

ACTION-RESEARCH

Addressing the Data Analytics Gap: A Community-University Partnership to Enhance Analytics Capabilities in the Non-Profit Sector

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Although data analytics has become an increasingly important tool in the for-profit sector, non-profit organizations frequently lack these skills. As data availability and usage increases, this also exacerbates the data analytics gap. In this research, we describe the process of establishing a community-university partnership with a non-profit organization to address the data analytics gap. We present a case study of this relationship from the perspective of the university research team, the non-profit organization utilizing the analytics to seek grants, and a grant-providing foundation. We find that the local organization adopted data analytics because it was necessary and also the organization embraced the importance of making data-driven decisions. We also found the main themes that emerged regarding the reasons to adopt data analytics were: the need to ground assumptions in evidence, increase accountability to donors, increase the efficiency of the organization, and be competitive in an already saturated non-profit sector.

Keywords: Community Engagement; Data Analytics; Non-Profit Organizations; Data Analysis; Analytics

Introduction

Data analysis has become a very important tool for many organizations. Large corporations use data analytics to refine marketing plans, focus advertising campaigns, and create more effective business strategies. Often, some form of data analysis is used to better understand issues and dynamics within an organization as well. Government and political organizations routinely use data analysis to identify potential donors and new supporters. Data analytics, which can be defined as “the science of examining data to draw conclusions and, when used in decision-making, to present paths or courses of action” (Picciano, 2012, p. 12), has become seemingly ubiquitous in recent years. However, while large organizations often have access to enough resources to obtain these services, few small organizations are similarly well-equipped. This creates a particularly stark disparity between these large, well-equipped organizations and smaller groups without extensive resources.

This paper describes the process of developing an initiative to assist local non-profit organizations with their data analysis needs through a case study of one specific relationship. In particular, we seek to showcase the important impact that a college or university can have on its surrounding community by developing these types of targeted community-university partnerships. We discuss the existing research regarding the need for data analysis assistance and the backgrounds of the relevant stakeholders in this process. We then describe the methods used, the data collected, and the themes that emerged from analyzing this particular relationship. Finally, we discuss the relevance of our findings and conclude by examining the implications of our community-university initiative.

Theoretical Background

As partnerships between universities and communities have become increasingly prominent in recent decades, scholars have begun to document and analyze this trend. The idea that a university has an obligation to improve the quality of life in its surrounding community has waned in previous years, but more recently this idea has evolved as universities have worked to become more engaged in their communities (Holland,

2005). Additionally, the number of universities being awarded community engagement classification status by the Carnegie Foundation has continued to increase (Carnegie Foundation for the Advancement of Teaching, 2007).

Community Engagement

In the scholarship of community engagement, there is not one clear definition that encapsulates what this term specifically means. In this research, we draw from several existing sources on this topic, specifically Boyers (1996) definition of community engagement as a partnership between a university and the community. This definition serves as a baseline of understanding for our analysis, but we also recognize that other researchers have focused more on the reciprocal partnership aspect of this activity. For example, Sandmann and Weerts (2008) observe that leaders at universities use the term “engagement” to describe this renewed commitment to building community-university partnerships. This partnership should be a working relationship that shares resources and knowledge (Carnegie Foundation for the Advancement of Teaching, 2007) between each other to help reach their goals. For example, a university would have a relationship with local non-profit organizations or the state, to exchange information in order to help with the improvement of the community. Throughout our project, we strive to emphasize both the community-building and the reciprocal nature of the initiative described in our analysis.

A Gap in Data Analytics

In the for-profit sector, data analytics have long been used to improve the organization in a wide variety of ways. McAfee and Brynjolfsson (2012) find that data-driven companies are both more productive and profitable. This is a clear advantage when there is tight competition between corporations in the marketplace. Jim Collins (2001) contends that evidence-based decisions are a critical factor in business, stating “you absolutely cannot make a series of good decisions without first confronting the brutal facts” (p. 69). Other researchers similarly find that analytics-based decisions are more accurate than those based on intuition (Bonabeau, 2003; Pfeffer & Stutton, 2006). Davenport and Harris (2007) argue that businesses need to use analytics to be more efficient and effective to make the best decisions possible. This research highlights the importance of using data to improve decision-making at all stages of the process.

