2018

Strategies for Identifying and Selecting Performance Measures of Effectiveness for Nonprofit Organizations

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This is to certify that the doctoral study by

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MBA, Old Dominion University, 2002

BEng (Hons), University of Northumbria at Newcastle, 1992

Consulting Capstone Study Submitted in Partial Fulfillment

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Abstract

There is a growing demand for accountability of nonprofit organizations, and nonprofit business leaders are increasingly under pressure to demonstrate operational effectiveness. The problem is that some business leaders of nonprofit organizations lack strategies for identifying and selecting actionable performance measures of operational effectiveness. Using the plan-do-study-act conceptual framework, this single case study of a nonprofit organization located in the mid-Atlantic region of United States was conducted to explore strategies that 3 of its business leaders used to identify and select actionable performance measures of operational effectiveness. Using thematic analysis of data collected from semistructured interviews, documents, and public sources, emergent themes included: (a) usefulness of measures, (b) customer experience, and (c) workforce education. The findings of this study may have implications for social change by helping nonprofit business leaders achieve consensus on measures of effectiveness beyond financial measures. Additionally, the findings could support the usefulness of transparency in reporting performance outcomes, encourage a shift in focus from program spending and ratios to effectiveness, and prompt external stakeholders to expect performance measures that demonstrate effectiveness in nonprofit program operations.

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Dedication

In achieving this milestone accomplishment, the individual to whom I dedicate this work effort is my grandmother, Lena Estelle Joseph. I did not realize it at the time, but despite a house full of grandchildren and the challenges of the day, my grandmother somehow managed to give each of us the attention we needed, to guide and encourage our development. In short, she made each of us feel special and unique and accommodated our individual needs with ease. My grandmother was an avid learner, curiously interested in the world at large, and espoused the value of education and mindfulness.

For a time, while attending Hopetown Primary School in Guyana, South America, I would run home during the lunch break to have grandmother help me with the arithmetic fraction assignment of the day. Over time, the exercise was good, I finally "got fractions" and became confident I could do anything, given time, and a patient teacher. Grandmother remained my teacher in many things for several years until her passing.

It saddens me that my grandmother is not here to celebrate this achievement with me, but I am sure she would have been proud. And I know that despite the physical challenges she faced in later years, it would not have kept her from attending my graduation ceremony or other celebration, of that I am sure! It takes a village. I lived in one, and when I left Guyana, I built a village of support in the United Kingdom, and again in the United States. I am thankful for all the blessings I received along the way, and the people I have encountered on this journey as I make my way in the world.

Acknowledgments

I am thankful for the guidance and support I have received from the faculty at Walden University since my first class on 29 February 2016. I wish to thank my chair Dr. Steve Roussas, who permitted me a level of freedom that was at times terrifying but also character building. Special thanks to my second committee member Dr. Janice Garfield, who never sleeps, and who has a unique way of critiquing such that suggestions for edits or revisions did not seem at all laborious, but instead made me want to do better. No doctoral committee is complete without a supportive and understanding University Research Reviewer, and I thank Dr. Rocky Dwyer for accompanying me in that capacity.

I began this doctoral study with the destination in mind, but along the way, it became about the journey. It was a great honor to participate in the Baldrige Examiner Training Experience as a result of winning the Dr. Curt Reimann Baldrige Scholarship, and I am appreciative of the Baldrige Foundation for the ensuing opportunities.

Last but not least, I wish to express my gratitude to the client organization for their kindness and support during this endeavor, and for willingly sharing their knowledge and expertise so that I could both learn and hopefully provide value in return.

This doctoral study has been a challenging experience I will neither forget nor soon repeat as I curiously look forward to the next chapter.

Table of Contents

List of Tables

List of Figures

Section 1: Foundation of the Study

Background of the Problem

Increasingly, business leaders of nonprofit organizations struggle to identify and select actionable performance measures of operational effectiveness. But the financial measures of performance that for-profit organizations predominantly employ are not appropriate for nonprofit organizations (Carnochan, Samples, Myers, & Austin, 2014; Knox & Wang, 2016). Additionally, there is a growing demand for accountability by nonprofit organizations from external stakeholders (Carnochan et al., 2014; Moxham, 2014; Prentice, 2016). However, there is little consensus regarding a standard set of performance measures that business leaders of nonprofit organizations can use to demonstrate operational effectiveness (Blouin, Lee, & Erickson, 2018).

Charity watchdogs have consistently derived and publicized a program ratio (Garven, Hoffman, & McSwain, 2016; Liket & Maas, 2015) through manipulation of the primary nonprofit organization financial reports to the Internal Revenue Service (IRS, 2017). Although this could be an available performance measure to evaluate nonprofit organizations, the operational effectiveness of the nonprofit organization is not accurately captured. Subsequently, the identification and selection of appropriate performance measures may improve the stakeholder's perception of the nonprofit organizations' operational effectiveness (see Blouin et al., 2018).

Problem Statement

Nonprofit business managers are increasingly accountable for operational effectiveness based on financial ratios to facilitate comparisons among their counterparts

(Liket & Maas, 2015). In 2012, operating results for approximately 35% of nonprofit organizations surveyed indicated that the ratio of mission-related program expenditure to total expenses, otherwise known as the program ratio, was below the 65% limit established by nonprofit watchdogs such as CharityWatch and Charity Navigator (Garven et al., 2016; Liket & Maas, 2015). The general business problem is that some nonprofit business managers lack strategies to identify and select actionable performance measures. The specific business problem is that some nonprofit business managers in the mid-Atlantic region of the United States lack strategies to identify and select actionable performance measures of operational effectiveness.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies that business managers of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness. The target population comprises three business managers of a nonprofit organization in the mid-Atlantic region of the United States who have successfully identified and selected actionable performance measures of operational effectiveness. Identifying and selecting actionable measures of performance could help increase public confidence in the selected nonprofit organization. The findings could encourage business managers of local nonprofit organizations to collaborate in developing and implementing processes to evaluate and demonstrate effectiveness by using performance measures that align with strategic objectives. Such measures could facilitate transparency in nonprofit organization reporting, shift the focus from program spending and ratios to effectiveness, and encourage external stakeholders (funders,

donors, and other contributors) to expect performance measures that indicate effectiveness in program operations. An additional benefit could be the expansion of key local stakeholders' knowledge and understanding of the challenges nonprofit business managers face to achieve performance outcomes and facilitate a focus on fulfilling their missions in support of communities.

Nature of the Study

Researchers can use one of three methods to conduct research: qualitative, quantitative, and mixed (Starr, 2014). The qualitative method is the discovery and exploration of a phenomenon (Yilmaz, 2013). I used the qualitative method because I explored strategies that nonprofit business managers can use to identify and select performance measures of operational effectiveness related to outputs, outcomes, and impact, based on interview questions posed to respondents. Researchers employ the quantitative research method to predict and control the phenomenon of interest, culminating in the testing of hypotheses and justification of the conclusions (Park & Park, 2016). A quantitative methodology is applicable when researchers seek to test a hypothesis, which did not fit the purpose of this case study. Researchers can also use a mixed method approach when it is appropriate to combine qualitative and quantitative methods in a single study (Starr, 2014). I did not use the mixed method because I did not include a quantitative component in my study.

There are three popular designs of qualitative research that I considered: the case study, ethnography, and phenomenology. Researchers use a case study design to capture respondents' perceptions and thoughts through interviews, observations, and other forms

of data (Yin, 2018); because my intent was to explore the strategies that business managers of nonprofit organizations employ to identify and select relevant and actionable performance measures in support of their strategic objectives, I used the case study design. Researchers employ an ethnographic research design if the desire is to focus on cultural dynamics and human interaction (Hallett & Barber, 2014). Ethnographic research typically involves long-term field engagement and participant interaction to understand better a phenomenon involving a cultural group (Yates & Leggett, 2016). The ethnographic design was not appropriate for this study because my focus was on actionable performance measures of operational effectiveness rather than group culture. Researchers use a phenomenological design to explore the meanings of the lived experiences of the participants (Gill, 2014). Because I was not describing the lived experiences of the selected participants, I did not use the phenomenological design.

Research Question

What strategies do business managers of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness?

Interview Questions

1. What strategies do you use to identify and select actionable performance measures of operational effectiveness?
2. How do you evaluate the effectiveness of these strategies?
3. What were some barriers you encountered while applying your strategies?
4. How did you overcome those barriers?
5. How did you assess the effectiveness of overcoming these barriers?

6. What additional information could you share related to identifying and selecting actionable performance measures of operational effectiveness?

Conceptual Framework

The conceptual framework employed in this study is the plan-do-study-act (PDSA) cycle, sometimes referred to as the plan-do-check-act quality improvement model (Christoff, 2018; Crowfoot & Prasad, 2017). Shewhart initially introduced the plan-do-check-act/PDSA process improvement framework in 1939, and it was later modified by Deming in 1950, revised as the Shewhart cycle/Deming cycle in 1986, and finally named the PDSA or Deming Wheel (or Deming circle) in 1993 (Popescu & Popescu, 2015). The PDSA model is a 4-step iterative and dynamic quality improvement model with operational components as follows: planning (to achieve change), doing (executing/implementing planned improvement, studying (analyzing output against objectives), and acting (verifying the output; Popescu & Popescu, 2015).

I chose the PDSA framework for this qualitative single case study for its potential use as a systematic approach to evaluating the effectiveness of evidence-based changes made to a system or process by managers following the analysis of actionable data collected for the performance measures. Quality improvement can be overwhelming without a structured, organized approach to managing the process (Morelli, 2016). Researchers using the PDSA model can evaluate a process at any time while applying improvements, culminating in adoption, resumption, or abandonment of results (Donnelly & Kirk, 2015; Popescu & Popescu, 2015). I employed the PDSA model as a lens for understanding how to structure the components of this case study regarding the strategies

that business leaders of nonprofit organizations use to identify and select actionable performance measures and indicators of effectiveness.

Operational Definitions

Charity watchdog: A charity watchdog is an organization that seeks to help donors and stakeholders make informed decisions to patronize or affiliate with the nonprofit organization, and may provide ratings, comparisons, or other indicators of perceived fiscal behaviors (Garven et al., 2016)

[redacted]

National taxonomy of exempt entities: A national taxonomy of exempt entities is a classification system developed by the National Center for Charitable Statistics in the 1980s to facilitate data collection and analysis of information based on the type of organization and their activities, and which the IRS adopted in the mid-1990s (GuideStar, 2018).

Power distance: A power distance is a behavioral indicator of society's willingness to accept the concentration of authority at higher levels, particularly in a hierarchical organizational environment, and that may permeate through or influence participatory work systems (Jiang, Colakoglu, Lepak, Blasi, & Kruse, 2015). Geert Hofstede developed this system as part of a broader framework for understanding cultures (Jiang et al., 2015).

Program ratio: A program ratio derived from dividing a nonprofits' program expenses by its total expenses to indicate how much the organization spent in support its mission (Garven et al., 2016).

Third sector: A third sector refers to voluntary, nonprofit and charitable organizations that are neither private for-profit nor public sector entities (Melão, Guia, & Amorim, 2017).

Assumptions, Limitations, and Delimitations

Assumptions

An assumption is a situation whereby the researcher does not explicitly interpret every concept that underpins the study but instead relies on the readers' shared common understanding (Kirkwood & Price, 2013). The participants possess the potential for introducing bias through their responses, knowing the purpose of the study, and providing what they believe the researcher wants to hear. I assumed that the participants selected for this study were forthright, sincere, helpful, and knowledgeable to assist in this study.

Limitations

Limitations are circumstances restricting the conditions surrounding the study that the researcher cannot influence, but which the researcher must take into consideration (Willems, Boenigk, & Jegers, 2014). First, the scope was limited to a single nonprofit organization in the mid-Atlantic region of the United States, which means the findings are unique to the single organization. Second, there is little potential for researcher-introduced bias because I have no prior knowledge or experience with the research topic.

Delimitations

The boundaries established by the researcher to a study refers to those conditions or situations the researcher can control to limit the scope of the study (Venkatesh, Brown, & Bala, 2013). In this study, I formulated a research question with the objective of exploring the strategies that business leaders of a nonprofit organization in the mid-Atlantic region of the United States use to identify and select actionable performance measures of operational effectiveness.

Significance of the Study

Contribution to Business Practice

This study could aid local business managers of nonprofit organizations in exploring strategies to identify performance measures and indicators of effectiveness related to outputs, outcomes, and impact. The shift from financial ratios to the inclusion of measures of effectiveness may be the impetus for nonprofit organization business managers to identify relevant and actionable measures to enhance reporting and improve public confidence in the nonprofit organization. By using measures of effectiveness

related to outputs, outcomes, and impact, local business managers may be able to focus more on achieving their mission and outcome accountability (Mitchell, 2013), and less on not exceeding the program ratio limits of the charity watchdogs such as CharityWatch and Charity Navigator (Garven et al., 2016; Liket & Maas, 2015).

Implications for Social Change

The implications for social change from the findings of this study include encouraging local business managers of nonprofit organizations to achieve consensus on measures of effectiveness, increased collaboration to grow the framework of measures, sharing of knowledge and best practices, and increased understanding of the effectiveness of nonprofit organizations beyond financial measures. Additionally, charity watchdogs can use these measures of effectiveness of nonprofit organization outputs, outcomes, and impact in conjunction with financial measures for ongoing reporting to educate stakeholders, funders, and donors. Local business managers of nonprofit organizations can also report their achievement with nonfinancial measures of effectiveness that resonate with society. Society's adjustment to the nonfinancial measures of nonprofit organization effectiveness may encourage nonprofit watchdogs to report these measures in addition to the financial ratios and permit nonprofit organizations to focus on their mission of serving the community.

A Review of the Professional and Academic Literature

I conducted a review of the professional and academic literature, employing mostly peer-reviewed sources published within the past 5 years, and a smaller quantity that was either older than 5 years or scholarly but not peer-reviewed. My objective was to

examine the literature and explore a cross-section of opinions or trends related to performance measures and operational effectiveness as part of a quality or performance improvement initiative. By conducting a literature review, I present a foundation for understanding the research topic, which is the strategies that business leaders of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness. I used a total of 219 sources in this doctoral study, of which 197 (90%) are from peer-reviewed sources. Additionally, I used one dissertation published in 2015 and eight seminal works. The publication date of six seminal sources was on or after 2014, with the remainder published in 2013 or earlier. Of the 125 sources referenced in this literature review, those published within the past 5 years of the completion date of this doctoral study equaled 107 (86%), and the remaining 18 (14%) published before 2014. I used one book, published in 2015 in this literature review. Of the published material referenced in this literature review, 94% were peer-reviewed, and 6% were from non-peer sources.

I accessed the following databases accessed through Walden University's online library for this doctoral study: ABI/Inform, Business Source Complete, Emerald Insight, ProQuest Central, SAGE Journals, Science Direct, Taylor and Francis, and Ulrich's Periodicals Directory (to verify the peer-review status and obtain the homepage of sources). I employed a crossref.org guest query to retrieve or verify the digital object identifier for sources used in this study. Additionally, I used Google Scholar to locate additional sources for this doctoral study. Primary search terms included *performance measurement, performance measures, supply chain integration, operational effectiveness,*

high-performance work systems, and *quality management system* in conjunction with *organization* or *nonprofit*. A review of the literature using the terms revealed additional terms that further supported the research topic: *performance measurement system, quality improvement, continuous improvement,* and *process improvement*. I also used citation chaining to locate recent literature related to the research topic and search terms of interest. Subsequently, I organized the literature review into three major sections. First, I begin with a brief overview of some popular quality management systems, followed by a detailed examination of the PDSA framework, which I chose as the conceptual framework for this study. Second, I explore performance measures and operational effectiveness as part of quality management or quality improvement system. Finally, I conclude with a synthesis of the chosen framework, performance measures, and operational effectiveness to illustrate the foundation for my exploration of the strategies that business leaders of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness.

Quality Management System

Nonprofit organizations, often referred to as third-sector organizations, are increasingly under pressure, whether through competition for scarce resources or stakeholder requirements, to demonstrate responsible use of resources (Melão et al., 2017). Further compounding this issue is a tendency for business leaders of nonprofit organizations to downplay market competition in the nonprofit arena, though some have steadily adopted practices from their for-profit counterparts (Sharp, 2018). The ambivalence toward competition is possibly rooted in the nonprofit's perception of the

role that competition should play in its business activities, preferring instead to take a hybrid position of coopetition—cooperation and competition (Sharp, 2018). Additionally, there is an increased demand for accountability and transparency due to pressure from external stakeholders, funders, and donors, suggesting that nonprofit organizations must demonstrate effectiveness through performance measurement systems (López-Arceiz, Pérezgrueso, & Torres, 2017). Subsequently, the impetus is on business leaders of nonprofit organizations to embrace performance excellence, performance measurement systems, quality management systems, or some combination of quality management tools to ensure their survival in the increasingly competitive marketplace (McKernan, Kennedy, & Aldred, 2016).

A quality management system encompasses the policies, processes, and procedures that business leaders deem necessary to achieve quality objectives, and there is a synergistic relationship with information systems, which includes the infrastructure and personnel facilitating the communication of information (Barata & Cunha, 2017). Although quality management can be a competitive differentiator, its meaning varies as does the attributes considered essential to the organizations' success in the implementation of the continuous improvement initiative (Weckenmann, Akkasoglu, & Werner, 2015). Quality management has evolved over the years, as have the tools and thinking of practitioners and researchers (Samman & Ouenniche, 2016). Conceptually speaking, the idea of quality has evolved to include an objective and a subjective component (Aquilani, Silvestri, Ruggieri, & Gatti, 2017). However, of more significant

concern is the meaning of quality that has also changed over time, and for which perception and characteristics vary based on context, value, product, user, and so on.

Continuous improvement is a state of maturity whereby organizations continuously improve daily activities through the evaluation and analysis of their performance and the subsequent adoption of effective processes or practices (Chadha, 2017). The term *continuous improvement* is synonymous with the Japanese word, *Kaizen* which loosely translates to "do, change" (kai) and "well" (zen) and is a philosophy of thinking and managing change. Continuous improvement is a change in behavior coupled with improvement over time, which can be incremental or radical, and where the combined effort of everyone targets the reduction or elimination of wasteful processes and systems (Lleo, Viles, Jurburg, & Lomas, 2017). The motivation for continuous improvement, when properly aligned with the organizations' values, can help business leaders reduce or eliminate nonvalue-adding tasks or processes while facilitating ongoing collaboration, learning, and delivery of high-quality service (Reinke, 2015).

Employee participation is a key factor that influences the success of continuous improvement initiatives (Singh & Singh, 2015), which, in the absence of appropriate managerial influential tactics, reduces the likelihood of success of the continuous improvement endeavor (Lam, O'Donnell, & Robertson, 2015). Despite having a well-thought plan for improvement, success is elusive without employees who are both motivated and committed (Lam et al., 2015). For instance, Matthews, MacCarthy, and Braziotis (2017) reiterated the need for business leaders to develop a proactive approach in their continuous improvement efforts to yield positive and sustained results.

Additionally, Sangwa and Sangwan (2018) recommended some actions to assure success including pilot testing, coordination by subject matter expert, measuring against defined targets, and periodically reviewing performance indicators. Wandersman, Alia, Cook, and Ramaswamy (2015) went a step further, adding that decision-making that is both adaptive and proactive is valuable to the continuous improvement process. Moreover, buy-in from organizational leaders and other internal stakeholders may represent an even higher success factor (Milner & Savage, 2016).

Regardless of whether business leaders consider continuous improvement, the quality management system or tools chosen should align with the desired strategic objectives, the economic sector in which the organization operates, and the availability of resources such as cost, time, and qualified, skilled personnel to guide or champion the continuous improvement endeavor (Weckenmann et al., 2015). There are many quality management system tools or frameworks available to practitioners and researchers for performance improvement initiatives. Some well-known quality and performance management frameworks include the International Organization of Standardization's (ISO) ISO 9000 series (Ramu, 2017), total quality management (Psomas, 2016), six sigma (Antony, Rodgers, & Cudney, 2017), business process reengineering (Hammer, 1990), the Malcolm Baldrige National Quality Award (Karimi, Safari, Hashemi, & Kalantar, 2014), and plan-do-study-act (Bollegala et al., 2016).

In the early 1980s, the ISO introduced the ISO 9000 series of standards as a basic set of requirements for a quality management system (West & Cianfrani, 2017). The ISO established ISO 9001 to provide a level playing field for international trade and a

measure of assurance that an acquired product or service met expectations (West & Cianfrani, 2017). However, although ISO 9001 is not a comprehensive quality management system (West & Cianfrani, 2017), ISO certification has given an organization the perception of quality and improved quality awareness (Weckenmann et al., 2015). ISO implementation can be understood in five stages: (a) identification and selection of the internal and external processes that the organization will monitor, (b) establishment of standards for the selected processes, (c) employment of corrective actions against measured performance of selected processes, (d) documentation of selected processes, and (e) monitoring and adapting processes for continuous improvement (Samman & Ouenniche, 2016). However, some have stated that ISO is only an archive that organizations use to document the standards or procedures they claim to follow (Samman & Ouenniche, 2016).

Since its inception, the ISO quality management system has undergone a series of changes. When the ISO introduced the 9001:2000 standards, they required that the managing entity or organization identify processes needed and how their business leaders applied these standards throughout the organization and included references to quality (Wilson & Campbell, 2016). The ISO 9001:2008 edition of the quality management system added specificity where organizations had to do more than identify and define their processes and references to quality, and subsequently, replaced with requirements, facilitating the accommodation of organization centric outputs (Wilson & Campbell, 2016). According to Nelson (2016), the latest iteration, ISO 9001:2015, represents a significant change that now encompasses seven quality management principles:

- Customer focus
- Leadership
- Personnel engagement
- Process
- Improvement
- Evidence-based decision-making
- Relationship management (requiring business leaders to employ risk-based thinking ahead of proposed actions and the impact such actions will have on the business.

The 2015 edition of ISO 9001 is similar to a Baldrige-like holistic approach, suggesting that it is mot than an archival system of documented processes. Additionally, business leaders may feel empowered to consider *quality objectives* as factors influencing the success of the organization, as well as defining specific plans to achieve those objectives: actions, resources, responsible party, timing, and evaluation (Cochran, 2015). This mandate for communicating management objectives and goals should be specific, measurable, assignable, relevant, and timely (SMART; Bjerke & Renger, 2017). SMART is not a one-size-fits-all approach, but is applicable in the context of the organization in an incremental rather than simultaneous manner (Bjerke & Renger, 2017). Further, the use of smart objectives increases the likelihood of achieving effective results because of the specificity of orientation and direction provided by the SMART framework (Ogbeiwi, 2017). Organizations that pursue ISO certification as part of a proactive quality

management strategy with a focus on continuous improvement have a higher likelihood of achieving positive business benefits (Singh & Singh, 2015).

In addition to the ISO 9000 series, total quality management originated in the 1950s and gained prominence in 1984 when National Cash Register spurred improvement initiatives by rewarding their employees for useful suggestions (Banuro, Ntiri-Ampomah, & Banuro, 2017). Recognition and reward programs may be used by business leaders to encourage support for continuous improvement initiatives (Lodgaard, Igvaldsen, Aschehoug, & Gamme, 2016). Much like ISO 9001, the external focus of total quality management is on meeting customer requirements, whereas the internal focus is on management's commitment to and their influence of employees' aspirations for high quality (Weckenmann et al., 2015). Total quality management can be a framework whereby organizations engage in continuous improvement of processes and products to exceed customer expectations while also achieving improved efficiency and performance within the organization (Al Nahyan & All, 2017).

Many business leaders have struggled with the success of quality improvement programs (Lodgaard et al., 2016), though business leaders of larger organizations may have the resources to support such initiatives (Asarlind & Gremyr, 2014). Regardless, many businesses continue to invest in innovative technologies and processes in pursuit of operational improvements (Santa, Echeverry, Sánchez, & Rios Patiño, 2014a). The motivation to deploy total quality management in an organization indicates business leaders' influence due to internal factors such as improvements in the process, productivity, product, or quality (Sternad, Krenn, & Schmid, 2017), though such motives

might be a side effect of restructuring or reorganizing the business. From an external perspective, business leaders may choose to implement total quality management initiatives because of customer or strategic market demands (Sternad et al., 2017). Although resource constraints may present challenges, which inhibit the success of those initiatives, a significant way of assuring success is "blueprinting" that allows business leaders graphically map their organizations' processes in a user-friendly and methodological manner (Calabrese & Corbò, 2015). Additionally, business leaders can capitalize on small successes throughout the implementation process by pursuing incremental changes rather than drastic changes (Chadha, 2017), thereby growing the support base for future implementation as part of a cycle of continuous incremental improvement (Antony, Gijo, Kumar, & Ghadge, 2016; Singh & Singh, 2015).

The six sigma program is another form of quality management that businesses can use. Motorola has been credited with launching the six sigma quality management program in 1987, the same year that the U.S. Department of Commerce released the Baldrige National Quality Award (Antony et al., 2016). Two statisticians from Motorola developed six sigma, and Motorola won the Baldrige National Quality Award a year later (Drohomeretski, Gouvea da Costa, Pinheiro de Lima, & Andrea da Rosa Garbuio, 2014). However, Motorola was not an enthusiastic supporter of six sigma and instead allowed its statisticians to present the concept to other organizations where organizations such as General Electric, AlliedSignal, and others heavily promoted it in the United States and internationally (Antony et al., 2016). With Motorola's success inadvertently attributed to six sigma, this quality management tool quickly gained the attention of other

organizations wishing to pursue business excellence by replicating Motorola's perceived success (Drohomeretski et al., 2014).

The objective of six sigma was to facilitate the elimination of waste by streamlining the processes. In 1995 General Electric developed the 5-step methodological improvements based on the original six sigma quality management tool. The five steps were: (a) define, (b) measure, (c) analyze, (d) implement, and (e) control (DMAIC) intended for an existing process (Samman & Ouenniche, 2016). The second General Electric improvement methodology also consisted of five steps: (a) define, (b) measure, (c) analyze, (d) design and, (e) verify (DMADV), but General Electric intended its use for new or radically redesigned processes (Samman & Ouenniche, 2016). Both General Electric methodologies have much in common with ISO, including the gap analysis of determining what needs to occur to transition from the current state to the future state, to reduce or eliminate wasteful activities (Samman & Ouenniche, 2016). A possible impediment to the widespread use of six sigma outside the manufacturing arena is business leaders' perception that the principles of six sigma are only applicable to manufacturing environments, and that little benefit accrues to the organization if business leaders apply those principles to a nonmanufacturing environment (Antony et al., 2016; Singh & Singh, 2015). Newman (2017) appeared to support that position by stating that six sigma is a data-driven, quantitative approach to error reduction that is best suited to high-volume production environments. Robert Kaplan and David Norton introduced the balanced scorecard in 1992 which linked the four main perspectives of business: (a) financial, (b) customer, (c) internal business, and (d) innovation and learning (Kaplan &

Norton, 1992). The balanced scorecard is one of a few continuous improvement methodologies that Kaplan and Norton (1992) developed, and that incorporates all aspects of business operations that are typical of a service or manufacturing entity (Singh & Singh, 2015). Balfaqih, Nopiah, Saibani, and Al-Nory (2016) advocated a perspective-based approach because of the ability to monitor general performance measures in conjunction with the causes and mediating effects of the relationships among those performance measures. Subsequently, business leaders can maintain vigilance across their organizations' continuous improvement initiatives by using a small complement of operational and financial measures related to performance and service, and the resulting value provided to stakeholders, thereby minimizing sub-optimization (Kaplan & Norton, 1992).

Ideally, business leaders match important strategic goals with actionable measures of performance, to improve operational effectiveness by encouraging employees of the organization to strive towards the stated vision (Kaplan & Norton, 1992). Hence, business leaders may consider the balanced scorecard as a holistic measurement system (to translate vision and strategy from the objectives and defined measures), a strategic system (to align actions with strategy), and a communication tool (to describe the strategy to frontline employees and facilitate plan execution) (Cooper, Ezzamel, & Qu, 2017). Additionally, each of the 'perspectives' shares a linkage to four components which, taken together, help an organization execute its strategy: (a) objectives (explicitly defined goals), (b) measures (quantifiable performance monitoring and evaluation), (c) targets (expected results), and (d) strategic initiatives (activities to achieve or exceed targets)

(Cooper et al., 2017). Breja, Banwet, and Iyer (2016) emphasized the importance of strategy in the pursuit of business excellence and stated that the Baldrige National Quality Award, the European Foundation for Quality Management, and others prominently feature strategy as an essential component of a quality management system.

In the 1880s Taylor (as cited in Hooda, 2014) advocated for business leaders' use of process reengineering to streamline work processes with the objective of improving productivity, and by the early 1900s, Fayol (as cited in Hooda, 2014) suggested reengineering to maximize utilization of resources. (Hooda, 2014). In 1990, Michael Hammer and James Champy formally introduced business process reengineering (BPR), and it quickly gained popularity with well-established management thinkers, chiefly because of the potential for organizations to become world-class entities (Hooda, 2014). By adopting BPR, the expectation was that by breaking with old habits and finding innovative ways to accomplish tasks, a new operating form would emerge, in addition to the organization achieving improved performance (Hammer, 1990). Hooda (2014) stated that the crux of BPR efforts was for organizations to eliminate nonvalue-adding tasks, improving efficiency and subsequently, their competitive standing. Mathur and Asthana (2016) agreed with Hooda's (2014) assertion that the consolidation and elimination of wasteful activities is the cornerstone of BPR and added that the objective of BPR is to accomplish a similar or higher level of productivity with fewer resources and greater efficiency. Hammer (1990), in defense of BPR, cautioned that computerization of processes alone was insufficient and that to achieve the desired improvement, business leaders must thoroughly examine and reengineer core processes.

Samman and Ouenniche (2016) summarized the implementation of BPR as consisting of four phases involving: (a) the organizations' end goal, (b) the current state of the organization, (c) a gap assessment and reengineering between the end goal and current state, and (d) reengineering implementation. Huang, Lee, Chiu and Yen (2015) in their study of a BPR implementation related to cost reduction, lead time reduction, and quality improvement, examined not only the internal and external processes but also employee performance measures. Taher and Krotov (2016) noted that organizations transitioning to an enterprise resource planning system where none previously existed would undergo process reengineering in pursuit of automation, through increased speed, efficiency, and quality of output. Huang et al. (2015) found that while investment in information technology before and during the BPR implementation heavily influenced the success of the BPR effort, the emergence of new work habits appeared to impact employee performance.

The United States government introduced the Baldrige National Quality Award (BNQA) in 1987 to boost the competitiveness of U.S. industries and help stave off economic decline, by concentrating attention on quality and performance excellence in response to Japanese dominance (Karimi et al., 2014). The Baldrige criteria is a comprehensive quality management framework that permits business leaders to align their business strategy and operations through an assessment of business processes along seven categories. These categories are:

1. Leadership
2. Strategy

3. Customers
4. Measurement, analysis and knowledge management
5. Workforce
6. Operations
7. Results

Collectively, these categories represent the pillars of an organization's system. Each year, organizations in six sectors (manufacturing, service, small business, education, health care, and nonprofit) could achieve recognition for performance excellence (Baldridge Performance Excellence Program, 2017). Since the introduction of the Baldrige National Quality Award, other organizations have created similar awards programs at the international level such as the European Foundation for Quality Management (EFQM) award and many more, to similarly encourage economic competitiveness rooted in quality (Soysa, Jayamaha, & Grigg, 2016).

As such, the Baldrige National Quality Award has become the gold standard for success to which organizations aspire, and subsequently, the pursuit of performance excellence has gained prominence in various industries and locales, including the United Arab Emirates with the development of the Dubai Quality Award (Lasrado & Uzbeck, 2017). Soysa et al. (2016) stated that the Baldrige National Quality Award and European Foundation for Quality Management awards are perhaps two of the best examples of structured quality management tools that business leaders can use to evaluate and assess their organization to uncover areas for improvement. Duarte, Goodson, and Dougherty (2014), Lasrado and Uzbeck (2017), and Soysa et al. (2016) emphasized business

leaders' use of these quality awards for self-assessing, benchmarking, or application of best practices within their organization. I covered the Baldrige criteria in greater detail in Section 3 because I used it to evaluate the client organization.

