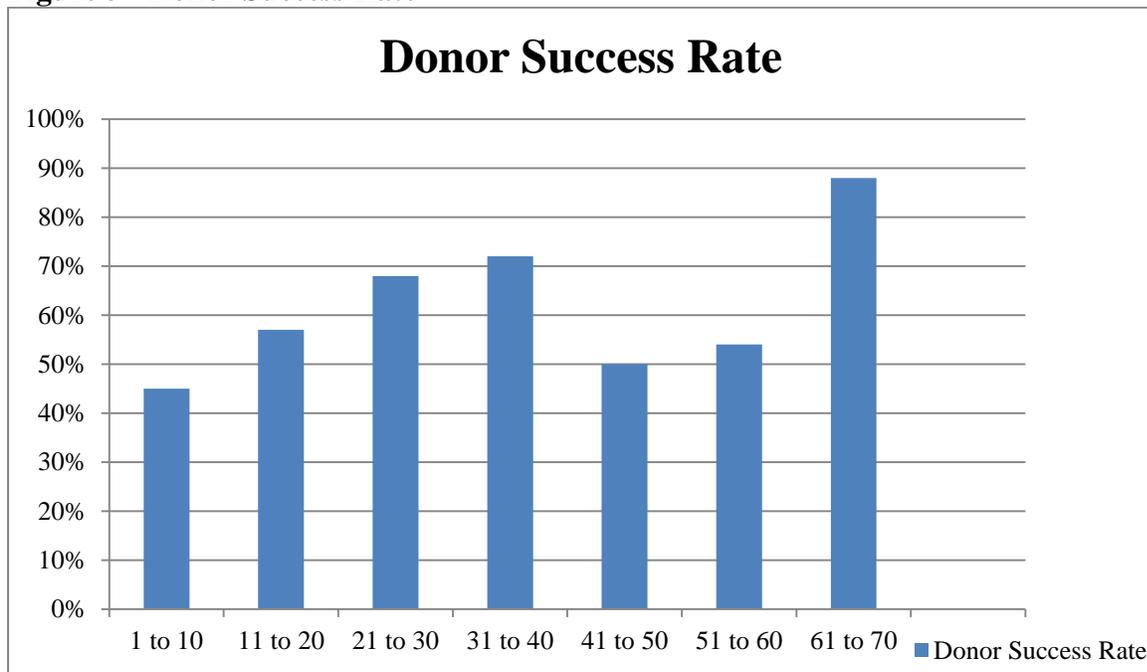


When looking broadly at success rate by the number of donors, it is of no surprise that the smallest segment of donors also has the lowest rate of fully funded projects; with groups of 0-10 donors successfully funding projects roughly 45 percent of the time (see Table 15). The 0-10 segment includes a handful of proposals that did not have a single donor.

Despite the overall low numbers, groups of 0-10 still have a modest fully funded project success rate due in part to larger than mean donations from project champions. The 11-20 group sees a nearly quarter increase in fully funded proposals, as well as a 12 percent jump in success rate to 57 percent of all proposed projects. Moving on to projects with 21-30 donors, the number of fully funded proposals drops, but the success rate continues to climb all the way to 68 percent.

| Table 15 - Success Rate by Number of Donors | | |
|---|---|---|
| **Number of Donors** | **Fully Funded Proposals** | **Success Rate** |
| **0-10** | 28 | 45% |
| **11-20** | 38 | 57% |
| **21-30** | 17 | 68% |
| **31-40** | 13 | 72% |
| **41-50** | 9 | 50% |
| **51-60** | 7 | 54% |
| **61-70** | 7 | 88% |
| **71-80** | 1 | 100% |
| **81-90** | 1 | 50% |
| **91-100** | 3 | 50% |
| **100+** | 3 | 50% |

Despite the overall low numbers, groups of 0-10 still have a modest fully funded project success rate due in part to larger than mean donations from project champions. The 11-20 group sees a nearly quarter increase in fully funded proposals, as well as a 12 percent jump in success rate to 57 percent of all proposed projects. Moving on to projects with 21-30 donors, the number of fully funded proposals drops, but the success rate continues to climb all the way to 68 percent. The next donor group focusing on projects with 31-40 donors is the last remaining segment with more than 10 fully funded proposals; within this segment the upward trajectory of project success continues with a 72 percent success rate of proposals that receive between 31 and 40 donations. Project success actually dips among proposals with between 41 and 60 donors before rebounding in the 61-70 segment all the way to 88 percent. The remaining segments cluster around 50 percent success with just a handful of fully funded projects per grouping.

The upward trajectory of donors and success rate is as expected; yet, it is interesting to see the cutoff points on how fewer or more donors may impact project success. While it is no surprise that the number of projects dwindles as the donor segments increase, it is of some surprise that the projects with the largest groups of donors, as few as there may be, are only

roughly 50 percent successful. This can perhaps be attributed to the type of projects and scope of the proposals. The most donated to projects fall within the community grants domain suggesting that some of these projects may both have the greatest community reach as well as be broad enough in scope and classification to appeal to a large number of potential donors. Similar to the number of donors a project has and its impact on project success, a project's monetary request can also play a large role in the likelihood a proposal is fully funded. While there is no limit on the amount a project may request, getting smaller scale projects funded is obviously done with much greater ease than larger more nuanced and costly project proposals.

| Table 16 - Success Rate by Proposal Request Amount | | | | |
|---|---|---|---|---|
| **Project Request** | **Projects** | **Fully Funded Proposals** | **Percent of Projects** | **Success Rate** |
| **0-5,000** | 152 | 105 | 70% | 69% |
| **5001-10,000** | 33 | 12 | 15% | 36% |
| **10,001-15,000** | 20 | 5 | 9% | 25% |
| **15,001-20,000** | 2 | 0 | 1% | 0% |
| **20,001-25,000** | 3 | 1 | 1% | 33% |
| **25,001-30,000** | 4 | 1 | 2% | 25% |
| **30,001-35,000** | 2 | 1 | 1% | 50% |
| **35,001-40,000** | 1 | 0 | <1% | 0% |
| **40,001+** | 9 | 2 | 4% | 22% |

Of the 226 project proposals analyzed across the civic crowdfunding platforms, roughly seventy percent requested $5,000 or less (see Table 16). Of these 152 proposals, 105 were fully funded for a success rate of nearly 69 percent, a number that dwarfs the success of the increasing project request segments. The next grouping of project requests ranging from $5,001-$10,000 makes up 15 percent of all requests with 33 total projects and a 36 percent rate. Project requests between $10,001 and $15,000 show an even greater plummet in project success than the previous threshold with only a quarter of all proposed projects fully funded. While there are only 21 total

requests exceeding $15,000 analyzed across the two platforms, fully funded project success is even less likely reaching almost 24 percent for all remaining project proposals.

Clearly the vast majority of all project requests fall below $5,000 and as Table 17 shows, as proposal request increase success rate decreases. Table 18 examines the distribution and success of project requests for proposals under $5,000 in an effort to further examine where project request amount may start to inhibit project success.

| Table 17 - Project Proposal Pricing Dispersion in Projects Proposals Under $5,000 | | | | |
|---|---|---|---|---|
| **Project Request** | **Projects** | **Fully Funded Proposals** | **Percent** | **Success Rate** |
| 0-500 | 26 | 23 | 17% | 88% |
| 501-1,000 | 29 | 26 | 19% | 90% |
| 1,001-1,500 | 21 | 15 | 14% | 71% |
| 1,501-2,000 | 15 | 11 | 10% | 73% |
| 2,001-2,500 | 15 | 9 | 10% | 60% |
| 2,501-3,000 | 12 | 6 | 8% | 50% |
| 3,001-3,500 | 15 | 5 | 10% | 33% |
| 3,501-4,000 | 4 | 2 | 3% | 50% |
| 4,001-4,500 | 7 | 3 | 5% | 43% |
| 4,501-5,000 | 8 | 5 | 5% | 63% |

In looking at project requests under $5,000 the most frequently requested monetary amounts falls between 0 and $500 and $501 and $1,000; projects within this request level have been successfully funded more than 88 percent of the time (see Table 17). Looking at project proposals requesting $1,001-1,500, there are both fewer proposals and a lesser likelihood of success. Project requests between $1,501 and $2,000 while fewer still, see a slight uptick in success rate from 71% to 73%. Despite this small jump, the general trend follows that as the project request increases; the success rate drops from 73% to 60% to 50% to 33% for requests between $3,001 and $3,500 (see Figure 4). There is a small spike in projects requests between

$3,501 and $5,000, yet each of the thresholds within this range have eight for fewer total proposal requests and five or fewer fully funded proposals.