The non-profit and public sectors are similarly following suit and beginning to embrace data analytics. It is critically important for non-profit organizations to present and utilize quality information because funders are seeking accountability and expect resources to be allocated strategically and efficiently (Lenczner & Phillips, 2012). Much like for-profit organizations, non-profit organizations gain advantage from the increased efficiency and productivity (Rogge, Agasisti, & De Witte, 2017) derived from data analytics, and benefit from using data in the evaluation of their programs (Carman & Fredericks, 2008). Additionally, the more non-profit organizations identify foundations as important sources of revenue, the greater the likelihood the non-profit organization will adopt some form of outcome measurement (Barman & MacIndoe, 2012). In this way, non-profit organizations are under the same pressure as for-profit organizations to utilize data, but they have the added factor of needing to address external issues as well.

One such external pressure is the expectation of donors regarding the allocation of resources. In many cases, donors support non-profit organizations with a high percentage of expenses going toward service delivery and a low-percentage toward overhead costs. This issue, identified by Hager et al. (2004) as the starvation cycle, leads to an under-investment in organizational infrastructure (Gregory & Howard, 2009). This process provides continued disincentives for non-profit organizations to support their own internal administrative needs, even when this would improve the efficiency of the organization. This pressure seems to be increasing as well, as there is a downward trend in reported overhead costs over the last few decades (Lecy & Searing, 2014). Garven et al. (2016) argues that this percentage is not an effective evaluative tool of organizational performance, while Byrd and Cote (2017) discuss how this issue has become so important in the non-profit sector that charity watchdog groups have begun issuing guidance to donors to avoid accepting this “overhead myth” (p. 5) and instead focus on more useful metrics.

While the overhead myth leads non-profit organizations not only to underfund administrative costs in general, funding for data analytics costs specifically have several additional external constraints. Several researchers observe that non-profit organizations are limited in their ability to use data for a variety of reasons (Johnson, 2015; Lenczner & Phillips, 2012), including the reluctance of funders to invest in technological infrastructure (Al-Kodmany, 2012), and also funders not understanding data analytics (Stoecker, 2007). Johnson (2015) also observes that the analytics capabilities of non-profit organizations is limited by their access to expensive software. For example, Hackler and Saxton (2007) find that non-profit organizations

spend less than 2% of their budget on hardware or software. Additionally, in the public and non-profit sectors data analytics are often very cost-prohibitive, forcing non-profit and public sector organizations to rely on “open data”, which Janssen, Charalabidis, and Zuiderwijk (2012) define as “non-privacy-restricted and non-confidential data which is produced with public money and is made available without any restrictions on its usage and distribution” (p. 258).

This external bias against data analytics capacity specifically affects non-profit organizations, but internal organizational pressures play an important role as well. Organizations learn as a whole from the collective understanding of problems and solutions held by the members of the group. This process of organizational learning is an ongoing process in which group members collectively assimilate new information, translate that into knowledge, apply that knowledge to needs, and then revise and reshape the knowledge (Gill, 2000, p. 6). The process of developing new ideas can be limited or facilitated by the collective knowledge of the group, and group members may be resistant to adopting new ideas due to their perception of limited resources (Gill, 2010). These external pressures can make it difficult for organizations to collectively learn and adopt new ideas and priorities. This may be especially true of small, non-profit organizations which often lack both resources and personnel.