I chose the Plan-Do-Study-Act (PDSA) framework as the lens through which to explore the research topic for two reasons: firstly, due to the framework's rich and established history of practical application in manufacturing through to the medical field, and secondly because of its proven success in process improvement initiatives (Bollegala et al., 2016). According to Donnelly and Kirk (2015), the PDSA cycles has an established and proven record of achievement through its application in various settings, testing changes, and evaluating the effects of those changes in real-world situations in a proactive manner. The PDSA framework has its origins in the manufacturing industry (Laverentz & Kumm, 2017), and evolved from Walter Shewhart and W. Edwards Deming's work on an iterative process of continuous improvement managing production defects (Singh & Singh, 2015).

At the core of the PDSA framework are four stages (or cycles): (a) plan (define, assess, and analyze the current state), (b) do (test the application of the improvement), (c) study (compare the effectiveness of the improvement against what the researcher or practitioner predicted), and (d) act (decide whether to incorporate the improvement for the long term; Crowfoot & Prasad, 2017; Prybutok, 2018). Researchers or practitioners can execute the iterations of the PDSA cycle serially to examine the effects of singular changes, or they can execute the iterations in parallel to explore the effects of multiple changes on various parts of the system (Struchens, Iiams, Sears, & Ellis, 2016). Struchens

et al. (2016) pointed out that three factors influencing the scale of testing were: (a) confidence in whether the change will result in improvement, (b) the 'perceived' cost of failure, and (c) the resistance of the system to change. Similarly, Prybutok (2018) also alluded to the use of PDSA cycles in small-scale sequential tests of quality improvement, the potential for large-scale parallel testing, and that doing so offers practitioners the ability to control the scale of the implementation while showing measurable improvement.

Leis and Shojania (2016) stated that practitioners and researchers often employ the plan-do-check-act /PDSA framework as a foundation of iterative quality improvement, particularly in healthcare, and which is firmly grounded in the scientific method (Leis & Shojania, 2016; Vordenberg, Smith, Diez, Remington, & Bostwick, 2018). Often, the PDSA cycles referred to as the plan-do-check-adjust or the plan-do-check-act cycles. The PDSA cycles' repetitive four-stage process makes it a superb framework under which to undertake continuous improvement initiatives (Crowfoot & Prasad, 2017; Leis & Shojania, 2016; Newman, 2017). The similarities among the four stages of the PDSA cycles and the scientific method of hypothesizing, collecting data, analyzing the results, and drawing inferences also led Reed and Card (2015) to agree with Leis and Shojania's (2016) assertion. Adoption of the iterative scientific method of the PDSA cycles to assess the continuous improvement process and associated interventions can, at the very least, provide a significant body of knowledge to the organization and its business leaders on achieving quality (Speroff & O'Connor, 2004).

The use of the PDSA cycles has enhanced the development of quality measures, as well as the reporting of those measures to improve outcomes (Morelli, 2016; Prybutok, 2018). Practitioners favor the PDSA cycles for continuous improvement initiatives because it permits them to quickly learn whether the change or intervention has improved the existing system or process, and to adjust accordingly (Reed & Card, 2015; Renedo, Marston, Spyridonidis, & Barlow, 2015). Furthermore, the inability to explain why a change or intervention succeeded indicates gaps in understanding between the predicted and actual outcomes, thereby presenting opportunities for learning (Etchells, Ho, & Shojania, 2015; Struchens et al., 2016). Prybutok (2018) stated that while successful PDSA implementations have the potential to yield positive collateral benefits for both the organization and its stakeholders, its business leaders must sustain commitment to the improvement process to avoid regression to old habits.

Regarding continuous improvement initiatives, there is great value in small sample sizes (Struchens et al., 2016), especially when used appropriately, such as demonstrating the relationship between a proposed change and an improvement in the outcome (Speroff & O'Connor, 2004), thereby reinforcing the direction of the continuous improvement endeavor. Similarly, failure is an opportunity to challenge long held beliefs or ways of thinking, with the focus being not on avoiding failure, but instead deriving value and learning from it (Birkinshaw & Haas, 2016). Subsequently, practitioners can balance their level of uncertainty of risk regarding the success of the test of a change or intervention with the sample size or scale of the continuous improvement initiative (Famurewa, Asplund, Rantatalo, Parida, & Kumar, 2015). Birkinshaw and Haas (2016),

as well as Donnelly and Kirk (2015), believed that proper application of the PDSA cycles could provide practitioners with a high return on failure. Because of it, they introduced the concept of a 'return on failure ratio' whereby the numerator represented the lessons learned, and the denominator represented the resources invested in the continuous improvement project.

Supply Chain Integration

A supply chain encompasses the business processes and activities in which an organization engages, beginning from the point at which a customer demands a good or service through to the delivery of that good or service to the customer (Moreira & Tjahjono, 2016). Supply chains are not exclusive to the secondary economic sector (manufacturing organizations), but also have relevance in the primary (raw material extraction) as well as the tertiary (service) sector. Business leaders' understanding of the information flowing inside their supply chains can greatly improve the operational performance of the organization (Figl, 2017; Moreira & Tjahjono, 2016). Ideally, a supply chain should be *agile* and quickly adapt to market changes, but may be expensive to implement and maintain, whereas a 'lean' supply chain may be efficient, reliable, and slow to adapt to change, but more cost-effective to implement and maintain in the long term (Khan, Stolte, Creazza, & Hansen, 2016). Regardless, both supply chain models are valid, and heavily dependent on the nature of the business model as well as the associated operating environment (Kenyon, Meixell, & Westfall, 2017).

Sangari, Hosnavi, and Zahedi (2015) stated that supply chain integration is a measure of how well an organization collaborates with others in its supply chain,

specifically the linkages among systems and processes. Organizations pursuing supply chain integration are more likely to experience improvements in operational performance (Cámara, Fuentes, & Marín, 2015). The classification of business processes as internal or external is not entirely unusual, and in fact, facilitates consistency and focus such that the involved parties operate from a common framework (Movahedi, Miri-Lavassani, & Kumar, 2016). Some researchers suggest organizations first pursue internal supply chain integration because it may represent the backbone of their business operations, and such familiarity with internal processes has the potential for improved operational efficiencies before involving external entities (Halkjær & Lueg, 2017). Furthermore, other researchers argue in favor of a mixed supply chain integration whereby there is involvement from both internal and external stakeholders in the improvement initiative (Khan et al., 2016; Sangari et al., 2015). From an internal process perspective, business leaders may choose to focus on quality, cost, or time expended to produce a good or service, and externally, focus on customer satisfaction, timeliness, delivery, and reliability (Huang et al., 2015). Regardless of whether the organization chooses to pursue a supply chain integration strategy that is internal or mixed, it must consider trade-offs regarding what the organization will or will not do to manage inconsistencies as well as the scope of coordination and control of the various activities (Balau, 2015).

Performance Measurement

Smith and Bititci (2017) stated that there was a relationship between performance measurement and management, employee engagement, and performance, adding that these fell under technical and social organizational control. Additionally, ‘performance

measurement' provides a framework that business leaders can use to portray the current state of the organization, observe the effects of change initiatives, and determine the value of those efforts to the organization (Smith & Bititci, 2017). In the private sector, the primary mechanism of performance measurement (PM) is financial or accounting based (Arya & Mittendorf, 2015), and grossly inadequate as a single performance measure for nonprofit organizations (Knox & Wang, 2016). Knox and Wang (2016) added that while many small and midsized nonprofits have implemented some performance measurement system, the majority of small and midsized nonprofits merely report outputs not outcomes. The lack of reported outcomes may be due to several factors: (a) limited fluctuating financial resources, (b) leadership turnover, (c) employee turnover, and (d) a general lack of resources compared to their larger counterparts (Knox & Wang, 2016). Performance measurement is a structured framework that business leaders can use to develop and implement systems in support of organizational objectives and involves assessing opportunities for improvement of organizational capabilities and learning (Star, Russ-Eft, Braverman, & Levine, 2016). Additionally, performance measurement has its basis in three approaches: (a) result, (b) compliance, and (c) process, whereby the first is a lagging or reactive indicator and the remainder, leading or proactive indicators (Podgórski, 2015).

From a social impact perspective, there are five benefits to performance measurement in providing public benefits:

1. Demonstrated achievement of social benefits
2. Identification of opportunities for improvement

3. Complementary nonfinancial measures of operational effectiveness
4. Freedom from tying unavailable performance to a specific financial cycle
5. Provision of impact and outcome data related to the performance of the organization (Arshad, Omar, Bakar, & Nasor, 2015).

Interestingly, Charles and Kim (2016) argued that while performance measurement has steadily gained a foothold with nonprofit organizations, there is little evidence showing that performance measurement influences donors' patronage and that nonprofit organizations' increasingly positive demonstration of outcomes may give donors and stakeholders the impression that the nonprofit organization has a lesser need for resources. Furthermore, Eckerd and Moulton (2011) cautioned that the nonprofits' heterogeneity is at risk of erosion if all adopt the same performance evaluation and measurement techniques, these organizations may hinder their competitive agility. However, Eckerd and Moulton (2011) also added that the diverse use of the performance evaluation and measurement tools may permit nonprofits to maintain their uniqueness yet provide a common mechanism for measuring the performance of nonprofit organizations. Organizations which engage in performance measurement in pursuit of reduced costs or reduced lead time in their internal processes had achieved improved performance and quality from an external perspective (Huang, 2015). Hence performance measurement of organizational processes as part of a quality improvement system and which also includes the measurement of employee performance is critical to the organizations' success and long-term stability (Tickle, Mann, & Adebanjo, 2016).

Huang et al. (2015) alluded to ‘pay for performance’ as the oldest reward system in which an organization rewards its employees for achieving desired performance levels, thereby motivating or incentivizing those employees to continue such behavior pursuit of organizational objectives. Two basic classifications of reward systems are intrinsic or intangible (originating within the employee and driven by their beliefs and values) and extrinsic or tangible (things of value to the employee) (Huang et al., 2015). Mitchell and Berlan (2018) saw rewards as part of a larger system, adding that there were five areas in which nonprofit business leaders should evaluate their organization: (a) external pressures, (b) internal requirements, (c) culture, (d) rigor, and (e) frequency of evaluation. Subsequently, Mitchell and Berlan (2018) stated that the organization’s perception of the influence of each of these five areas on its business impacts the extent to which the organization may prioritize its performance measurement and evaluation. External pressures directly influence evaluative rigor but have little impact on evaluation culture, whereas, internal requirements indirectly influence rigor by changing the organizational culture, and aids improvement in evaluation outcomes (Mitchell & Berlan, 2018).

Beer and Micheli (2017) alluded to the growing demand for accountability of nonprofit organizations and stated that the definitions of ‘performance measures,’ foster implicit assumptions on the part of stakeholders. Beer and Micheli (2017) added that performance measurement influences the perceptions of stakeholders in both positive and negative ways, and that business leaders of the organization are responsible for aligning outcome measurement and stakeholder expectations. While business leaders of nonprofit organizations often choose an outcome measurement approach which they deem

important to their organization, Beer and Micheli (2017) stated that researchers disagree on how to inform stakeholders' understanding of the legitimacy of those performance measures.

Business leaders of nonprofit organizations are under pressure to manage their program ratios, also known as efficiency ratios, thanks to nonprofit charity watchdogs' publication of this common metric, which stakeholders and donors have subsequently used to evaluate the performance of nonprofit organizations. Parsons, Pryor, and Roberts (2017) agreed that business leaders of nonprofit organizations perceive pressure from donors and external stakeholders, whether rightly or wrongly, to manage their program ratios to secure current or future patronage. According to Jonker and Meehan (2014), 'prizewinning' nonprofit organizations have maintained excellent longevity in their sector due to mastery in five areas: (a) focus on the mission, (b) fundraising, (c) governance by their board of directors BOD), (d) succession planning, and (e) performance measurement. While nonprofit organizations represent a significant contribution to the United States' economy, the need for more research on performance measurement and demonstration of operational effectiveness remains unmet (McKeever & Pettijohn, 2014). Some business leaders are not appreciative of the benefits of performance measurement due to the perceived distraction from or increase in their respective workloads (Jonker & Meehan, 2014), while others grudgingly comply with varying degrees of performance measurement programs as a condition of regulatory and other stakeholder demands.

Arena, Azzone, and Bengo (2015) examined performance measurement of social enterprises, a type of organization which, like nonprofit organizations, focuses on social issues, except that social enterprises generate financial profits to fund their socially beneficial activities. Business leaders of social enterprises, much like their nonprofit counterparts face many of the same challenges, chief of which is to demonstrate accountability towards their stakeholders (Arena et al., 2015). Arena et al. (2015) asserted that despite the availability of various tools to measure performance, little progress had been made by practitioners or researchers to define measures which can demonstrably connect the social, economic, and environmental impact of the organizations' continuous improvement efforts.

According to Moullin (2007), a key challenge faced by business leaders of nonprofit organizations is the ability to develop actionable performance measures of operational effectiveness that are both useful and effective. Subsequently, Moullin (2007) strongly suggested that business leaders of nonprofit organizations clearly define what they wish to measure and why, and added that clarity in this regard would provide much needed guidance regarding the services provided by nonprofit organizations. At the other end of the spectrum is a myriad of performance measures which business leaders may find overwhelming; hence managers often direct their attention to the extent to which the organization provides value to its stakeholders while demonstrating operational effectiveness (Arena et al., 2015). Regardless of the accepted performance measurement system, the value of those measures being heavily dependent on the availability of accurate and updated information, the interpretation and analysis of that data, and the

subsequent implementation as well as the monitoring of those actions (Laihonen & Pekkola, 2016).

Performance measurement continues to pose challenges for practitioners and researchers alike in that while it offers useful data, the very act of measuring performance has been shown, in some situations, to negatively impact outcomes (Rawhouser, Cummings, & Newbert, 2017). Rawhouser et al. (2017) acknowledged that the dynamic nature of today's business cycles is such that changes in the business environment occur out of necessity. Subsequently, these changes create a situation whereby the current performance measures no longer fit the strategic plans, hence business leaders must ensure that new performance measures established by them are in alignment with the rewards or incentives (Selden & Sowa, 2015). Furthermore, business leaders use of appropriate compensation, and non-monetary rewards have a direct effect on voluntary employee turnover (Knapp, Smith, & Sprinkle, 2017). Although a cycle of data collection and performance measurement can inform business leaders of how well they are doing, such information may not indicate how the organization can do better (Sanger, 2013). To that end, Sanger (2013) suggested that an effective performance measurement system is one which incorporates a holistic approach, across multiple dimensions on a continuous basis, rather than, say once a year. Frequent data collection and analysis provides an opportunity for business leaders to interpret data from past actions, act on those findings, and effect change promptly (Star et al., 2016).

The operationalization of performance measurement appears under different terms: (a) metric, (b) performance indicator, (c) key performance indicator, or (d) key

results indicator to name a few (Star et al., 2016). Key performance indicators are quantifiable measures which business leaders use to evaluate the activities of the organization, and which the organization may consider essential to their success in achieving its strategic objectives (Bourne, Franco-Santos, Micheli, & Pavlov, 2018). Key results indicators, on the other hand, are measures which business leaders can use to determine if the organization is doing well, not whether specific actions were successful (Star et al., 2016). From a directional perspective, other terms related to performance measures include leading indicator, lagging indicator, strategy, goal, objective, target, and priority. Star et al. (2016) stated that key performance indicators relate to what business leaders of the organization must do to improve, whereas, key results indicators show how well the organization has done concerning the desired goals and objectives.

Bourne et al. (2018) suggested that in areas where the environment is constantly in flux, the use of linear closed systems is inadequate, as is the demand for business operating systems and strategies. Business leaders and others in the organization can, according to Bourne et al. (2018), frame their performance measurement and management efforts as a system of systems (SoS), requiring both independence and connectivity. Essentially, each subsystem addresses a specific business problem; however, based on the nature of the problem, not all subsystems are necessarily part of the whole system. Additionally, the use of clear visual representations can help the organization maintain focus on measuring the right things for the right reasons, and which matter to the success of the organization (Figl, 2017). Business leaders often focus on performance and results, in particular, the efficiency and effectiveness of their

organization (Bartuševičienė & Šakalytė, 2013). However, there is a distinct difference between efficiency and effectiveness whereby, the former involves the transformation of inputs into outputs, and the latter involves measuring how those outputs interact with the environment (Bartuševičienė & Šakalytė, 2013). Additionally, an organization's decision makers may experience challenges in three areas: (a) aggregating performance measures for simplicity, (b) adequately weighing the importance of those measures, and (c) handling a large amount of low-level data to support upper-level requirements (Podgórski, 2015).

Operational Performance

Business leaders of an organization may characterize operational performance as its ability to adapt to changing market demands and improve service levels to its customer (Cámara et al., 2015). The manner in which an organization shares information with external entities influences the organization's overall operational performance (Prajogo, Toy, Bhattacharya, Oke, & Cheng, 2018). Prajogo et al. (2018) further distinguished between internal operational performance and external operational performance whereby, the former is directly controlled by the organization, and the latter by the external stakeholder. Internal operational performance factors which the organization directly controls include productivity and operating costs, whereas external operational performance components are those related to delivery, flexibility, quality, and price (Danese & Bortolotti, 2014; Prajogo et al., 2018). Santa, Hyland, and Ferrer (2014b) emphasized that despite the various ways to measure operational performance, business leaders seeking operational performance improvement should try to understand

the expectations of their stakeholders. Regardless, the organization's operational performance comprises three segments which are vital to both internal and external contexts (information management, process management, and operational performance), and which share a connectedness and dependency (Prajogo et al., 2018). Subsequently, Leyer, Stumpf-Wollersheim, and Pisani (2017) suggested that it is possible for an organization to successfully achieve operational performance as well as innovation through the synergy of new ideas and products or services, by using a process-oriented organizational design. The six components of a process-oriented organizational design include:

- organizational structure
- task knowledge
- goal setting
- customer focus
- improvement
- personal autonomy (Leyer et al., 2017).

Moreover, the components of the process-oriented organizational design affecting operational performance are similar to those typically encountered in process improvement activities, particularly in environments driven by information technology (Leyer et al., 2017). Halkjær and Lueg (2017) spoke in favor of task specialization as a factor which improves operational performance, and Danese and Bortolotti (2014) added that the organization might achieve significant operational performance, provided they sensibly mix their supply chain integration activities ranging from partial to full adoption.

Leyer et al. (2017) also suggested that business leaders can ensure their organization achieves improved operational performance provided they do three things: (a) assign ‘owners’ to processes, (b) keep process teams small, and (c) minimize how often employees must interact with each other. However, organizations with limited financial and human resources may be unable to pursue the specialization alluded to by Halkjær and Lueg (2017), and instead forced to combine the tasks performed by its personnel to keep operational costs down, which in turn, could negatively impact their ability to achieve operational performance improvements.

Operational Effectiveness

Operational effectiveness is the organizations’ assimilation and adoption of best practices, with a focus on doing things better, through the validation and execution of its activities (Knox & Wang, 2016). An organization can characterize its operational effectiveness as its ability to define and establish processes based on its operational needs and measure as well as improve those processes (Santa et al., 2014b). The establishment of benchmarks and actionable performance measures is a precursor to the pursuit of operational effectiveness (Santa et al., 2014b). Additionally, Balau (2015) stated that the success of an organization is dependent upon its operational effectiveness as well as its strategic positioning. If an organization’s leaders expect to sustain its competitive position, it must create a uniquely valuable position through its strategic plan, which outlines both the tasks and activities in which it will participate while discarding those activities deemed unimportant to the strategic objective (Balau, 2015).

Strategic positioning entails the organization creating and delivering value to its customers and stakeholders by doing things differently (Borgianni, Cascini, & Rotini, 2015). Further, business leaders should ensure that they balance the pursuit of operational effectiveness with safety as a complementary factor, to avoid placing its human resources in danger (Pagell, Klassen, Johnston, Shevchenko, & Sharma, 2015). Pagell et al. (2015) pointed out that a strong correlation existed between increases in occupational health and safety-related issues and the organizational pursuit of operational effectiveness, and that the complexity of tasks, task overload, and general ignorance or unimportance of occupational health and safety are contributing factors. To realize improvements in operational effectiveness, business leaders must first define the key performance measures, and objectives deemed important to their organizations' operation, as well as the benchmarks against which the organization will evaluate its performance (Santa et al., 2014b). Therefore, to assure the long-term effectiveness of any continuous improvement initiative, organizations should consider the pursuit of operational effectiveness and occupational safety as complementary components of that initiative (Pagell et al., 2015).

Work Systems

Increasing competitive pressures on nonprofit organizations to demonstrate operational effectiveness has driven many such organizations to implement high-performance work systems (Kellner, Townsend, & Wilkinson, 2017). Work systems are those common tasks which organizations conduct in a coordinated manner, usually through a series of interconnected systems, to achieve a goal of producing goods and services (Kaste, Hoffman, Caldwell, Kasdaglis, & Neville, 2015). Work systems may

exist in informational, procedural, or technological form and can range from simple to complex (Kaste et al., 2015). Subsequently, the resulting impact of a change introduced to a working system is not directly related to the simplicity or complexity of the existing work system, because the nature of the change can also be simple or complex (Kaste et al., 2015). Regardless of the type of work system undergoing directed change, the organization's values, if aligned with the work system, will more likely result in a positive outcome and increased employee engagement in support of the continuous improvement initiative (Kellner et al., 2017). Santa et al. (2014a) examined the alignment between the effectiveness of technological innovation and operational effectiveness of an e-government application deployment, and while they found no relationship between user satisfaction and operational effectiveness, they discovered that quality of service, quality of information, and finally the quality of the system influenced overall user satisfaction.

The elimination of wasteful activities or processes also referred to as nonvalue-added (NVA) activities, represents a key component of most improvement initiatives, as is the inclusion of best practices (Wandersman et al., 2015). Santa et al. (2014a) cautioned that there is a limit to an organization's pursuit of continuous innovation and that the implementation of systems, technological or otherwise, does not necessarily result in operational effectiveness. Organizations in pursuit of operational effectiveness often focus on output, outcome, and impact, as well as consideration of value-added activities, innovation, and cost management (Bartuševičienė & Šakalytė, 2013). Further, Kaste et al. (2015) stated that additional complexity arises from human interaction which, when compounded with their involvement in any system, however simple, can potentially

lead to increased unpredictability of the overall work system. Subsequently, work teams consisting of only humans, or both humans and an organizational system which may or may not involve technology creates challenges ranging from predictable to unpredictable, notably when the organization introduces change to that system (Kaste et al., 2015).

Jiang et al. (2015) used the term 'involvement work system' to describe organizational work practices which involve humans interacting in teams, sharing information, and taking an active role in making decisions on how they accomplish their tasks. Business leaders may classify work systems as those business practices in which the organizations' leaders in human resources and management engage to develop the competencies and skills of the workforce, and ultimately increase the commitment and productivity of that workforce (Selden & Sowa, 2015). Involvement work systems have been shown to improve operational effectiveness through indirect (symbolic) or direct (instrumental) means, and there is evidence pointing to human interaction and participation as potentially influenced by the current national power distance (Jiang et al., 2015). Additionally, employees' cultural values serve to support and reinforce their self-worth through behaviors that are consistent with culturally accepted norms, whereas behaviors not in agreement with culturally accepted norms serve to psychologically disrupt and discourage undesirable behavioral patterns (Jiang et al., 2015).

Situations in which a poor fit exists between the workforce and the organization, or between the performance of the workforce and organizational expectations encourages voluntary turnover, which in turn negatively impacts the nonprofits' already limited financial resources as well as the service levels of the organization (Selden & Sowa,

2015). Hence, a successful high performance work system (HPWS) is one in which the organization has aligned its human resource and management practices such that its workforce and performance fits well with that of the organization (Selden & Sowa, 2015). Kellner et al. (2017) also emphasized the importance of the organization aligning its values with their high-performance work system to assure positive workforce development and participation in support of the organization's goals and strategies. Furthermore, organizations with clear standards in place and whose expectations are well known to the workforce can expect higher employee commitment and involvement, as well as lower attrition and lower training costs associated with reduced turnover (Bartuševičienė & Šakalytė, 2013; Movahedi et al., 2016).

Critical Success Factors of Performance Measurement

For nonprofit organizations, challenges remain on how best to measure and report effectiveness and quality, and furthermore, monetizing outcomes when few benchmarks or best practices exist due to the uniqueness of the organization's activities (Blouin et al., 2018). Fadaei and Cats (2016) also echoed the challenges associated with the design and operationalization of performance measures and indicators and subsequently, determining their impact. Two modes of evaluating the expected or unintended effects of design and operationalization of performance measures are a comparison (of before and after outputs) or simulation (tabletop or similar exercises; (Fadaei & Cats, 2016) however, the value of the latter is heavily dependent upon the realism of the simulation. Subsequently, business leaders should be cautious about measuring what is readily accessible and instead focus on what matters while remaining mindful of the potential for exaggerating

measures deemed acceptable while not necessarily accurate. Huang et al. (2015) also stated that the selection of goals and performance measures which are easily achievable is equivalent to having no goals at all because it does not encourage high performance whereas, harder and more specific goals are more likely to result in higher productivity.

Critical success factors are the best practices, drivers or key components which influence an organization's success in deploying or implementing a performance measurement or improvement initiative (Zidane & Olsson, 2017; Aich, Muduli, Onik, & Kim, 2018). Simply put, critical success factors represent behaviors or actions in which an organization should engage in its pursuit of performance management or improvement initiatives (Taher & Krotov, 2016). Before pursuing performance measurement or improvement initiatives, business leaders should ensure that their organization is ready and capable of deploying such programs because a lack of resources presents a significant and at times insurmountable barrier which impedes the success of those initiatives (Albliwi, Antony, Abdul, & Lim, 2015). Additionally, Drohomeretski et al. (2014) suggested business leaders use value stream mapping as a first step to describe and understand their business processes or activities, determine which add value and are worthy of improvement, and which to discontinue. At the very least, the value stream map may depict the scope of the business problem and provide business leaders a clearer idea of the resources and or time commitment necessary (Star et al., 2016). Favorable operational performance has been achieved from mapping, standardizing, and improving processes, and is further enhanced through greater employee understanding of tasks as well as increased of those employees motivation to provide value to their customers (Van

Assen, 2018). Additonally, Banuro et al. (2017) reminded us that a potentially damaging aspect of standardization is a routine process which is lacking variety, negatively impacting employee morale, and subsequently productivity.

Aquilani et al. (2017) stated that top management's commitment and leadership was essential to the success of any performance or continuous improvement initiative, in addition to organizational focus on customer service/satisfaction, human resource management, strategic planning, training and education, employee involvement, process management, and information measurement and analysis. The organization should base its process of identifying and selecting performance measures on what is most important to the organizations' success (Prentice, 2016), and its business leaders ensuring that those measures are specific, measurable, achievable, relevant, and timely, but most importantly support decision-making (Huang et al., 2015). Moreover, an organization should not overlook the value of new service development (NSD) which results from innovations in new services or procedures, creating value regarding time, cost-effectiveness, and improved productivity when identifying and selecting performance measures (Yang, Lee, & Cheng, 2016). The commitment and involvement of management are essential to the successful implementation of a performance improvement initiative (Lodgaard et al., 2016; Zidane & Olsson, 2017), as is the ability of the organization to complement quantitative data with its qualitative counterpart to better understand the worldviews and barriers of the parties involved (Lodgaard et al., 2016). Management involvement and support, employee involvement, training of employees, as well as fact-based follow-ups

are critical factors influencing the success of any performance or quality management initiatives (Albliwi et al., 2015; Assarlind & Gremyr, 2014; Singh & Singh, 2015).

It is imperative that business leaders have a clear vision of what they expect to achieve from pursuing a performance management or improvement initiative, and to ensure alignment between activities and their business processes (Movahedi et al., 2016), organizational values (Kellner et al., 2017), and ultimately the strategic plan (Lee & Clerkin, 2017). Of perhaps equal importance is business leaders' involvement in actively communicating those action initiatives and objectives to all involved parties, educating the workforce on how these initiatives relate to their daily activities and emphasizing how their performance influences the success of the entire organization (Yang et al., 2016). Ideally, face-to-face communication is preferable because it is one of the most effective ways to 'get the message across' to the frontline and other affected stakeholders (Prajogo et al., 2018). Besides face-to-face communication, the organization may achieve other means of reinforcing and verifying learning through informal learning, learning from failures and successes (Wang et al., 2018), engaging in substantive activities by adjusting to necessary changes promptly, and leveraging technology.

Podgórski (2015) suggested using an analytical hierarchy process to aid the selection of leading key performance indicators used to measure performance which is a four-step process involving:

- breaking down the problem into criteria and decision variants
- pairwise comparison of criteria
- pairwise comparison of decision variants

- deriving criteria and decision variants to resolve the problem

The characteristics of ‘SMART’ goals apply to the organization’s selection of what criteria embodies the key performance indicators (McKernan et al., 2016; Yang et al., 2016; see also Donnelly & Kirk, 2015). Regarding ‘SMART’ goals and key performance indicators, business leaders address specificity when the indicator clearly and appropriately represents the effectiveness of the proposed measurement, and measurability regarding quantifiable data which they can compare at various points in time (Podgórski, 2015). The organization can assess the achievability of the selected performance measure based on the cost versus benefit of obtaining and using the collected data, and assess relevancy from the contribution of the performance measure to effect changes in the outcome (Podgórski, 2015). Finally, the organization should bound its performance measures so that it can obtain the value of the indicator promptly such that its business leaders can act accordingly to make informed decisions (Podgórski, 2015). Timeliness is also important regarding rewarding employees as soon as practicable upon achieving the desired performance level so that they are both recognized and motivated perpetuate desirable behaviors while the experience is still fresh (Huang et al., 2015).

The mission, vision, and values collectively form a construct defined by the organization to achieve a multitude of things:

- provide direction and purpose
- clarify the extent of the organizations’ activities
- set performance standards

- align the organizations' goals and values with that of its employees
- motivate and inspire internal as well as external stakeholders
- serve as the basis for organizational resource allocation (Macedo, Pinho, & Silva, 2016).

Macedo et al. (2016) suggested that operationalizing the mission, vision, and values provide a basis for reflective performance indicators and formative measures of effect. Measures of organizational commitment can encompass employee loyalty, connection, willingness to above and beyond to achieve organizational objectives (Macedo et al., 2016). Business leaders can measure organizational performance from both a financial and nonfinancial perspective, with the financial measures consisting of revenue growth, surplus, and financial balance between services rendered versus expenditure (Macedo et al., 2016). Nonfinancial measures of organization performance may include quality/safety of the work environment, period-to-period increase in donations, funders, volunteers, members, partnerships, and social capital (Macedo et al., 2016).

Furthermore, business leaders should aim to use the smallest complement of data and information in their performance measurement efforts and to guide important decisions (Podgórski, 2015). Huang et al. (2015) suggested that managers and line personnel use clearly defined business processes to establish performance measures against which they evaluate the workforce, and subsequently motivate them to achieve higher performance levels. Subsequently, business leaders should commit themselves to three things: (a) supporting the change process, (b) ensuring documentation and visible mapping of processes are available, and (c) sharing vertically as well as horizontally

throughout the organization (Movahedi et al., 2016). Additionally, business leaders should reinforce support of such initiatives through training and learning for its employees (Movahedi et al., 2016; Antony et al., 2017).

Fadaei and Cats (2016) showed that metrics from other industries, such as dwell time, trip time, on-time performance, and reliability from the transportation industry might have value outside the sector for other process streams. Further, Podgórski (2015) suggested using a three-step process in conjunction with analytical hierarchy process software to derive a methodology for selecting key performance indicators to measure the operational performance of occupational safety and health management systems which included:

- development of proactive performance indicators (PPIs)
- individually ranking SMART criteria for the selected PPIs
- Prioritization and selection of key performance indicators of the individual occupational and safety health components.