**Figure 4 - Under $5K Project Success**
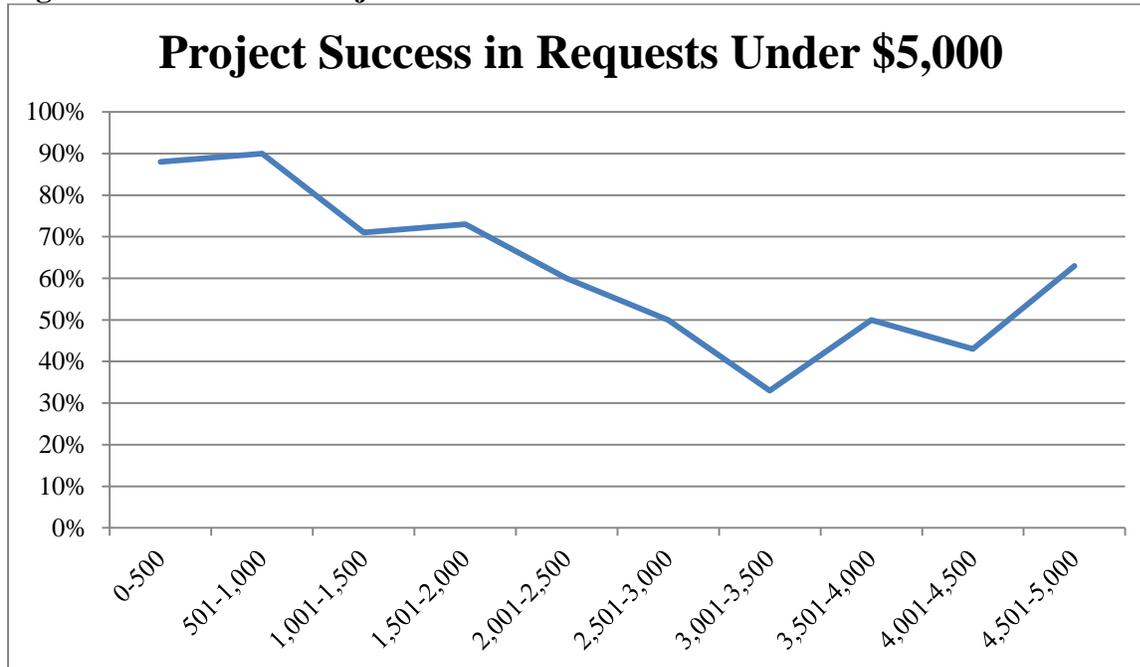


Moving on to total amount raised and its relation to project success, the total number of proposals are distributed similarly to that of monetary request amount, with the vast majority of raised funds contributing relatively smaller scale project proposals. That said, while 70 percent of all requests fall into the $5,000 or less range, this threshold makes up 83 percent of all raised monies (see Table 18). It is a similar trend when comparing requests between $5,001-10,000 and $10,001-15,000 with roughly 40 percent more requests between $5,001 and $15,000 than there are monies raised in the same grouping.

| Table 18 - Success Rate by Monies Raised | | | | |
|---|---|---|---|---|
| **Monies Raised** | **Projects** | **Fully Funded Proposals** | **Percent** | **Success Rate** |
| **0-5,000** | 187 | 104 | 83% | 56% |
| **5,001-10,000** | 24 | 12 | 11% | 50% |
| **10,001-15,000** | 8 | 6 | 4% | 75% |
| **15,001-20,000** | 0 | 0 | - | - |
| **20,001-25,000** | 1 | 1 | <1% | 100% |
| **25,001-30,000** | 1 | 1 | <1% | 100% |
| **30,001-35,000** | 1 | 1 | <1% | 100% |
| **35,001-40,000** | 0 | 0 | - | - |
| **40,001+** | 4 | 2 | 2% | 50% |

**Project Type Results**

***Hypothesis 1****: Garden and park projects are the most frequently proposed project categories.*

The content analysis of the two analyzed platforms and categorization of the 226 project proposals does not support this hypothesis. In Davies (2014) research, garden and parks projects have been combined into one category. In this analysis and in congruence with platform listing, they are examined separately as a sustainability category and a parks category. The community garden projects include community gardens, co-op food programs, and seed saver exchanges, whereas the parks category is mostly limited to building and maintaining playgrounds, and dog and skate parks.

Looking at the two categories separately, sustainability proposals make up the most frequently requested of all projects at 21% (see Figure 5). Parks on the other hand make up just six percent of proposals with a total of 14 projects (see Table 19).

When examining each platform individually, the hypothesis still lacks support, yet the results are drastically different between the two. On the Citizinvestor platform the number of sustainability proposals was much less frequent, with only two project requests constituting just four percent of the platforms total requests.

**Figure 5 - Proposal Distribution**



**Project Proposal Category Distribution**

| Category | Percentage |
|---|---|
| Other | 16% |
| Neighborhood Improvement | 8% |
| Greening | 8% |
| Walkability/Cycling | 8% |
| Art/Culture | 12% |
| Community Grants | 17% |
| Sustainability | 21% |
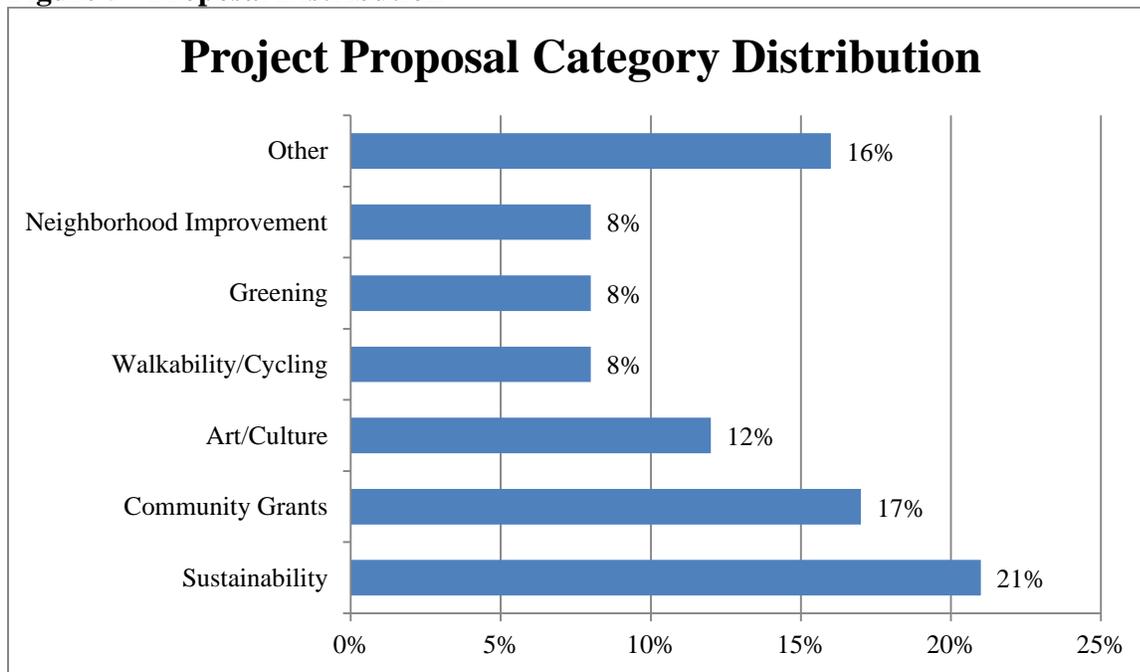
Yet, park project proposals are much more common constituting nearly a quarter (23%) of all requested proposals (see Table 6). If you were to combine parks and sustainability programs the results would remain mostly the same with the combined category being the most popular across Citizinvestor, ioby, and collectively, yet still not reaching the levels indicated in the earlier research.

Examining ioby provides a drastically different result. On the ioby platform there were 45 sustainability project proposals in the observed timeframe from 2012-2015 (see Table 6). These proposals accounted for roughly 26 percent of all proposed projects on the platform, making it the most-requested category. With the exception of the community grants category, sustainability requests more than double every other requested category. Parks on the other-hand make up less than one percent of total project proposals on ioby.

There would seem to be a few potential explanations for the lack of support in the hypothesis. The first is a matter of categorization; Davies (2014) used 14 relatively broad categories developed from his analysis of a number of crowdfunding platforms with both generic and civic orientations. This analysis focuses exclusively on two platforms, both of a civic orientation, which by nature has led to a number of similar and overlapping categories and project types. The categorization used herein is the result of a merger of the two platforms and their self-identified project categories. Ultimately, each proposal was reviewed in the content analysis and categorized anew based on proposal goals and objectives to fit within the categorical structure. While this methodology differs from prior research (particularly in the number of platforms reviewed to derive categorization) focusing solely on civic platforms, it does fit within the scope of this research to provide insight into the most popular civic crowdfunding proposals and the frequency with which they occur in comparison to other proposed categories.

The second potential explanation is the number of platforms in this analysis. Davies (2014) analyzed seven platforms whereas this analysis focuses specifically on two. Obviously with the greater number of reviewed cases across in some instances, substantially different platforms, come differences and discrepancies in categorization. This is further exacerbated by Davies (2014) use of four civic platforms and three generic platforms, three of which are headquartered outside of the United States. It is possible that different contextual factors have a played a role in not just the categorization of the projects, but also and perhaps more impactfully the types of projects being proposed and funded. If anything this may highlight the potential difference between proposals across civic and generic platforms, especially pertaining to the frequency within which they are proposed.

While the results of the analysis failed to support the hypothesis, by focusing on only two civic platforms in the United States, the analysis highlights the specific types of civic projects being proposed within the American context. Of particular note is the insight it provides into the public interest. Predominantly the importance placed on sustainability and community grants proposals over other civic-minded projects. Collectively these two categories make up nearly 40 percent of all project proposals across the two platforms. This suggests that amongst project conveners that sustainability and community grant proposals are of the greatest interest when compared to other civic oriented project proposals.

In addition to citizen preference, the results of this hypothesis also suggest that there may be a difference between civic projects on generic and civic platforms (as well as within and outside of the United States), particularly for the types of projects and how they are classified. This could be of interest particularly in the early stages of proposal development when selecting the platform for fundraising, as it appears that different platforms may promote different projects and potentially attract different segments of the funding population. Knowing where to propose particular projects to maximize chances of success would be critical knowledge for those interested in pursuing similar civic funding projects.

***Hypothesis 2****: The most frequently proposed project categories are also the project types that are most likely to be successfully funded.*

Much like in addressing the first hypothesis, a directed content analysis was used in answering hypothesis 2. In order to better understand the types of projects being proposed and funded a project categorization typology was developed through the incorporation and merger of both reviewed platforms along with the existing relevant literature (see Davies, 2014). Citizinvestor places projects into one of eight categories, while ioby frequently uses 11 or more.