Although much of the literature tends to focus on either the non-profit, public, or private sectors, these same pressures tend to affect all three to varying degrees according to their ability to secure resources. Although larger organizations have increasingly recognized the value of data analytics, smaller organizations may struggle to obtain this expertise and assistance. This is especially true of small non-profit organizations, who experience both the issue of the overhead myth from donors and also the internal struggle learning as an organization the value of data analytics which fosters those skills in individuals. Although we have drawn from literature focusing primarily on quantitative data, we believe that the same pressures are applied to the use of qualitative data, since this and mixed-methods research requires a high-level of training and often benefits from specialized software. We therefore use the term “data analytics” to include a wide range of both quantitative and qualitative methods. As the demand for data analytics increases, smaller organizations are often experiencing, what we term in this research as a growing *data analytics gap*.

Project Description

The main purpose of this study is to analyze a community-university partnership initiative designed to address the *data analytics gap*. We conducted a case study of the process itself, which involved several stakeholders from different locations in this process. Since one primary motivation for non-profit organizations to close the *data analytics gap* is to increase their capacity to earn grants, there are effectively three main stakeholders in this analysis: the community organization (which is the group in need of analytics assistance), the university group assisting with the data analytics, and the primary grant-giving organization in the area.

In order to maintain the anonymity of the study participants, we masked the identity of each group by removing the specific name and replacing it with a generic description of the group in brackets. The objective was to de-emphasize the particular context of the case study in our analysis and focus our attention more on the process and relationships between the groups. This focus on process allows us to highlight the relationship itself and to provide an example of one way in which a university-community partnership can address this need.

Community Organization Background: Literacy for Today and Tomorrow

The community group in this analysis is the Literacy for Today and Tomorrow (LIFT) organization. This organization is an adult literacy program in the West Georgia region that was formed in 1995 and is part of the statewide Certified Literate Community Program. The LIFT program functions as the coordinating agency to support, promote, and coordinate a variety of adult literacy providers in the area. LIFT also partners with other non-profit organizations, colleges, and universities in the region.

Research Center Background: Data Analysis and Visualization Lab

The University of West Georgia created the Data Analysis and Visualization Lab (DAVL) to connect the campus to the community by addressing the *data analytics gap*. The DAVL was established in January 2014 and has assisted numerous different organizations (e.g. non-profits, state agencies, local school systems) in the West Georgia region. The DAVL functions by working with community groups to identify program evaluation or data analysis projects. We then train students on these types of projects and guide them as they assist the community organization with their analysis projects. This effort involves both undergraduate and graduate students, depending on the student's level of ability.

Community Foundation Background: Community Foundation of West Georgia

The Community Foundation of West Georgia (CFWG) is a charitable non-profit organization in Carrollton, Georgia that partners with local non-profit organizations, individuals, and companies in the West Georgia Area to assist the organizations in accomplishing their missions to improve the quality of life among the area's residents. Along with the University of West Georgia, Office of Community Engagement, the CFWG engages in many community-university collaborative partnerships, often initiating or fostering connections with new organizations. This partnership improves the vitality and breadth of the non-profit sector in the region and strengthens the overall community-university relationship. These include organizations that work closely with issues of social inequality, including adult literacy, poverty, education, health, and the environment.

Addressing the Data Analytics Gap

Each of the three stakeholders described in the preceding section has a unique perspective on addressing the *data analytics gap* and each offers different insights from their respective social location. The LIFT organization is the group that is directly affected by this gap and is seeking to obtain grants and funding. The CFWG is the organization that aggregates contributions from donors and then administers grants to other non-profit organizations through a rigorous selection process. The DAVL functions as a unit within the university that seeks to help both groups achieve their goals by addressing the *data analytics gap*.

In this particular case, the DAVL fostered a relationship with the LIFT organization that enabled them to obtain a grant from the CFWG and to focus its organizational goals on a particular neighborhood in Carrollton, Georgia. This process began when the director of LIFT attended an event in which the DAVL staff presented data on some of the demographic and social characteristics of the county. One of the data visualizations included a map of the education levels in the county. The map inspired the LIFT director to reach out for more information to better understand the area being served. Initially, the conversation was about obtaining data on literacy and education, since that is the focus of LIFT. The DAVL staff worked to get more data to LIFT on these topics and, during the course of our meetings, the group found that it would be important for LIFT to learn more information about the target group in this neighborhood. In particular, we worked together to identify factors that were barriers to people attending the adult literacy initiatives of LIFT such as childcare and access to vehicles. As the two groups worked together to identify relevant data, the comprehensive nature of the problem gradually emerged. We were able to help LIFT develop a strategic plan to target these issues in a specific area.