Podgórski's (2015) main occupational safety and health components and a few examples which organizations may adopt were:

- Policy (compliance and participation).
- Organizing (training, documentation, communication).
- Planning and implementation (goals, action plans, risk assessment, emergency preparedness).
- Evaluation (monitoring and measuring, investigations, audits, reviews).

- Action for improvement (corrective and preventive action, continuous improvement).

Ho, Wu, and Wu (2014) proposed that person-organization fit theory played a role in the success of an organizations' implementation of a customer-oriented strategy and that their level of consensus directly influenced the resulting employee performance. Through consensus, the mutual understanding of both manager and subordinate Consensus eliminated or minimized the perception of task uncertainty and associated stress, and reinforced belief in a fair reward system (Ho et al., 2014). However, a lack of consensus appeared to negatively impact the subordinates' perception of the value of the performance measures, increased the uncertainty of task and undesirable behavior, thereby resulting in a lack of commitment, and subsequently declining performance (Ho et al., 2014). Van Assen (2018) and Leyer et al. (2017) emphasized the importance of the employees' comprehension of 'process-oriented thinking' and its subsequent impact on operational performance and customer-focused performance whereby, employees are aware of their customers and creating value, as opposed to operating in a functional vacuum and unaware of how they create value for the customer. Business leaders should not conduct performance management or quality improvement initiatives in a vacuum but should make a concerted effort to consider and include suppliers as well as customers to achieve a holistic solution (Al Nahyan & All, 2017). Halkjær and Lueg (2017) believed that business leaders could seek improved operational performance by focusing and centralizing related activities to take advantage of the combined resources and

competencies, but warned that adverse operational performance might result if business leaders fail to apply resources and competencies that are complementary.

Employee involvement and engagement are also essential to the success of organizational performance management or improvement initiatives, particularly in light of management's desire for high performance and productivity in pursuit of organizational objectives (Bartuševičienė & Šakalytė, 2013). The achievement of a high performing committed, and engaged workforce begins with business leaders' conscious selection and hiring employees who have the right skills and experience, or the potential as well as the opportunity to achieve the desired skills and experience through training (Bartuševičienė & Šakalytė, 2013). However, Lleo et al. (2017) indicated that despite its importance, employee involvement and engagement is one of the biggest challenges for organizations to achieve and that success in this area was either fragmented at best or, at worst, nonexistent. Rigid hierarchical organizational structures which stifle communication (Star et al., 2016), inadequate resource allocation in support of employee involvement, and lack of top management support were factors fostering lackluster attitudes, subsequently derailing efforts to successfully execute organizational objectives (Lleo et al., 2017). Star et al. (2016) also agreed with Jiang et al. (2015) that business leaders struggled to achieve cohesive employee involvement was due in part to the changes required of the organization as a whole when pursuing performance management or improvement initiatives.

Performance management or improvement is a process requiring a cultural change and long-term commitment to achieve organizational objectives (Knox & Wang, 2016).

At the crux of cultural change in support of performance management or improvement initiatives are two components: communication and management. Communication involves the dissemination of information to involved stakeholders (Knox & Wang, 2016) to help them see the relationship between their efforts and organizational outcomes through measurement whereas, management solving problems through empowerment, learning, and risk-taking (Sanger, 2013). Sanger (2013), as well as Shin, Yuan, and Zhou (2017), advocated that management foster an environment in which they reinforce employee values and behaviors deemed desirable through accountability, trust, and performance results. Additionally, the attitude of an organization towards risk in conjunction with its reward system whether geared towards performance, behavior, or outcome ultimately influences its success in adopting and using performance measures (Lee & Clerkin, 2017). Further, Beer and Micheli (2017) stated that the alignment of the organizations' strategy, its environment, and culture are essential to the success of implementing performance measurement and management systems. Star et al. (2016) also stated that organizations in which the prevailing culture valued achievement have achieved significant success in its performance improvement initiatives.

McKernan et al. (2016) and Singh and Singh (2015) advocated for the deployment of dedicated face-to-face training and meetings as a critical success factor in moving the organization forward in its improvement initiatives, in addition to ongoing mentoring and support, as well as some followup or refresher training. Business leaders should be aware that the size and scope of the organization, as well as the complexity of tasks, may require more time and resources to fully deploy performance improvement

initiatives across the organization (McKernan et al., 2016). Assarlind and Gremyr (2014) went a step further and stated that gradual implementation with realistic goals is equally important to the success of performance improvement initiatives.

An important aspect of fact-based follow-up is the organization's ability to measure the impact of its activities (Assarlind & Gremyr, 2014) and ensure that subsequent actions are in alignment with their goals and objectives (Assarlind & Gremyr, 2014; Antony et al., 2017). Lodgaard et al. (2016) emphasized that business leaders of organizations resolve differences of opinion promptly to minimize resistance to improvement initiatives, improve trust and confidence among those at different levels in the organization, and that management should encourage, empower, and reward employees' use of improvement methods. While the resistance of high seniority or an aging workforce has been shown to impact operational performance adversely, a conscious decision by management to intentionally and intelligently mix teams of employees where possible may also erase resistance to improvement initiatives and develop employees' problem-solving skills (Singh & Singh, 2015). Employee training also serves to communicate strategy and action plan, reveal deviations from or adherence to desired controls, safety protocols, cognitive, and operational outcomes (Jiang et al., 2015; Kaste et al., 2015). Additionally, Zhang, Guo, and Zhao (2017) suggested that it may be helpful for employees to self-organize formal and informal activities such as training programs, brainstorming exercises, and workshops to communicate, share information and solidify their understanding of terms and expectations. Podgórski (2015) and Zhang et al., 2017) added that internal knowledge management practices such as

learning circles, learning groups, or interdepartmental meetings could enhance the organizations' knowledge distribution and retention. Training and learning of personnel are especially beneficial in complex systems where the risk of error, injury, and subsequently costs are higher than in other areas or processes (Podgórski, 2015).

There is excellent value in benchmarking whereby, an organization investigates and learns from other 'best-in-class' organizations, whether they be in-sector competitors or out of sector organizations, and whose best practices been shown to provide a sustainable competitive advantage (Zidane & Olsson, 2017; Huang et al., 2015). Benchmarking and organizational self-assessment is a common practice of high performing organizations that are continuously in pursuit of improved outcomes (Bartuševičienė & Šakalytė, 2013). However, Balau (2015) cautioned that too much benchmarking can be counterproductive because of the potential danger of declining differentiators such that organizations end up following the same path, and no clear winner emerges in the long term. The lack of publicly available benchmarking information in the nonprofit sector further challenges business leaders due to insufficient reporting by others in the sector, and no voluntary or regulatory drivers exist to encourage such activity (Knowles, Prince, Hutchison, & Jones, 2015). Benchmarking can also occur within an organization, at the individual, group (such as a department), or organizational level (single or multisite; Podgórski, 2015) and which employees may find directly relatable and adaptable because of the familiarity of the source and associated processes (Podgórski, 2015). Business leaders may alleviate the general lack of benchmarking information inside or outside the organization through insight gained from

outside the sector, such as the service or manufacturing industry value stream and best practices, to not merely measure, but most importantly learn from those organizations (Hall, 2017).

Kenyon et al. (2017) also reiterated the importance of best practices and went a step further to include outsourcing, whereby an organization *farms out* one or more competencies to another entity who can efficiently and more cost-effectively produce that good or service. There are instances where such managerial decisions have resulted in adverse effectiveness, quality, delivery, customer loyalty, declining innovation, and ultimately operational performance (Kenyon et al., 2017). Some organizations have been successful with outsourcing specific competencies (Antony et al., 2016), such as the LEGO company, which experienced a resurgence in demand for its building blocks by 'crowdsourcing' its design and development of new product lines, while at the same time learning at the organizational, group, and individual levels about crowdsourcing (Schlagwein & Bjorn-Andersen, 2014). While the LEGO organization moderated the crowdsourcing 'platform,' it could not tame some aspects of the interaction with outsiders, and the situation could easily have spiraled out of control, resulting in an unfavorable business environment (Schlagwein & Bjorn-Andersen, 2014). Some organizations have gone so far as to outsource their quality management system to an external entity for a few days each month because they do not possess the necessary resources to do so on their own (Zhang et al., 2017). Despite binding nondisclosure agreements, some business leaders remain uneasy engaging in 'crowdsourcing' practices or relying on external entities to aid innovation, because of the desire to protect their

proprietary and intellectual property from falling into the hands of their competitors (Schlagwein & Bjorn-Andersen, 2014).

An organizations' success and sustainability hinges on its ability to maintain focus on satisfying its customer need through the goods and services it produces, however, business leaders must also find balance and recognize that they cannot satisfy all needs of all customers (Balau, 2015). There has been a growing trend of data management and business intelligence whereby organizations attempt to uncover competitive advantages by analyzing mounds of data for trends and relationships, to reduce costs or increase sales, and subsequently improve customer satisfaction. Despite this trend, Syed, Bandara, French, and Stewart (2018) stated that the ability to measure and quantify the achievement of objectives remains a challenge for business leaders in the public sector, and further complicated by its diverse customer base.

Regrettably, resource constraints may severely restrict the capability of most nonprofit organizations to engage in such activities, despite the ability to 'rent' computing power, particularly if the collected data is not in a homogenized format that can be readily analyzed. According to Kaplan and Norton (1992), customer satisfaction is one of three nonfinancial measures of organizational effectiveness, with the other two being learning/growth and internal business processes. Financial measures represent the majority of performance measures used by many nonprofit organizations, namely 'program spend' which is the administrative and fundraising expenditure that makes up its operating expenses (Garven et al., 2016). However, Lee and Nowell (2015) advocated a multidimensional *holistic* approach to performance measurement whereby financial

measures, though considered lagging indicators because they reflect the outcomes of what has already occurred (Kaplan & Norton, 1992), but which business leaders can use to complement nonfinancial measures. Upadhaya, Munir and Blount (2014) stated that there are narratives in support of nonfinancial measures which both explains the value and demonstrates the success of the nonprofit program or activity may permit the organization, in the long-term, to capitalize on value creation and receive favorable support in the future. Pimentel and Major (2016) advocated for diagramming the impact factors of a quality management system as a combination of assets, conversion factors, and results or outcomes as follows:

- assets (inputs) = people, process, and culture
- conversion factors = communication, commitment, involvement, planning, and control
- results or outcomes (outputs) = organization performance and customers.

Subsequently, a business leader's understanding of the inputs and conversion factors that yield outcomes and results increases the likelihood of success of the quality management initiative (Pimentel & Major, 2016). In summary, organizational commitment to a holistic approach to performance management or continuous improvement fosters the emergence of organizational quality, and ultimately the sustainability and longevity of that organization (Zidane & Olsson, 2017).

Transition

In Section 1 of this study, I explained the background of the business problem, followed by the related problem and purpose statements respectively. Next, in the section

regarding the nature of the study, I provided an overview of the research methods and designs that I considered, and the rationale for choosing to conduct a qualitative case study. I identified the research question, the interview questions, the conceptual framework that underpins this qualitative case study, the assumptions, limitations, and delimitations within which I bounded this study. I illustrated the nature of the study through the perceived contribution to business practice, and the implications for social change, which can result from the findings of this study. I then concluded with a review of the professional and academic literature where I explored quality management systems, performance measures, operational effectiveness, and the factors influencing the successful implementation of continuous improvement initiatives.

I begin with a restatement of the purpose statement in Section 2, explained my role as the researcher during this qualitative case study, and the criteria for selecting the participants. I further expand on the research method and research design, the methodology of the population sampling, and the steps followed to ensure compliance with ethical standards of research involving the participants. Additionally, I discuss the protocol for data collection, organization, and analysis, as well as how I address the reliability and validity of the study.

Finally, in Section 3, I provide a brief introduction to the purpose of the study and conduct an assessment of a nonprofit organization using the Baldrige Criteria for Performance Excellence (2017). I then present my findings, explain the applicability of the findings to business practice, and offer recommendations for future research of this business problem.

Section 2: The Project

Purpose Statement

The objective of this qualitative single case study was to explore strategies that business managers of nonprofit organizations use to identify and select actionable performance measures. The population comprised three business managers of a nonprofit organization in the mid-Atlantic region of the United States who have successfully addressed the specific business problem. Identifying and selecting actionable measures of performance could help increase public confidence in the selected nonprofit organization. The findings may also encourage business managers of local nonprofit organizations to collaborate in developing and implementing processes to evaluate and demonstrate effectiveness by using performance measures that align with strategic objectives. Such measures could facilitate transparency in nonprofit organization reporting, shift the focus from program spending and ratios to effectiveness, and encourage external stakeholders (funders, donors, and other contributors) to expect performance measures that indicate effectiveness in program operations. An additional benefit could be the expansion of key local stakeholders' knowledge and understanding of the challenges nonprofit business managers face to achieve performance outcomes and facilitate a focus on fulfilling their missions in support of communities.

Role of the Researcher

The researcher collects and analyzes data as part of the qualitative research process (Boateng, Akamavi, & Ndoro, 2016), in addition to protecting the identity of the participants of the study (Adesoro et al., 2016). Subsequently, the researcher should

maintain the confidentiality of the data collected from participants during the study (Webber, Ser, & Goussak, 2015). The researcher should secure and store the data such that it is inaccessible to unauthorized persons (Webber et al., 2015). The role of the researcher involves organizing, analyzing, interpreting, and deriving meaning from the collected data within the context of the case study (Yilmaz, 2013). As such, the researcher should be mindful of introducing bias through their worldview (Barnham, 2015), and avoid making value judgments during the study (Boswell & Corbett, 2015).

Because this is a qualitative research study, my role as a researcher was to act as the instrument of data collection, using prepared questions in conjunction with an interview protocol for collection and inductive data analysis. The rationale for an interview protocol is to set the ground rules for research inquiry and participant expectations, with a directed plan of action, ensuring successful data collection in a consistent manner (Castillo-Montoya, 2016). As the instrument of data collection, my chief responsibility was to employ active listening skills, observation, and note-taking while being mindful of not influencing or biasing participant responses by becoming too involved in the discussion or interjecting my thoughts or ideas. During the data collection process, I tried to remain mindful of not influencing participants through my nonverbal actions or appearing prefer a direction of inquiry that is counter to what would have unfolded by my following the participants' lead. This approach was informed by research by Onwuegbuzie and Byers (2014), who recommended practices to which researchers should adhere to avoid influencing the direction of the study, and Hurn (2014), who suggested that more than 60% of communication occurs through nonverbal cues and

signals, which can lead to bias in the data collected as well as its interpretations and conclusions. To mitigate the presence of other biases, I recorded the participants' responses verbatim and sought clarification of my understanding of their responses through paraphrasing and make corrections accordingly.

Researchers should also be aware of the potential for their respective worldviews and biases that influence research findings (Lachapelle, Montpetit, & Gauvin, 2014), and researchers should maintain the highest ethical standards (Başerer, Başerer, & Tüfekçi Akcan, 2016) when conducting research, especially regarding the protection of research participants (O'Grady, 2016). Castillo-Montoya (2016) also suggested how researchers may construct useful and effective interview questions that relate to the research topic, to elicit information from participants with minimal influence through the use of an interview protocol to assure consistent data collection.

The National Research Act (Pub. L. 93-348) of 1974 was the precursor for the formation of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (Mathews & Jamal, 2014). Four years later, the commission's deliberations and discussions culminated in the *Belmont Report* protocol (The Belmont Report, 1979). The Belmont protocol hinges on three ethical principles under which to conduct research involving human subjects: respect for persons, beneficence, and justice (Mathews & Jamal, 2014; Padela, Malik, Curlin, & De Vries, 2014). I followed the first principle of respect for persons by ensuring that I treated participants as autonomous agents and did not engage with participants who had diminished autonomy. I complied with the second principle of beneficence by seeking

permission from the participant through a consent form, thereby protecting the participant from or minimizing exposure to harm through stated confidentiality and privacy. Third, I adhered to the principle of justice through fair treatment of participants and made it known that this research may be beneficial in helping business managers of nonprofit organizations identify and select actionable performance measures of operational effectiveness.

Participants

Researchers expect participants to possess knowledge and experience that is relevant to the research topic (Pecáková, 2016). The selection of three business leaders as participants for this study was primarily because these leaders possessed experience with successfully employing a continuous improvement initiative and could provide invaluable support for this doctoral study. Drawing on multiple participant perspectives in the single client organization offers the potential for identifying the strengths, weaknesses, and opportunities for improvement across the client organization. Capturing the individual participant experiences can provide rich data in support of the study (Yilmaz, 2013).

I spoke with business leaders of the client organization and explained the goal of the research as well as the academic expectations. The selected business leaders had either held leadership positions for 10 or more years with the client organization or possessed experience with successful continuous improvement initiatives, and my interaction with them was in a remote capacity (Guest, Bunce, & Johnson, 2006). Despite the selection process, researchers expect participants to possess knowledge and

experience that is relevant to the research topic (Pecáková, 2016). I communicated with the participants electronically, sending consent forms and service order agreements, and received responses in the affirmative to proceed with the research. Because it is important to have an environment of trust and respect between researchers and participants (O-Grady, 2016), I engaged in telephone conversations with the participants to confirm, clarify, or answer questions regarding the research on a regular basis to establish a trusting relationship.

Research Method and Design

Research Method

Researchers use the qualitative research method when the objective of the research is to explore phenomena (Baillie, 2015) with a degree of flexibility not typically found in quantitative studies. I chose the qualitative research approach because I conducted an in-depth exploratory study of the strategies that business managers of nonprofit organizations employ to identify and select relevant and actionable performance measures in support of their strategic objectives. My choice of a qualitative research methodology is due to the intent of the overarching research question to capture and describe the complexity and richness of the phenomenon in depth. Qualitative researchers enjoy the flexibility that allows them to engage in additional data collection and analysis as the situation arises in addition to being guided by the direction of the study while exploring the phenomenon in depth (Newman, Ridenour, Newman, & DeMarco, 2003). The strength of qualitative research lies in the ability of the researcher to conduct an in-depth investigation of a phenomenon, to uncover new insights and

understanding through the participants of the study, though the debate is ongoing regarding the advancement of understanding of knowledge gained (Starr, 2014).

At the other end of the spectrum is the quantitative research method, which researchers use to examine the relationships among variables, controlling two or more variables, testing hypotheses, attempting to predict the outcome (Sriratana & Sharma, 2016), and justifying their conclusions (Reed, McNicholas, Woodcock, Issen, & Bell, 2014). The quantitative method is strict (Rooney, Lawlor, & Rohan, 2016), which would have impeded my ability to collect rich descriptive information. I wished to explore the strategies employed by business managers of nonprofit organizations to identify and select actionable performance measures of operational effectiveness, which is more text-based versus numeric; therefore, I did not use the quantitative method.

The mixed method approach integrates the qualitative and qualitative techniques in a single research study, combining the best aspects of both methods (McCusker & Gunaydin, 2015; Molina-Azorin, Bergh, Corley, & Ketchen, 2017). Though mixed methods research overcomes the individual limitations of the quantitative and qualitative methods (Doucerain, Vargas, & Ryder, 2016), I did not conduct a mixed method study because my exploration of the phenomenon involved only the qualitative aspect of the research method and not the quantitative one.

Research Design

The research design is an important component of research, without which the study is of little value (Onen, 2016). Researchers use the research design to connect the research question to the data collection, analysis, and the conclusion of the study

(Baškarada, 2014; Yin, 2018). The concepts surrounding the research phenomena are important in determining the best form of data collection and analysis (Gerring, 2017; Onen, 2016). Researchers can use the research design to systematically guide the data collection, analysis, and interpretation of the research (Onwuegbuzie & Byers, 2014). The responsibility for qualitative research design lies with the researcher to cohesively link the research question to the chosen method and the resulting findings (Sarma, 2015).

The objective of this qualitative single case study was to explore strategies that business managers of nonprofit organizations use to select performance measures in alignment with their strategic objectives. The researcher can follow four steps in pursuit of the exploration of the research topic: assessing previous research, developing research questions, collecting data, and analyzing results (Park & Park, 2016). Case study research applies to situations where the researcher wishes to study a topic on which little research exists or where the researcher desires detailed, in-depth understanding with research conducted at a point in time or for a specific period (Baškarada, 2014). A case study design is also best suited where the researcher intends to explore the decision-making process, its influence on the implementation, and the resulting outcomes of those decisions (Eriksson & Kovalainen, 2016).

Ethnography and phenomenology are other examples of qualitative research designs (Leung, 2015). Ethnographic researchers use their observation of participants to explore their cultural characteristics (Arino, LeBaron, & Milliken, 2016). Geographical constraints (Janghorban, Roudsari & Taghipour, 2014), coupled with the need to maintain

long-term contact with the client organization in their operational setting (Renedo et al., 2015), makes the ethnographic design impractical for this study.

Researchers employ a phenomenological design when they are studying the participants' lived experiences and perceptions (Sarma, 2015). For example, Chan, Walker-Gleaves, and Walker-Gleaves (2015) demonstrated the effectiveness of collecting various nuances of the phenomenon in their study, which resulted in a rich and diverse story of their participants' lives. Researchers may achieve success by exploring the complexity of participants' experiences in nuanced detail by using a phenomenological approach (Bevan, 2014). However, I wished to explore strategies that business managers of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness; therefore, I did not use the phenomenological approach.

Data saturation is a criterion used to assess the quality of qualitative research and has a direct bearing on the validity of that research (Fusch & Ness, 2015). Additionally, it is important to be thorough in achieving data saturation (Cope, 2014). During the data collection process, I considered data saturation achieved when no new information emerges from my interviews with the participants (see O'Reilly & Parker, 2013).

Population and Sampling

I based this qualitative doctoral study on the preselected population of business leaders employed by a nonprofit organization in the mid-Atlantic region of the United States and who have experience with successfully identifying and selecting actionable performance measures of operational effectiveness. The use of nonprobability (purposeful) sampling assures the success of the study through the selection of

participants whose contribution and involvement yields an in-depth understanding of the phenomena (Yilmaz, 2013). Additionally, the researcher risks limiting the generalizability of the study by exploring the unique environment of the client organization, and lead others to question the trustworthiness of the study (Elo et al., 2014). Subsequently, the generalizability of qualitative research falters because of the researcher's focus on a contextually specific population (Leung, 2015).

The recruitment and selection of the population influenced the research question in the context of the phenomena studied by the researcher (Wahyuni, 2012). The sample size used in this doctoral study consists of three participants who are business leaders of a nonprofit organization in the mid-Atlantic United States and who possess experience identifying and selecting actionable performance measures of operational effectiveness. Typically, the samples used in qualitative studies are not representative of the population at large, and hence the findings can be challenging to apply to other environments (Sarma, 2015). My exploration of why and how business leaders of a nonprofit organization in the mid-Atlantic region of the United States identify and select actionable performance measures of operational effectiveness yielded rich, informative data. Additionally, my use of a purposive sample can help to elicit a significant amount of useful and relevant data, despite the small sample size (Yilmaz, 2013). Additionally, the researcher can efficiently conduct research activities because purposive sampling is less time-consuming from a participant solicitation perspective, and the chosen participants can adequately inform the study (Robinson, 2014). Without purposive sampling, the process of recruiting and vetting participants may have been inefficient and yielded

participants who could not provide information that was pertinent to the study (Berger, 2015).

In qualitative research, the point of data saturation occurs when no new information emerges during the data collection process (Chan et al., 2015; Guest et al., 2006). The researcher's choice of sample size in a qualitative study impacts the ability of the researcher to achieve data saturation and casts doubt on the researcher regarding the perceived quality of the study (Fusch & Ness, 2015). However, large sample sizes do not necessarily guarantee data saturation, and neither does a small sample size (Johnson, 2015). Some researchers, when assessing the *quality* of qualitative research allege that the subjective judgment regarding whether a researcher has achieved saturation remains unclear (Baillie, 2015; Onwuegbuzie & Byers, 2014; Starr, 2014). Other researchers go a step further to make the distinction between theoretical saturation, that is, when continued data collection no longer generates new insights or theories (Johnson, 2015; Mayer, 2015), and data saturation, whereby the data collected is both rich (quality) and thick (quantity; Onwuegbuzie & Byers, 2014). Subsequently, I achieved data saturation with the preselected sample consisting of the three business leaders of the nonprofit organization.

The availability and qualification of the participants, coupled with their experience, informed the DBA faculty's selection of the senior business leaders to participate and provide valuable information for this doctoral study. The participants shared the following characteristics: (a) actively employed by the nonprofit organization, (b) actively involved in the identification and selection of actionable performance

measures of operational effectiveness, and (c) agreeing to participate in this study through acknowledgment of the consent forms that I sent to the participants of the study. I conducted semistructured interviews with the participants using open-ended questions (Elo et al., 2014) to elicit rich descriptive data related to the phenomenon. As a matter of convenience to myself and the participants, I sent interview questions to the participants in advance to afford them the courtesy of collecting their thoughts. Finally, I conducted the interviews via telephone call at a time that was agreeable to the participants. Conducting the interviews in this manner demonstrated my respect for the participants' time. However, remotely interviewing participants without the aid of video conference or other visual presentation techniques denies researchers the opportunity to observe nonverbal communication make further discoveries as would be possible with in-person interviews (Arino et al., 2016). Additionally, during the interview process, researchers may inhabit an environment that is free of distractions (Adesoro et al., 2016; Castillo-Montoya, 2016) for both the researcher and participants.

Ethical Research

At the inception of this doctoral study, I initiated the IRB preapproval process, and the IRB issued approval number 01-26-17-0599551 for use in my doctoral study, signifying that my research request had met the specified requirements. Per the IRB instructions, I used the Consent Form in conjunction with the Service Order provided by Walden University during the consulting capstone (doctoral study). As the researcher, the IRB requires that I adhere to the procedures and policies prescribed by the IRB, and the

IRB is the final authority as to approval or denial of deviations from the original research agreement and processed through the IRB.

The researcher bears a responsibility to conduct research ethically and abide by the principles of the Belmont protocol (The Belmont Report, 1979) as it pertains to research involving human participants (Mathews & Jamal, 2014; Padela et al., 2014). Qualitative research is replete with references to informed consent (Mathews & Jamal, 2014; Padela et al., 2014) whereby the researcher makes every attempt to inform or assure participants of the following:

- willing involvement in the study
- the intent of the study
- confidentiality of involvement
- ability to withdraw from the study at any time
- researcher handling of data upon completion of the study (Cugini, 2015).

The willingness of participants to participate in the study is an important determinant of the success of the research study (Robinson, 2014). The researcher ensured that participants are aware of their ability to withdraw from the doctoral study at any time (Bengtsson, 2016) before, during, or after the doctoral study by contacting the researcher through any conveniently available method. While participant withdrawal can negatively impact the successful completion of the study, the researcher is responsible for providing a safe environment and to respect the wishes of the participant above the researcher's own desire to complete the study (Emanuel, Wendler, & Grady, 2000). Due to the increased use of technology whereby researchers upload data to a central repository

for use by other researchers, participants may not be able to completely remove their information if they later choose to withdraw from a study (Mathews & Jamal, 2014). However, no such danger exists for participants of this study, because I do not upload data to a publicly accessible environment or an area in which unauthorized personnel may access such content beyond the control of the researcher. The researcher informed participants that their participation is confidential (Mathews & Jamal, 2014), remove or redact any personally identifiable information from the study, and only the researcher is privy to and protects the identity of the client organization and participants of the study.

I used a simple encoding scheme consisting of alphanumeric identifiers to identify data collected and to clarify or confirm participant responses for data collection and analysis. The researcher shall alter the name of the client organization to protect its identity during the study and through to publication (Wahyuni, 2012). Accordingly, I redacted any documents or other data used during the study which contains the name of the client organization or information that can identify its employees to protect those entities (Bengtsson, 2016; Wahyuni, 2012). Additionally, I informed participants that I would not offer monetary incentives to the participants for their involvement in the study, but that the client organization will receive a copy of the completed study in appreciation for participant contributions to the study.

While this doctoral study is not of a clinical nature, Emanuel et al. (2000) suggested a level of robustness, going a step further to propose seven components that they believed encompassed ethical research: (a) knowledge, (b) scientific value, (c) fair participant selection, (d) favorable risk-benefit ratio, (e) independent review, (f) informed

consent, and (g) respect for participants. I have met many of Emanuel et al.'s (2000) requirements for ethical research during this doctoral study, including an independent review, oversight, and approval from Walden University's Institutional Review Board (IRB). Additionally, I avoided using information that can identify participants, such as age, sex, professional titles, nicknames and the like as these can potentially unmask participants and place them in a vulnerable position.

The protection and privacy of the participants and the client organization are of utmost importance, and it is essential that the researcher not violate the trust developed between researcher and participant (O'Grady, 2016; Venkatesh et al., 2013). Hence, a final measure undertaken by myself involved the handling and retention of the material following the conclusion of the doctoral study. The research material may take the form of interview notes, proprietary or publicly available information, and audio files. Subsequently, I converted papers to electronic format through a document scanning device. I stored audio files in a password-encrypted data container that is accessible only to myself. The reason for converting the research data to an electronic format was to reduce the footprint of the data that I must protect, securing such material from unauthorized persons, thereby further protecting participants and the client organization. To ensure the availability of the data should the primary storage mechanism fail, I maintained a second synchronized copy of the data that I will similarly protect. Finally, I enabled an electronic calendar reminder to activate 5 years from the date of publication of the research study, to destroy the research data by erasing the password-encrypted data container.

Data Collection Instruments

The primary instrument of data collection for qualitative research is the researcher (Starr, 2014). As the data collection instrument, the researcher employs a combination of semistructured, open-ended interview questions in conjunction with supporting documents when collecting data for qualitative studies. Subsequently, used the Baldrige Criteria for Performance Excellence as the basis for collecting data on the current state of the client organization. I conducted data collection across the seven categories of the Baldrige criteria through interviews with senior leaders of the client organization. I assessed the seven categories in the following order:

1. Leadership (exploring how senior leadership leads and governs the organization).
2. Strategy (development and implementation).
3. Customers (engagement, information retrieval, and relationship building).
4. Performance (measurement, analysis, and knowledge management).
5. Workforce (engagement and environment).
6. Operations (processes and operational effectiveness)
7. Results (assessing the previously evaluated categories).

Additionally, I asked the senior leaders six additional open-ended interview questions to gain clarity on the strategies used by business leaders of the nonprofit organization to identify and select actionable performance measures of operational effectiveness. I recorded the interviews with the senior leader participants and transcribed the results verbatim. Verbatim transcription of the interviews followed by participant

verification of the transcribed data assures the accuracy of the collected data (Onwuegbuzie & Byers, 2014).

I used publicly available data from the *GuideStar* organization, an online information service specializing in reporting on nonprofit organizations in the United States (GuideStar, 2018), in conjunction with data provided by the senior leaders of the client organization and information from the organization's website. The researcher's use of an additional data source from outside the client organization served to assure the truthfulness and accuracy of the data provided by the participants (Yin, 2018). Open-ended questions offer a richness of explanations and insights that may not be possible with closed-ended questions (Venkatesh et al., 2013) however, the researcher must be wary of losing the focus of the study if the participant strays off topic (Sarma, 2015), and hence the researcher must be vigilant during the interview process to guide participant responses back to the study. The focus of the data collection process was to provide accurate and relevant information for the researcher to analyze the client organizations' systems based on the Baldrige criteria, and going a step further, identify the strategies used by senior leaders of nonprofit organizations to identify and select actionable performance measures of operational effectiveness.

Data Collection Technique

For qualitative research, the primary source of data collection is through semistructured interviews with the participants of the study (Venkatesh et al., 2013). Since gaining IRB approval, I did not conduct a pilot study pilot study, because this study is a qualitative exploration of the strategies that business leaders use to identify and select

actionable performance measures of operational effectiveness and involves the review of documentation in conjunction with participant interviews. I collected data for this study through interviews with the business leaders in addition to reviewing data from the client organization, as well as that which is publicly available from GuideStar and other sources.