Many projects may have components that fall into more than one category, making individual categorization difficult. By merging and paring down the two platform's categories, we can get a broader sense of where particular projects fit across the platforms. Due to this, the adding and dropping of categories from each platform, some proposals were coded differently than how they were originally classified on the platform they were proposed on; yet the new categorization can be and is applied equally to all proposals across each platform.

In analyzing each of the 226 projects proposals and descriptions and breaking them down into the 11 categories, sustainability proposals (21%) and community grants (17%) make up the most frequently proposed projects. Art/culture and educational proposals follow as the only other project categories that make up more than 10 percent of all project proposals. When looking at the highest total of funded projects, it once again leads to community grants and sustainability proposals each with 26 fully funded projects, each accounting for 20 percent of funded proposals respectively.

In looking at the total proposed projects as well as the total funded projects where community grants and sustainability proposals are the top two in each category, there is obvious support for the hypothesis. Intuitively, it makes sense, the most frequently proposed projects would through no other reason than sheer numbers have the greatest chance to also be the most successfully funded. Taking it a step further and looking at the success rate of each category reveals a slightly different picture however. Library programs take the top spot with a 100 percent success rate; this could be due in part to the relatively low cost of the proposals as well as the non-exclusionary nature of such projects. Libraries are followed by public health proposals at 86 percent success (see Table 19). Community grants, one of the most frequently proposed and overall successful categories has the third highest success rate at 68 percent. Following

community grants are greening at 59 percent, walkability/cycling at 56 percent, and finally

sustainability programs at 55 percent successful.

| Table 19 - Category Success Rates | | | |
|---|---|---|---|
| | **Total and Percent, Project Proposals** | **Total and Percent, Fully Funded Projects** | **Percent Success** |
| **Art/Culture*** | 28 | 11 | 39% |
| **Community Grants** | 38 | 26 | 68% |
| **Education*** | 24 | 9 | 38% |
| **Greening** | 17 | 10 | 59% |
| **Libraries*** | 7 | 7 | 100% |
| **Neighborhood Improvements** | 17 | 9 | 53% |
| **Parks** | 14 | 7 | 50% |
| **Public Health*** | 14 | 12 | 86% |
| **Recycling** | 2 | 0 | 0% |
| **Sustainability** | 47 | 26 | 55% |
| **Walkability/Cycling** | 18 | 10 | 56% |
| *Indicates statistical difference at 0.05 using Chi Square and Fisher's Exact Tests. | | | |

The two most frequently proposed categories, community grants and sustainability have

the third and sixth highest rates of success of all analyzed proposals. The most successful, library

proposals only have seven total proposals while the second highest success rate, attributed to

public health programs has 14 total proposals. Next are community grant proposals with 38 total

project proposals, 28 of which were fully funded. To put this in perspective, out of proposal

categories with more than 15 total proposals, community grant requests are roughly nine percent

more successful than the category with next highest percentage of success (see Table 19). When

looking at 20 or more requests, community grant projects have a 13 percent better success rate

over sustainability projects at 55 percent and a nearly 30 percent differential between art/culture

and education proposals (see Table 19).

What this exercise ultimately reveals is that on the surface there would seem to be

support for the hypothesis that the most proposed projects are also the most funded. Both

community grants and sustainability programs far outpace the other proposals as far as the frequency with which they are proposed and also funded. Yet when examining the actual success rate of the proposals it begins to tell a different story. The two most proposed and funded projects are not the most successful or even in the top few. Community grant proposals have the third highest funding success rate, while sustainability projects, the most proposed type of project is firmly in the bottom half of category success rate.

Although it can be said that the most requested proposals are also the most funded, when accounting for the success rate in addition to the total numbers it can become deceiving. The most successfully funded projects are community grants and sustainability proposals, yet they do not have the highest rate of categorical success. This raises a few interesting points related to public interest and responsiveness. Particularly when factoring in category success rate, it appears there would be a disconnect in the projects that are being proposed when compared to the projects actually being funded. Obviously it can be difficult to pinpoint the exact reason why this is, perhaps local demographics such as community wealth, population, or something else entirely, but on a broad level this analysis reveals that the projects being proposed most frequently are not the most likely to be successful.

It is also interesting to note that while most proposals cluster around 50 percent success rate, both art/culture and education programs, each with more than 20 proposals fall into the 30 percent success range. What does this say about these two categories in comparison with the other nine categories? The majority of the other categories, with the exception of public health proposals focus for the most part on community public goods. These proposals are typically non-excludable and offer a sort of lasting infrastructure change such as bike paths, playgrounds, community gardens, and the like that citizens can use well into the future. The difference with

the less successful art/culture and education proposals is that they are not necessarily offering public goods to the extent that the majority of other categories do. Lending credence to the idea that project success may be impacted by project type, and in particular how broadly the benefits of a project may be distributed. Art/culture proposals typically focus on community beautification and pride, and while non-excludable, these projects rarely offer a distinct usage component. Education programs are similar in that there may be a trickle down public benefit to educating disadvantaged segments of society, yet by the limits of funding, space, etc. they are in their very nature excludable.

The implications of this could be substantial both to conveners and the community at large where projects are being proposed. If projects are not necessarily in line with what citizens are likely to support, the process could result in a waste of time and effort for all involved; this could also impact the likelihood of future proposals and successes. This analysis highlights both the types of proposals that are most often proposed, while contrasting that with those that are most funded and most likely to be fully funded, two important distinctions. It also highlights potential differences in project funding success based on categorical differences and the types of goods and services being produced and offered. Ultimately revealing that within the observed timeframe selection bias does not appear to be much of an issue as far as convening projects goes. This knowledge may help to inform individuals planning and proposing different projects; particularly on what types of projects are likely to work and what types of projects often experience funding challenges and lack the necessary community support.

**Quantitative Analysis Results**

**Project Success Results**

This section begins by detailing the results of the OLS regression analysis in Table 20 and then the results of the logistic regression analysis in Table 21 before discussing the hypotheses and findings. Table 20 illustrates the impact of the model variables on the overall percentage funded of a project proposal. Every project proposal starts with a monetary budget request. This budget number is used as the baseline, which is then compared to the total amount raised by a project proposal. Dividing the total amount raised by the total amount requested gives the percentage funded, which in this instance is being utilized as the dependent variable. This model highlights the impact that specific variables identified through the literature and qualitative analysis have on project proposal funding. The analysis sheds light on the impact a variable may have on projects meeting and exceeding their 100 percent project success funding goal and also the project proposals that fall short of full funding.

In running the analysis, residual values were fairly compliant with normality. In the few instances where there were issues, such as with the request, raised, poverty rate, and population variables, data transformations were performed. There were no further issues with collinearity or homoscedasticity. Overall the determinants of support for the percentage funded model have a .58 adjusted $R^2$, meaning that the overall model explains nearly 60 percent of the variance. Three variables achieve statistical significance at the 0.01 threshold in the directions assumed. The first significant variable, engagement, measured by the number of investors, is positively correlated with the dependent variable, meaning that the more individuals engaged or the more project donors present, the more likely a project proposal is to achieve a higher percentage of its funding goal. The number of investor's variable has a coefficient of .39, meaning that for every additional investor in a project, holding all other variables constant, the fulfillment of the percentage of the project request increases by .39. This finding is interesting because within the

observed cases, it literally places a value on investors and the impact they have on projects

reaching their funding goals.

| Table 20 - OLS Regression Analysis Highlighting the Impact of Explanatory Variables on the Overall Percentage Funded of a Project Proposal | | |
|---|---|---|
| **Variable** | **Coefficient** | **Standard Error** |
| **Engagement\*\*** | .39 | .09 |
| **Use of Digital Video** | 3.12 | 5.14 |
| **Request for Volunteers** | 1.87 | 4.16 |
| **Monetary Proposal Request\*\*** | -25.98 | 1.72 |
| **Amount Raised\*\*** | .49 | .05 |
| **Services** | 2.33 | 3.90 |
| **Use of Project Updates** | -2.06 | 3.87 |
| **Use of Social Media** | 1.57 | 16.51 |
| **Visible Problems** | .54 | 5.83 |
| **Community Need** | 2.81 | 3.95 |
| **Use of Rewards** | 10.42 | 9.59 |
| **Use of Matched Funds** | -3.81 | 10.45 |
| **Median Household Income** | -.14 | 5.28 |
| **Median Age** | .11 | .36 |
| **Poverty Rate** | 1.70 | 4.58 |
| **Education Level** | .06 | .28 |
| **Population** | -.01 | .03 |
| **Convening Coalition** | .52 | 3.91 |
| **Democratic Citizenship** | -.25 | .19 |
| **ioby** | 4.83 | 5.96 |
| **Constant** | 240.48 | 42.67 |
| **Adjusted R-squared** | .58 | |
| N=226          F=16.05          Prob > F =0.00 | | |
| *=Significant at .05 \*\*=Significant at .01 | | |

The amount of monetary request and the amount raised also exhibit statistical

significance at the 0.01 level in the assumed directions. Amount requested has a negative

relationship with percentage funded; indicating that as project proposal budget requests increase,

the percentage of total funding a project proposal receives decreases. For each unit increase of

the project proposal's request amount, holding everything else constant, there is a corresponding

decrease of nearly 26 points in the percentage funded dependent variable. In addition, the amount

raised has a statistically significant relationship in the expected direction. The more money raised positively impacts the percentage of the project proposal funded. For each unit increase in the amount raised, the percentage of a project reaching its full funding goal increases by .49 points.