Study Objectives

This study is about the process of bridging the *data analytics gap* for a community organization by a university. It is a case study of one such initiative involving several reciprocal stages. Our main purpose in this study is to examine the following research questions:

1. How does information shared by the university impact the actions of an organization in the community?
2. What are the stages in the process of knowledge generation and sharing in the specific case of addressing the *data analytics gap*?
3. Does addressing *the analytics gap* improve the effectiveness of the community organization?
4. Do organizations embrace the long-term value of data analytics for their organization beyond the immediate external pressures to adopt data analytics practices?

Procedures

This analysis is a study of the process of a university addressing a concern identified by the community. Specifically, this is a case study of a community engagement unit within a university addressing the *data analytics gap* in an ongoing relationship with one specific community organization. Creswell (2007) contends that a case study approach is useful in cases where the researchers seek to provide an in-depth analysis of a clearly identifiable and bounded case or cases. Such an approach is appropriate in this situation as we are examining the effects of a specific initiative on a single community organization with clearly bounded beginning and end points. Our research was reviewed and approved by the appropriate Institutional Review Board prior to data collection.

Interviews

In order to gain insights from the main stakeholders in this process, we interviewed the director of LIFT and the director of the Community Foundation of West Georgia. Each interview was semi-structured and consisted of open-ended questions (Rubin & Rubin, 2005). The interviews were then transcribed, coded, and analyzed by the research team. These interviews, along with our own experiences in the DAVL, form the foundation of our analyses. We analyze and synthesize all three unique perspectives on this process and discuss emergent themes and important connections.

Analysis

There is growing accountability from local non-profit organizations to funders and foundations to make fiscally responsible decisions. As this is a trend that likely affects many communities, our study is an examination of the process of developing university partnerships with organizations to help them establish strategic plans and allocate resources using relevant data. Our purpose is to describe and analyze the process of establishing a community-university initiative that is aimed at addressing the *data analytics gap*. We use what Weiss (1994) describes as a “case-focused analysis” in which we synthesize material from both interviews into related issues to describe the overall story of the initiative. Although the outcomes of the initiatives were specifically helpful to the community organization in securing grants and making data-driven decisions, they are not the focus of this paper.

Findings

Data Analytics Gap

There is a *data analytics gap* among non-profit community organizations compared to those in the for-profit sector. While larger companies are able to hire expensive analysts to help the organization make data-driven decisions, smaller non-profit groups frequently do not have this as an option. The director of the LIFT stated, “the biggest challenge for the non-profits is... they don’t have that skill set for the most part”. This gap was observed repeatedly by the DAVL staff among many, if not most, non-profit organizations in the West Georgia Area.

The gap can be especially challenging since the demand for data analytics is fairly recent and many non-profit directors have not had a chance to acquire these skills. When working in the Data Analysis and Visualization Lab (DAVL), the authors have consistently received comments from non-profit organizations that they took their job because they liked helping people, but they now are expected to also understand data. Most organizations perceive this trend to have occurred fairly recently and to be growing rapidly. This can drastically affect a non-profit leader’s ability to manage their organization if they lack the necessary analytic skills. Additionally, many leaders are not even familiar enough with this area to know where to begin. The director of the CFWG stated that a barrier to using data analytics is that “a lot of them are intimidated by [technology] and just not knowing where to start.” Lack of knowledge of the rapidly demanding area of data analytics has quickly put non-profit organizations out of touch and unable to utilize these tools.