When researchers conduct interviews, they can obtain rich descriptive data to explore and better understand the phenomenon (Yilmaz, 2013). Additionally, the semistructured interview technique presents the researcher with a variety of information that can become unwieldy (Starr, 2014). However, if the researcher conducts the interview appropriately, the researcher can gain unique perspectives and experiences from each participant which can greatly inform the direction of the study (Bevan, 2014). A potential challenge with semistructured interviews is that the data collected by the researcher may be wide-ranging and difficult to analyze (Bengtsson, 2016) when compared to a structured line of questioning as is typical of survey data collection instruments. However, an advantage of semistructured interviews is that it permits the researcher flexibility to build rapport with the participants (Vaughn & Turner, 2016), and allow the participant's responses to guide the direction of the researcher (Newman et al., 2003). A disadvantage of using semistructured interviews as the data collection technique is that a researcher's lack of experience or expertise can negatively impact the quality of the data collected, and subsequently the results of the study. Dana, Dawes, and Peterson (2013) warned that researchers risk overwhelming themselves with more data than what is useful to the study and subsequently, the researcher must ignore some cues. While an

experienced researcher with active listening skills can achieve good results with fewer participants, an inexperienced researcher may require a larger number of participants to adequately explore the research topic (Malterud, Siersma, & Guassora, 2015), while maintaining the flexibility of the exploration process (Bevan, 2014).

Before the interview began, I encouraged participants to discuss their experiences with implementing quality improvement initiatives openly. Specifically, the interview centered on the research question which is, the strategies that business leaders use to identify and select actionable performance measures of operational effectiveness. I followed an interview protocol while asking the participants the open-ended interview questions. Due to geographic and time constraints; the researcher can conduct interviews with the participants remotely (Guest et al., 2006). Researchers can conduct interviews remotely using a variety of technologies including telephone, email, messaging, and video conferencing.

Interviewing participants remotely versus in person has the primary disadvantage in that the researcher cannot directly observe the nonverbal cues of the participants (Bowden & Galindo-Gonzalez, 2015). Subsequently, the researcher can rely on verbal or audible cues to ask probing questions. The researchers' reliance on verbal cues required the researcher to actively listen to the participants' responses (Bevan, 2014), to determine whether to ask further probing questions (Berger, 2015). Additionally, researchers can ask clarifying questions of the participants if the participant responses are unclear so that the researcher can place those participant responses in the proper context (Hayfield & Huxley, 2015; O'Grady, 2016).

The chief advantage of conducting interviews remotely as opposed to in person is that it can be the most flexible, efficient, and cost-effective way to gain access to the participants for the duration (Bowden & Galindo-Gonzalez, 2015). A potential disadvantage of conducting remote interviews relates to the technological or accessibility challenges that can ensue for both researcher and participant. However, I conducted telephone interviews with the participants and recorded my exchange with the participants using a digital recorder so that I could transcribe their responses verbatim. Berger (2015) suggested researchers use a three-part encounter log whereby the researcher records three things: (a) what the participant said, (b) the context of the verbatim response, and (c) the participants' feelings or thoughts about that exchange. However, to efficiently use my time with the participants, I recorded only what the participants said, without the additional components of context, feelings or thoughts, as those are unlikely to inform the study adequately. Following the transcription of the interview, I presented participants with the relevant data of our exchange for member checking and verification in a manner consistent to that suggested by Birt, Scott, Cavers, Campbell, and Walter (2016).

Data Organization Techniques

To assure efficient and accurate retrieval of the collected data, the researcher must devise and deploy a system to organize and store, as well as easily retrieve such data (Baškarada, 2014). Additionally, the data organization should accommodate the various types of data collected (Wahyuni, 2012). Examples of the types of data collected by the researcher included documentation from private and public sources, audio files from the

participant interviews, and the verbatim transcription of each interview. During the interview, the researcher made notes and later elaborated on them while the interview exchange was still fresh in mind (Starr, 2014). The researcher may also make annotations in the interview transcript and other documentation collected from private and public sources in support of emerging theories.

Additionally, the researcher may maintain a written research log of activity as part of the data organization process. Subsequently, the researcher can categorize the data collected in a manner that adequately captures information points which were relevant to the research topic, yet facilitates cross-referencing or linking of connecting thoughts and ideas (Austin & Sutton, 2014). The researcher can take precautions to secure and protect the integrity of the data as well as the identity of the participants of the study (Adesoro et al., 2016). Regardless, the researcher's data organization also permits the identification and retrieval of the specific contributions of each participant, particularly in cases where the researcher may need to conduct follow-up interviews (Bowden & Galindo-Gonzalez, 2015).

During the study, I worked with the hard copies of the documents collected from private and public sources, as well as the interview transcripts and researcher annotations. At the conclusion of the study, I converted the hard copies into an indexed portable document format (pdf) file. Additionally, I created hyperlinks from the indexed pdf file to the audio files and external data sources where available. I placed all data collected during the study in a password-protected encrypted container as suggested by Wahyuni (2012), and the password known only to myself. Per IRB and Walden University

requirements, and to ensure future access to the data for an up to 5 years since the publication of this study, I recorded the password of the encrypted container in a master file on my personal computer that is also password protected and known only to myself.

Additionally, I duplicated an instance of the password-protected encrypted data onto two removable storage devices, thereby ensuring that premature failure of one or both removable storage devices did not result in complete data loss. An added measure of protection involved the automatic shadow copy (backup) of active files from the primary to the secondary fixed storage device installed on my personal computer. I placed the removable storage devices in a one-hour fireproof safe that is accessible via a combination code known only to myself. Five years after the publication of this study, an electronic reminder will alert me to destroy the data related to this study. At that time, I will perform a low-level format of removable storage media which will restrict the ability of an individual to recover the data. Following that, I will also force-delete the password-protected encrypted containers from the primary and secondary fixed storage devices on my personal computer.

Data Analysis

The objective of this qualitative case study was to explore the strategies that business leaders use to identify and select actionable performance measures of operational effectiveness. The researcher collects data from multiple sources including participant interviews, private, and publicly available sources (Yin, 2018). Additionally, researchers often present the interview transcript to the participant for member checking, whereby, participants clarify or verify the correctness of the transcription. A key

component of data analysis involves enhancing the reliability of the results and assuring data saturation through a methodological process termed *data triangulation* (Fusch & Ness, 2015; Hadi & José Closs, 2016), whereby researchers explore different perspectives through sense-making, while also maintaining awareness of contradictions or inconsistencies when using data from various sources (Fusch & Ness, 2015). Subsequently, researchers conduct data analysis to uncover patterns and relationships that exist in the collected data in support of the research question (Atchan, Davis, & Foureur, 2016; Yin, 2018).

Despite the advances in software programs used by researchers to analyze qualitative data, the quality of the analysis hinges on the researchers' collection as well as the organization of the data. Hence, the researchers' self-awareness of their ability to unwittingly influence the data collection process requires careful consideration (Elo et al., 2014). However, because this is a qualitative case study I used a small sample, in this case, three senior leaders from the client organization. I used Microsoft Word to record a written transcription of the interviews into a table, which I emailed to the participants to review within a few days. Participant review and member checking of the interpretation of the data assures researcher of the accuracy of the data collected during the interview (Atchan et al., 2016; Onwuegbuzie & Byers, 2014). Following participant review of the transcribed data (Morse, 2015), I printed the participant responses, then used a pen, paper, and colored highlighter to conduct a rough analysis of the data, assigning codes or categories throughout the transcript. I also reviewed the data collected from the client organization and publicly available sources and convert them into a text format that was

processable for thematic analysis. To further facilitate analysis, I imported the interview transcripts and other collected data into Quirkos, a software program, to conduct a deeper exploration of the data by coding and categorizing data through researcher-initiated links. The coding and categorization of data using Quirkos readily permitted my identification of emerging themes and trends in the data. Thematic analysis can be useful to the researcher in the interpretation and linking of connected themes. Going a step further, I can create visual representations of my findings using built-in or custom reports if necessary.

Reliability and Validity

Reliability

The reliability of qualitative research relates to the integrity through which a researcher has conducted a qualitative study (Noble & Smith, 2015). Leung (2015) added that reliability in qualitative research is the expectation that others can replicate the processes and results of the study. There is an ongoing debate regarding the quality of qualitative research, specifically the credibility, trustworthiness, reliability, and validity of such research (Sandelowski, 2015). Some researchers continue to question whether qualitative research possesses sufficient thoroughness and consistency (Noble & Smith, 2015; Sandelowski, 2015). Sarma (2015) further stated that the absence of uniform criteria for assessing the quality of qualitative research encourages subjective judgments. Qualitative researchers often employ data triangulation, whereby they use multiple sources and types of data in the study to assure the dependability of the data (Fusch & Ness, 2015; Noble & Smith, 2015). I used the interview transcripts reviewed by the

participants, in conjunction with member checking, data obtained from the client organization, as well as publicly available information from GuideStar to support the consistency and dependability of the data used in this study.

Validity

Qualitative case studies often employ small sample sizes. Despite the richness of the data collected and detailed analysis performed on that data (Baillie, 2015), questions abound about whether the researcher conducted the study in a trustworthy manner and with the highest levels of integrity (Hadi & José Closs, 2016; Sarma, 2015). Subsequently, the tools, methods, and practices used by qualitative researchers obtain and analyze the data ultimately influences the validity of the resulting study (Fusch & Ness, 2015). As such, the validity of a qualitative case study refers to the truthfulness and trustworthiness of the researcher to accurately represent the participants' perspectives and interpretations (Cope, 2014) despite the potential for methodological bias (Noble & Smith, 2015). Atchan et al. (2016) mentioned four criteria of trustworthiness that researchers can use to support the validity of a qualitative study: (a) credibility, (b) dependability, (c) confirmability, and (d) transferability. Additionally, Fusch and Ness (2015) indicated that data triangulation and saturation are inextricably linked, with the presence of the former assuring the latter.

Researchers could enhance the credibility of their research by accurately recording and representing the data obtained from the participants as well as validating participant responses (Cope, 2014). Nonparticipants of the study who contextually relate, believe, or identify with the descriptions of the participant experiences depicted in the

study can attest to the credibility of the study (Robinson, 2014). Further, qualitative researchers can achieve credibility by demonstrating transparency of the processes and methods used in the study (Leung, 2015). I ensured the credibility of the study by employing participant involvement for member checking and validation of their responses to the interview questions. Additionally, my adherence to the research protocol demonstrated transparency which, when used in conjunction with data triangulation, assured credibility and consistency.

The extent to which a researcher or practitioner can transfer the findings of a qualitative study to similar situations or settings is an indication of its transferability (Sarma, 2015; Venkatesh et al., 2013; Yilmaz, 2013). Elo et al. (2014) also stated that transferability lends itself to the extrapolation of the results of a study to similar situations, and implies support in the audiences' ability to discern those characteristics based on the researchers' detailed description of the participants, sampling, data collection, and analysis used in the study. Hence, researchers can achieve a measure of transferability by demonstrating full comprehension through their description and interpretation of the participants' perspectives (Bengtsson, 2016). While I do not aim for my study to make generalizations about the phenomenon, I can strive to achieve transferability by providing as much information as possible about the participants and the context of my study so that readers can evaluate the transferability of my study for themselves.

Researchers can demonstrate the confirmability of qualitative studies when their findings emerge from the collection and analysis of data, and whose inferences are

logically attributable to the data (Yilmaz, 2013). Additionally, researchers can demonstrate or promote rigor in qualitative studies using reflective journals, whereby researchers describe their critical and analytical thinking during the progression of the study (Baillie, 2015). Sarma (2015) further stated that a researcher's use of triangulation and confirmability could minimize the perceived effect of researcher bias in a qualitative study. In this regard, my objectivity and choice of representation of my views, if properly established using a reflective journal, can support the credibility of the participants' viewpoint or perspective.

I touched upon data saturation earlier in this section of the study as part of Research Design, Population and Sampling, as well as Data Analysis. Fusch and Ness (2015) emphasized that the inability of qualitative researchers to achieve data saturation impedes the validity of the research study. A sufficiently large sample size coupled with the researchers' thorough exploration of the phenomenon can result in data saturation (Cope, 2014). In this qualitative study, data saturation occurs at the point whereby there is repetition in the collected data or no new information surfaces during the data collection process. Fusch and Ness (2015) cautioned that regarding sample size, a researcher might achieve data saturation more quickly for a small study than a larger one. However, despite the small sample size of three senior leaders from the client organization, a researcher can still achieve saturation by thoroughly exploring and reporting on the phenomenon.

Transition and Summary

I covered several components of this study in Section 2, beginning with a reminder of the purpose statement, which is a core component of this study. I then proceeded to describe my role as the researcher, the participant's involvement, as well as the research method and design used in this study. Additionally, I discussed the population and sampling, ethical considerations, and other aspects related to the data, specifically, the data collection instruments, technique, analysis, reliability, and validity. In Section 3 of the study, I begin with an overview, followed by a presentation of the findings, applications to professional practice, implications for social change, recommendations for action and further study, reflections, and finally the conclusion of the study.

Section 3: Organizational Profile

Key Factors Worksheet

Organizational Description

Nationally, there are just over 114,000 candidates [redacted], and MOA (a pseudonym for my client organization) maintains the largest registry [redacted]. MOA is a private nonprofit entity, which operates as [redacted] contractor to the [redacted] AGENCY (also a pseudonym) providing a common platform through the [redacted] NETWORK (also a pseudonym). MOA's mission is to advance the availability of [redacted] through support from its communities, engaging in outreach activities such as education, technological innovations, and the development of policy. [redacted]. MOA's business leaders further bolster the organization's financial position through the MOA Foundation, a separately run entity whose objective is to generate private revenue and charitable support to advance the mission of MOA.

[redacted] Education and policy development occur through one- and two-way engagements initiated by the chief executive officer (CEO), the BOD, department managers, staff, and volunteers at various times throughout the year. MOA's vision is to promote long and healthy lives [redacted] MOA's mission and vision inform its strategic plans and subsequently the achievement of those plans.

Organizational environment.

Product offerings. MOA occupies a unique position as the sole service provider to the AGENCY to administer, in a private nonprofit capacity, the national registry for [redacted] matching and [redacted] allocation and placement otherwise known as [redacted]. MOA's core product offerings are match, data, and quality. Matching involves operating and maintaining an electronic [redacted] list [redacted]. MOA, through its operatives, conduct [redacted] without the influence of religion, lifestyle, financial or social standing due to the policies in effect mandating equitable allocation[redacted]. The data core competency of MOA stems from its ability to collect, aggregate, and analyze data [redacted], and presenting that information in a meaningful and actionable manner to interested parties. Regarding quality, MOA through its operatives strives to provide information to interested parties that are accurate and comply with the obligations of the NETWORK.

These core competencies or product offerings are possible due to MOA's ongoing technological advancements and heavy reliance on specialized information technology assets to assure the best possible data quality, analysis, [redacted]equitable allocation[redacted]. The relative importance of MOA's main product offerings is equally critical to their overall success [redacted]. Without the data collection and aggregation, they cannot effectively [redacted]equitable allocation[redacted] pursue their mission.

[redacted] MOA's proprietary electronic network, [redacted] is remotely accessible 24 hours per day every day, permits best use allocation of the limited supply [redacted]. Regarding the data product offering, MOA, through its operations, collects an extensive amount of [redacted] data, and which is specific, personally identifiable information [redacted]. MOA's designees maintain a published collection of [redacted] registration forms on its website that it uses to solicit such information from [redacted] donors [redacted]. The granular [redacted] data collection is beneficial to the matching process and contributes to the success of the [redacted] procedure as well as post [redacted] research.

[redacted]

MOA's designees publish additional services on its website that includes educational information and resources of interest to patients and professionals regarding

pre and post [redacted] issues or concerns, policy updates and changes, and access to their proprietary network [redacted]. Some members of MOA's workforce also engage in research to expand their understanding and knowledge of [redacted] performance, and the impact and efficacy of policy changes in pursuit of improved [redacted] rates. Some research published by individuals affiliated with MOA includes studies on [redacted] the impact of increased [redacted] rates, and biases in decision-making behaviors regarding [redacted] offers and refusals by [redacted] professionals. Researchers also gain academic experience working as part of a research team, sharing their knowledge with the [redacted] community and exploring opportunities to expand the availability [redacted]. MOA's researchers, as well as member researchers, publish and present studies at public forums, [redacted], and while the AGENCY may have supported many of the studies, the MOA-affiliated authors take full responsibility for the content and acknowledge that it does not necessarily reflect the policies of the AGENCY. MOA's designees also publish four newsletters to which recipients can subscribe online: [redacted] Pro, [redacted] News, and [redacted] Careers.

Mission, vision, and values. MOA's senior leaders supported displaying its mission, vision, and values on its website, and I have depicted them in Table 1.

Table 1

Mission, Vision, and Values

Component	Description
Mission	[redacted]
Vision	[redacted]
Values	Our values guide our behaviors [redacted]

Additionally, MOA's senior leaders further defined five components that encompass its values as depicted in Figure 1. MOA's senior leaders perceive stewardship and accountability as separate but complementary paths. MOA's leadership strive to achieve stewardship and accountability through strategic planning and prioritization of assets and initiatives in fulfillment of the federally contracted requirements [redacted].

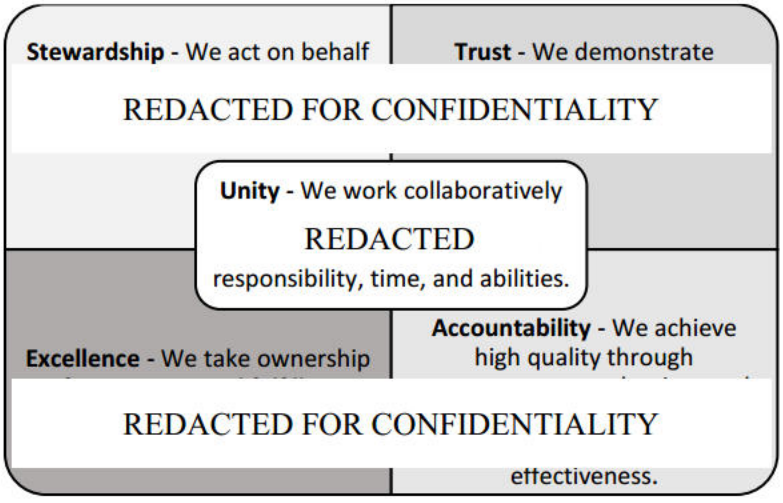

Figure 1. MOA's values framework.

Regarding delivering on its mission, MOA's senior leaders outlined eight strategic goals they sought to align with its values and vision:

1. Engage volunteer community members
2. Effectively organize the efforts of professional staff
3. Improve technological systems that support staff and member efforts
4. Be good stewards of financial resources
5. Serve as the operator or the network
6. Deliver value to MOA members
7. Support the [redacted] community
8. Be a leader in [redacted]-related services worldwide

MOA's core competencies of match, data, and quality directly relate to various components of its mission statement. First, the proprietary algorithms and software tools that make up their proprietary network [redacted]. Subsequently, MOA's operatives seek to provide meaningful information from the data that both educates and informs the community [redacted] through enforcement of mandated policies. Additionally, MOA's designees publish educational materials [redacted] on its website as well as news and developments that are of interest to the [redacted] community. Third party independent auditors conduct annual assessments of MOA's financial position, and MOA's designees have published this information on its website for the past 3 years as a demonstration of fiscal transparency. MOA's website also serves as a portal for its education and training outreach for the community at large, research and data analytics for [redacted] performance

evaluation, as well as information technology consulting, customized registries, and clinical databases for entities large and small. The communication via MOA's website is primarily one-way, published by MOA's designees and consumed by its stakeholders. MOA's website has a "get involved" section that shows a calendar of events and activities with filters for the community, education, [redacted], patient, professional, and [redacted] community meetings. The "attend a MOA event" in the "get involved section" of its website displays two opportunities for non-professional community involvement: the annual soiree held in fall, and the gallery at MOA that features artwork by local artists or those with a direct connection to donation [redacted]. There is a third option directed at [redacted] professionals (clinical, social, and financial). However, these activities appear to be for community engagement and appreciation, showcasing a lighter side of things.

Workforce profile. MOA's workforce consists of paid and unpaid personnel, of which over 80% are unpaid volunteers who serve at various events sponsored by MOA during a given year as well as on national committees, and the BOD. Table 2 shows the overall composition of MOA's workforce.

Table 2

Workforce Composition Overall

Category	Compensation	Complement	Percent Composition
Full-Time Employees	Paid	337	16
National and BOD	Unpaid	350	17
Event Community	Unpaid	385	19
Ambassador Program	Unpaid	1000	48
		2072	100

MOA's full-time paid staff work typical business hours, with some key personnel sharing the responsibility for providing 24-hour service to its customers. The staffing levels in specific departments of MOA appears to be in line with its core product offerings of match, data, quality as well as its mission and vision as evidenced by the information technology department (35%), [redacted] quality (16%), research (10%), [redacted] center combined with policy (12%), and the remainder filling out other departments of the workforce. Members of the information technology department are responsible for developing, managing and maintaining the infrastructure on which MOA relies for data collection, aggregation, reporting, matching, and quality. Over 80% of the information technology staff are contractors and represent less than 10% of the paid workforce. MOA's senior leaders created the [redacted] quality department in 2015 and tasked it with monitoring the performance of member institutions [redacted] in addition to compliance with [redacted] policy, federal, local, state and other regulatory requirements.

The [redacted] quality department is responsible for assessing, advancing, and improving strategies to stimulate and support member performance, manage the [redacted] membership and professional standards committee as well as patient safety. MOA's leadership takes pride in its research staff, which includes doctoral and masters level biostatisticians and mathematicians who work with [redacted] data and are familiar with its nuances to analyze and present results in a manner that consumers can easily understand. Volunteers participate on national committees and the BOD, as well as MOA outreach activities with the local community such as 5K Runs, Fund-Raisers, Health Fairs, and so on. However, it is unclear if MOA's business leaders actively track volunteer engagement for its community outreach or other events. MOA's full-time workforce breakdown by sex (Figure 2) is approximately 44% male and 56% female.

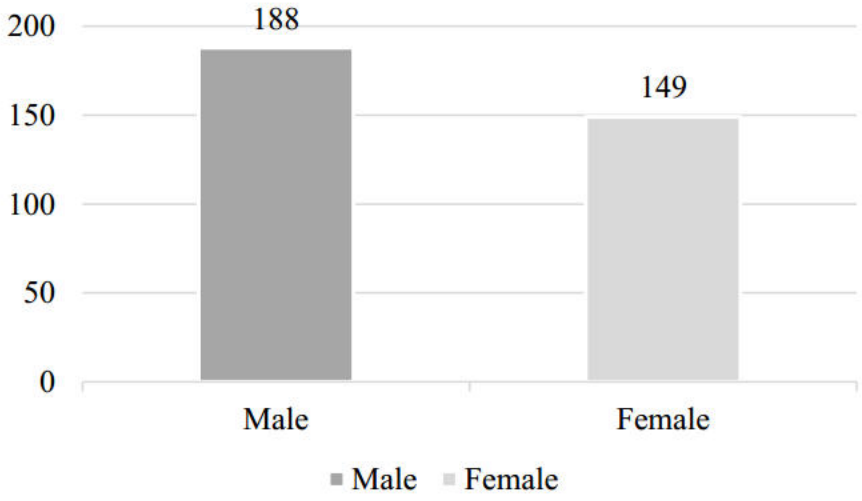

Figure 2. MOA's full-time workforce breakdown by sex.

Board member diversity, regarding ethnicity, culture, sex, as well as experience, is influential in significantly improving the financial and nonfinancial success of

nonprofit organizations (Harris, 2014). There exists some racial diversity within MOA, but the workforce is overwhelmingly Caucasian (nearly 80%), with just over 10% African American, 6% Hispanic/Latino, 2% Asian, and trace amounts of other races. There is no indication of the racial or sex makeup of the BOD, whether MOA's senior leaders plan to improve the diversity of its workforce or consciously seek to maintain a proportional representation of its workforce relative to the community it serves.

Furthermore, the presence of racial diversity, particularly at the managerial level, enhances the discovery of new competitive actions, and subsequently the intensity or frequency with which an organization introduces innovations (Andrevski, Richard, Shaw, & Ferrier, 2014). Similarly, such diversity equips an organization to respond effectively to environmental challenges, thereby protecting the organization from competitive harm (Andrevski et al., 2014). A BOD consisting of 42 elected members and several members of repute to whom the CEO is responsible heads MOA's organizational structure. With the addition of two ex-officio representatives of the AGENCY, the BOD has the authority to act on matters on behalf of the operator (see the bounded area in Figure 3). MOA's webmaster has published images of its chief (C suite) and director (D suite) of leaders in the leadership section of its website, with image click-through to a biographical summary of each member, that is helpful in personalizing the connection to leadership and foster familiarity with stakeholders and customers. Figure 3 depicts MOA's organizational structure.

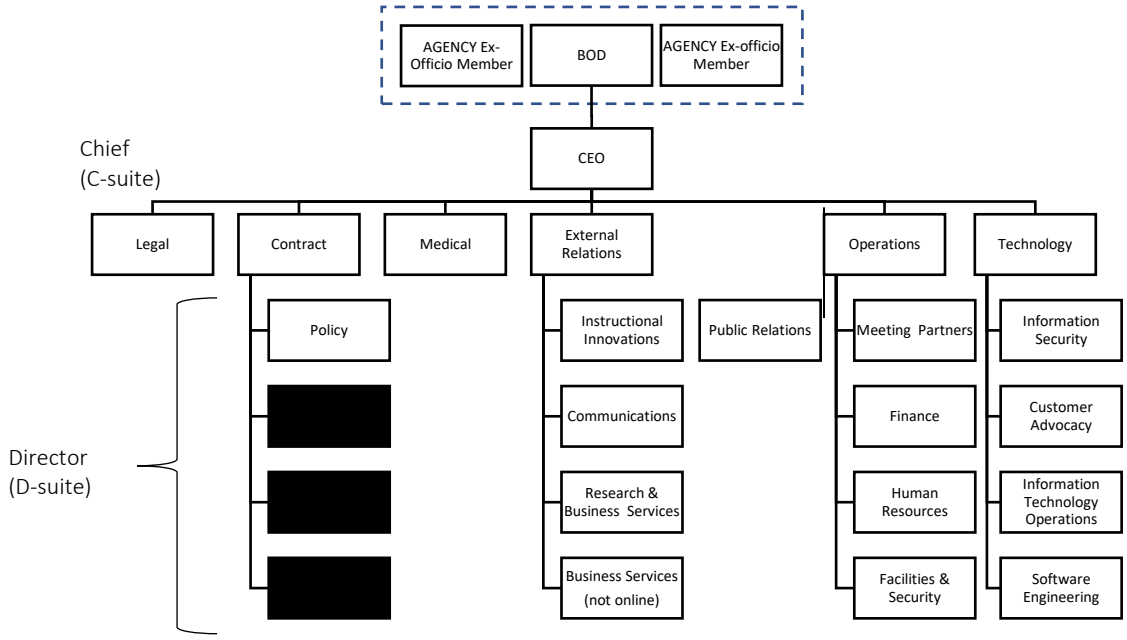

Figure 3. MOA's organizational structure. Adapted from organization documents by MOA, 2017.

It is unclear under which branch or branches of governance the various volunteer workforce segments reside, and how or whether MOA's leadership centralizes management of this resource. Regarding diversity, excluding the BOD, MOA's governance base consists of seven members in the C suite (including the CEO), 17 members in the D suite, with females representing approximately one third, and Caucasians over 95% of the governance base. Table 3 depicts the governance base composition in the C and D suite by sex.

Table 3

C and D Suite Governance Composition by Sex

Executive Level	Sex		Composition (%)	
	Male	Female	Male	Female
C Suite	5	2	71	29
D Suite	11	6	65	35
Total	16	8	67	33

Figure 4 shows the racial composition of MOA's governance base in the C and D suite

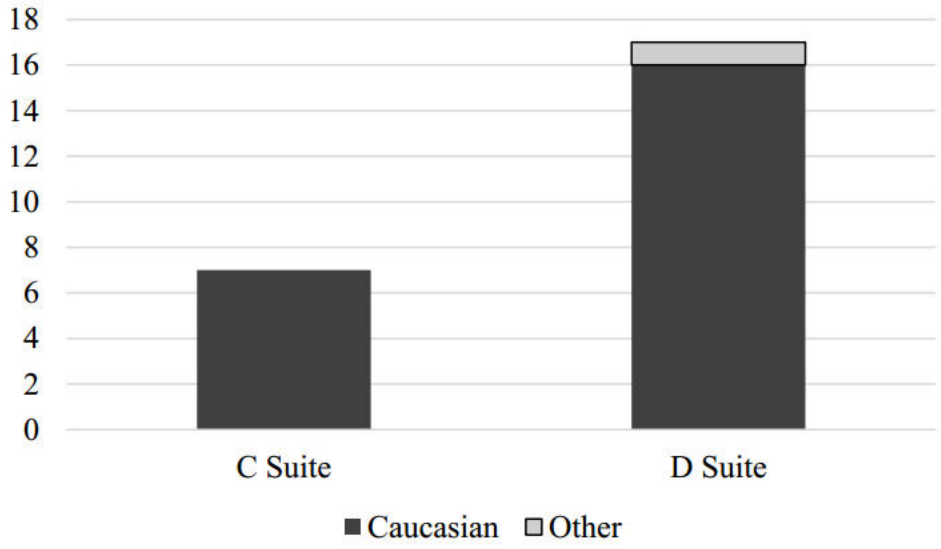

Figure 4. MOA's C and D suite composition by race.

[redacted]

The main responsibilities of the [redacted] center are [redacted] placement, transportation, waiting list maintenance, as well as information and logistics support. The [redacted] department is responsible for developing policy in cooperation with the 42-member BOD, which

includes representatives from each of the [redacted] regions and assisted by more than 20 committees. Figure 5 shows MOA's policy development process. In the interest of transparency, MOA's designees publish and maintain, on its website, information regarding its governance principles, the composition of the committees, BOD, their organizational affiliation, certifications, and accreditations, as well as meeting minutes and reports to the BOD. The MOA's business leaders have posted copies of its annual report online going back to 2011, with each successive year depicting more content and a willingness to expand on the amount of information disseminated to interested parties. The organization has also published three years of audited financial reports and tax information on its website.

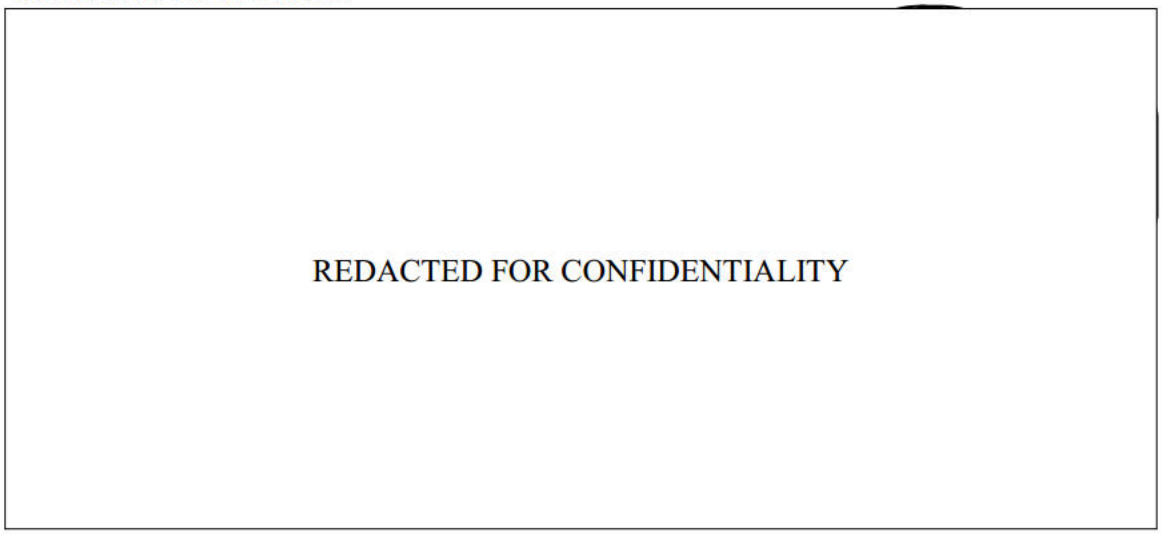

Figure 5. MOA's policy development process.