It was somewhat of a surprise that no other variables show statistical significance. The project updates variable is of particular note because the literature is in overwhelming agreement about the importance of project updates as a means to connect, include, and encourage. Despite the intuitive and theoretical underpinning, only slightly more than half of all analyzed projects incorporated updates into their proposals. Of the 120 project proposals that incorporate project updates, slightly more than half ended up being fully funded. Instinctively and based on the literature, one would expect the usage and success to be higher, yet the analysis reveals a different result with just over a quarter of total projects using updates and achieving their budgetary goals. The OLS regression model in Table 20 provides further evidence of the overall lack of impact showing that the use of project updates in a given campaign actually has a negative impact on the percentage funded dependent variable.

The use of fund matching, population size, and voter turnout also stand out due to their lack of support and negative direction. At least in the case of fund matching, this could perhaps be due to the small sample of projects actually employing fund matching out of the larger overall sample. The population size and voter turnout findings would be interesting to explore in greater detail in future research as we continue to learn more about funding communities.

The findings included some surprising results. The significant variables are as expected and in the expected directions, but the lack of significant variables in the OLS model was unexpected. Some of this can be attributed to the newness of the field and the lack of theoretical testing that has taken place to date. Of the significant variables, being able to evaluate the impact

of additional investors provides valuable insight into just how much an individual may bring to a particular project. In addition, one of the more interesting findings is the magnitude of the project request variable signifying a substantially greater impact on the percentage funded of a project than the other significant variables. This finding truly underscores how much money matters in project requests and how critical pricing and scope can be to project success.

Moving on to the logistic regression model results, Table 21 shows the overall model results are fairly similar to those in Table 20 above. In each model the same predictors are significant, albeit at different levels. The number of individuals engaged by the proposal, the amount requested, and the amount raised all come back as significant predictors in the same direction of project success. Again, a number of variables thought and expected to have an impact have not shown significance; however, there were a few such as the matched funds variable, project type, and the platform variable that were close. This once again highlights the challenge of model specification in an emerging field.

When examining the significant variables individually, we find that the engagement variable measuring the number of investors in a project is significantly and positively correlated with project success. Again, success is defined in this model as a project proposal meeting its initial project request funding goals. For each additional investor a project receives the chance of success increases by .02. The next significant variable, monetary proposal request is again a negative influence on project success with each unit increase in request equating to a nearly 3 point decrease in overall project success. This is far and away the greatest magnitude of impact on project success among significant variables within the model. Finally, the amount raised variable has a positive impact as expected on project success. For each unit increase in the amount raised the likelihood of project success increases by nearly .05.

Much like in the OLS model, the significant predictors are as expected and in the
direction expected. Once again, however, the initial monetary project request has the greatest
magnitude of significant variables in its negative impact on project success. This finding further
reinforces the OLS results that while there may be a number of variables that matter, ultimately it
comes down to money. Lesser requests are more successful in achieving their goals and
increases in project proposal funding goals come at a steep price to the likelihood of overall
project success.

| Table 21 - Logistic Regression Analysis Highlighting the Impact of Explanatory Variables on the Successfully Funded Project Proposal | | |
|---|---|---|
| **Variable** | **Coefficient** | **Standard Error** |
| **Engagement**\*\* | .02 | .01 |
| **Use of Digital Video** | -.02 | .55 |
| **Request for Volunteers** | .47 | .44 |
| **Monetary Proposal Request**\*\* | -2.76 | .41 |
| **Amount Raised**\*\* | .05 | .01 |
| **Services** | .69 | .42 |
| **Use of Project Updates** | .06 | .42 |
| **Use of Social Media** | -1.16 | 2.82 |
| **Visible Problems** | -.19 | .57 |
| **Community Need** | .27 | .43 |
| **Use of Rewards** | .93 | .93 |
| **Use of Matched Funds** | -2.12 | 1.26 |
| **Median Household Income** | -.52 | .61 |
| **Median Age** | .04 | .04 |
| **Poverty Rate** | -.14 | .53 |
| **Education Level** | .01 | .03 |
| **Population** | -.01 | .01 |
| **Convening Coalition** | -.39 | .42 |
| **Democratic Citizenship** | -.02 | .02 |
| **ioby** | -1.21 | .66 |
| **Constant** | 22.81 | .42 |
| **Adjusted R-squared** | **.42** | |
| N=223        LR Chi$^2$ =127.42 Prob > Chi$^2$ =0.00 | | |
| *=Significant at .05 **=Significant at .01 | | |

*Hypothesis 3*: *Project proposals convened by coalitions have a greater impact on project success than those offered by a single convener.*

Moving beyond the general findings and interest allows for the examination of the third hypothesis.  This hypothesis examines the impact of the coalition variable, which indicates the presence of multiple convening stakeholders, on the percentage of success a project proposal achieves (as defined by percentage of funding goal achieved), and then separately on overall project success. Utilizing the percentage funded dependent variable allows for comparison between proposals convened by individuals with those of coalitions and the impacts they have on percentage of total funds raised per proposal. In addition, the project success dependent variable allows for insight into whether coalitions are better able to achieve funding goals.

This hypothesis builds from the network and collaboration literature in theorizing that in resource-constrained environments, convening efforts led by coalitions from multiple sectors may have a greater impact than those proposed by sole actors. Just over one third of the reviewed project proposals were convened by coalitions of multi-sectoral stakeholders with slightly more than half of that number reaching or exceeding their fundraising goals. The OLS regression analysis (percentage dependent variable) affirms that convening coalitions have a positive impact that may be greater than a single convener yet the findings lack statistical significance (see Table 20). Conversely, the results of the logistic regression highlight a negative relationship on overall project success, albeit once again lacking significance. The difference between the two models is interesting and perhaps indicates that while the importance of multi-sectoral coalitions of conveners cannot be discounted, having a group of conveners alone does not necessarily have a more significant impact in the reviewed cases than proposals offered by sole conveners. Ultimately having large networks of actors involved seems to have a positive impact as evidence

by the higher percentage of funding but the extent is perhaps not as great in this instance as theorized since coalition convened projects were found to have a negative relationship with overall project success. Coalitions would seem to important in bringing resources to the table, as evidenced by the findings in Table 20, but may not be able to push a campaign over the top in order to achieve funding goals on their own.

*Hypothesis 4: The greater engaged the public is in a given crowdfunding campaign, the more likely a project is to be successfully funded.*

Hypothesis 4 explores project success and engagement. Project engagement is measured through the number of investors a particular project has in order to examine the impact that greater engagement has on the two dependent variables, percent funded and project success. This number serves to highlight how many individuals the project and its conveners were able to reach and persuade enough to contribute to their cause. The New Public Service and collaboration literature highlight the importance of an active, engaged citizenry (Stoker, 2006) and digital and online engagement have increasing taken on a prominent position in today's society (Zuckerman, 2014). Therefore, it is theorized that engagement would have a positive relationship with project success within the civic crowdfunding arena. This would stand to mean that the more engaged individuals are, or the more individual donors a project proposal is able to recruit, the more likely a project proposal is to achieve its funding goals.

The analysis in Table 20 shows a positive relationship that is statistically significant at the 0.001 threshold. The analysis in Table 21 further affirms this hypothesis, showing both a positive relationship and statistical significance at the 0.05 threshold. The impact of additional investors is more pronounced in the OLS model, which makes sense since the dependent variable percent funded is almost always equal or lesser than in the logistic regression looking at project

success. An additional investor increases the percentage funded of a project by .4 and the overall likelihood of project success by .02. In summation, the findings indicate that the more people who are involved in a civic crowdfunding campaign or the more individual project donors to a given campaign positively impact the likelihood a project proposal is successful in achieving its funding goals.

***Hypothesis 5****: Project success is greater in areas where democratic citizenship is more prevalent.*

Hypothesis 5 examines the New Public Service construct of democratic citizenship and how it relates to civic crowdfunding project proposal success. This hypothesis examines the impact of democratic citizenship, as measured by county-level voter turnout data, on the dependent variables percent funded and project success. This hypothesis allows for insight into whether project proposals are more likely to be successful in areas that have higher levels of political involvement. The literature equates high levels of democratic citizenship with a citizenry that exhibits an active interest and involvement in matters of local government and the community (J. Denhardt & Denhardt, 2003). As civic crowdfunding has the potential to impact local service delivery and community initiatives it is theorized that in areas where democratic citizenship is high, civic crowdfunding project proposals may be more likely to be successful.

Utilizing county-level voter turnout data to account for degrees of democratic citizenship in proposing jurisdictions, the analysis indicates that there is little support for the hypothesis. In both models the democratic citizenship variable was not statistically significant and somewhat surprisingly indicated a negative relationship with project success. This finding further reinforces the negative relationship highlighted in the OLS percent funded model. While unexpected, the lack of support and relation between democratic citizenship and project success further adds

clarity to the specific types of communities that are likely to successfully propose and fund civic crowdfunding projects.

***Hypothesis 6****: Project pricing requests have a negative relationship with project success.*

Hypothesis 6 examines project pricing requests (the "request" variable in tables) in order to examine their impact on proposal success. Recent work examining civic crowdfunding found the majority of projects to be of a smaller scale as it relates to monetary request (Davies, 2014). The hypothesis further explores this linkage to gain a better understanding of the impact that project proposal pricing requests have. In particular, it explores if as pricing requests increase does project success decreases.

Both Table 20 and Table 21 highlight that monetary request has a negative and statistically significant relationship with project success. A one unit increase in monetary requests have a negative impact of nearly 26 points on project funding percentage and makes it nearly 3 points less likely that a project is successful. This further confirms the findings in the previous model and supports the hypothesis. As project proposal requests increase, the likelihood of project success decreases while holding all other variables in the model constant. The findings are as theorized, yet the results allow for a number of potentially interesting future research opportunities looking specifically at whether there is an optimum pricing request level and how this may vary across each locality.