The existence of the *data analytics gap* can seem especially paradoxical because data appears to be everywhere, but it is not always clear how to find current and reliable data in the sea of information. Our research team has observed this gap many times as we have provided consulting services to local non-profit organizations regarding data access. It can be very confusing for organizations to find different, and sometimes conflicting, statistics on the same topic. In many ways, the tremendous growth in the availability of data has actually made it more difficult for untrained people to know how to find meaningful and reliable information. The director of the Community Foundation observes that the problem is “a lot of [the non-profits] are intimidated by it and just not knowing where to start”, and “they don’t know what they don’t know... and that’s the real challenge.” The non-profit organizations overall lack of familiarity with the utilization and availability of data analytics tools becomes a significant barrier to use.

Even after reliable data is located, it still needs to be analyzed and interpreted. This theme appeared throughout the entire research process, both during the interviews and in the research team’s interaction with the stakeholders. There seems to be a common misconception that having the data available is all that is needed, and data availability should directly translate into actionable insights. However, in our research this was not the case. During the interactions with the LIFT organization, the director repeatedly expressed feeling overwhelmed by the data and not knowing where to turn for information. The director also noted that just finding the data is not enough, since the statistics could often contradict each other.

The data often needs to be analyzed and interpreted to find the actionable insights in all of the irrelevant data noise. However, being able to translate complex information into succinct and concise knowledge can be a very powerful experience. When describing this “ah-ha” moment, which occurred at a data-sharing event, the director of LIFT explained the DAVL staff presented “this huge map, and in the center of it is this dark blue area” and “it just hit me that that’s what we were concentrating on is that area”. The map being described was the percentage of people in each census tract of the county who did not have a high school diploma. This one piece of information gave the LIFT director an actionable insight into how the limited resources could be focusing more narrowly on this specific area, rather than spreading it broadly to areas that did not necessarily need it as much.

Motivations to Address the Data Analytics Gap

Data really is everywhere and from the perspectives of both the grant-seeking community group and the grant-administering organization, it was apparent in this research that each group clearly learned and understood how important using data has become. The need for using data analytics arises from several factors. We divide these into the emerging themes (shown in **Table 1**) of evidence, accountability, efficiency, and saturation.

The analysis and interpretation of the data can be very important, not just because of the insights that it provides, but also because it can allow organizations to ground their assumptions in evidence. Non-profits can examine and, in some cases, confront their stakeholder’s pre-existing ideas about the demographics of the people in the area. In many rural communities where residential mobility is limited, many potential donors may be making their decisions about community priorities based upon his or her experiences and memories from decades ago. These assumptions may be very disconnected from current trends and needs. The CFWG director stated:

I think that’s where we fall short a little bit is that our demographics are changing. Probably a lot quicker than a lot of us recognize. I mean, ... I think just to realize it, just because you checked it a year or two years ago doesn’t necessarily mean that’s the exact same story that it is right now and so I think that’s going to be a problem for them. It’s realizing this is not written in stone. This is ... organic. It’s going to be changing and you need to be sort of moving along with it, or at least keeping abreast of what those changes are.

Not only do the demographic and social characteristics of an area change over time, but in some cases, people may only ever be exposed to a very narrow swath of a community. For organizations seeking support and resources, it can be difficult to convince potential donors that a particular social reality exists in a community if they have never personally experienced it. The Community Foundation’s director added:

Table 1: Emergent Themes from Analysis of Interviews.

Emergent Themes	Grantee ([non-profit organization])	Grantor ([foundation])
<hr/>		
Data Analytics Gap		
Overwhelmed with data	x	
The data needs to be analyzed/interpreted	x	x
<hr/>		
Motivations to Address the Analytics Gap		
Emerging Expectation of Needing Evidence	x	x
Accountability		x
Organizational Efficiency	x	x
Saturation		x
<hr/>		
Embracing Analytics		
Data insights are valuable	x	

Why can't we look on the social side of what the underlying community looks like right now? What's the racial demographics? What's the socio-economic demographics? What is it? What are we looking at? Because in my world it's pretty vanilla to a certain extent, but I know that's not true for everybody.