Assets. Business leaders might consider their organization's reputation an asset (Leiva, Ferrero, & Calderón, 2016), and with the advances in interactive interfaces and social media platforms, the public feels empowered to inflict damage through negative publicity (Horn et al., 2015). The relative ease with which the public can share, mention,

and broadcast content to followers require business leaders to develop a multipronged strategy to counter negative influences (Horn et al., 2015). Reputation grows from the participation and perception of the customers and other stakeholders (Horn et al., 2015), hence MOA's business leaders should be aware of the CharityWatchdogs' perception of their operational effectiveness due to their potential to influence stakeholders and interested parties' willingness to donate time, financial, or other resources in support of the organization. Guidestar (2018) is a nonprofit 501(c)(3) entity that maintains a database of all tax-exempt organizations and registered as such with the IRS by gathering, organizing, and distributing information about nonprofit organizations in the United States. Horn et al. (2015) stated that threats to the corporate reputation originate from three dimensions: (a) customer, (b) employee, and (c) corporate. A lack of timely and consistent engagement by the organization or a reluctance to maintain a presence on social media is equally injurious to its reputation (Horn et al., 2015).

Business leaders of nonprofit organizations can actively manage stakeholder perception through active involvement in monitoring and responding to activity posted on social media portals and other platforms such as Greatnonprofits.org. For example, MOA's business leaders have been actively responding to posts and comments related to its corporate profile on Glassdoor.com, and currently has a presence on the following social media platforms, each of which is accessible from its website at the about section: Facebook, Twitter, LinkedIn, YouTube, Instagram, and Google+. Social media designees of MOA regularly post content to its Facebook page on average two to four times a month. MOA's social media designees also post updates to MOA's Twitter account

several times a week and at least once a week on LinkedIn. MOA also has a YouTube channel that was last updated November 2017, its Instagram account is active at least twice a month, and its Google+ account was last active in January 2017. It is unclear whether MOA's business leaders possess metrics reflecting the value and ability of these social media engagement platforms to reach stakeholders in support of the organization's mission.

Regarding facilities, MOA operates primarily from two sites that are a block apart, approximately three-tenths of a mile. The facility that serves as MOA's headquarters operates continuously to facilitate [redacted] allocation, placement, and transportation assistance as well as policy and waitlisting. The secondary facility serves as the operations center for crucial information technology services and infrastructure. MOA also owns and operates a tertiary facility located approximately ten miles from its main site to assure business continuity of critical information technology services and [redacted] center operations should a catastrophic event render the headquarters inactive.

By providing information that advances transparency, stakeholders can make informed decisions regarding charitable giving (GuideStar, 2018). MOA has earned the 2018 gold seal of transparency rating from GuideStar because of its demonstrated commitment to transparency. MOA's senior leaders acknowledged its Guidestar rating in the best practices section of their website, as well as their commitment to continual improvement through ISO 9001, and enterprise risk management (ERM). CharityNavigator, one of a handful of CharityWatchdogs does not maintain a rating or ranking for MOA because it only rates organizations that receive at least 40% of its

funding directly from individual contributions. While the CharityNavigator database lists MOA as a charitable entity, no record appears of MOA in the CharityWatch database, as is also the case with the MOA Foundation. MOA demonstrates some outward transparency by posting its audited financial statements and reports on its website since 2011. To demonstrate accountability, some nonprofit business leaders have adopted the Sarbanes-Oxley compliance requirements of its forprofit counterparts as best practices to apply to its organization (Hatfield, 2018). Hatfield (2018) also alluded to nonprofit business leaders falling prey to the pressure to maintain a low program ratio or expense ratio, and as such hiring insufficient or inadequate personnel, thereby fostering operational inefficiency and perpetuating a vicious cycle.

The program ratios derived from the information MOA's business leaders filed in its IRS form 990 during the tax years 2012 thru 2016, and which CharityWatchdogs typically publish for nonprofits they watch (shown in Figure 6). The program ratio or program efficiency demonstrates how well the organization is performing its mission. Some CharityWatchdogs suggest that a program expense ratio of 70% is acceptable, and others state that the standard-bearers achieve above 90%. According to the Better Business Bureau, a minimum program ratio of 65% is a possible measure of operational effectiveness for most organizations (Garven et al., 2016).

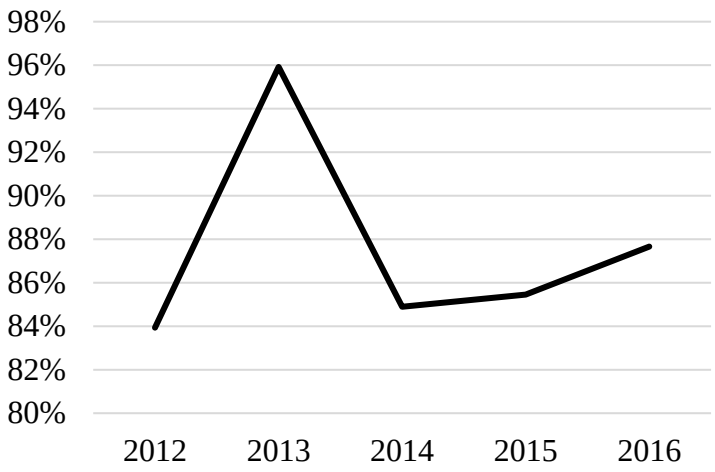

Figure 6. MOA's program ratios for tax years 2012-2016.

To guard against some nonprofit organizations' potential abuse of financial resources, some CharityWatchdogs have derived alternative performance measures, such as overhead ratios by which to evaluate nonprofit operational effectiveness (Lecy & Searing, 2015). Examining MOA's financial statements filed with the IRS, I have derived its overhead ratios as shown in Figure 7. The declining trend of overhead expenses ratios falls in line with Lecy and Searing's (2015) findings, agrees with an increasing trend in fundraising expenses, and both ratios appear favorable. However, this is due to the unique contractual arrangement between the AGENCY and MOA, and the fact that MOA's business operations do not rely on individual direct donations for more than 40% of its funding to maintain operations, and hence gain the attention of CharityWatchdogs.

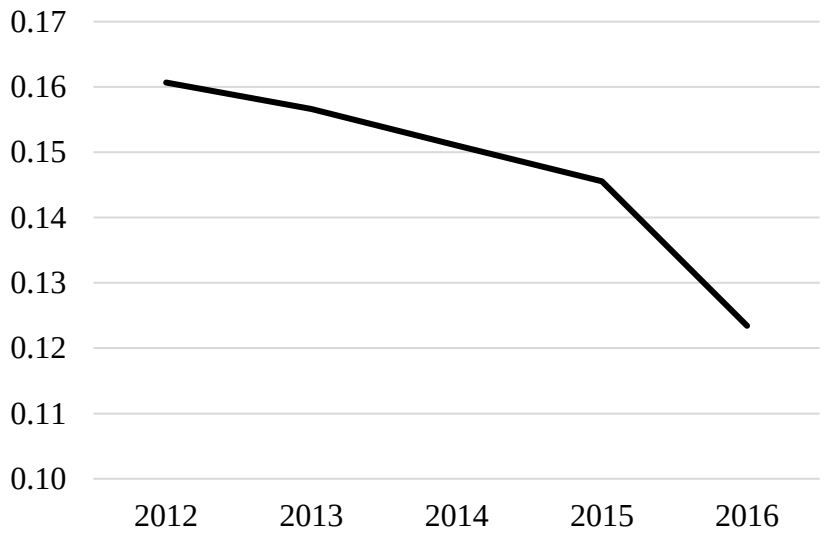

Figure 7. MOA's overhead ratios for tax years 2012-2016.

MOA's major facilities are the two physical facilities from which it conduction daily operations, as well as the hot-site facility located approximately ten miles away. The proprietary network and matching algorithms that run on its information technology infrastructure collectively represent a significant portion of MOA's operating assets.

Regulatory requirements. MOA's leadership and workforce must adhere to an assortment of federal, state, regulatory and contractual requirements as the operator of the NETWORK. The operating environment of MOA demands compliance with the policies laid out in the [redacted], workforce health and safety requirements as regulated by the Occupational Safety and Health Administration, fair and equal treatment of employees per the Equal Employment Opportunities Commission, as well as the Belmont Protocol of 1979 when conducting research. MOA's leadership and workforce must also adhere to federal, state and local laws and as it pertains to facility operations, information system security, and taxation. As a nonprofit entity, MOA's

leadership must complete annual tax filing of Form 990, maintain its 501(c)(3) designation through the state corporation commission, and follow applicable governance policies to prevent fraud and abuse. Additionally, MOA's leadership must comply with the requirements of the Family and Medical Leave Act (FMLA) of 1993, the Health Insurance Portability and Accountability Act (HIPAA) of 1996, the Affordable Care Act (ACA) of 2010, and the Americans with Disabilities Act (ADA).

Organizational relationships.

Organizational structure. A 42-member elected BOD heads MOA's organizational leadership structure in conjunction with some esteemed [redacted] professionals referred to as ex-officio members. With the addition of AGENCY ex-officio members, the BOD becomes the operator's BOD. The BOD, sans AGENCY ex-officio members, acts as the regular BOD for MOA, evaluates the CEO, and holds him responsible for the operating effectiveness of the organization. The C-suite reports to the CEO who holds them accountable for executing the strategic plan in pursuit of the goals and objectives, and evaluates them accordingly. Going a step further, the C-suite holds accountable and evaluates the D-suite and so on through to the lower levels of the workforce hierarchy. Figure 3 depicts MOA's current workforce organizational structure. The AGENCY solicits nominations for the BOD annually and requires all nominees to complete the online biography form [redacted]. Term limits on the BOD vary depending on the position, and directors may extend some terms, but no more than two times at one year apiece [redacted]

Customers and stakeholders. Customers are the actual or potential users of

MOA's products and services and include donors, [redacted], researchers, future donors, [redacted]AGENCY. Stakeholders are those individuals or groups affected by MOA's actions beginning with the immediate stakeholders, its workforce, both paid and unpaid (volunteers). MOA's stakeholders also include [redacted] professionals, researchers, future donors, future recipients, and potential volunteers. Additionally, [redacted] the AGENCY that contracted with MOA to operate the network is also a stakeholder of the organization. Market segmentation refers to groups that share one or more characteristics, and which MOA's operatives can aggregate for various purposes such as analytics, marketing, service delivery, and so on. Table 4 illustrates the customer, stakeholder, and market segmentation, and Table 5 shows the requirements/expectations of those segments.

Table 4

Customers, Stakeholders, and Market Segments

Customers	Stakeholders	Segment
Current Donors Future Donors	Current Donors Future Donors	Donors
Current Recipients Future Recipients	Current Recipients Future Recipients	Recipients
[redacted] Professionals	[redacted] Professionals	[redacted] Professionals
Researchers	Researchers	Researchers
	Current Volunteers Future Volunteers Fulltime Paid Employees	Workforce
[redacted]	[redacted]	Service Owner

Table 5

Market Segmentation and Requirements/Expectations

Segment	Requirements/Expectations
[redacted]	System availability Accurate information Availability [redacted] Fair allocation Timely response Ethical Trustworthy
[redacted]	System availability Accurate information Availability [redacted] Fair allocation Timely response Ethical Trustworthy
[redacted] Professionals	System availability Accurate information Availability [redacted] Involvement in policy changes Timely response Ethical Trustworthy
Researchers	Accurate information System availability Ethical Trustworthy
Workforce	A safe and rewarding work environment Doing good [redacted] Ethical Trustworthy
Service Owner	Satisfactory operation of the network Observing [redacted] requirements/expectations

As the operator of the network MOA's primary objective is to increase the availability of [redacted]. Essential components of MOA's [redacted]

mission involve increasing awareness, [redacted] equitable allocation [redacted], and staying abreast of research which seeks to extend the available pool [redacted]. MOA's website, updated regularly by its webmaster, contains a wealth of information of interest to patients, professionals, prospective donors, volunteers, and those interested in policy. The pass-through internet link to [redacted] for online public comment is one aspect public involvement in policy changes. The online calendar informs [redacted] professionals and various committee members of upcoming events. MOA's various social media platforms mentioned in the Assets section earlier provides a mechanism for two-way communication and involvement with stakeholders and customers and displayed at the bottom of each of its web pages. A 'contact us' link is also displayed at the bottom of each page of its website, and which interested parties can use to submit questions online. MOA's leadership mostly engage two-way communication with its workforce (including volunteers) several times a year, and one-way communication periodically or as required.

Suppliers and partners. Regarding infrastructure, suppliers provide services for building and security maintenance, utilities, operational resiliency (system disaster recovery/failover), workforce staffing/recruiting, marketing material, website, internet service, and email, as well as grounds keeping. MOA's suppliers also provide operational hardware such as switches, routers, servers, workstations, telephone system, conference room system, mobile communication devices, and backup generators. Suppliers provide software application programs or platforms such as collaboration suites, cloud-hosted services for anywhere anytime access, and on-premise applications. Collectively, these

suppliers enable MOA's business leaders to conduct its daily operations and enhance its competitiveness in delivering its core competencies. MOA's business leaders evaluate and review some supplier performance, but it is unclear if there is a defined process in place to handle all supplier performance that falls below preferred or contracted standards.

MOA's operatives collaborate with like-minded organizations, working together to create, innovate, and bring products and services to market through partnerships. Such partnerships exist with the [redacted] Centers with whom MOA shares and exchanges information. Most information exchange occurs electronically via its proprietary network and the network of its partners, as well as through email, telephone calls, and meetings.

Organizational Situation

Competitive environment.

Competitive position. The National [redacted] established the NETWORK in [redacted], and MOA has consistently won the contract to administer and manage the NETWORK since the AGENCY solicited proposals [redacted] for operating the NETWORK. The National [redacted] specifically requires that a private nonprofit organization operate the NETWORK [redacted] Since its inception, the overall contract term has remained unchanged at [redacted] years and opens for bidding at the end of each term. MOA as the [redacted] operator of the NETWORK is the largest entity in the field, has

steadily grown over the years, further separating itself from potential competitors. MOA's leadership has invested significant resources in its information technology infrastructure, creating a proprietary system, increasing the accuracy of matching algorithms, reducing response times, and enhancing analytics. Should another entity win the award to administer and manage the network, it will not be able to take advantage of that technology and will have to develop its own. The request for proposal posted by the AGENCY on FedBizOpps.gov in April 2018 outlined several requirements, but some stipulated specific requirements that appear to favor MOA, such as demonstrated experience:

[redacted]

2. managing an enterprise of similar complexity as the NETWORK
3. managing an extensive data collection system that interfaces with hundreds of independent healthcare organizations
4. operating an extensive policy development process
5. by providing three past-performance references on the same or similar work required in the request for proposal from the previous three years

The language of the request for proposal states that in the absence of Past Performance History offerors should state "No Past Performance History Available" however, doing so likely results in those offerors receiving an unknown rating and not evaluated favorably or unfavorably. There are many organizations, which, individually, possess capabilities and expertise on one, two, or more areas, but not the entire collective

or scale of MOA, and do not appear to pose a threat to MOA at this time. [redacted] maintains a registry [redacted], has teams in 47 states, shares information with its partners, and enjoys financial support from many reputable organizations [redacted] DLA lists [redacted] MOA, and several associations as community partners that connect to its national registry [redacted]. MOA's CEO serves on the board of [redacted], as do others from the [redacted] community, [redacted]. Much like the [redacted] advisory committee, MOA's representation on its committees also originates from the [redacted] community. Other small competitors like [redacted] offer some of the services that MOA performs, but operates within a geographic region, maintains a [redacted] registry, and also participates in education and outreach activities with the local community [redacted]. The collaboration, communication, and information sharing between MOA and its partners serve to fuel both individual and collective innovation. Research and educational institutions with necessary financial resources can handle the algorithms, analytics, processing, matching, and networking, but may fall short regarding the demonstrated expertise demanded by the NETWORK contract.

Competitiveness changes. MOA's current five-year contract with [redacted]AGENCY expires in September 2018, and at least two independent entities have filed applications with [redacted]AGENCY to service the next contract cycle [redacted]. [redacted], one of two competitive bidders recently lodged a protest against AGENCY[redacted] to extend the filing deadline for the NETWORK contract [redacted], and with

pressure from the sitting president of the United States, the AGENCY extended the deadline by 21 days to May 30th, 2018 [redacted]. MOA's business leaders are aware of the need to be vigilant and proactive to keep competitors at bay by meeting or exceeding contractual obligations, and fostering an environment of innovation and risk-taking. MOA's leadership strives to separate itself from rivals by continuing work on the suite of systems that make up its [redacted] network, as well as the data lake (a repository containing a variety of data sets related to multiple systems), an application program interface (to facilitate interaction by members from third-party systems), and other improvements. With a new contract term up for bidding, potential bidders and others have claimed that MOA is inefficient, slow, and keeps recipients on the waiting list for years [redacted]. While some critics stated they have no strong objections to [redacted]AGENCY awarding the next contract to MOA, others feel that MOA can and should do better for having managed the network for such a long time [redacted]. The current political landscape is an unsteady one that may present other challenges, specifically regulatory changes that may help or hinder MOA's operability.

Comparative data. The uniqueness of MOA's business operations is such that there is a lack of direct comparative data, and even the smaller competitors who perform two or more functions like MOA do not publicize information that MOA's business leaders could use to benchmark its performance. MOA is essentially a repository and clearinghouse for the output and input functions of the members of the NETWORK but does not directly engage in those functions. General industry information in the United States does not exist against which to compare MOA [redacted]

[redacted]. MOA's business leaders may identify and select any of its internal comparatives by examining other industry sectors and applying best practices. Additionally, the National Council of Nonprofits (2018) provides research, reports, and data on the nonprofit sector that MOA's business leaders may find useful in improving its operational effectiveness and advancing its mission. While there is no state nonprofit organization with which MOA's leadership can connect on a local level, there is still value in reviewing the information from other states, particularly case studies and best practices.

Strategic context. Strategic challenges are those factors influencing the future success of MOA, and strategic advantages are the market-driven factors that may influence future success. MOA's business leaders face many strategic challenges and enjoy some advantages as it relates to its business, operations, societal responsibilities, and workforce (see Table 6).

Table 6

Summary of Strategic Challenges and Advantages

Area	Strategic Challenges	Strategic Advantages
Business	Primary source of funding from waitlist registration fees Unsteady secondary funding from contributions and gifts [redacted] [redacted] [redacted] Changing political and regulatory climate	Dependable revenue stream [redacted] operator of the NETWORK Expertise in collecting, aggregating, analyzing data Expertise matching recipients and donors
Operations	Staying ahead of technological changes Adapting to regulatory changes Managing system change process with member-connected networks Infrastructure and facility to support existing operations	The proprietary system, [redacted] algorithms, and analytical capabilities Potential for more collaboration with partners to leverage limited resources
Societal Responsibilities	[redacted] [redacted] [redacted]	Continually improving processes [redacted] Educate and involve customers and stakeholders
Workforce	Attracting and retaining passionate and talented personnel	Workforce capable of helping to achieve mission and vision

Performance improvement system. MOA's business leaders use ISO 9000 to assure adherence and compliance in some of its processes and business activities, but they have not deployed ISO across the enterprise. There are pockets of process improvement models in effect where MOA's leadership sought to use what they believed to be the best tool such as PDSA, LEAN, and Agile (for software development). MOA's business leaders use an array of measures to demonstrate achievement of contractual performance measures for the continued operation of the NETWORK and an assortment of measures for other areas of the business. Presently, MOA's leadership annually sponsors continuous improvement projects, recognizing those efforts during their innovator days, engaging in both formal and informal recognition of those who demonstrate MOA's values. Annually, the BOD conducts a self-evaluation, and in turn with the corporate affairs committee evaluates the CEO against the annual strategic goals. On a quarterly and annual basis, the CEO evaluates the C and D suite, who in turn evaluate their subordinates. In early 2017, MOA's senior leaders began the organization's Baldrige journey, conducting a self-assessment of all facets of their business using the Baldrige Criteria for Performance Excellence (Baldrige Performance Excellence Program, 2017). Subsequently, business leaders of MOA decided to use the criteria as its model for performance improvement, to align and realize its strategic objectives and goals, from the corporate level down to the department, area, and finally to employee performance.

Leadership Triad: Leadership, Strategy, and Customers

Leadership

Senior leadership. Due to MOA's arrangement with the AGENCY, the NETWORK [redacted] dictates the regulatory and governance framework of the NETWORK BOD and also dictates specific representation across the spectrum individuals in the [redacted] community. At the organizational level is the senior leadership, which consists of the CEO and nine members of the executive team. The mission and vision (see Table 1) had been in effect for some time, but that the senior leadership launched the core values (also shown in Table 1) across the enterprise in 2011. On a quarterly and annual basis, the BOD reviews the behavior of the senior leadership, who in turn review that of their direct reports and so on. MOA's business leaders deploy the mission, vision, and values (Table 1) by reminding its workforce through whatever means possible, such as the computer screen saver, intranet portal, postings in the hallways and break room, and during various engagement activities (Table 7).

Table 7

Mission, Vision, and Values Engagement Activities by Frequency

Message	Venue	Frequency
Mission, Vision, and Values	REDACTED FOR CONFIDENTIALITY	

Note. Adapted from organization documents by MOA, 2017.

Upon onboarding, employees sign/acknowledge a Confidentiality, Anti-harassment, and Employment Policy Statement. MOA's senior leadership strives to lead by example, personifying the values framework (Figure 1), recognizing the workforce modeling of core values on an individual or team basis.

Regarding leadership promoting legal and ethical behavior, the NETWORK [redacted], as well as the applicable regulatory requirements mentioned previously guide MOA's actions to assure the trustworthiness of the NETWORK. It is unclear if business leaders of MOA require its employees to acknowledge, whether through a formal check-off process or another mechanism, that they have demonstrated compliance per those requirements. MOA's business leaders shared that transparency in communication was evident in regular CEO communication and interaction with the BOD, however, the

frequency of communication is not synonymous with transparency. An example of MOA's business leaders' demonstration accountability was in adopting the NETWORK contractual requirements to drive its strategic planning initiatives and using those measures to assess their performance. The general counsel appeared to bear significant responsibility in demonstrating organizational commitment to legal and ethical behavior, but MOA's business leaders recognized that opportunities existed to extend oversight to their contractors. MOA's leadership has demonstrated an openness and willingness to receive input from the workforce through questions in the annual survey, rounding, and also by maintaining an ethics hotline for anonymous reporting.

The senior leadership communicates with the workforce throughout the year in different venues on a quarterly, monthly, weekly, or an as needed basis, engaging mostly in two-way communication with the workforce, both paid and unpaid. Some examples of the communication tools used include direct involvement, intranet portal, e-mail, website, conversational, lunches, huddles, and newsletter (Table 13).

MOA's senior leadership in conjunction with the BOD use a variety of approaches for creating an environment for success now and in the future in three areas: (a) accountability to accomplish objectives, (b) learning and innovation, and (c) high-performance workforce with continuous improvement. Regarding the accountability to accomplish objectives, it was unclear what correlation existed between the national [redacted] and department–level performance metrics to inform the evaluation of the department, and subsequently the employee. Quarterly check-ins provided an opportunity for more timely review to determine whether projects should cease, or change form.

MOA's business leaders encourage organizational learning and innovation through a 'day to innovate' where the workforce can use a day to work on an initiative. MOA's leadership prides itself on promoting an open community for learning and innovation and engages in innovation days to spur improvements. However, it is unclear what process or methodology MOA's business leaders use to discontinue an initiative it no longer deems viable. MOA's senior leaders indicated that they used various communication methods to review the progress of work to goals, and staff must identify development goals for themselves, with manager approval for resource or funding assistance. MOA's business leaders also stated that they have a process in place to create a focus on activities that will achieve its mission.

Governance and societal responsibilities. MOA's governance at the highest level is the responsibility of the 42-member BOD mentioned previously, the composition and terms limits of whose membership is as outlined in the appendix of the NETWORK [redacted]. The rules for NETWORK BOD membership ensure representation across a broad spectrum of experience, perspective, minority, and sex representation of the [redacted] community as applicable. MOA's BOD has several committees, each tasked with a specific focus to ensure regular attention to strategic planning, budgetary, policy actions of the NETWORK BOD, as well as MOA's compliance with financial and operational requirements of its NETWORK contract. At least annually, the BOD members evaluate themselves, then that BOD and one other committee evaluate the CEO's performance, and, in turn, evaluates the senior leadership and other direct reports quarterly as well as annually.

MOA has a chief legal officer tasked with ensuring compliance with regulatory requirements stated previously in the regulatory requirements section, NETWORK obligations, contractual obligations and oversight of suppliers and external entities, as well as risk management. The chief legal officer proactively protects MOA's interests and at the same time, minimizes the impact of adverse effects on the business operations by anticipating legal, regulatory, and community concerns. During its annual workplace survey, MOA's workforce is asked to assess how well MOA adheres to its values and ethics. However, there may be opportunities to receive unbiased feedback on this tool and potential improvements for ongoing assessment.

MOA's leadership, in pursuit of its mission assures societal well-being through its [redacted]equitable allocation[redacted] timely response from an always-on system to serve the needs of [redacted] recipients. MOA's operatives actively engage with its known community through the array of social media platforms mentioned previously in the assets section. MOA itself can serve as a forum for community education and awareness. Those in the [redacted] community are aware of MOA, but perhaps those outside the community are not.

Strategy

Strategy development. MOA's senior leadership has several strategic planning processes, whereby it develops the organization-level strategic plans as well as the information technology roadmaps and NETWORK strategic plan from the NETWORK contractual requirements. MOA's senior leaders must provide periodic updates to the AGENCY, and this is the dominant driving force behind the various initiatives and

measures currently in place. The development of strategy begins with the senior leadership and the BOD, and involves feedback from customers, stakeholders, and the workforce, with the latter sending their organizational resources back up the chain for consideration by the senior leadership and BOD. The BOD and advisory committees are responsible for identifying and prioritizing the projects and tasks that best align with the overall strategic plan. The senior leadership measure and track the progress of these activities, but other than monitoring the corporate dashboard of metrics. MOA's senior leaders also engages customers and stakeholders in its planning process. MOA's strategic goals for September 2018 to September 2021 and similarly, the NETWORK strategic goals are:

1. Increase the [redacted]
2. Provide [redacted] access to [redacted]
3. Promote efficiency [redacted]
4. Promote [redacted] safety
5. Improve [redacted] outcomes

MOA's business leaders incorporate innovations into its strategy development by engaging the senior leaders, the BOD, and employees in joint brainstorming sessions, employing idea boards and other mechanisms as necessary.

MOA's business leaders collect and analyze relevant data to develop and inform the strategic planning process by conducting member surveys, collecting data from its [redacted] network and partners, analyzing that data, and using the results to inform the strategic development process.

MOA's senior leaders decide which key processes its internal workforce or external suppliers will perform by determining whether it possesses the infrastructure or expertise in-house and can reasonably accomplish the required work in the timeframe available, and within the necessary budgetary restrictions based on a cost-benefit analysis. Alternatively, MOA's business leaders may seek external resources to accomplish an objective and meet the required timeframe by soliciting requests for quotations from multiple sources whenever possible, through its procurement division. Sole-source supplier situations exist, but that is the exception, not the rule.

MOA's strategic objectives, and the timetable for achieving them is within 3 to 5 years. Ordinarily, the project management effort when dealing with external suppliers permits MOA leadership some internal resource flexibility. Depending on the level of engagement required of the local resource, the capacity demand may increase or decrease, and MOA leadership determines, as the situation arises, whether they can comfortably absorb the fluctuations and still maintain ongoing operations.

MOA's senior leaders prioritize the importance of its organizational needs to meet strategic goals by examining the resource, time, and cost requirements. MOA's senior leaders allocate resources to the highest priority items, recognizing that some lower priority items may need to remain within focus for the duration. Some of the initiatives stemming from MOA's strategic plans may be devoid of firm timelines for completion because they are juggling resources to keep competing projects afloat. The executive committee shoulders the responsibility for deciding and approving projects based on priority, impact, and timing.

Strategy implementation. Business leaders develop key short- and longer-term action plans through initiatives in alignment with the NETWORK strategic objectives, with input from the accountable senior leader at the executive level, down to the department and individual levels. The NETWORK contract has an initial term of one year, followed by four additional terms of 12 months each, and this arrangement influences the long-range planning of MOA's senior leaders and BOD as they seek to remain agile and responsive. The short-term action plans are approximately one year in duration, with the long-term ones typically extending to three years.

The strategic planning process begins with the BOD, which they conduct annually, then push down through the C and D suite, which eventually materialize as initiatives to the frontline workforce. MOA's senior leaders deploy and reinforce its strategic plans through all levels of the organization using various communication tools such as meetings, town halls, intranet portal, email, quarterly check-ins, and also annually (Table 12).

MOA's senior leaders ensure that it has the financial and other resources to both support current action plans and longer-term goals by requesting annual budget plans with resource dependencies from each department. The senior leaders review this information and together with the BOD, use the recently implemented staff ranking, priority, and project estimation data for each action plan in their decision making. Following review by the [redacted] Committee, the executive committee of the NETWORK BOD prioritizes and decides which projects or initiatives MOA's leadership will pursue to achieve desired objectives.

On an annual basis, the department leaders are responsible for their respective budget plans as well as providing staffing and resource requirements for current and future projects to the senior leaders, and eventually to the CEO for final approval. The department heads tie the implementation plan to their respective department goals, and subsequently the employee's quarterly and annual performance reviews. The frontline workforce has an opportunity to voice concerns regarding the initiatives and corresponding measures used in their evaluation, and the process by which the department heads communicate such concerns to the senior leadership. The majority of its key metrics have a completion year, except a few initiatives where the metric appears misplaced. The nature of the strategic plan appeared to lack specificity in the area of key metrics, where the majority of measures stated:

- an increase
- a decrease
- increase percentage
- maintain or increase

There were statements made by MOA's leadership in the key metrics portion of its 2018-2021 strategic plan where three items (a) expand communication and educational materials to reduce donation barriers, (b) develop an equity measure for [redacted] candidates, and (c) establish a common policy framework for geographic [redacted] distribution may have been better suited in the initiatives section. Taken together, the first statement shows alignment with the organization's business area strategic challenge; specifically, the boosting of registration and waitlist [redacted], the second satisfies its

societal responsibilities of equitable and fair allocation, and the third aligns with several components in its operations area (see Table 8).

Table 8

Goals and Key Metrics for 2018-2021 Strategic Plan

Goal #	Year	Key Metric
2	2019	At least a 10% increase in the pool of interested volunteers to serve on board and committees
3	2020	95% [redacted] using data portal
3	2021	50% electronic submission of required data
3	2021	Maintain or exceed 99% uptime of apps/functions [redacted]
3	2021	Three month startup for IT projects following BOD approval for 50% of projects
3	2021	Maintain at least 90% of projects within 12 months of BOD approval

Note. Excerpted from Strategic Plan for 2018 to 2021 from MOA website.

Regarding establishing and implementing changes to their action plans if unexpected circumstances arise, MOA's senior leaders rely on a customized corporate dashboard monitored by the executive, senior, and department leaders, with reporting going up and down the chain during regularly convened meetings. MOA's business leaders assert that the open communication between the leadership levels facilitates agility in adapting resource allocation needs and priorities to changing requirements.

Customers

Voice of the customer. MOA's leadership listens, interacts, and observes its current customers to obtain actionable information through two mechanisms: in person and remote. In-person listening includes interpersonal interactions through meetings and site visits, with remote interaction coming from the telephone, email, service portal, and

annual member surveys. Both listening post mechanisms enable MOA's operatives to obtain actionable data from current customers in addition to other actionable feedback. MOA's leadership employs its volunteer workforce as well as its institutional members from the [redacted] centers, [redacted], and laboratories to serve on committees, such as bylaws or policy, implementing changes, and evaluating the overall effectiveness of changes.