***Hypothesis 7****: The type of project proposal impacts the overall likelihood of success of a given proposal.*

The final hypothesis analyzed within the model, hypothesis 7, focuses on project type in an effort to determine if different types of project proposals are more or less likely to be successfully funded than others. Hypothesis 7 specifically examines the services variable to

determine the impact that this type of project has on the dependent variables of percent of project funded and project success. This question builds off of the qualitative analysis, and takes it a step further by classifying the previously-identified project categories into one of two types of project proposals: either provided services or structural/building improvement projects. Further understanding the types of projects on a broad level that are most likely to be funded can potentially save substantial time and money of all involved, which in turn leads to a better experience and increased likelihood of future engagement.

In each of the two models, found in Tables 20 and 21, there is shown to be little support for the hypothesis, with service projects failing to show statistical significance. The finding falls short of confirming the hypotheses, but does provide interesting and valuable insight into what broad categories are more likely to be funded and successful. Once again this finding opens the door for additional future research that would examine project success at a more micro level and further break down what success looks like and how likely it may be for different types of project proposals.

The analysis found in chapter four provides a number of interesting insights at a broad level, particularly as it relates to the types of project proposals being done, the characteristics of the successful projects and types of places where they find success, and finally the types of projects that are most likely to be successfully funded. Perhaps equally as interesting is the information that the results provide on why some projects may not be successfully funded and the difference between the models with regard to the coalition variable and hypothesis.

The first research question focusing on project type provides a cursory look at the field and overviews the types of projects addressed within the civic crowdfunding sphere. The second question looking at project success begins to provide valuable insight about the communities

where projects come from and also what types of projects are being successfully funded. In each area, the research provides substantial impetus for future study to fully tease out the findings and characteristics of success in order to more fully understand the place and space of civic crowdfunding.

**CHAPTER FIVE**

**CONCLUSIONS**

**Summary of the Research**

The purpose of this research has been to examine the role of civic crowdfunding in public administration and local government. As an increasingly popular alternative funding and service delivery mechanism, civic crowdfunding has shown the potential to augment traditional local government service delivery. This research provides insight into how civic crowdfunding has been utilized, what a successful civic crowdfunding campaign looks like, what factors contribute to project funding, and also begins to theorize how civic crowdfunding may be used in the future.

In an effort to address these issues, the study asked two research questions focusing on project type and project success. The first research question on project type examined the different types of projects that conveners propose through the reviewed platforms, while also looking at what types of proposals are more likely to be fully funded as well as those that are less successful. In addressing this question, data were collected across two civic crowdfunding platforms resulting in a sample size of 226 unique project proposals over the course of more than four years. Project proposals were then reviewed, coded, and verified by an outside party. This exercise provides insight into the most frequently proposed projects across the two reviewed platforms and also informed the quantitative analysis results addressing the second research question.

Specifically, the first research question and the corresponding hypotheses shed light on the most frequently proposed types of projects and whether the most frequently proposed categories were also the most successfully funded. The analysis identified sustainability projects, such as projects including community garden initiatives, food co-ops, and urban farms as the

most often proposed category type accounting for more than 20 percent of all proposed projects. Following sustainability proposals are community grants. Community grants encompass a variety of proposals that focus on different community needs by raising awareness through the campaigns. Community grant proposals make up 17 percent of all project proposals and are typically small in scope and requested amount. Art/culture proposals are the next most frequently proposed campaign accounting for 12 percent of all proposed projects. In total, the top three most proposed projects account for nearly 50 percent of all project proposals across the reviewed platforms.

Perhaps the most interesting finding from the project type examination is that the most frequently proposed projects do not have the highest rates of project funding success. Sustainability and art/culture proposals tie for the total most successfully funded projects, yet neither have the highest success rate. The findings hint at a potential disconnect between the projects being proposed and those being funded; in particular suggesting that conveners may not be proposing projects in a way to optimize chances of achieving full funding. Further, by identifying both the most likely projects to be successfully funded, as well as the types of projects likely to fail, we can begin to think about what it is about specific project categories that appeal to potential donors. When factoring in other variables such as benefit distribution, project scope, and community demographics we can better understand how certain types of projects work in different places.

The second research question examines project success and the specific factors and characteristics that influence the likelihood that a project receives funding. This model builds on the relatively sparse crowdfunding research and also incorporates literature from the New Public Service, as well as its tenets citizen engagement, public values, and network governance to

inform the research. In addition, the content analysis also informs the quantitative model and analysis.

By addressing both project success and failure through the examination of fully funded projects as well as partially funded proposals this study provides valuable insight for scholars interested in new forms of engagement and service delivery as well as practitioners focused on funding a community need. The analysis highlights the communities that propose and fund projects as well as the types of projects and critical elements to funding success.

Perhaps most interesting is the information the analysis provides about how and where projects are funded. It is not as simple as the more affluent and involved an area is, the more likely project success is. A number of other factors influence project success and failure. The analysis highlights that involvement matters; greater involvement equals greater likelihood of project success. The analysis also shows that cost is perhaps the most important aspect of project success. More so than the amount of money raised or the number of investors in a project, or even the wealth of an area, the amount of a project request matters. Monetary proposal requests had a substantially greater negative impact on project success in each model, highlighting that despite any number of other important factors in this case it seems that money is the greatest. It could be that projects with overly high budget requests may be disregarded by potential funders as unrealistic or people are more likely to give to projects where a little bit goes a long way. In any case this finding highlights the need for additional research to better understand project pricing and how it may impact project success among different types of projects and in different areas.

In looking beyond project components the analysis sheds light on where projects may be successful and the characteristics that contribute to success. Better understanding where project

proposals work can allow for more effective civic crowdfunding projects and campaigns. A surprise finding of the research was the negligible impact of population size within proposing jurisdictions. Surprisingly voter turnout and income, also theorized to have a positive impact on project success were also found to lack significance within the model. These findings collectively raise questions about the population characteristics of proposing jurisdictions. The more affluent communities may have larger budgets and other resources at their disposal to fund the types of projects typically proposed through civic crowdfunding platforms whereas the jurisdictions on the other end of the financial spectrum may lack the necessary resources to get even a crowdfunding project off the ground. The smaller, middle class areas in many cases exhibit a greater sense of project need than the more affluent proposing jurisdictions, but still retain enough collective resources to meet funding goals.

The results also highlight the marginal impact of the New Public Service in explaining civic crowdfunding success. Convening coalitions were not found to be significant in either case further affirming the importance and impact of project pricing. These findings suggest that project proposals convened by coalitions may be effective in bringing resources to the table and raising money but not enough so to positively impact overall project success. The findings also raise the question of just how useful the New Public Service literature is in explaining the success of civic crowdfunding proposals. While many of the concepts are present and incorporated into project proposals, the results have been mixed with engagement having a positive impact as expected but other variables such as democratic citizenship and convening coalitions having unexpected or little impact on project success. The results raise the question that perhaps the New Public Service is better in explaining project development and interest than it is project success.

Another surprise is the lack of impact of fund matching. Fund matching is the process of a campaign offering to match donations was found to have a negative impact on project success. Each of these findings would be interesting to explore in more detail in future research in order to determine the types of convening actors in each project and also the projects that utilize fund matching.

Civic crowdfunding initiatives have continued to grow across the country, joining a number of alternative funding and service delivery mechanisms designed to better connect citizens and communities with much needed resources. This study provides valuable insight into what these projects look like and where they work, which provides information on how to best utilize civic crowdfunding campaigns within local jurisdictions. By examining both project successes and failures, as well community demographics, we can begin to illustrate the types of communities where innovative financing is taking place and, perhaps most importantly, working. Being able to isolate communities and particular variables of interest within the models that drive success and failure lays the groundwork for a bevy of future research further exploring specific aspects of civic crowdfunding success and also community use of innovative technology.

**Relation to the Literature**

The findings described above complement the existing literature in a number of directions, the most relevant of which will be discussed here. As described in chapter two, civic crowdfunding is a still developing avenue for local government to leverage. The primary strength is that crowdfunding has the potential to better connect citizens and government, and offer citizens a greater voice in the development of their community. While testing this premise in the literature is beyond the scope of this project, it would be interesting to examine in future research

through interviews with donors and local government administrators. The same could be said for the concerns regarding representation and accountability that were discussed in Chapter two.

Much like strengths and concerns, this study probes potential implications, but it is somewhat beyond the scope to truly understand how representation and accountability work across the cases, as well as what impact the cases have within their community. Perhaps the most interesting aspect of implications where this study contributes to the literature is with regard to preference revelation. This research highlights the types of projects that are most frequently proposed, and the likelihood of success given a number of variables and constraints. This information can be particularly valuable for local government to determine the types of projects that people desire and fund in similar localities across the country.

As it relates to project components and the characteristics of success discussed in chapter two, the results are mixed. The variables measuring engagement, democratic citizenship, and the like were found to be not significant or have minimal impact on project success. This is not to discount the existing literature, as much as it points to the newness of the literature and challenge of theoretical development in an emerging field. Further, much of the existing literature and that of which was used to guide this study examines different strengths and characteristics, but there has been little research to date examining what contributes to civic crowdfunding success. This study starts to bridge that gap by examining community demographics, project components, characteristics of success, and the New Public Service and their impacts or lack thereof on project success. Across the board, the results indicate that project components, the size of request, amount raised, and number of donors have the greatest effect on project success.

**Limitations and Future Research**

One of the primary limitations of this study is the difficulty in measuring certain variables due to the lack of available data. The inability to track participants is a particular challenge since it is impossible to tell, reliably, where project donations are coming from. The majority of project proposals solicit donations anonymously, or with limited personal information displayed on the project proposal page. Representatives from Citizinvestor advised that the information was kept by the payment processor and they had limited access to it; multiple overtures to ioby went unanswered.