The disconnection from the actual social characteristics of a neighborhood can be particularly great in areas with high levels of racial segregation or divided sharply by economic status. When presenting this information to the community, our research team repeatedly noted that most of the community members were already familiar with the areas having the highest levels of social disadvantage, but they rarely entered them. As we worked directly with the LIFT organization to develop data, the director was able to use a variety of information to better understand the neighborhood in ways that were previously not possible. The director commented "I've been poor before, but I've never been in poverty". Grounding existing ideas in evidence not only clarified the characteristics of the target group for LIFT, it helped the director gain a deeper understanding of the related needs of the people in the focal neighborhood.

The next factor is the increased need for accountability to the donors. In our interview, the director of the CFWG, which administers grants, discussed how donors increasingly want more accountability, and they expected information-based decision making. From the grantee perspective, which is the LIFT organization, the director discussed how the Community Foundation was specifically asking applicants to include data in their applications. At all stages of the process, the data was necessary to justify the requests of the organization applying for the grant, and also of the one administering the grant, since both were ultimately beholden to the donors. The CFWG also noted the need for accountability has increased with younger generations of donors, who were more likely to thoroughly investigate an organization before donating money. This growing culture of accountability has steered both the grantees and the grantors to participate in a more data-driven management culture.

Another factor that repeatedly appeared in our research is the efficiency of the non-profit organization. This is regarding the efficiency of both the decision-making of the organization and also the outcomes of organizational initiatives. From the grantee perspective, efficiency is closely related to accountability. The CFWG director believed donors "have a right to know if their money is being invested wisely, if it is being used efficiently and effectively." The director also observed that younger donors have a different perspective than older donors and focus more on "efficiency-driven questions."

Finally, the saturation of the non-profit sector is an important consideration for both grant-seeking and grant-giving organizations. When discussing how the area donors would feel about the data analytics used by the LIFT organization, the Community Foundation director stated:

Now, when [they] have seen how it is applied like with [the [non-profit organization] director] ... and identify that neighborhood... there is only so much money out there. And how do you maximize those grant dollars? Or when you're trying to seek grant dollars, and so for them being able to target and also from a fundraising standpoint... [she or he] is looking at it like: is there pockets in the community where there are higher pockets of poverty in Carroll County? Well then if there's people that may be living close to those neighborhoods that maybe have more resources, then [he or she] can target from a fundraising standpoint. It's sort of coming at it from two different directions. Both from a targeted spending of resources and targeting trying to get those resources.

Embracing Data Analytics

As the process progressed and the relationship evolved, it became increasingly clear that the LIFT director was rapidly embracing not just the need for data analytics but was also accepting the actual value of the insights that could be obtained.

It made it much easier to write a grant when I learned things just like the significant amount of the population in that tract that used bicycles. I learned that through being aware of the data you gave me, that showed how many people don't have vehicles and how many people used bikes.

The focus of the LIFT organization is on adult literacy and the original inquiry was narrowly focused on this issue. But as our relationship evolved, the LIFT director worked with us to better understand the needs of the people in the area to develop a program to help in the most effective way possible and to write a grant application that made the most comprehensive use of the information.

The motivations for using data analytics were all tied closely to shifting cultural demands in the non-profit sector for increased use of data and addressing the *data analytics gap*. However, another clear theme that emerged from both the grant-seeking (LIFT) and the grant-awarding (CFWG) organizations was the insights found in the analytics were actually valuable. They did not just feel like they were fulfilling more requirements and “jumping through hoops”. There was a genuine embrace of the value of data analytics as a way to improve the organization. In the experiences of the research team working on similar DAVL initiatives, actually valuing data analytics was not at all universal among non-profit organizations in the area. Many, if not most, did very much regard data analytics as a “necessary evil” in order to obtain grants and attract donors. However, throughout the reciprocal process of working with the LIFT director to identify relevant data and help find actionable insights, the director became increasingly invested in the process of actually using data analytics to improve the organization.