MOA's business leaders stated that because all customers must be members of the NETWORK, its customer base is preestablished (see Table 5). Hence, MOA's business leaders focus their efforts on current customers, seeking to expand its service offerings to those customers. MOA's business leaders listen to potential customers to obtain actionable information annually, biannually, quarterly, weekly, and on an ongoing basis. Customer listening takes the form of meetings, public comments, surveys, conferences, customer service staff, user acceptance testing, and the Information Technology customer council. From a statistical perspective, it is possible that potential (future) donors and recipients represent the largest segment of MOA's customer base.

MOA's senior leaders primarily seek to maintain their relationship with the AGENCY[redacted] by meeting their contractual requirements for managing and operating the NETWORK. Also, MOA's senior leaders determine customer satisfaction, dissatisfaction, and engagement primarily through surveys and response time to customer service requests.

Business leaders of MOA obtain information on customer satisfaction through member surveys, public comments, and meetings, but does not possess such information

relative to competing organizations. Currently, business leaders of MOA monitor engagement based on member usage of regional support services and attendance of regional meetings. MOA's business leaders are working to build other measures, such as a customer engagement ladder, possibly including the use of a customer retention management application to actively build and maintain a relationship with its customers.

Customer engagement. MOA's business leaders determine its product offerings through customer input, national and regional conference focus groups, as well as discussions and brainstorming at multiple levels within the organization. Committees comprising cross-functional members evaluate customer requested product offerings based on whether it potentially impacts the allocation policy or if it is merely an enhancement request. There are two separate evaluation paths for desired product offerings, and both go into a centralized repository for data-driven review. This centralized repository makes it possible for business leaders of MOA to analyze the frequency and source of product/service requests, to prioritize as necessary, and also inform the originating member of its decision to proceed to put the request on hold. The executive committee and 20 or so committees collaborate on public comment proposals as well as member-related financial and operational impact through an online portal for policy and bylaws proposals. The 42-member BOD reviews and approves proposals that have progressed through the feedback and revision process before implementation (see Figure 5). The internal customer council (ICC) receives, vets, and maintains software enhancement requests in the service portal. The ICC evaluates software enhancement requests deemed worthy of implementation and makes recommendations to the

information technology customer council (ITCC) who then prioritizes those enhancements deemed worthy of implementation.

Customers of MOA seek information and support through the customer service support department as well as the [redacted] center, and 24/7-365 on-call staff. The bylaws and policy public comment area, its website, and social media portals are three additional ways in which customers to seek information, with support achieved through MOA's contact us section of the website, telephone, and service portal system.

The BOD with input from the senior leadership determined the customer groups based on common needs and requirements from the key work systems or match and quality. Member segmentation exists based on their presence within [redacted] regions that service the [redacted] network as dictated by the AGENCY. MOA's leadership relies on its existing systems and infrastructure to support current customer needs regarding impact, equity, and access.

Results Triad: Workforce, Operations, and Results

Workforce

Workforce environment. MOA's business leaders assess its workforce capability and capacity requirements as the operational need arises, and this primarily originates from the annual strategic planning process whereby department leaders submit budgets and resource needs to their senior leaders for further review and eventual approval by the BOD. The quarterly performance check-ins and annual performance evaluations serve to remind or reinforce the need for supervisors to develop action plans for workforce training and education to improve capabilities.

Recruitment of new workforce members occurs through internal and external postings. Internal postings provide opportunities for hiring from within and externally through employee referrals. External postings involve business leaders from MOA's human resource department publicizing employment opportunities on its website, in addition to engaging with staffing services, executive search firms, and online job boards Figure 8 depicts the hiring and placement process for the full-time paid workforce.

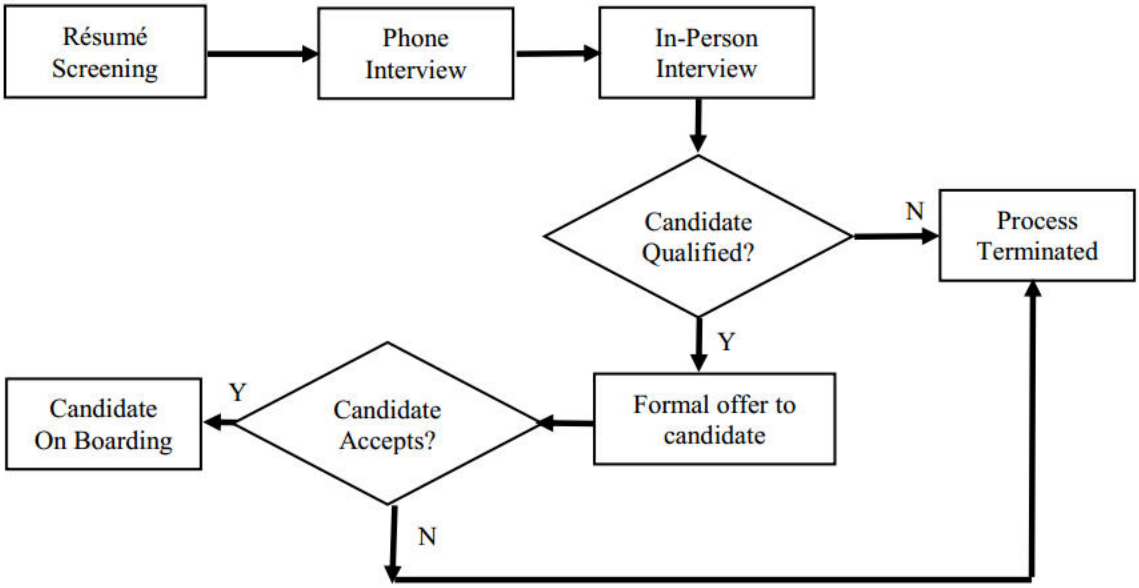

Figure 8. Standard hiring process for the full-time paid workforce.

It is unclear that MOA's business leaders intentionally seeks candidates who are a good cultural fit with MOA, and whether the hiring managers make a concerted effort to assure diversity. However, MOA's business leaders offer its workforce a standard menu of benefits (Table 9) and communicate its code of conduct as well as the policies and procedures to new hires in the employee packet and during onboarding.

Table 9

Full-time Paid Workforce Benefits

Benefit	Description
Accidental Death & Dismemberment	
Discount Services	American Family Fitness, AT&T, Dell, Liberty Mutual Insurance, Wells Fargo at Work, Truliant Federal Credit Union, Sams Club, BJs, Costco
Educational Assistance	529 Plan
Employee Assistance	An intervention program to assist the employee with issues that may adversely affect their performance
Health Insurance	Medical, Dental, Vision Flexible Spending Account (FSA)
Health & Fitness	On-site fitness center
Legal Resources	
Life Insurance	
Paid Time Off	Administrative leave (15 hours) Bonus Vacation (2 days for perfect attendance) Holiday (11 days) Medical/Bereavement Leave Sick Time (80 hours available) Vacation (12 days) Vacation buy-up plan (40 hours maximum)
Retirement Plan	401(k) with 4% employee base, 6% employer match
Special Leave	Time off permitted for life situations such as Adoption, Family & Medical Leave (FMLA), Organ/Tissue Donation

Note. Information obtained from MOA website

MOA's management prepares the workforce for changing capability and capacity needs by directly communicating those needs as soon as they are aware, typically during the annual budget planning process. The goals from the strategic plan inform the capability requirements, and subsequently the training and educational needs if the capabilities and capacities do not exist internally. The organization of the workforce

follows a traditional hierarchical structure, primarily based on job function (per Figure 3), down through to departments and individual employees. Management of the workforce occurs at the department level, involving only the paid workforce.

The workforce health, security, and accessibility derive from various visible and some not so visible mechanisms provided by MOA, which includes secured entrances and restricted access areas through encoded employee badges, security guards in the main lobby and patrolling the premises, as well as a video surveillance system. MOA's leadership also provides ADA compliant access in and around the facility for its paid workforce, some of which are available to visitors and volunteers as determined by the lobby guards. MOA's leadership supports workforce health through the benefits package it offers to all full-time paid employees (see Table 9), the published policies that govern MOA, as well as the regulatory requirements to which it must adhere as mentioned previously in the Organization Profile.

Workforce engagement. The openness of the organizational culture is evident from the top of MOA, such as the CEO-sponsored town halls and lunches, CEO Executive Blog, Grand Rounds, down to departmental meetings and huddles with the paid workforce. The paid workforce enjoys open communication through comment boxes. However, some members of the volunteer workforce can only provide input during public comment sessions for policy decisions, except for the scheduled communication that occurs between senior leadership, the paid workforce, stakeholders, and volunteers. Overall, the senior leaders of MOA, including the CEO engage mostly in two-way and some one-way communication with its entire workforce across several

venues. For the paid workforce, MOA's business leaders conduct weekly and monthly department meetings and huddles, bimonthly Performance Excellence Collaboratives, email communication as needed, monthly newsletters (for its community volunteer workforce), intranet (for the pair workforce), and other meetings held fortnightly, monthly, and quarterly (mostly with the volunteer workforce; Table 12).

MOA's business leaders determine the key drivers of workforce engagement from the results of its annual workplace dynamics survey and recently began conducting exit interviews and collecting data from that process. Additionally, the annual workplace dynamics survey is only available to the paid full-time workforce, not the volunteers, and it is unclear whether the committee or community volunteers have an opportunity to be heard. However, the addition of the volunteer coordinator position in 2017 may bring greater focus and organization to its largest workforce segment.

Senior leaders also review the progress of work processes concerning the strategic objectives, identifying barriers, and reinforcing the importance of the mission. However, it is unclear if a reevaluation of the work process occurs if barriers exist or required resources are insurmountable. It is also unclear how senior leaders reinforce the importance of the mission to drive workforce engagement and subsequently high performance. Senior leaders of MOA empower its paid workforce to identify professional development goals for themselves and annually budgets funding for this endeavor, with manager approval. It emphatically stated that the human resources department evaluates the performance management system annually and that cycles of improvement have occurred. On a quarterly basis, department managers review the progress of the planned

goals, adherence to core values, and management competencies, and evaluates these factors to determine annual merit increases for full-time paid employees.

MOA's senior leaders engage in a mixture of learning and development tools to support its needs and development of its workforce. There are approximately seven approaches employed by MOA leadership to reach its paid workforce, contractors, and committee volunteers. All workforce segments participate in general orientation and instructional innovations webinars, with the paid workforce participating in personal development goal setting, annual training, grand rounds, and book club/reviews. The volunteer workforce leadership received leadership training much like the paid workforce.

MOA's senior leaders have some plans and ideas in place for senior and executive levels of the workforce, but the preparation of the lower levels of the workforce for leadership positions, career progression, or succession planning for the future sustainability of the organization is not apparent. Senior leaders of MOA recently added an organizational development leader who is responsible for developing, launching, and managing the career progression program.

Operations

Work processes. Key work products and work processes are those activities that deliver stakeholder value and help MOA achieve success and sustainability. MOA's senior leaders adopt key work product and process requirements based on input or request from customers and stakeholders through the listening posts mentioned earlier, as well as its binding contractual requirements from the NETWORK.

Matching is a key work system as part of MOA's function as the operator of the NETWORK and involves the use of multiple allocation systems based on the type of [redacted] while maximizing [redacted] allocation. Quality is a second key work system because MOA's business leaders must provide the oversight for safe, efficient, and effective care, and is a core system they have integrated through the [redacted] quality department. The [redacted] quality department provides monitoring and conducts site visits at the respective organizations to ensure there is policy adherence as well as safe and effective [redacted]. The data component is not a core competency per se, but an essential work process that serves as the connecting link to the other two core competencies and involves collecting and analyzing patient-level data obtained from the [redacted] centers in the NETWORK. The culmination of these three work processes: match, data, and quality results in the transmission of an electronic [redacted] offer [redacted] for potential recipients. It is unclear if the AGENCY[redacted] or a third-party conduct audits or inspections of MOA's compliance with regulations or adherence to the allocation policy as it pertains to its operation of the NETWORK, as opposed to MOA policing itself.

Business leaders of MOA have defined four key processes in support of their key work systems: Develop, Implement, Operate & Support, and Evaluate (see Figure 9).

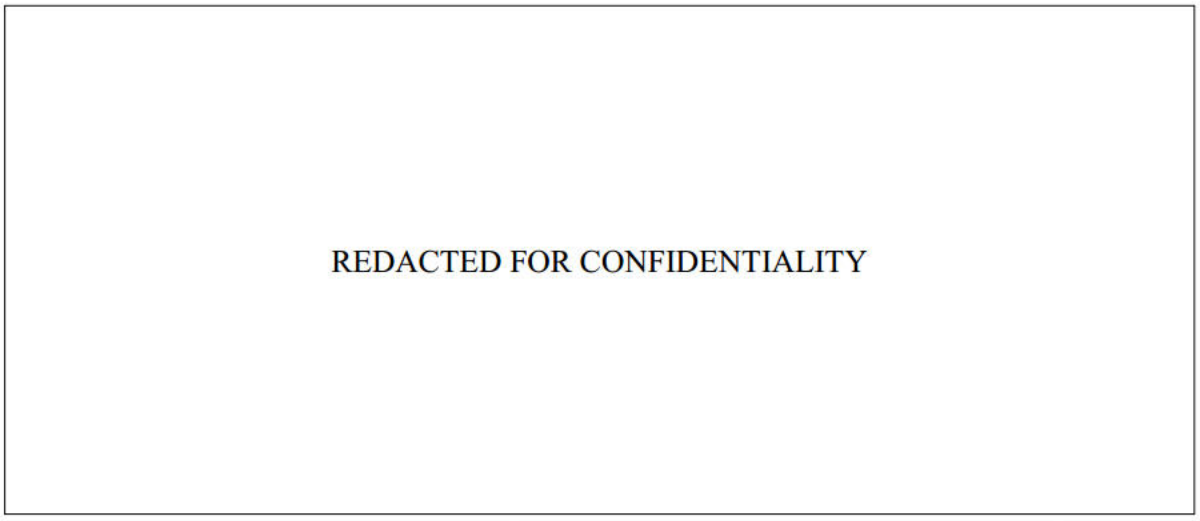

Figure 9. MOA's key work systems (match and quality) with supporting key processes. Adapted from organization documents by MOA, 2017.

The ultimate goal of the work processes is to meet the NETWORK requirements of providing efficient, timely, accurate allocation of limited [redacted] in a safe manner and compliance with allocation policies/bylaws. With input from customers and stakeholders, MOA's leadership begins the process of evaluating and determining the best solution with minimal impact to its stakeholders, gaining approval for resources (human, tangible, and financial), and working on implementing changes. MOA's leadership forms cross-functional teams and involves them from initial development through to post-implementation. Doing so permits MOA's leadership to capitalize on the knowledge and experience of its workforce and demonstrate transparency in its policy/bylaw development and system enhancement process. At a minimum, these teams consist of members from the following areas:

1. Research department

2. Information Technology department
3. [redacted] Quality department
4. Regional Administration (from the NETWORK)
5. Communications department

Some work products also arise from within MOA's operations and go through an approval process, with the respective individuals or groups recognized accordingly for their efforts. Work processes also evolve in support of the work products through experiential and evidence-based means, with additional steps involving three focus areas (Figure 10).

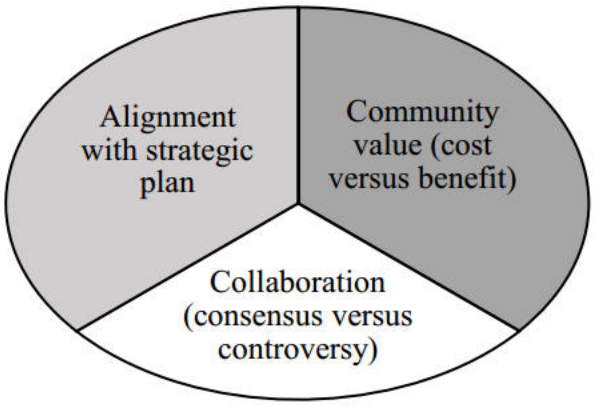

Figure 10. MOA's focus areas of work product and work process design. Adapted from organization documents by MOA, 2017.

Senior leadership and department heads' use of corporate dashboard and intranet-based performance information respectively is the primary means through which they receive updates, and from which they may take action to delve further into an objective or initiative. MOA's senior leadership expect department heads to keep abreast of what is

occurring in their area, notifying them of progress, delays, and challenges on a regular basis. At least annually, progress sharing and learning also occur during the interdepartmental Performance Excellence Collaborative sessions.

The strategic plan is the key driver of objectives and informs the senior leadership's decision of what they consider as the key support processes, and in turn, enable business leaders of MOA to deliver on its contractual requirements from the NETWORK. MOA's business leaders stated that its key work processes are: (a) information technology security and operations, (b) meeting planning, (c) management of facilities, (d) human resources, and (e) finances.

MOA's business leaders improve its work processes based on input from customers and stakeholders, as well as through self-assessment of its internal operations. Business leaders of MOA use PDSA, LEAN, its Performance Excellence Collaborative sessions, a handful of other improvement systems that it feels best fits the task, and most recently the Baldrige Performance Excellence framework. However, it is unclear if MOA's business leaders systematically deploy these tools to enhance its core competencies or reduce variability.

MOA's supply chain evolved out of necessity, and it manages some areas more robustly than others. It is unclear if MOA's leadership has a vendor performance or evaluation process in place for all suppliers (consumables, hardware, services, and software), whether it tracks its supplier's performance over time, and whether it uses that information to guide future procurement decisions. MOA's senior leaders perceived its supply chain as depicted in Figure 11 and emphasized that it employs the services of two

vendors (one primary one failover) for electronic [redacted] notifications. It is also unclear if MOA's designees periodically test the service delivery of the second electronic notification vendor to assure its continued reliability.

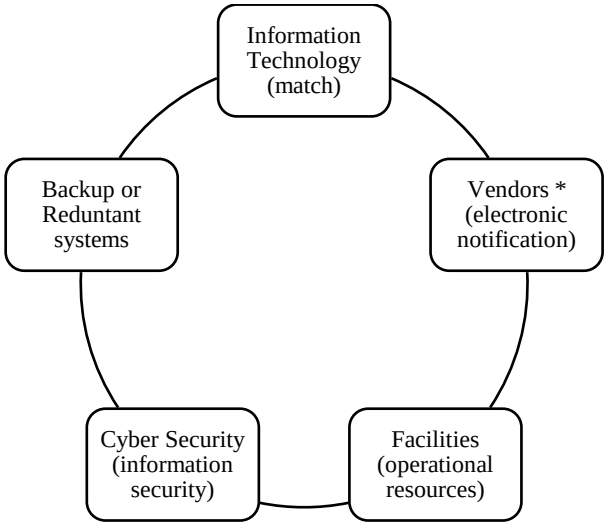

Figure 11. MOA's operational supply chain.

MOA's senior leaders pursue opportunities for innovation primarily through two channels: customers and employees. The executive committee reviews suggestions for innovation and evaluates them against the strategic plan and associated objectives. It is unclear how or if the senior leaders of MOA decide to terminate an initiative if it is no longer necessary, whether they track all innovation suggestions for historical purposes or until a need or resource arises. Additionally, MOA's business leaders employ the customer listening posts as mentioned in customer engagement.

Operational effectiveness. Overall operational cost control occurs through several steps including periodic and annual budgetary review, levels of approval before procurement, as well as BOD oversight and approval in conjunction with the

procurement policy for expenditures. Real-time tracking of expenses versus budgetary requirements is available to all department leaders as soon as the finance department has made all system entries. Fiscal accountability and responsibility assured through monthly reviews by senior leaders and department leaders, examining variances and value to the community, as well as quarterly reviews of similar reports by the finance department.

The chief technology officer is responsible for ensuring the reliability of the information system, and through the direct reports, conducts cybersecurity awareness training and familiarization for the paid workforce, facilitates internal and external threat assessments through drills and debriefs, and improves the system accordingly. MOA's information technology team monitors system performance and availability issues through the use of preconfigured alerts and notifications, and periodically tests switchover to the operation of the redundant hot site. At least once every three years, MOA's business leaders evaluate its information system components to determine if it needs to incorporate additional redundancy or high-availability systems to assure its reliability and availability. Technology is changing at a rapid pace, and three years may be too large a window for review, with systems remaining in a vulnerable position for an unsatisfactory period. Senior leaders of MOA may wish to consider conducting its business impact analysis at least quarterly, but ideally within a few months of completing a system change or enhancement. However, MOA's senior leaders go a step further, employing the services of its Data Quality group to check for data inconsistency across the system and with its NETWORK members in the data sharing network.

The information technology department subscribes to intrusion detection, antivirus, secure mail, encryption, restricted access, external penetration testing, and other hardened services to protect its information system and the patient-level data that resides in its system as well as the organization's operational data. Moreover, the entire paid workforce accesses the information system by authenticating against the active directory with credentials and permissions granted to them for their specific tasks and areas of responsibility. The senior leadership of MOA participates in quarterly incident response drills, and the entire workforce participates in unannounced third-party penetration testing and social engineering which are impactful in simulating real situations and subsequently securing those assets from unauthorized entities.

MOA's business leaders provide a safe operating environment through its use of secured and restricted areas in its facilities that are accessible through badge swipe, through the daily visible presence of security officers on 24x7-hour shifts, and surveillance cameras. These services are available at both operational facilities, but it is unclear what security complement exists at the hot site or if MOA's readiness team conducts penetration testing at the hot site.

MOA's business leaders ensure its preparedness for disasters or emergencies by conducting planning and training exercises themselves and conducting drills through a third-party entity (Table 10). Presently, there are two levels of drills: crisis and fire, with the former limited to senior leaders and the latter open to all members of the paid workforce. As part of their business continuity efforts, MOA's senior leaders employ teams comprised of members from the workforce, to manage the planning and training,

and holds its staff accountable for updating the business continuity plans. The business continuity planning application and associated data is externally hosted and readily accessible to all authorized members of the workforce. Additionally, it is unclear if individuals whom leadership identified as having leadership potential receive crisis training.

Table 10

Summary of Emergency Disaster Preparedness Actions

Action	Frequency	Description
Plan	Every two months	Review and revise emergency and safety materials
Plan	Quarterly	Departments review and update their business continuity plans
Plan	Every two years	Department continuity plans reviewed by the organization to determine if IT or Facility needs have changed and revised accordingly
Train	Every two months	First Aid and Automated External Defibrillator (AED) training for the entire paid workforce as opposed to the previous policy of a select few
Drill	Twice a year	Crisis drills and table-top exercises conducted by an external entity for the senior leaders Fire drills conducted by the organization for the paid workforce

Note. Adapted from organization documents by MOA, 2017.

Measurement, Analysis, and Knowledge Management

Measurement, analysis, and improvement of organizational performance. Business leaders track data and information on daily operations and overall organizational performance through their customized corporate dashboards down through to department specific measures. Individual departments monitor their progress and have an opportunity to share updates monthly, during quarterly check-ins, and annually during

their performance evaluation and Performance Excellence Collaborative sessions. As part of their contractual requirements, the organization provides quarterly updates to the AGENCY[redacted]. There are silos of data collection and analysis which the organization plans to streamline and standardize across the enterprise and subsequently, refine the corporate dashboard accordingly. Additionally, the organization seeks to engage in interdepartmental sharing of improvements, cycles of learning, successes and failures across the organization to better serve the needs of its customers and stakeholders.

Business leaders of the organization have been scouring various sources in search of comparative data to support fact-based decision-making. Business leaders of MOA have found it challenging to locate direct comparative data from smaller competing entities or other sources due to the uniqueness of their core business and the fact that very little published information exists in this regard. However, business leaders have been using their historical data, and have begun to consider sources of comparative data outside of the healthcare industry.

MOA's business leaders collect voice-of-the-customer and market data information from a variety of listening posts mentioned earlier that are not necessarily integrated, such as enhancement requests, public comments, meetings, and an annual survey. The internal customer council evaluates enhancement requests at least quarterly or as needed, based on themes, repeat requests, and member segmentation to determine the feasibility of integration with the current or future strategic plan.

MOA's business leaders use a variety of tools (ISO, Lean, PDSA, and most recently the Baldrige Performance Excellence framework) for performance management;

however, it is unclear if MOA possesses a centralized, integrated system used by all departments for daily operations, and which can support unexpected changes that occur internally or externally. The organization has empowered its leaders to collaborate, monitor, and manage the resources and priorities as needs change, and stated that the frequent scheduled interaction of its business leaders (see Table 11) enables timely response to rapid or unexpected changes.

Table 11

Performance Management Review Process

Primary Attendees	Secondary Attendees	Meeting Frequency	Scope or Function
Directors	Senior Leaders Department Leaders	Every two months	Progress updates of projects and initiatives Discuss current/changing needs
Executive Team	Senior Leaders	Weekly	Prioritization of projects and initiatives Resource allocation/deallocation

MOA's leadership in conjunction with statisticians review organizational performance and capabilities through customized corporate dashboards, primarily relating to components of the [redacted] network, such as the number of [redacted] [redacted] registrations, and [redacted] donors. However, it is unclear if the organization can track its capabilities down to the department level to obtain an accurate account of the consumption or demand of those resources. The organization is aware that the information technology resource is both a bottleneck and an enabler of customer

satisfaction and has instituted interdepartmental leadership reviews of the IT resource and roadmap.

MOA's business leaders use its customer-facing listening posts to solicit input and suggestions for desired services or enhancements. The corporate affairs committee uses this information to prioritize the strategic objectives and establish the overall organizational performance. The corporate affairs committee receives input from the information technology advisory committee on matters relating to information technology strategy, performance standards, and NETWORK contractual requirements. However, it is unclear how the organizational and information technology performance reviews influence opportunities for improvement or innovation.

Information and knowledge management. MOA's business leaders stated that it manages its patient-level information and proprietary matching network differently from its business operations network. While it is unclear if both systems share the same infrastructure, it appears that MOA's leadership relies on its Information Technology and Data Quality teams to conduct quality assessments and validations of member-supplied data bound for its proprietary matching network. Department leaders verify and ensure the quality of their department-level data themselves and rely on subordinates to verify some aspects of their work.

Business leaders of MOA ensure the availability of organizational data and information through their use of data replication to its hot-site, backup generators, and uninterruptible power supplies. Information security permissions restrict user access to the network and other resources and may change based on personnel needs. Presently, the

organization conducts an annual permission survey of its UNet but acknowledged that no such survey exists for its organizational network. MOA's business leaders can consider enhancing their service support portal to include permission changes and other user services as personnel needs change, subject to supervisor approval, rather than conducting an annual survey to determine if there is a mismatch between actual versus desired privileges. In recent years, MOA's information technology department has undertaken initiatives to improve and upgrade the information systems related to matching and analytics. However, it is unclear if MOA's information technology team engages in a wholesale or phased scheduled refresh of information technology resources related to its corporate operations.

The paid workforce shares best practices, lessons learned, and mistakes made, and the results of their performance improvement projects with their departmental peers, and in an open forum with other departments during their bimonthly Performance Excellence Collaborative. The organization plans to collect, classify, and categorize information from the Performance Excellence Collaborative sessions for future retrieval across the enterprise.

Individuals within MOA use their knowledge and resources to conduct research on system and enhancement requests, to take advantage of best practices and organizational learning, and transfer that success to its solution development efforts. The organization also forms cross-functional teams to share knowledge across the organization, to share project and departmental experience. The results of the annual workplace dynamics survey indicate improved interdepartmental cooperation. However,

it is unclear if the organization collects and categorizes this knowledge in a central repository for future retrieval and analysis over time.

Collection, Analysis, and Preparation of Results

Product and Process Results

MOA's key work processes are matching and quality (Figure 9), where policy/bylaw revision or change appears to represent approximately 80% of the work process involvement. To that end, MOA's business leaders provided data around public comments, proposals approved by consent, policy correction rates (per 1000 lines of policy), and BOD approval rate of software projects. While this data demonstrated favorable trends, it is unclear how these results accurately represent the customer service process.

The data presented by MOA's leadership team for its process effectiveness and efficiency cover varying timeframes: four months, 12 months, two, three, and four years. These inconsistencies may be indicative of MOA's infancy in developing measures of efficiency and effectiveness for its processes. Some useful measures presented included [redacted] Usability, [redacted] Availability, [redacted] Runs Exceeding 2 Minutes, and Waitlist as shown in Figures 12 through 14 respectively. Overall, the majority of custom applications profiled exhibit a favorable trend (increased ease of use). However, the [redacted] application remains an ongoing challenge and has continued to present in the neighborhood of 20%. MOA's designees also conduct verifications of its data against medical records to improve accuracy and assure policy compliance. Business leaders provided measures of servers' exploitable vulnerabilities, the volume of report

downloads, and data submission completeness as indicators of its process performance. However, it is unclear how such measures relate to the key processes outlined in Figure 9.

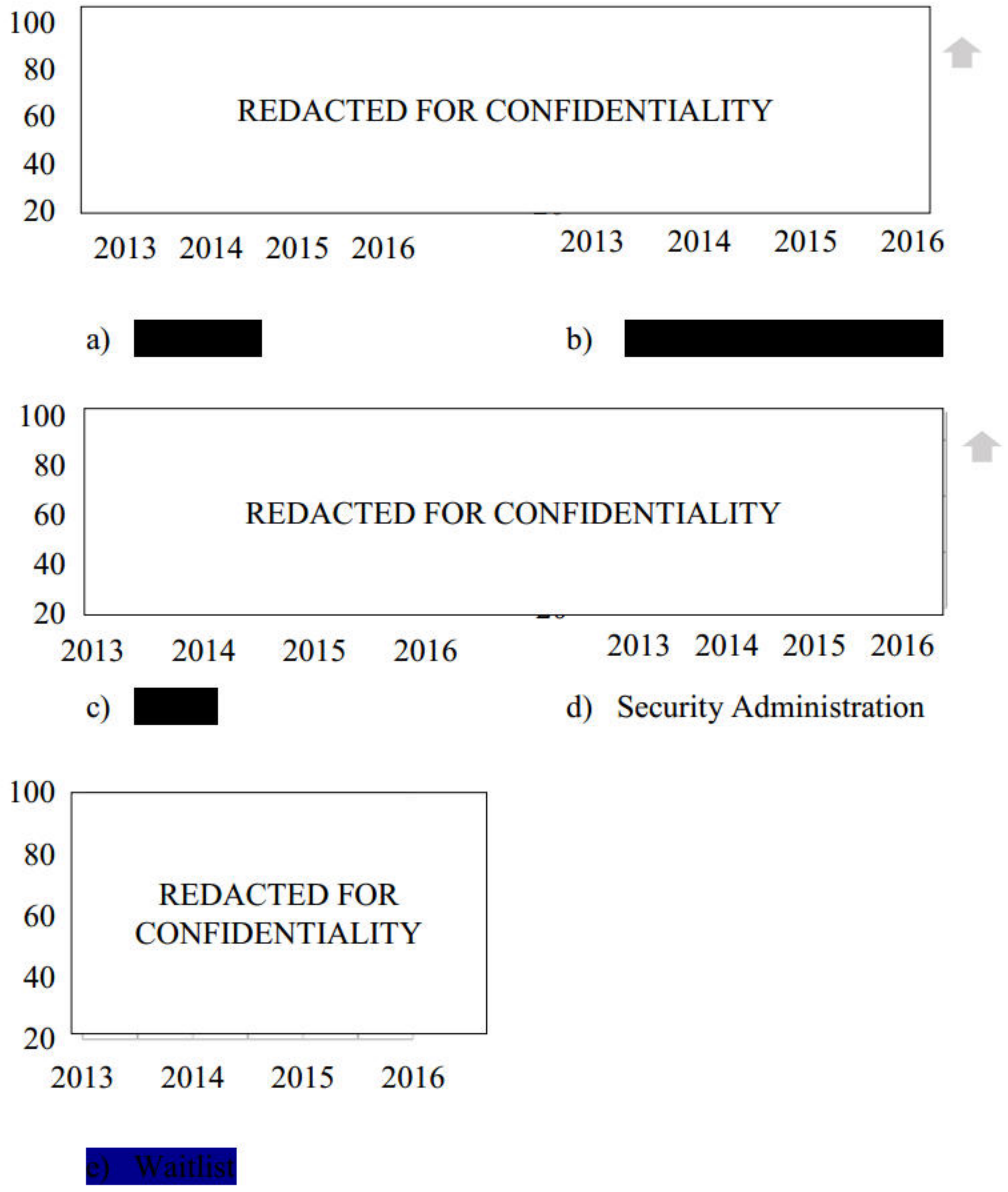

Figure 12. MOA's [redacted] usability by application. Adapted from organization documents by MOA, 2017. The up arrow indicates a beneficial trend.