In addition, the impact of the New Public Service variables on project success was found to be minimal. Measuring democratic citizenship by voter turnout proved to be challenging because the most local representation of the data came from county-level presidential election records, which, both miss a segment of the population, and report data at the county level when many projects are hyperlocal. While the results and impacts of democratic citizenship on project success were not as expected, voter turnout is just one way in which to measure democratic citizenship. It is possible that democratic citizenship may have also been captured by the engagement variable, as it measures project participation.

The above limitations provide opportunities for future research in an effort to address measurement challenges and further unpack the New Public Service concepts and their impact on civic crowdfunding project success. Looking more at charitable giving and the impact of social capital on project success would be both interesting and fruitful. Social capital could be measured much in the same manner as Kwon, Heflin, and Ruef (2013) did in looking at the impact of social capital on public goods at a community level by merging Census data with results from Harvard's Social Capital Community Benchmark Survey and NORC's General Social Survey. While this would not solve the issue of knowing who is actually donating, it

would provide an additional level of detail on the impact and prevalence of social capital within proposing jurisdictions.

Adding additional measures of engagement may also prove interesting; these may include measuring social media coverage and the size of social networks that proposals may be shared across, and also further analyzing project participation, engagement, and outreach strategies and the level of participation that occurs within them. Additionally, further examining the impact of population size, and community demographics on project success would provide an interesting avenue for future research. Doing so would require a broad approach to better understand project success across different proposing jurisdictions. This approach could be complimented by a case study analysis examining specific types of projects in different areas of the country to gain additional insight into how much of a difference community and variables such as local government budgets and regional demographics factor into project success. This would also allow for further investigation into how civic crowdfunding projects compliment local government budgets and also whether and how they may impact the types of projects proposed within local government.

Ultimately, the future research opportunities within this field are abundant, yet there are data challenges that must be properly addressed. Being one of the first large-scale studies to examine civic crowdfunding, what it is and how it works has shed light on the challenges and illuminated a number of opportunities that would contribute to both the growth of the civic crowdfunding field, as well as to the disciplines understanding and incorporation of innovative technology and new methods of engagement in local government.

**Contributions to the Literature**

This research contributes to the small, but steadily growing literature on civic crowdfunding, as one of the most in-depth analyses of project type and success to date. This work builds on prior studies and provides examples and analysis that identifies the types of projects that are most often proposed, community demographics that correlate with project success, as well as confirming and rejecting prior findings and hypotheses by providing examples and analysis from the field. Further this work highlights the potential impacts that civic crowdfunding campaigns can have within a community particularly as it relates to service delivery and citizen engagement. The results of the analysis provide insight into a number of potential positive implications and begin to provide a guide to practitioners interested in convening a successful civic crowdfunding campaign.

Much of the early crowdfunding literature is purely empirical observation and calls for additional grounding of the emerging field. This research begins to stitch together a number theoretical fields in an effort to inform the field from a broad public administration perspective by pulling elements from the New Public Service, civic engagement, public value, democratic citizenship, and collaboration literature bases to provide perspective and begin to explain the different processes that span a number of fields focusing on citizen engagement, local government, and the cross-section of innovative technology to connect citizens with government.

## Contributions to the Field of Public Administration

The research also offers a number of interesting findings and contributions that further the public administration literature particularly as it relates to explaining connections that link individuals through the use of innovative technology to local government. This research highlights how online platforms can leverage citizen networks to provide goods and services within local communities by building on collaboration and the New Public Service literature.

The research also highlights how new methods of engagement may be incorporated into local government organizations and illustrates the number of actors, both governmental and nongovernmental, that are required for successful integration and development.

Civic crowdfunding, in a sense can be thought of as the New Public Service in action. Civic crowdfunding reorients the traditional interactions of citizens and public servants much like Denhardt and Denhardt (2003) describe. Civic crowdfunding, like the New Pubic Service is citizen centric; citizens work in conjunction with other community leaders and fill various roles to design, plan, fund, and implement community goods and services. This study provides linkages and examples of the components that describe the New Public Service, in particular highlighting how public servants may utilize all the tools available to further engage and include citizens in the community decision making process. As local governments continue to struggle with budgetary issues it will be interesting to revisit these linkages and see whether civic crowdfunding continues to grow as a resource generating mechanism. Civic crowdfunding is likely to continue to grow in its popularity as citizens expect more from their local governments, but local governments struggle with budgetary issues.

This study also highlights how collectively empowered citizens can work through new and innovative channels along with public servants to make a difference in their communities. The results of this study, outlining project success, provide a rudimentary guide to planning and funding a civic crowdfunding campaign that can be of use to scholars and practitioners alike interested in citizen engagement and community betterment. As noted above, this study sheds light on a newly emerging field of civic crowdfunding. It provides important information for those who are considering using civic crowdfunding, and also provides a number of areas where

future research can continue to provide insight and analysis for those interested in civic

crowdfunding and the potential it may unlock for communities across the country.

**REFERENCES**

Agranoff, R. (2013). Local governments in multilevel systems: Emergent public administration challenges. *The American Review of Public Administration, 44*(4S), S47-S62.

Agranoff, R. (2006). Inside collaborative networks: Ten lessons for public managers. *Public Administration Review*, *66*(s1), 56-65.

Agranoff, R., & McGuire, M. (2003). Inside the matrix: Integrating the paradigms of intergovernmental and network management. *International Journal of Public Administration, 26*(12), 1401-1422.

Agrawal, A., Catalini, C., & Goldfarb, A. (2013). Crowdfunding: Social frictions in the flat world? *NEBR working paper 16820.*

Ansell, C., & Gash, A. (2007). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory: J-PART, 18*(4), 543-571.

Aron, R., Sundararajan, A., & Viswanathan, S. (2006). Intelligent agents in electronic markets for information goods: Customization, preference revelation and pricing. *Decision Support Systems, 41*(4), 764-786.

Baeck, P., & Collins, L. (2013). Working the crowd: A short guide to crowdfunding and how it can work for you. *London, UK: Nesta,* 1-19.

Barnes, W. R. (2010). Governing cities in the coming decade: The democratic and regional disconnects. *Public Administration Review, 70*(S1), S137-S144.

Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing, 29*(5), 585-609.

Berger, B. (2011). *Attention deficit democracy: The paradox of civic engagement*. Princeton, New Jersey: Princeton University Press.

Bingham, L. B., Nabatchi, T., & O'Leary, R. (2005). The new governance: Practices and processes for stakeholder and citizen participation in the work of government. *Public Administration Review, 65*(5), 547-558.

Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review, 67*(5), 846-860.

Bovaird, T., & Loeffler, E. (2012). From engagement to co-production: The contribution of users and communities to outcomes and public value. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *4*(23), 1119-1138.

Bovaird, T. & Loeffler, E. (2013). We're all in this together: Harnessing user and community co-production of public outcomes. In Staite, C. (Ed.), *Making sense of the future: Do we need a new model of public services?* Birmingham, England: University of Birmingham/INLOGOV.

Boyne, G. A., & Walker, R. M. (2010). Strategic management and public service performance: The way ahead. *Public Administration Review, 70*(S1), S185-S192.

Boyte, H. C. (2011). Constructive politics as public work organizing the literature. *Political Theory*, *39*(5), 630-660.

Bozeman, B. (2002). Public-value failure: When efficient markets may not do. *Public Administration Review, 62*(2), 145-161.

Bozeman, B. (2007). *Public Values and Public Interest: Counterbalancing Economic Individualism.* Washington, D.C.: Georgetown University Press.

Brabham, D. C. (2008a). Crowdsourcing as a model for problem solving an introduction and cases. *Convergence: the international journal of research into new media technologies, 14*(1), 75-90.

Brabham, D. C. (2008b). Moving the crowd at iStockphoto: The composition of the crowd and motivations for participation in a crowdsourcing application. *First Monday, 13*(6).

Brabham, D. C. (2009). Crowdsourcing the public participation process for planning projects. *Planning Theory, 8*(3), 242-262.

Brabham, D. C. (2010). Moving the crowd at Threadless: Motivations for participation in a crowdsourcing application. *Information, Communication & Society, 13*(8), 1122-1145.

Brabham, D. C. (2012). Motivations for participation in a crowdsourcing application to improve public engagement in transit planning. *Journal of Applied Communication Research, 40*(3), 307-328.

Brabham, D. C. (2013). *Crowdsourcing*. Cambridge, MA: MIT Press.

Brandsen, T., & Pestoff, V. (2006). Co-production, the third sector and the delivery of public services: An introduction. *Public Management Review*, *8*(4), 493-501.

Brito, J. (2008). Improving government transparency online. *Public Manager, 37*(1), 22-26.

Broadnax, W. D. (2010). Diversity in Public Organizations: A Work in Progress. *Public Administration Review, 70*(S1), S177-S179.

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public value governance: Moving beyond traditional Public Administration and the New Public Management. *Public Administration Review, 74*(4), 445-456.

Bryson, J. M., Crosby, B. C., & Middleton-Stone, M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review, 66*(SI), 44-55.

Bryson, J. M., Quick, K. S., Slotterback, C. S., & Crosby, B. C. (2013). Designing public participation processes. *Public Administration Review, 73*(1), 23-34.

Cabannes, Y. (2004). Participatory budgeting: a significant contribution to participatory democracy. *Environment and Urbanization, 16*(1), 27-46.

Choi, S. (2009). Diversity in the US federal government: Diversity management and employee turnover in federal agencies. *Journal of Public Administration Research and Theory, 19*(3), 603-630.