Discussion and Conclusion

Through community engagement initiatives, universities can help local organizations address the *data analytics gap*. In this research, we examine our particular initiative in this area and analyze the factors that emerged from our efforts. This research was a case study of a successful partnership that benefitted not only the organization, but the university, and even the grant-giving organization in the area as well. Our first main finding confirms the existence of the *data analytics gap*. We find that there is a clear difference between the data analytics capabilities that small non-profit community organizations have and what they actually need to be competitive. Although we did not study small organizations in other sectors, it is likely that similar factors affect them as well.

Non-profit organizations struggle with data analytics for several reasons: partly due to the high cost associated with the software and technology used, partly because employees at non-profits often lack the necessary skills to use the data, and partly because there is such a tremendous sea of sometimes conflicting data available. Many non-profit leaders do not know where to even begin to find reliable information. Our findings with non-profit organizations echoes existing research on for-profit organizations regarding the challenges of actually finding useful trends and patterns in the vast amount of data (Zurada & Karwowski, 2011). These factors posed a significant barrier to the use of data analytics for the organization in this study. The non-profit organization in our study relies heavily on volunteer labor and has a very small operating budget. Additionally, the group did not have extensive training in data analysis and much of its attention was focused instead on delivering programming to the people it was serving. The director of the grant-administering foundation repeatedly discussed how this was a common situation for the non-profit groups in the area and that overcoming this *data analytics gap* was an important next step for the non-profit sector in the region.

Our research also found that the local organization (and other organizations in the area) felt pressure to utilize data analytics for several reasons. The first main theme we found was the emerging expectation of validating assumptions by basing them in evidence. Another emergent theme that encouraged the organization to utilize data analytics was the pressure from the grant-administering organization. This validates previous finding by others, that influence from philanthropic foundations exerts pressure on non-profit organizations to use data to measure outcomes (Barman & MacIndoe, 2012). The next theme that emerged from our study aligned with previous research on the need to use data to increase efficiency (Rogge, Agasisti, & Witte, 2017). Both the local organization and the grant-administering foundation repeatedly discussed the importance of using data to make more efficient decisions, as well as to be more accountable to the donors. Finally, the next theme that emerged was the saturation of the non-profits in the local sector. Since so many groups are asking for support from donors, and this pressure has only grown since the most recent economic recession in 2008, the need to stand-out from other non-profit organizations has increased tremendously. All four of these factors became apparent in our research as main themes that led the local organization to seek data analytics assistance from the university.

A final pattern that emerged from the data in our research was leaders of both the grant-seeking non-profit organization and the grant-administering foundation suggested that they learned to not just accept that data analysis was necessary, but to also genuinely embrace the value of using data to make decisions. Both groups discussed how it was not just a necessary new skill to adopt because it was required, but value was added to the organization through data analytics. The moment of insight that data analytics can provide into a social problem could be particularly powerful and valuable to an organization. Although our analysis was limited to this single initiative and we were not able to conclusively determine if this change was in fact a progression over time or not, it was very clear that both leaders perceived their positive views of data analysis had evolved over time.

It is important to reiterate our position in this paper that data analysis can and often does include a wide range of methods. Although much of the literature on big data and corporate data analytics focuses on quantitative data alone, our experience in working with community groups is that a wide range of evaluation techniques should be employed, and that these often require more resources from an organization than just quantitative alone. We observed a range of evaluative approaches within the organizations often utilizing what Holman (2007) describes as the “art of blending methods” (p. 45). Many if not all of the different methods used by organizations require training, expertise, and specialized software to utilize correctly, and our study is in no way meant to privilege quantitative methodologies.

A future direction of study would be to examine the factors that influence the adoption of data analytics not just as a necessity for operating a non-profit organization, but also as a desirable approach to decision-making. Our research suggested that the LIFT director increasingly became interested in data insights while continuing to refine the organization’s mission and develop strategies. Future research on how the process of knowledge co-creation increases the positive perceptions of the participants would add to these insights significantly.

Competing Interests

The authors have no competing interests to declare.

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