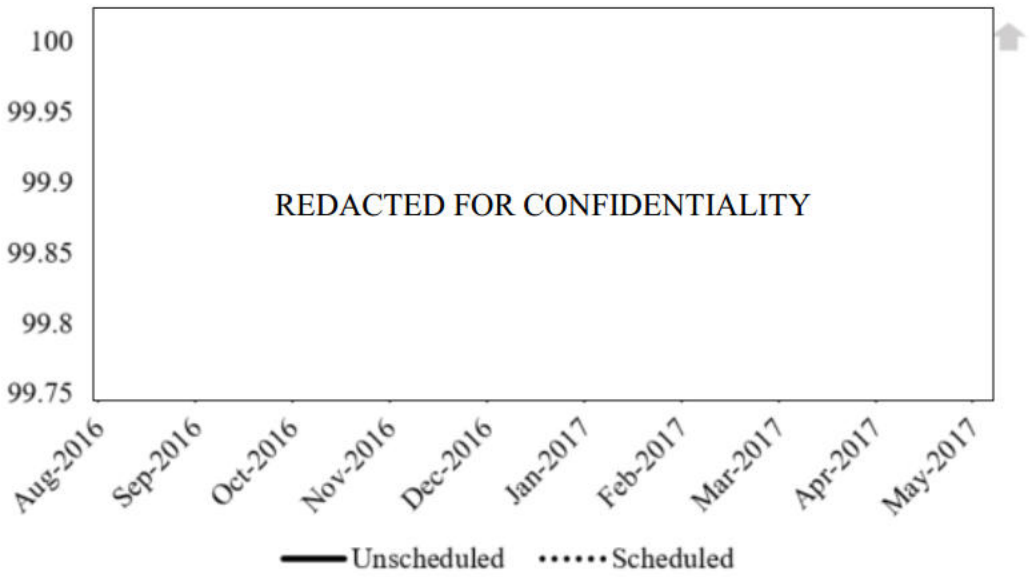

Figure 13. MOA's [redacted] system availability (unscheduled versus scheduled). Adapted from organization documents by MOA, 2017. The up arrow indicates a beneficial trend.

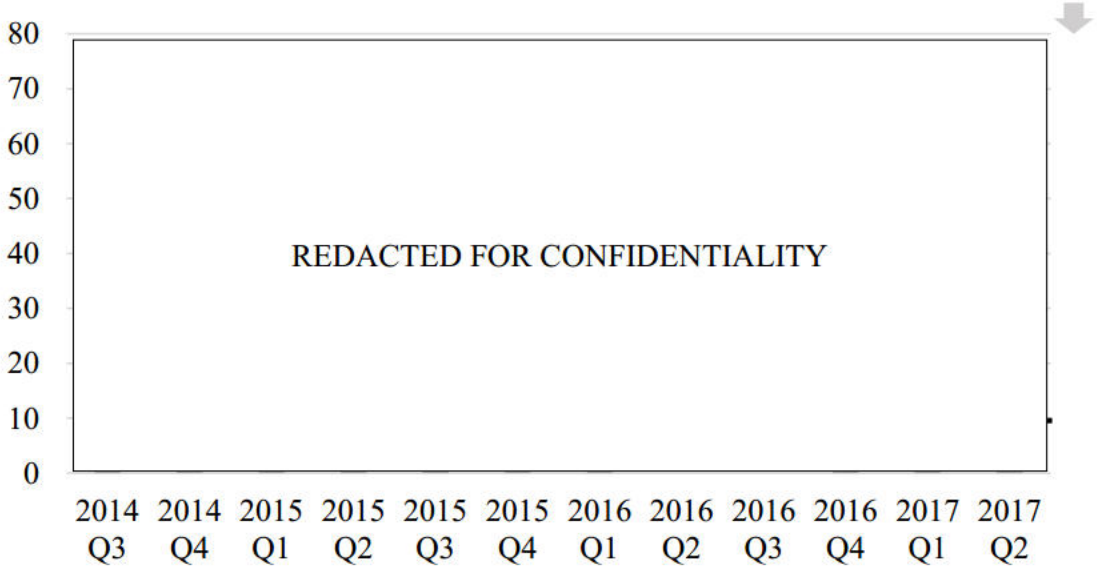

Figure 14. MOA's quarterly [redacted] runs exceeding 2 minutes. Adapted from organization documents by MOA, 2017. The up arrow indicates a beneficial trend.

Business leaders of MOA indicated that it performs drills and readiness for information security and emergency evacuation annually but did not share data regarding its safety and emergency preparedness results. Other than what the organization shared about its operational supply chain earlier (Figure 11), it did not provide information regarding its performance measures and how it contributes to the enhancement of its performance. The organization provided data for two years of security awareness training scores and indicated scoring upwards of 91%, so this is an encouraging start (Figure 15). The information provided by the organization in Figures 13 and 14 may also apply here.

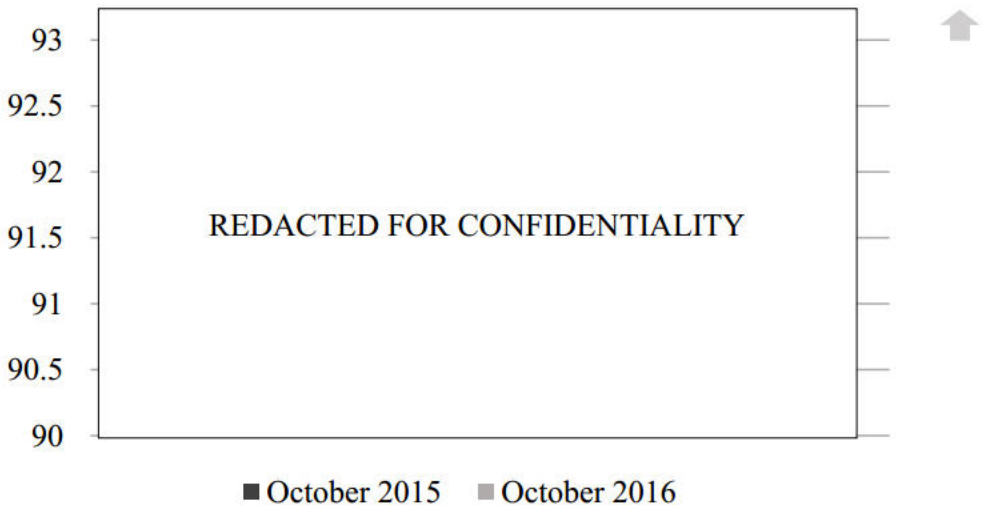

Figure 15. MOA's annual security awareness training (average scores). Adapted from organization documents by MOA, 2017. The up arrow indicates a beneficial trend.

Customer Results

Business leaders of MOA conduct member satisfaction surveys with the [redacted] centers, [redacted], and other members of the NETWORK. While the organization provided data from its [redacted] program site surveys [redacted]

[redacted], it did not provide data explicitly relating to customer satisfaction and dissatisfaction, except for scores from the [redacted] program site survey. The scores from the [redacted] program site survey, though favorable, appears disconnected from the usability measure. It is unclear if the structure of the current survey mechanism is sufficient to provide actionable information to the organization and in turn, positively influence the application usability effort.

MOA's business leaders monitor customer engagement of its NETWORK members by tracking institutional attendance at its fall and spring regional meetings as well as the institutional use of regional administration services for [redacted] regions of the NETWORK. MOA's leadership team indicated that they direct engagement efforts to regions where attendance falls below 85% or use of regional administration support services falls below 75%. Overall, it appears that 36 percent (4 regions) are at or falling below the defined threshold in both areas, and would, therefore, receive increased engagement efforts from MOA.

MOA's business leaders evaluate its engagement with AGENCY[redacted] as meeting the intended objectives of each meeting. It is unclear whether the AGENCY or MOA's senior leaders determine the objectives for each meeting, and whether those measures are truly impactful. Additionally, AGENCY[redacted] evaluates MOA per regulations contained in the Contractor Performance Assessment Reporting System across six areas: cost control, management, quality, regulatory compliance, schedule, and utilization of small business. The available data indicated that except for a satisfactory

rating for regulatory compliance in 2014, MOA has consistently ranked *Very Good* in meeting all requirements (Figure 16).

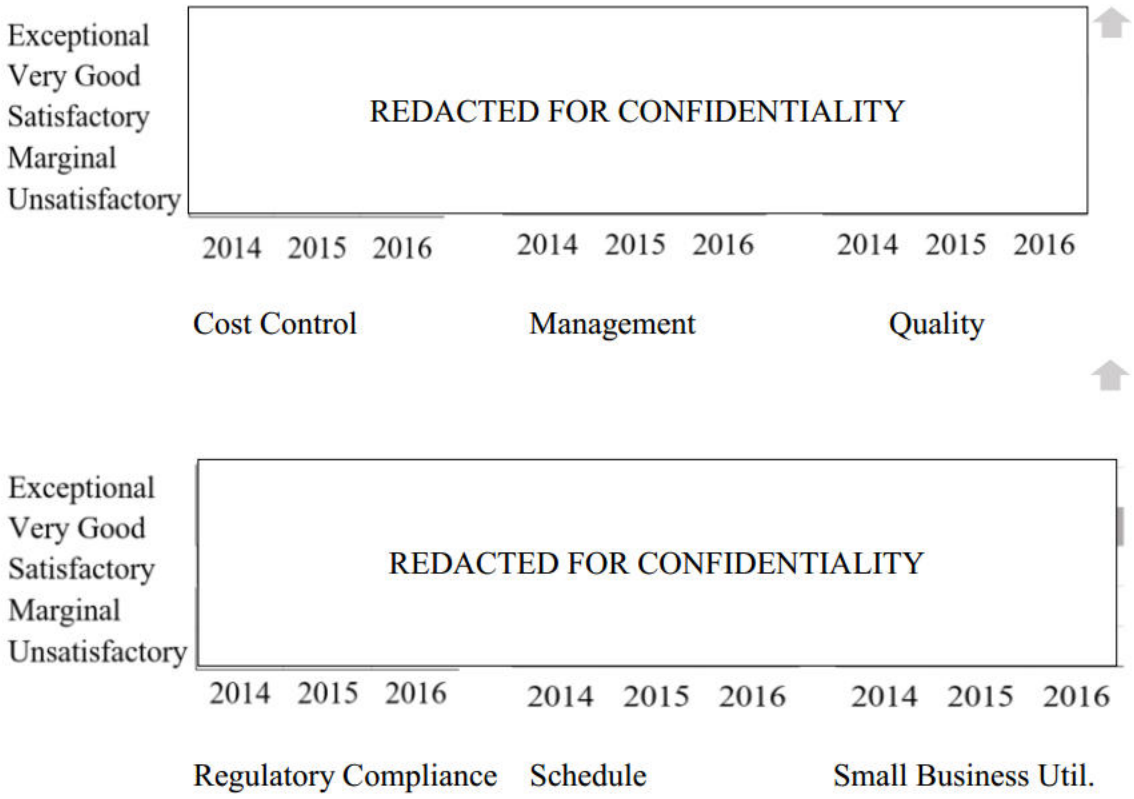

Figure 16. MOA's contractor performance assessment reporting system scores for operating years 2014 to 2016. Adapted from organization documents by MOA, 2017. The up arrow indicates a beneficial trend.

Workforce Results

Organizations that build workforce capabilities and capacities are better prepared to ensure the sustainability of the enterprise (Schalock et al., 2014). Business leaders of MOA face challenges when trying to plan its workforce needs for the services it wishes to provide, such that they have sufficient time to acquire the necessary training and

experience. Selden and Sowa (2015) stated that it was important for organizations to provide a healthy environment by developing future leaders from within the workforce.

Workforce climate refers to the shared perceptions and attitudes that its workforce observes across the organization. However, the organization did not provide data to substantiate this component. The organization indicated that it engages the workforce at various venues and times of the year as mentioned previously and that its leadership is very involved in that endeavor (Table 12). During these engagement activities, the organization communicates or acts on one or more areas of focus which may include: the mission vision values, strategic or action plan, knowledge transfer, continuous improvement, and innovation, as well as reward and recognition.

Table 12

Workforce Engagement Activities

Venue	Frequency	Direction Participants
Board Meetings	Twice Yearly	REDACTED FOR CONFIDENTIALITY
CEO Executive Blog	Ongoing	
CEO Sponsored Lunch	Monthly	
CEO Sponsored Town Hall	Twice Yearly	
Comment Boxes	Ongoing	
Committee Meetings	Monthly	
Department Huddles	Weekly	
Department Staff Meetings	Monthly	
Directed Email Communication	Ongoing	
Directors Meeting	Twice Monthly	
Grand Rounds	Quarterly	
AGENCY Meetings/POM Meetings	Quarterly	
Intranet Portal (Internal)	Ongoing	
Performance Excellence Collaborative	Twice Monthly	
Public Comment	Twice Yearly	
Regional Meetings	Quarterly	
[redacted] Pro Website	Ongoing	
Volunteer Newsletter (Ambassadors)	Monthly	

Note. OW = One Way, TW = Two Way (direction of communication). W = Workforce (paid full-time), C = Customer, CoV = Committee Volunteers, CyV = Community of Volunteers. Adapted from organization documents by MOA, 2017.

The workforce satisfaction and engagement data provided by the organization showed that it was consistently outperforming the benchmark data contained within the workplace dynamics survey. However, it does not appear that the organization solicits similar input from the volunteer workforce. Table 13 shows the nine areas around which MOA's senior leadership solicits workforce input through its annual workplace dynamics survey regarding engagement and satisfaction.

Table 13

Components of Workforce Engagement and Satisfaction Survey

Job Characteristics	Organizational Support
Encouragement (of ideas)	Appreciation
Meaningful (work)	Attitude (healthy)
Supportive manager	Caring leadership
Valued (efforts)	Cooperation (interdepartmental)
	Supportive organization

Perceived job characteristics and perceived organizational support are two profoundly influential factors affecting job satisfaction and turnover (Knapp et al., 2017). The areas around which MOA's business leaders survey its workforce appears to encompass job characteristics (autonomy, the variety of skill and task significance, task identity, and

feedback) as well as the organizational support (the relationship between employee and organization) (Knapp et al., 2017). Figure 17 shows the workforce turnover for MOA's new hires and permanent employees from 2014 to 2016, and Figure 18 shows the accompanying retention rates. However, the overall trend for both permanent and probationary new hires appears to be on the rise.

Figure 17. MOA's workforce turnover for operating years 2014-2016. Adapted from organization documents by MOA, 2017. The down arrow indicates a desirable trend.

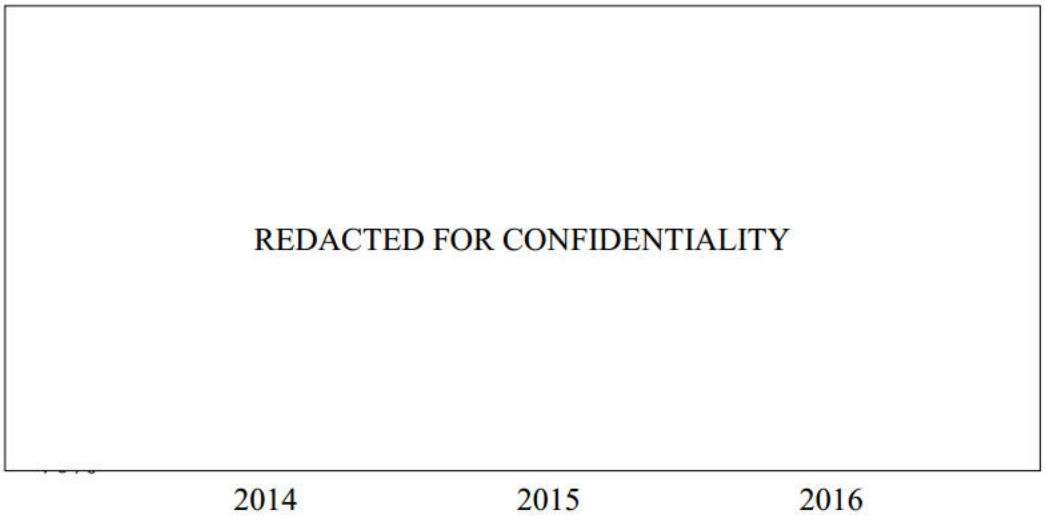

Figure 18. MOA's workforce retention for permanent employees for years 2014-2016. Adapted from organization documents by MOA, 2017. The up arrow indicates a desirable trend.

MOA's business leaders stated that the organization experienced an 11% increase in its workforce capacity, but it is not apparent whether or what proportion of those new hires backfilled vacant positions from within, or if the growth stemmed from direct external hires. The workforce distribution (Figure 19) shows that over 50% of MOA's workforce has spent five or more years with the organization, and the next largest, nearly 30% has been with the organization for less than two years. This large body of experienced personnel at both ends of the tenure spectrum represents a valuable pool upon which the organization can draw to raise the capabilities of the lesser tenured groups.

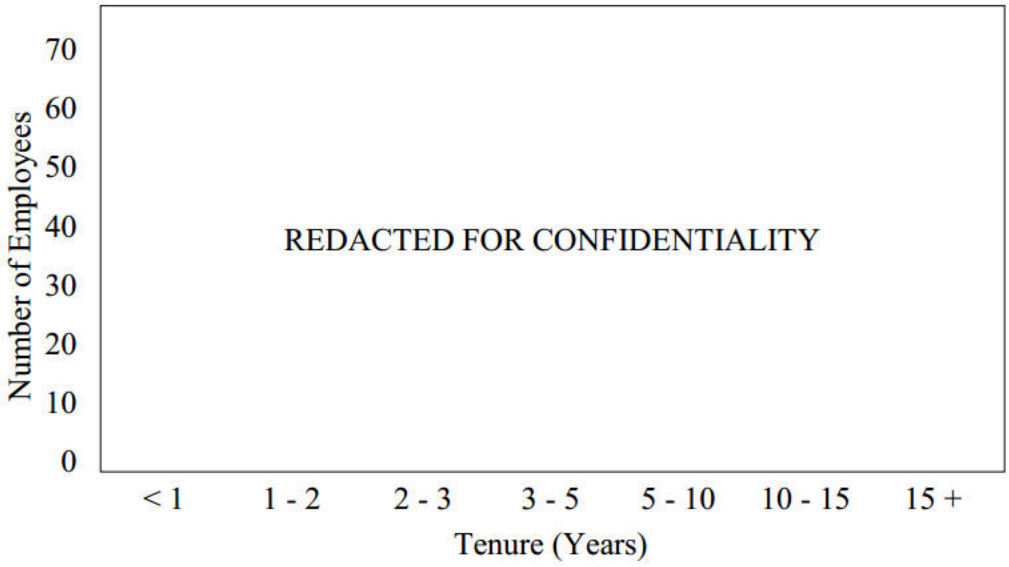

Figure 19. MOA's workforce complement by years of tenure with the organization. Adapted from organization documents by MOA, 2017.

Leadership and Governance Results

The organization evaluates senior leader communication and engagement with the workforce and customers (members) through the annual workplace dynamics and member survey tools respectively. MOA's senior leaders shared trend information (Figure 20) on four specific questions from their workplace dynamics survey during the years 2013 to 2016. Ethical behavior and trust as seen through the eyes of MOA's workforce (Figure 20 d) shows a favorable trend, as does leadership communication to the workforce (Figure 20 b). According to the workforce responses, the data indicates there is room for improvement regarding whether the organization is moving in the righ direction or senior leaders understanding of what is happening (Figure 20 a and c).

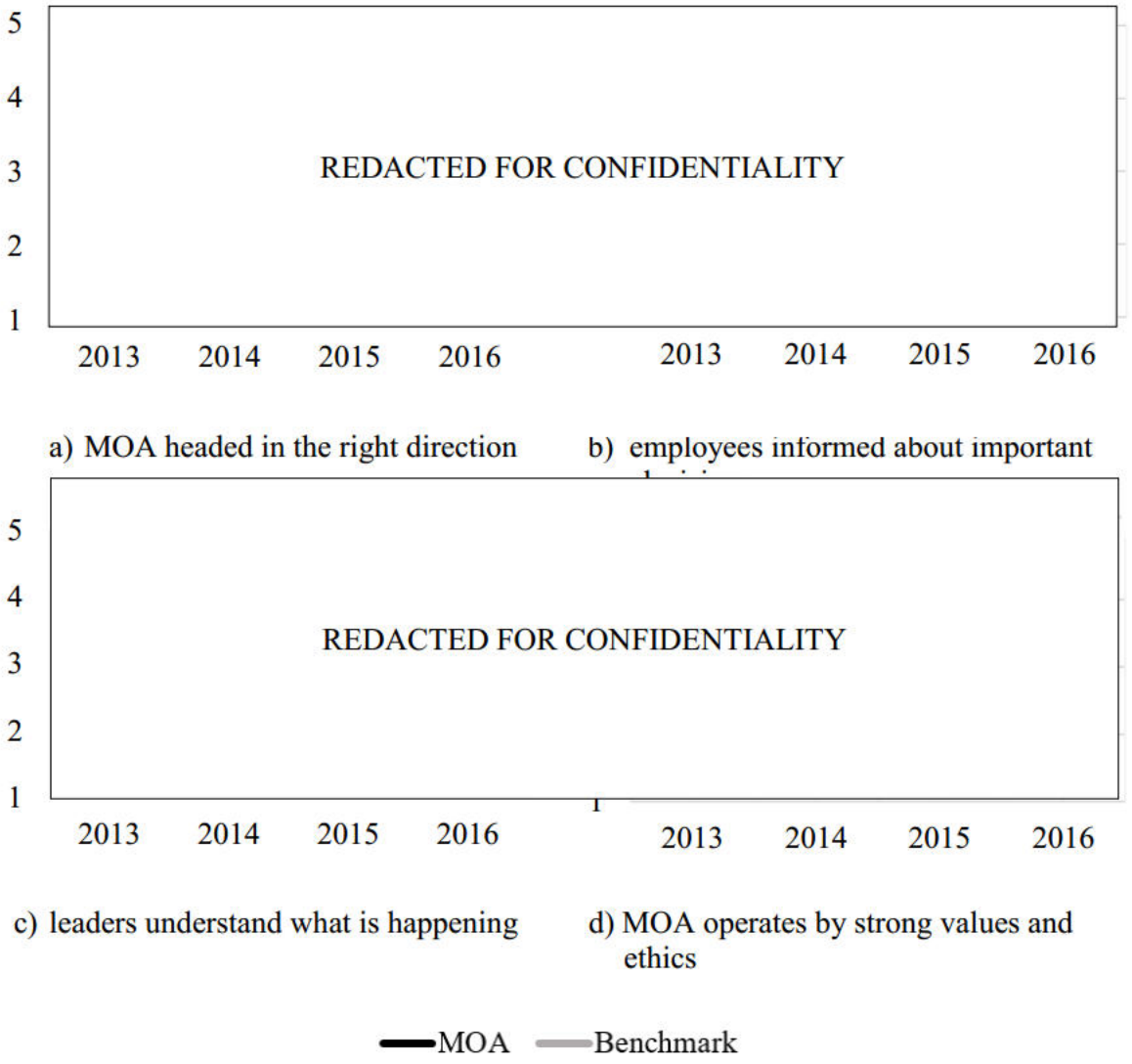

Figure 20. MOA's workplace dynamics survey responses for operation years 2013 to 2016. Adapted from organization documents by MOA, 2017. The up arrow indicates a desirable trend.

MOA's senior leaders provided information from its BOD self-assessment on meeting effectiveness, problem-solving, recruitment, and awareness of their responsibilities at this point (Figure 21). Agreement measures more than 75%

demonstrate desired strength in that area. However, MOA's senior leaders did not share trend information.

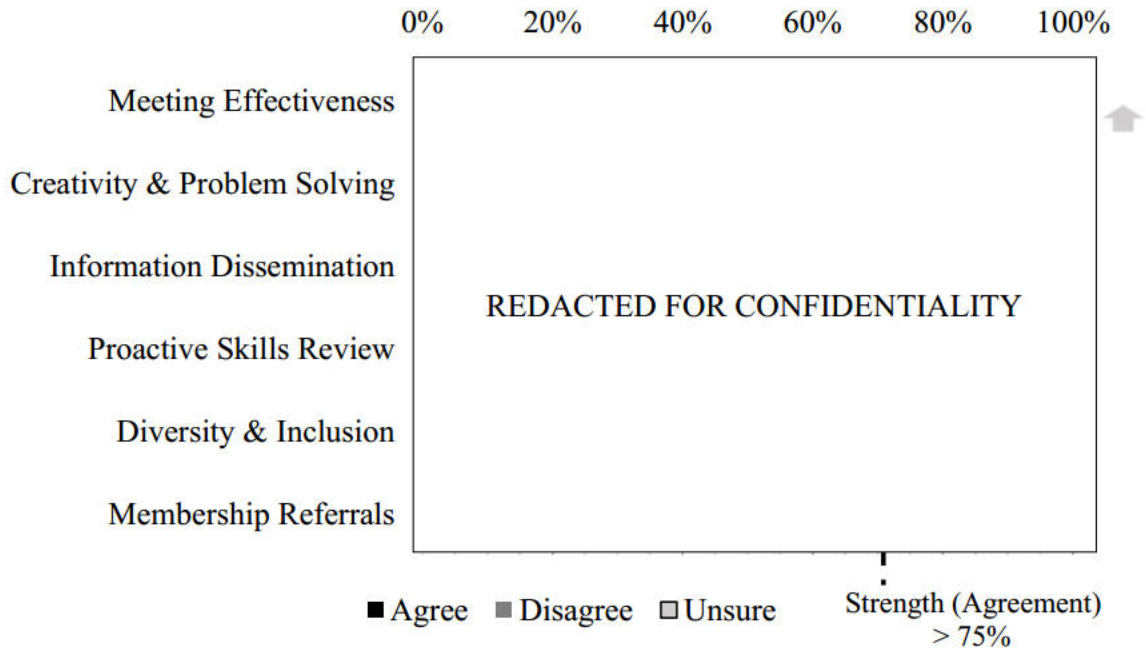

Figure 21. MOA's BOD self-assessment of engagement and recruitment activities. Adapted from organization documents by MOA, 2017. The up arrow indicates a desirable trend for agreement.

As evidence of governance accountability, MOA's business leaders provided trend information regarding the alignment of project plans to the associated strategic plans. However, the process by which MOA's leadership compiles and analyzes this information is unclear, but all appeared to show a downward (beneficial) trend from July 2015 to July 2017, MOA's senior leaders should seek an impartial perspective of the assessments conducted by the BOD and senior leadership from an external entity. The organization did not share results from its legal and regulatory compliance, societal well-

being and support of key communities, or achievement of organizational strategy and action plans.

Financial and Market Results

The nonprofit classification is a tax status, not an operating model, and business leaders must constantly balance money and mission, even MOA with its reliable revenue stream. Unlike most nonprofit organizations where upwards of 40% of its funding originate from individual and corporate donors; senior leaders of MOA obtain its primary source of revenue from the fees (see Figure 22) charged to list a [redacted] recipient in the database. While registration fees have remained relatively flat until 2012, MOA's senior leaders increased its registration fees by 22% in 2013 to absorb the costs of infrastructure and system improvements; they have since kept registration increases below 5%.

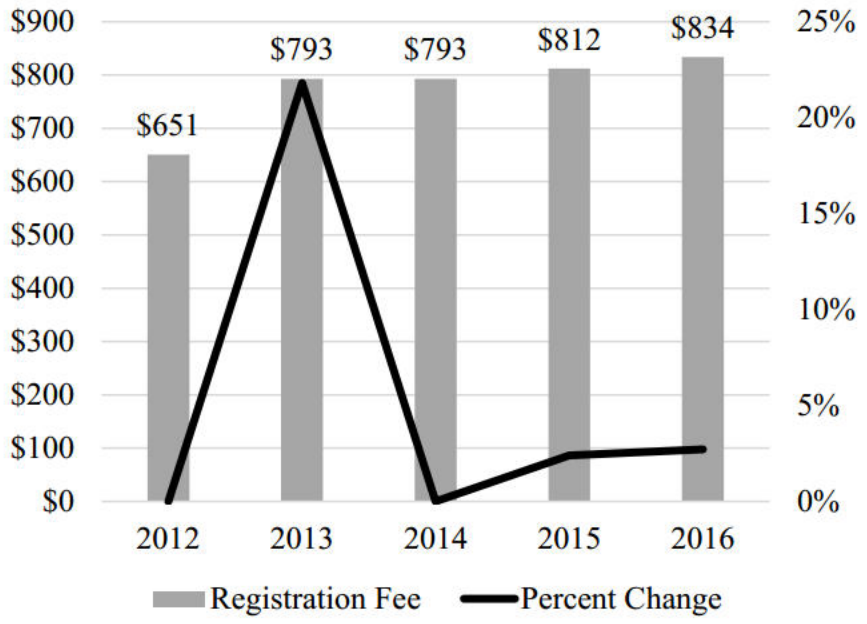

Figure 22. MOA's recipient registration fee and percent change for tax years 2012 and 2016.

The [redacted] registration fees collected by MOA accounts for almost 80% of its revenue stream. On page 2, the "Statement of Program Service Accomplishments" per section 3 of IRS form 990 is an opportunity for nonprofit organizations to tout their accomplishments. Additional content located in schedule O to describes matters not immediately clear from the concise information in section 3 of the IRS tax form. MOA's finance director consistently listed three uncoded services on its tax returns during the tax years 2012 thru 2016:

1. NETWORK Administration (computer matching, [redacted], and distribution [redacted])
2. Data Analytics (to increase efficiency, equitable allocation, and policy development)
3. Education ([redacted] information to professionals and the public)

Figures 23 and 24 show the related expense and revenue reported for each of these three services for tax years 2012-2016. NETWORK administration (Figure 23) is the largest of the three and which, during tax years 2012-2013 showed expenses closely matched revenue and since 2014, appears to show that MOA is carrying forward a positively healthy income position.

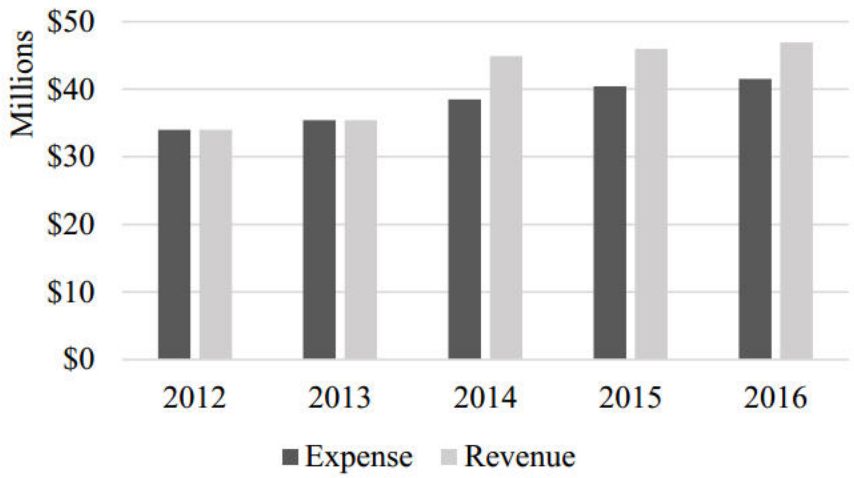

Figure 23. NETWORK administration expense and revenue for tax years 2012-2016.

Data analytics revenue and expense (see Figure 24) in the early years demonstrated significant gains in income that has eroded in later years (2014-2016), and similarly so with education expense and revenue.