Clark, B. Y., Brudney, J. L., & Jang, S. G. (2013). Coproduction of government services and the new information technology: Investigating the distributional biases. *Public Administration Review*, *73*(5), 687-701.

Clark, B. Y., Zingale, N., Logan, J. & Brudney, J. L. (2016). A framework for using crowdsourcing in government….Forthcoming.

Conley, A., & Moote, M. (2003). Evaluating collaborative natural resource management. *Society and Natural Resources, 16*(5), 371-386.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.

Davies, R. (2014). *Civic crowdfunding: Participatory communities, entrepreneurs and the political economy of place*. (Graduate thesis). MIT, Cambridge, MA.

Davies, R. (2015). Three provocations for civic crowdfunding. *Information, Communication & Society, 18*(3), 342-355.

De Buysere, K., Gajda, O., Kleverlaan, R., & Marom, D. (2012). A framework for european crowdfunding. *European Crowdfunding Network (ECN),* 1-40.

De Swert, K. (2012). Calculating inter-coder reliability in media content analysis using Krippendorff's Alpha. *Center for Politics and Communication*, 1-15.

Demediuk, P., Solli, R., & Adolfsson, P. (2012). People plan their park: Voice and choice through participatory budgeting. *The International Journal of Interdisciplinary Social Sciences, 6*(5), 185-198.

Denhardt, J., & Denhardt, R. (2003). *The new public service: Steering, not serving.* New York, NY: M.E. Sharpe.

Denhardt, R., & Denhardt, J. (2000). The new public service: Serving rather than steering. *Public Administration Review, 60*(6), 549-559.

Dixon, J., & Dogan, R. (2002). Hierarchies, networks and markets: responses to societal governance failure. *Administrative Theory & Praxis*, *24*(1), 175-196.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107-115.

Erkkilä, T. (2007). Governance and accountability: A shift in conceptualisation. *Public Administration Quarterly*, 31(1), 1-38.

Esposti, C. (2012). Crowdfunding industry report: Market trends, composition and crowdfunding platforms. *Crowdsourcing.org*.

Estellés-Arolas, E., & González-Ladrón-de-Guevara, F. (2012). Towards an integrated crowdsourcing definition. *Journal of Information Science, 38*(2), 189-200.

Ferreyra, C., & Beard, P. (2007). Participatory evaluation of collaborative and integrated water management: Insights from the field. *Journal of Environmental Planning and Management, 50*(2), 271-296.

Fisher, T. (2014). Public value and the integrative mind: How multiple sectors can collaborate in city building. *Public Administration Review, 74*(4), 457-464.

Frey, B. B., Lohmeier, J., Lee, S., & Tollefson, N. (2006). Measuring collaboration among grant partners. *American Journal of Evaluation, 27*(3), 383-392.

Gajda, R., & Koliba, C. (2007). Evaluating the imperative of intraorganizational collaboration: A school improvement perspective. *American Journal of Evaluation, 28*(1), 26-44.

Gerber, E. M., Hui, J. S., & Kuo, P.-Y. (2012). *Crowdfunding: Why people are motivated to post and fund projects on crowdfunding platforms.* In *Proceedings of the International Workshop on Design, Influence, and Social Technologies: Techniques, Impacts and Ethics*. 1-10.

Gray, B. (1985). Conditions facilitating interorganizational collaboration. *Human relations, 38*(10), 911-936.

Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems.* San Francisco, CA: Jossey-Bass Publishers.

Griffin, Z. (2012). Crowdfunding: Fleecing the American masses. *Case Western Reserve Journal of Law, Technology & the Internet, 4*(2), 375-421.

Grillo, M. C., Teixeira, M. A., & Wilson, D. C. (2010). Residential satisfaction and civic engagement: Understanding the causes of community participation. *Social Indicators Research, 97*(3), 451-466.

Gyourko, J., & Tracy, J. (1991). The structure of local public finance and the quality of life. *Journal of Political Economy*, *99*(4), 774-806.

Hartley, J., Sørensen, E., & Torfing, J. (2013). Collaborative innovation: A viable alternative to market competition and organizational entrepreneurship. *Public Administration Review, 73*(6), 821-830.

HealthCare.gov. (2016). Federal poverty level. *HeathCare.gov.*

Hemer, J. (2011). A snapshot on crowdfunding. *Working papers firms and region, No. R2/2011,* 1-44.

Hochman, O., Pines, D., & Thisse, J.-F. (1995). On the optimal structure of local governments. *The American Economic Review, 85*(5), 1224-1240.

Hood, C. (1991). A public management for all seasons? *Public administration, 69*(1), 3-19.

Howe, J. (2006). The rise of crowdsourcing. *Wired magazine, 14*(6), 1-4.

Howe, J. (2008). *Crowdsourcing: How the power of the crowd is driving the future of business.* New York, NY, Random House Publishing.

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Imperial, M. T. (2005). Using collaboration as a governance strategy lessons from six watershed management programs. *Administration & Society, 37*(3), 281-320.

Innes, J. E., & Booher, D. E. (2003). Collaborative policymaking: Governance through dialogue. In M. Hajer & H. Wagenaar (Eds.), *Deliberative policy analysis: Understanding governance in the network society* (33-59). Cambridge, MA: Cambridge University Press.

Irvin, R. A., & Stansbury, J. (2004). Citizen participation in decision making: Is it worth the effort? *Public Administration Review, 64*(1), 55-65.

*Jacobellis v. Ohio 378 U.S. 184*, 1964.

Jordan, M., Yusuf, J. E. W., Mayer, M., & Mahar, K. (2016). What citizens want to know about their government's finances: Closing the information gap. *The Social Science Journal*, *53*(3), 301-308.

Jørgensen, T. B., & Bozeman, B. (2007). Public values an inventory. *Administration & Society*, *39*(3), 354-381.

Ketokivi, M., & Castañer, X. (2004). Strategic planning as an integrative device. *Administrative Science Quarterly, 49*(3), 337-365.

Kettl, D. F. (2002). *The transformation of governance: Public administration for twenty-first century America.* Baltimore, MD: JHU Press.

Kim, S., & Lee, J. (2012). E-Participation, transparency, and trust in local government. *Public Administration Review, 72*(6), 819-828.

Kleemann, F., Voß, G. G., & Rieder, K. (2008). Un (der) paid innovators: The commercial utilization of consumer work through crowdsourcing. *Science, Technology & Innovation Studies, 4*(1), 5-26.

Koliba, C. J., Zia, A., & Mills, R. M. (2011). Accountability in governance networks: An assessment of public, private, and nonprofit emergency management practices following Hurricane Katrina. *Public Administration Review, 71*(2), 210-220.

Krippendorff, K. (2012). *Content analysis: An introduction to its methodology*: Thousand Oaks, CA: Sage Publications.

Kwon, S. W., Heflin, C., & Ruef, M. (2013). Community Social Capital and Entrepreneurship. *American Sociological Review*, *78*(6), 980-1008.

Lambert, T., & Schwienbacher, A. (2010). An empirical analysis of crowdfunding. *Social Science Research Network, 1578175*.

Leach, W. D., Pelkey, N. W., & Sabatier, P. A. (2002). Stakeholder partnerships as collaborative policymaking: Evaluation criteria applied to watershed management in California and Washington. *Journal of Policy Analysis and Management, 21*(4), 645-670.

Lindsay, D. (2015). Local governments and non-profits test crowdfunding for civic projects. *The Chronice of Philanthropy.* https://philanthropy.com/article/Local-Governments-and/152005

Mandarano, L. A. (2008). Evaluating collaborative environmental planning outputs and outcomes: Restoring and protecting habitat and the New York-New Jersey harbor estuary program. *Journal of Planning Education and Research, 27*(4), 456-468.

Margerum, R. D. (2002). Evaluating collaborative planning: Implications from an empirical analysis of growth management. *Journal of the American Planning Association, 68*(2), 179-193.

Marillion. (2014). 11 April 2003, Your questions answered. *Marillion.com,* http://www.marillion.com/news/newsitem.htm?id=30

Martin, L. L., Levey, R., & Cawley, J. (2012). The "new normal" for local government. *State and Local Government Review, 44*(1S), 17S-28S.

Mayer, M. (2016). "Crowdfunding and Social Policy" in Farazmand (Ed.), *The Global Encyclopedia of Public Administration*. New York, New York: Springer Reference.

Mayer, M. & Kenter, R. (2015). "The Prevailing Elements of Public-Sector Collaboration" in Morris and Miller-Stevens (eds), *Advancing Collaboration Theory: Models, Typologies, and Evidence*. New York, New York: Routledge Press.

Mayer, M. & Kenter, R. (2016). "Public Sector Collaboration and Social Policy" in Farazmand (Ed.), *The Global Encyclopedia of Public Administration*, Springer Reference.

McNamara, M. (2012). Starting to untangle the web of cooperation, coordination, and collaboration: A Framework for public managers. *International Journal of Public Administration, 35*(6), 389-401.

Mergel, I. (2015a). Open collaboration in the public sector: The case of social coding on GitHub. *Government Information Quarterly*.

Mergel, I. (2015b). Opening government: Designing open innovation processes to collaborate with external stakeholders. *Social Science Computer Review, 33*(5), 599-612.

Mergel, I. & Desouza, K. (2013). Implementing open innovation in the public sector: The case of challenge.gov. *Public Administration Review, 73*(6), 882-890.

Miglietta, A., Parisi, E., Pessione, M., & Servato, F. (2014). *CrowdFunding and local governments: a financial opportunity for a new liaison with citizens.* Paper presented at the Toulon-Verona Conference "Excellence in Services".

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* Thousand Oaks, CA: Sage Publications.

Milward, H. B., & Provan, K. G. (2000). Governing the hollow state. *Journal of Public Administration Research and Theory*, *10*(2), 359-380.

Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing, 29*(1), 1-16.

Moore, M. H. (1995). *Creating public value: Strategic management in government*. Cambridge, MA: Harvard University Press.

Mor Barak, M. E. (1999). Beyond affirmative action: Toward a model of diversity and organizational inclusion. *Administration in Social Work, 23*(3-4), 47-68.

Morse, R. S. (2010). Integrative public leadership: Catalyzing collaboration to create public value. *The Leadership Quarterly, 21*(2), 231-245.

Mulgan, R. (2000). 'Accountability': An ever-expanding concept? *Public Administration, 78*(3), 555-573.

Nalbandian, J. (2005). Professionals and the conflicting forces of administrative modernization and civic engagement. *The American Review of Public Administration, 35*(4), 311-326.

Nalbandian, J., O'Neill, R., Michael Wilkes, J., & Kaufman, A. (2013). Contemporary challenges in local government: Evolving roles and responsibilities, structures, and processes. *Public Administration Review, 73*(4), 567-574.

Nath, J. (2011). Reimagining government in the digital age. *National Civic Review, 100*(3), 19-23.

Noonan, P. M., McCall, Z. A., Zheng, C., & Erickson, A. S. G. (2012). An analysis of collaboration in a state-level interagency transition team. *Career Development and Transition for Exceptional Individuals, 35*(3), 143-154.

Noveck, B. S. (2009). *Wiki government: How technology can make government better, democracy stronger, and citizens more powerful*. Washington DC: Brookings Institution Press.

Osborne, D., & Gaebler, T. (1992). *Reinventing government: How the entrepreneurial spirit is transforming government.* Reading, MA: Adison Wesley.

Ostrom, V., Tiebout, C. M., & Warren, R. (1961). The organization of government in metropolitan areas: a theoretical inquiry. *The American Political Science Review*, *55*(4), 831-842.

Park, H. M., & Perry, J. L. (2013). The transformation of governance: Who are the new public servants and what difference does it make for democratic governance? *The American Review of Public Administration, 43*(1), 26-49.

Perry, J. L., & Buckwalter, N. D. (2010). The public service of the future. *Public Administration Review, 70*(S1), S238-S245.

Portney, K. (2005). Civic engagement and sustainable cities in the United States. *Public Administration Review, 65*(5), 579-591.

Public School; Repair and Maintenance; Hawaii 3R's; Crowdfunding; Pilot Program; Appropriation. *HI BB2631*, 2014.

Quittner, J. (2012). The wisdom of crowds. *Inc., 34*(10), 99-100.

Robbins, M. D., & Simonsen, B. (2002). A dynamic method of citizen preference revelation. *Journal of Public Budgeting, Accounting, and Financial Management, 14*(3), 445-462.

Romzek, B. S., & Dubnick, M. J. (1987). Accountability in the public sector: Lessons from the Challenger tragedy. *Public Administration Review*, *47*(3), 227-238.

Schwienbacher, A., & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. In D. Cummings (Ed.), *The Oxford Handbook of Entreprenurial Finance.* Oxford, U.K.: Oxford University Press.

Seltzer, E., & Mahmoudi, D. (2012). Citizen participation, open innovation, and crowdsourcing: Challenges and opportunities for planning. *Journal of Planning Literature*, *28*(1), 3-18.

Stiver, A., Barroca, L., Minocha, S., Richards, M., & Roberts, D. (2015). Civic crowdfunding research: Challenges, opportunities, and future agenda. *New Media & Society*, *17*(2), 249-271.

Stoker, G. (2006). Public value management a new narrative for networked governance? *The American Review of Public Administration*, *36*(1), 41-57.

Surowiecki, J. (2005). *The wisdom of crowds.* New York, NY: Random House Publishing.

Tapscott, D., & Williams, A. D. (2008). *Wikinomics: How mass collaboration changes everything*. London, U.K.: Penguin Publishing.

*Texas Department of Housing and Community Affairs et al. v. Inclusive Communities Project, Inc., et al. 13-1371,* 2015.

Thomson, A. M., & Perry, J. L. (2006). Collaboration processes: Inside the black box. *Public Administration Review, 66*(SI), 20-32.

Thomson, A. M., Perry, J. L., & Miller, T. K. (2009). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory: J-PART, 19*(1), 23-56.

Tiebout, C. M. (1956). A pure theory of local expenditures. *The Journal of Political Economy*, 416-424.

United States Census Bureau (2016). www.census.gov

Van Wart, M. (1998). *Changing public sector values*. Abingdon, U.K.: Taylor & Francis.

Wagner, R. E. (2011). Municipal corporations, economic calculation, and political pricing: exploring a theoretical antinomy. *Public Choice, 149*(1-2), 151-165.

Wagner, R. E. (2012). The institutional framework for shared consumption: Deemphasizing taxation in the theory of public finance. *Public Finance and Management, 12*(1), 5-21.

Warner, M. E. (2010). The Future of local government: Twenty-first-century challenges. *Public Administration Review, 70*(SI), S145-S147.

Weber, R. P. (1990). *Basic content analysis* (No. 49). Thousand Oaks, CA: Sage Publications.

Wilson, L. (1983). Preference revelation and public policy: Making sense of citizen survey data. *Public Administration Review*, 43(4), 335-342.

Wright, C. (2012). Cutting edge thinking. *Political Quarterly, 83*(3), 520-523.

Yang, K., & Melitski, J. (2007). Competing and complementary values in information technology strategic planning: observations from ten states. *Public Performance & Management Review, 30*(3), 426-452.

Zhang, Y., Zhang, Y., Lee, R., & Yang, K. (2012). Knowledge and skills for policy making: Stories from local public managers in Florida. *Journal of Public Affairs Education*, 18(1), 183-208.

Zuckerman, E. (2012). How do we make civic crowdfunding awesome. *Ethanzuckerman.com.*

Zuckerman, E. (2014). New media, new civics? *Policy & Internet, 6*(2), 151-168.

**APPENDIX A**

| Theme(s) | Subtheme(s) | Description | Example |
|---|---|---|---|
| Funding Source | *Funder Location* | The zip code, city, and state of the individual contributing to the project. | Virginia Beach, VA 23451<br><br>Coded As:<br><br>Same Zip =1<br>Same City=2<br>Same State=3<br>Other=4 |
| | *Project Location* | The zip code/city and state listed on the project proposal. | Zip Code/City Coded As:<br><br>5 Digit Zip<br><br>States Coded As:<br><br>Alabama=1<br>Alaska=2<br>Arizona=3, etc. |
| Marketing | *Digital Video* | The utilization of digital video within the project proposal. | Yes=1<br>No=0 |
| | *Social Media* | The use of Facebook, Twitter, etc., to promote the project proposal. | Yes=1<br>No=0 |
| Responsiveness | *Participation* | The participation of conveners and donors through project message boards. | Yes=1<br>No=0 |
| | *Project Updates* | The utilization of project updates on the funding platform to highlight progress and goals. | Yes=1<br>No=0 |
| | | Whether a project requests or | |

| | *Volunteers* | solicits volunteer involvement in planning and/or implementation. | Yes=1<br>No=0 |
|---|---|---|---|
| Project Type | *Built Environment* | Whether a project focuses on a structural built environment proposal. | Yes=1<br>No=0 |
| | *Services* | Whether a project focuses on a service oriented or educational proposal. | Yes=1<br>No=0 |
| | *Art/Culture, Community Grants, Education, Greening, Libraries, Neighborhood Improvements, Parks, Public Health, Recycling, Sustainability/Gardens, Walkability/Cycling* | The specific types of projects being proposed across the two platforms. | Coded As:<br><br>Art/Culture=1<br><br>Community Grants=2<br><br>Education=3<br><br>Greening=4<br><br>Libraries=5<br><br>Neighborhood Improvements=6<br><br>Parks=7<br><br>Public Health=8<br><br>Recycling=9<br><br>Sustainability/Gardens=10<br><br>Walkability/ Cycling=11 |
| | *Platform* | Citizinvestor or ioby | Coded As:<br><br>Citizinvestor=1<br>Ioby=2 |
| | *Project Type/Success* | | Goal Met/Exceeded=1 |

| | | Whether a project realizes the full proposal budget request. | Not Met=0 |
|---|---|---|---|
| Project Success | *Requested Project Amount* | The initial project proposal funding request. | $5,265, etc. |
| | *Percent Funded* | Of proposed projects the amount raised divided by the amount requested. | A funding goal of $515 that results in $575 of donations equals a funding percentage of 112%.<br><br>Coded as a continuous variable. |
| | | | |

| Public Interest | *Community Need* | Community need is a particular societal or resource need that the project proposal will address. Proposals highlight the identification and articulation of problems and project needs within the community. Community need is non-excludable and broad in scope. | Bike lanes to increase rider safety or education programs for at-risk youth.<br><br>Coded As:<br><br>Yes (indicating community need)=1<br>No=0 |
|---|---|---|---|
| | *Rewards* | Tangible or other incentive appealing to the public in solicitation of their participation and donation. | Yes=1<br>No=0 |
| | *Visible Problems* | Visible problems are broad issues affecting the local community. Typically non-controversial and obvious in nature, project proposals are seen as a response to a particular issue within the community. | A park cleanup project.<br><br>Coded As:<br><br>Yes (indicating a visible problem)=1<br>No=0 |

**VITA**

Martin Mayer graduated with a Ph.D. from the School of Public Service at Old Dominion University in 2016. He received a Bachelor of Arts Degree in 2008, majoring in Political Science, and a Master of Public Administration Degree in 2010 from the University of Akron. Martin has published on topics of interest related to local government, collaboration, and state decision-making.