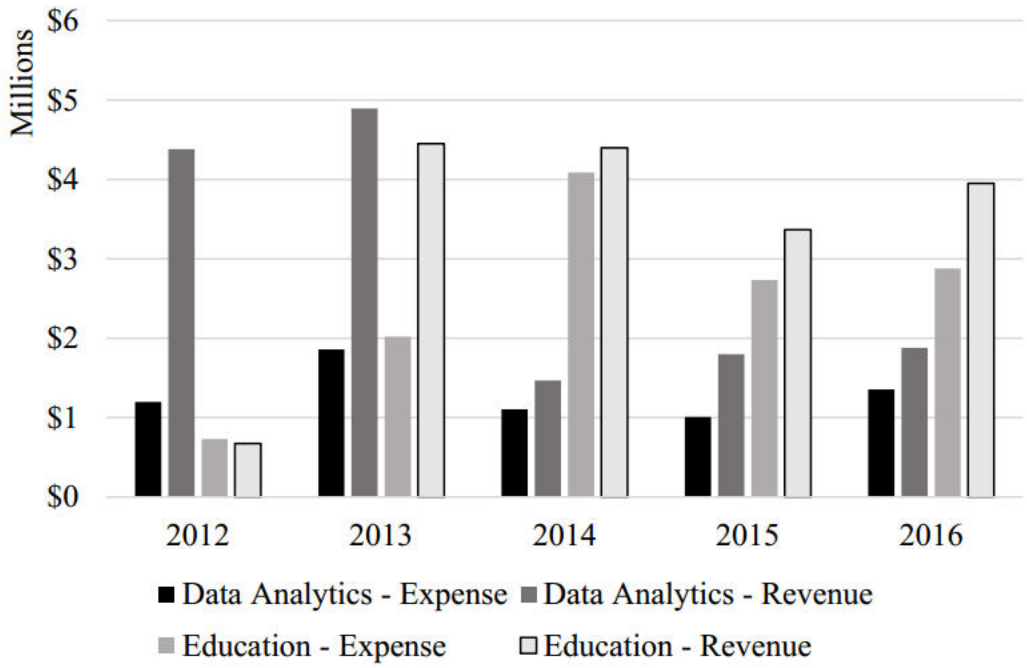

Figure 24. MOA's data analytics and education (expense and revenue) for tax years 2012-2016.

Overall, MOA's total revenue, total expenses, contributions, and program service expense over the 2012-2016 tax years show an initial rising trend from 2012 to 2014, with levels remaining relatively flat in the latter years per Figure 25. The NETWORK contract is a lucrative one, providing over $50 million per year, mostly from the [redacted] community, which, coupled with appropriate expense management, has the potential for freeing up financial resources for program services. Additionally, the revenue stream from contributions, gifts, and grants have remained relatively flat since 2014.

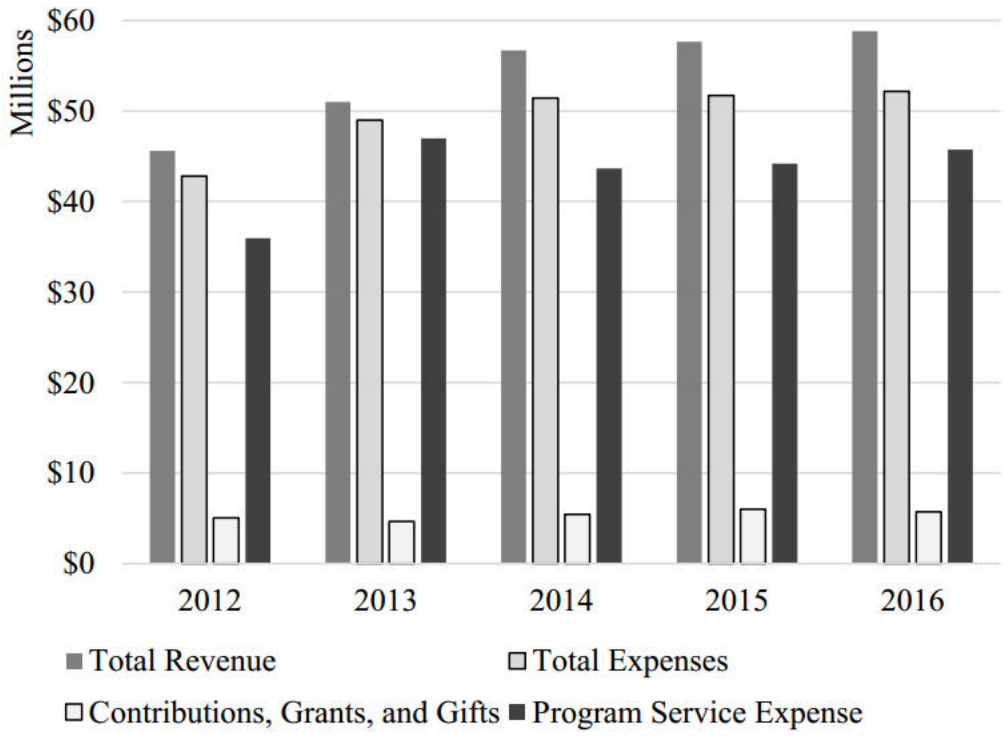

Figure 25. MOA's total revenue, total expenses, contributions, and program services for tax years 2012-2016.

An organization's operating reliance is an indication of how well it can pay for total expenses solely from program revenues. Figure 26 shows MOA's operating reliance over the tax years 2012-2016. Ideally, an operating reliance factor of one or higher is preferable, as it indicates that the organization is capable of sustaining itself and that business leaders are keeping expenses in line with revenue. A reliance ratio of much less than one is a potential sign of poor fiscal management, and that the organization cannot meet its obligations, or has to rely on restricted funds to stay afloat. It appears that MOA is close to self-sustainability, and has been experiencing a slow climb, having held itself above 0.96 since 2014, and may well be on track to achieve an operating reliance of one in a few more years.

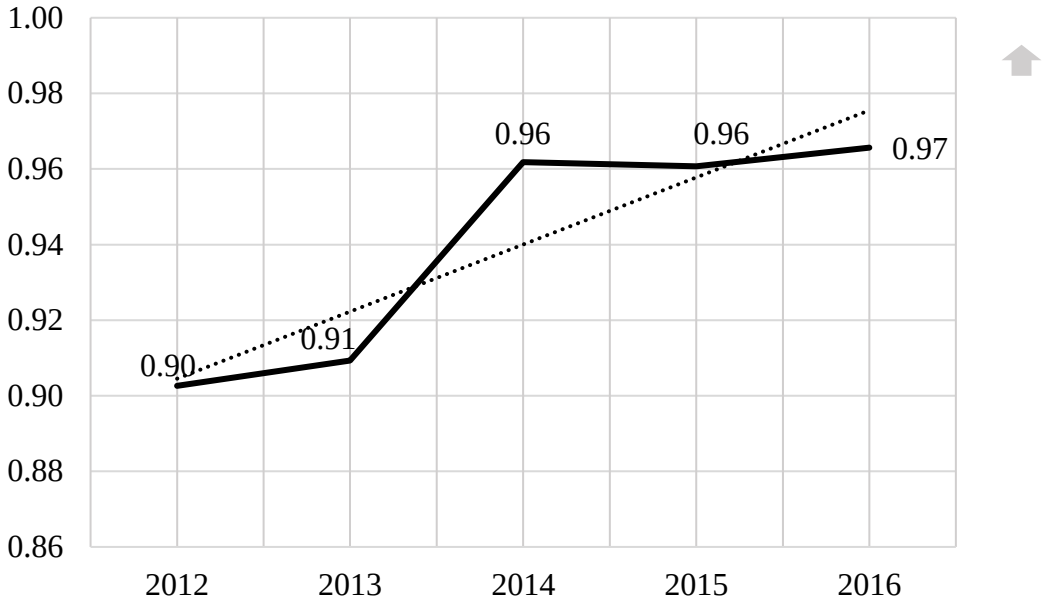

Figure 26. MOA's operating reliance over tax years 2012-2016. MOA's ability to meet its short-term obligations or obligations occurring within a given year (see Figure 27) appears robust because a current ratio between 1.5 and 3.0 is healthy, but this can vary by industry. The up arrow indicates a beneficial trend.

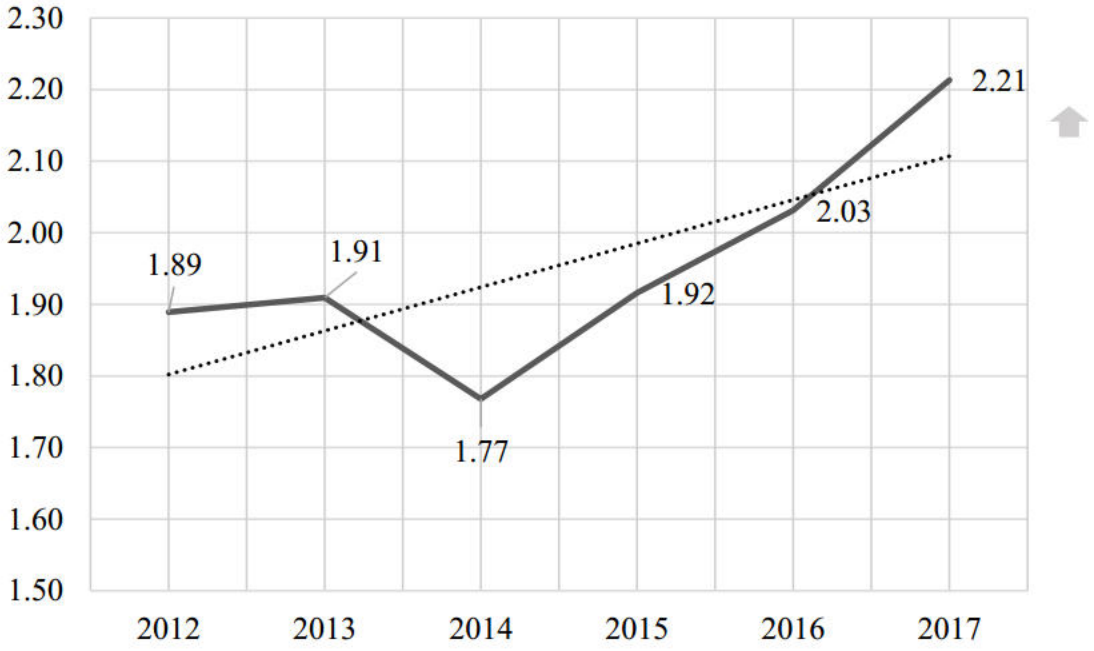

Figure 27. MOA's current ratios over tax years 2012-2016. The up arrow indicates a beneficial trend.

When data collection began in 1991 to capture the number of [redacted], the number of [redacted] fell short [redacted] by 50%, and [redacted] registrants were about twice [redacted]. [redacted]

[redacted]

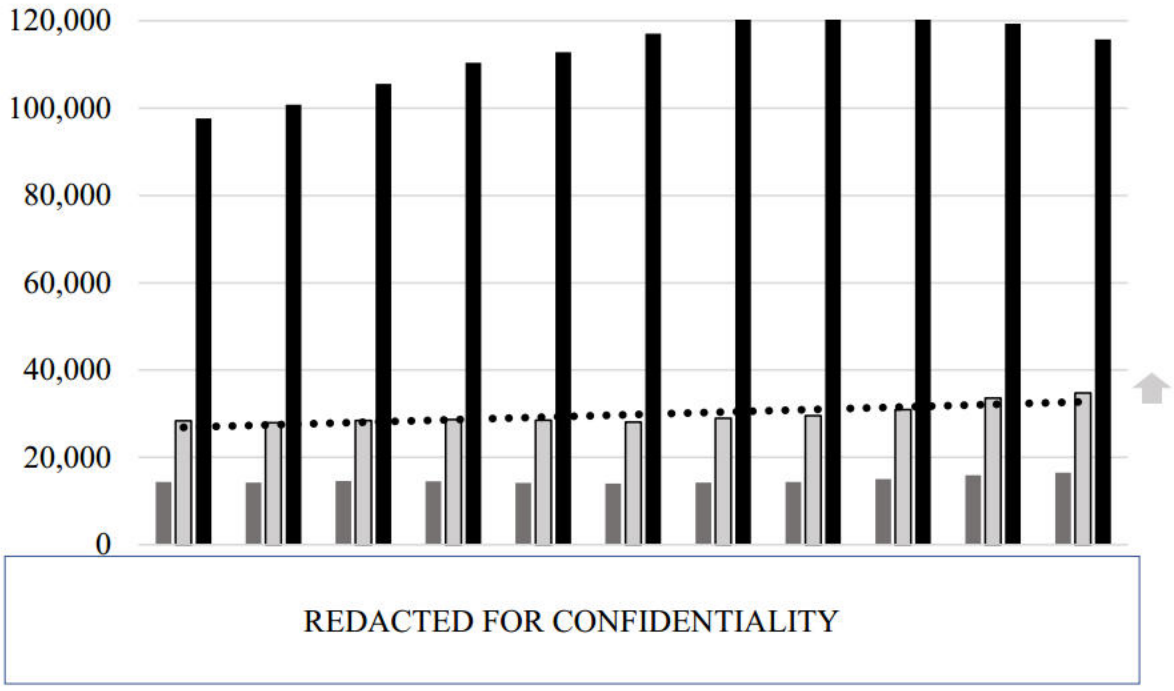

Figure 28. [redacted] registrants.

[redacted]

[redacted]

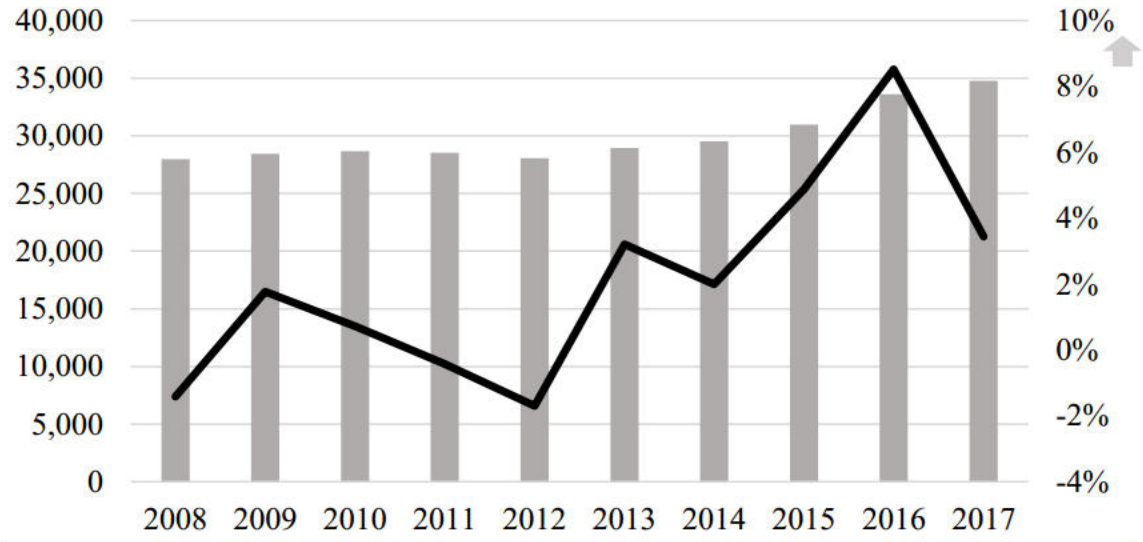

Figure 29. [redacted] and percent change from 2008-2017. The up arrow indicates a beneficial trend.

Key Themes

I interviewed three business leaders of MOA to determine the strategies they used to identify and select actionable performance measures of operational effectiveness. I found that they overwhelmingly engaged in three areas. The areas of engagement included: (a) usefulness of measures, (b) customer experience, and (c) workforce education. Within each area are subsets and interdependent components that collectively facilitate a holistic approach to identifying and selecting actionable performance measures of operational effectiveness.

The usefulness of measures involved management review, soliciting feedback from the workforce, and applying industry standards or best practices where applicable. In some instances, the business leaders have been able to use out-of-the-box metrics and measures from current software tools where such capabilities already exist. Business leaders also sought to identify actionable performance measures of operational effectiveness by mapping the current process, analyzing the current workflow, conducting a gap assessment, and determining the resources necessary to achieve that objective. Customer experience entailed understanding customer needs, what is important to the customer, assessing customer satisfaction, soliciting customer feedback from many sources such as surveys, customer comments, as well as system-based metrics relating to product experience. Workforce education involved informing the workforce of the measures, the need to monitor and measure that data, as well as how those measures apply to the group or individual performance.

Additionally, the business leaders of MOA sought feedback from the workforce since it ultimately tasked them with the collection of that data, and for which consistency of the data was of great importance. Workforce participation in performance measurement systems and the use of associated measures can potentially improve performance as well as clarity of tasks and objectives (Buathong & Bangchokdee, 2017). Lastly, speed and accuracy are two complementary and at times, competing factors, that were used to evaluate the effectiveness of the performance measures. While these two factors represent perhaps the oldest and simplest observation measures of human activity, Xu et al. (2018) stated that such measures could not account for things which are not directly observed, such as workload or task saturation, and which ultimately influences the resulting human activity.

The business leaders of MOA evaluated the effectiveness of those performance measures by analyzing the data collected, monitoring and measuring the output, and conducting trend analysis to determine whether they are moving in the right direction or if they should implement interventions to change course. The business leaders' monitoring and measuring of the processes informed the group and individual performance measures, resulting in skills or gap assessment, and subsequently, the development of action plans to shore-up the skillset and education of the workforce through additional training or knowledge transfer. Knowledge transfer took the form of periodic sharing across and within groups, as well as MOA's business leaders intentionally altering the group dynamics by mixing and reassigning the personnel of workgroups which also served to provide comparative performance data for evaluating

individuals and their teams. Workforce feedback also informed the effectiveness of the strategies in that business leaders collected qualitative data to enrich the quantitative measures. Information sharing has been shown to improve participation in performance measurement systems, as well as the acceptance and commitment of those involved (Buathong & Bangchokdee, 2017). The effectiveness of the strategies manifested in the analysis of the data where the resulting trends were favorable, and also in the measured output from the teams such as reduced error rate and improved throughput.

Some barriers that business leaders of MOA faced when trying to identify and implement performance measures included: (a) deciding what to measure, (b) the usefulness of the data, (c) finding comparative data, (d) workforce perception and resistance, and (e) setting targets. MOA's business leaders recognized that easily collected data is not necessarily useful and that just because something was readily measurable did not mean they had to measure it. While comparative data, whether in or out of sector has proven helpful in some businesses, not all areas of the organization has been able to benefit from such information due to the uniqueness of the service it provides. However, some areas of the organization readily realized benefits from out-of-the-box performance measures that were available within the tools already in use, so they did not need to look any further, notably, where the data collection occurred automatically as part of the workflow.

In those instances where MOA's business leaders implemented new performance measures, another barrier involved determining and setting targets against which they measure future performance. Business leaders expressed concern about setting targets too

high or too low, which brings with it concerns about workforce perception and productivity. Business leaders asking questions of the workforce results in the latter gaining greater clarity of their roles, tasks, and performance expectations (Buathong & Bangchokdee, 2017). Workflow inefficiency was another barrier faced by MOA's business leaders in addition to workforce perception and resistance. The latter represented perhaps the most significant barrier business leaders faced when applying performance measures, in that the workforce perceived the measures as unfairly targeting them or being used against them, and not accurately capturing what they considered reasonable. Workforce resistance to the implementation of performance measures is understandable when framed regarding what they can and cannot control while performing their tasks (Coronado & Cancino, 2016). Business leaders' involvement of middle managers in the selection of performance measures for evaluating their department improved the likelihood of their acceptance of those measures, and in some instances, their increased use (Buathong & Bangchokdee, 2017). Additionally, business leaders cited external factors and interdependencies as other barriers influencing the application of performance measures.

Ultimately, the ability of MOA's business leaders to overcome the barriers to implementing performance measures of operational effectiveness required a multipronged approach which included: (a) workforce education, (b) knowledge transfer, (c) workforce feedback, (d) workforce support, (e) usefulness of measure, and (f) workforce dynamics. MOA's business leaders educated the workforce on the usefulness of the measures regarding assessing what is important to the customer and delivering the

desired levels of customer service. MOA's business leaders established trust with the workforce by explaining the intended use of the performance measures: firstly to measure the effectiveness of the teams, and secondly to assess where workforce deficiencies exist and address them accordingly. Differences exist in the perception of performance measures between the frontline workforce and that of management due to differing priorities, roles, and availability of information (Moreira & Tjahjono, 2016). Business leaders also worked to overcome negative workforce perceptions and resistance by convincing the workforce through their actions and feedback that it reasonably conducted those measures for the right reasons.

The business leaders of MOA emphasized assessing workforce deficiencies through a variety of means: (a) informal workforce feedback, (b) management rounding, (c) skip levels which entailed informal feedback in the absence of the manager, and (d) conducting skills assessments. Management interaction and communication with the workforce serves to deploy performance measures from the higher to the lower levels of the organization as well as reinforce the alignment of organizational objectives (Moreira & Tjahjono, 2016). Based on the results of the workforce assessment, MOA's business leaders draw up action plans to improve workforce capabilities through skills training or workforce education. Additionally, the business leaders of MOA achieve knowledge transfer by modifying the group dynamics whereby, they change the composition of the groups such that they work with and learn from others. Modifying the group dynamics and comparing group performance over time also provided meaningful information

regarding how well the various groupings worked, and also a way to evaluate individual performance.

The business leaders of MOA provided support to the workforce by analyzing and changing the workflow to a more efficient form, providing resources, removing obstacles, and employing subject matter experts or experienced personnel to improve workforce productivity. Workforce feedback, whether formal or informal, serves as a helpful gauge in determining the usefulness of a measure. Since the workforce is quite often directly involved in the collection of that data and the additional work that may entail, business leaders willingly solicit their input. Additionally, workforce participation in pilot testing, whereby, the workforce expends effort and resources on a short-term basis to evaluate the usefulness of measures was particularly beneficial, not just for the results obtained, but also for facilitating buy-in from the workforce (Vordenberg et al., 2018). Business leaders balance the usefulness of performance against the resources necessary to collect that data, and whether it adds business value to the customer. This behavior is in line with Xu et al. (2018) who advocated for reducing participant burden by selecting appropriate dimensional measures and employing a combination of data collection methods such as self-reporting, using observers, or toolsets already in existence. Additionally, the desire to continue with one or more performance measures or change course entirely has often resolved itself once the organization has collected the data and its business leaders analyze it over time to determine impactful trends.

Business leaders' success in overcoming barriers to implementing performance measures manifested itself through their ability to demonstrate the usefulness of the

measures and their value in informing decisions for workforce support. Business leaders were successful in overcoming such barriers through measuring and monitoring data, analyzing the data, examining the data for impactful trends, and using the output to inform improvement initiatives. The widespread use of performance measurement systems has informed the evaluation and reward systems at the managerial level and has shown similar value in the operational performance or an organization (Moreira & Tjahjono, 2016). Additional success factors included the increased willingness of the workforce to engage and participate in the collection and analysis of the data, as well as the accompanying improvement in workforce feedback. Improved workforce feedback also provided business leaders opportunities to support the workforce through education, training, and knowledge transfer, as well as through the use of subject matter experts, experienced personnel, or by altering the group dynamics.

Business leaders further cemented workforce support of the performance measures by engaging them in reviewing the data as well as conducting short-duration pilot tests. Additionally, business leaders engaged others outside the immediate department in interdepartmental feedback to obtain another perspective of the performance measures. Xu et al. (2018) suggested that in high-risk industries and those for which the consequences of decisions or actions have the potential to be fatal, it was essential for business leaders to pursue performance measures that impact performance and safety. An organization such as MOA possesses work processes that are both high-risk and high-consequence where the actions of its operatives directly impact the survivability [redacted]. Indeed, MOA's business leaders found that

when they explained the performance measures to the workforce in the context of the 'fatality impact,' the workforce was less resistant to the use of those measures.

The business leaders stated that the effectiveness of the performance measures manifested as improved outcomes regarding measured team performance, favorable trends, and improved work effort over time with reduced errors and under cost or time estimates. Business leaders were able to track historical trend data, conduct a management review of the information collected, and evaluate the usefulness of the measures. The use of subjective measures is applicable in areas where objective measures cannot be readily determined such as innovations, improvements, utilization of capabilities, maintenance and support, and employee capability enhancement (Dai, Kuang, & Tang, 2018). While many organizations use both objective and subjective performance measures, there is evidence that performance evaluations are heavily influenced by objective measures, because there is little chance of misinterpretation (Dai et al., 2018).

I also evaluated the organization using the 2017-2018 edition of the Baldrige Criteria for Performance Excellence, the organizations' responses to a self-assessment completed in 2017, and information gathered from my interaction with them. Based on information obtained from the client organization, what follows is a review of strengths and opportunities for improvement for their processes and results. The processes reviewed encompassed categories 1 through 6 of the Baldrige criteria, as well as the results from category 7.

Process strengths. Operationally MOA's core competencies are well supported by a collection of services aimed at providing donor-recipient matching service that is timely, accurate, and facilitates equitable allocation of limited [redacted]. The organization has several processes, which collectively support its ongoing operations:

- Policy development
- Donor-recipient data aggregation and analysis
- Deployment of mission, vision, and values
- Member learning modules and educational materials
- New employee hiring/on-boarding
- Processes for the key work systems
- Utilization of volunteers
- Workforce feedback and communication

Policy development is an essential component of MOA's operation in that these are the rules that govern [redacted], and ultimately affect the life-saving decisions [redacted]. During the policy development process, MOA's business leaders engage in one- and two-way communication that involves the general public, [redacted] professionals, members of the NETWORK as well as the BOD, with a measure of iteration occurring during feedback request and proposal revision (Figure 5).

The organization, as the sole operator of the NETWORK, has functioned as a repository and a central clearinghouse [redacted]. In that capacity, MOA's business leaders and operatives

have gained extensive experience managing the ever-growing data collection system that interfaces with hundreds of independent healthcare systems. Subsequently, MOA's operatives can access, aggregate, provide data, analytics, and aid research conducted by internal fellows or external parties [redacted] because it has been collecting data since 1991. The organization recognizes the importance of accurate and secure information and employs resources from its [redacted] Quality and Information Technology Department to conduct data verification and testing internally and externally.

Senior leaders of MOA consistently deploy its mission, vision, and values (Table 1) through several channels to reinforce familiarity in the workforce and with others outside the organization. The organization has placed this information on their website, accessible through a link in the 'about' section where it has a page all to itself, explaining in more detail the core components of its value system, specifically: stewardship, unity, trust, excellence, and accountability (Figure 1). The organization has also posted this information in and around the interior of the primary operating facility: main entrance, hallways, break rooms, published material, and as the default screensaver on computers. Additionally, the organization regularly deploys its mission, vision, and values through its engagement activities (Table 7).

The organization also produces educational material as well as online learning modules for NETWORK members. MOA's leadership encourages members upon completion of online learning modules, to complete a satisfaction survey, the results of which go directly to the development team for review, and analysis. Actionable survey responses have the potential to influence the improvement of future educational offerings.

MOAs' senior leaders have defined and documented a hiring and placement process for adding full-time paid employees to its workforce (Figure 8). The organization uses a combination of internal and external postings as the situation dictates, using its website, established a relationship with staffing firms, and online job boards to fill its vacancies. The organization also provides an incentive for some internal vetting of new hires through its employee referral program. During onboarding, new hires receive orientation in the ways of the organization, including agreeing to and signing off on the mission, vision, and values.

The organization has defined key work systems and supporting key processes (Figure 9) that encompass its entire operation under the umbrella of match and quality. As stated previously, policy development is an essential component of MOA's operation, weaving its way through development and implementation as part of the matching process, remains a significant part of the quality process, and appears to go hand in hand with system enhancements.

MOA's workforce, like many nonprofits, consists of volunteer employees or representatives, and in this case, account for over 80% of the total workforce. MOA's leadership has segmented its volunteer workforce based on the functions they perform, with the more active volunteers participating on the BOD, on various committees, at outreach events and activities, and as part of the ambassador storytelling program. MOA's leadership has a defined process in place for managing the BOD volunteer engagement, and make similar efforts with the other volunteer segments.

Workforce feedback and communication is a strength that senior leaders continue to encourage, particularly in the development of departmental action plans, personnel action plans, and performance measures. The organization also solicits workforce input during the various engagement activities (Table 7 and Table 12), as well as from the annual workplace dynamics survey.

Process opportunities. The organization is performing well in many areas, but possesses a few opportunities for improvement:

1. Volunteer workforce
2. Social media engagement
3. Modeling ethics and core values
4. BOD evaluation and governance
5. Voice of the customer
6. Community engagement
7. Workforce capability and capacity
8. Career progression and succession planning

The organization's use of its volunteer workforce represented a strength, but remains an opportunity for improvement. Volunteers bring with them a wealth of knowledge and experience upon which the organization can draw to improve and sustain itself. Volunteers participate in various organizations to fulfill an altruistic intrinsic need, and with the appropriate level of engagement, can prove a valuable investment for the organization as a whole, such as improving workforce capabilities and skills through mentoring and training the paid workforce, or that of other volunteers. Except for the

BOD, it is unclear under which branch of governance the volunteer workforce falls, and subsequently, the ability to fully mobilize this valuable resource may fall short of the ideal. It is also unclear how or whether the organization centralizes management of this resource to curate their engagement efforts. It is also unclear how much, if any, of the organization's efforts on recruiting, retention, and training extends to the volunteer workforce. The organization indicated that recruitment of committee volunteers begins through data collection from surveys and personal contact at conferences, but it is unclear if there is a hiring process in place for other segments of the volunteer workforce, such as those not serving in committees.

Additionally, it is unclear if MOA's leadership has a defined and integrated process for terminating employees as well as capturing information from voluntary terminations. The process by which the organization manages its volunteer workforce is unclear, even though the organization indicated that it manages both its paid and volunteer workforce in alignment with strategic goals. Based on available information, it is unclear if MOA's leadership has a systematic process in place for managing the volunteer workforce. However, the addition of the volunteer coordinator position in 2017 may provide clarity of process and focus to this area.

Social media is a steadily expanding platform that can help or hinder an organizations' growth through its promotion of products and services, depending on how the organization manages its engagement with those consumers. Presently, MOA has a presence on Facebook, Google+, Instagram, LinkedIn, Twitter, and YouTube as indicated on the website. Google+ and YouTube have not had any activity since January and

October 2017 respectively, however Facebook, Twitter, and Instagram show more recent activity as of October 2018, with posts or updates made at least once per week. These social media platforms are free services that MOA's leadership can better leverage to engage with those inside and outside its community and its ambassadors. However, it is unclear if MOA's leadership is actively monitoring the effectiveness of these social media platforms to reach stakeholders in support of the mission.

MOA's senior leaders indicated that it required employees to sign and acknowledge an assortment of policies and procedures to which they must adhere. However, it is unclear if further review of these policies (besides the mission, vision, and values) occurs after hiring, and the modeling of legal and ethical behavior. Additionally, it is unclear what process the organization uses for reinforcing workforce behavior falling short of desirable standards. Senior leadership formally and informally recognizes workforce modeling of core values as they occur through the 'values in action' program. However, it is unclear how or whether MOA's leadership models its core values to the volunteer workforce or the community at large. Moreover, the organization did not indicate how they consistently modeled the other core values of unity, stewardship, and excellence, or whether they sought to confirm if the workforce clearly understood how those values applied to their daily activities.

Business leaders of MOA emphasized the importance of employee skills training and knowledge transfer and stated that they assessed the effectiveness through improved work product and outcomes. Business leaders of the organization indicated stated they set

expectations that drive high performance. However, it is unclear the process by which the senior leadership or department leaders drive up performance that falls short of the ideal.

Presently, on an annual basis, the BOD evaluates themselves and the CEO; however, in the interest of transparency, accountability, stewardship, and trust, it may be best to engage the services of an external party for an impartial perspective. It is unclear that MOA has a formal mentoring program as part of its leadership performance evaluation. It appears that the ethics committee is the only body responsible for reviewing or considering ethical issues as it relates to [redacted], and interacts with the BOD accordingly, but this limited scope of ethical behavior review may fall short of thoroughly assessing the overall organizational behavior.

Business leaders of MOA engage in many communication activities throughout the year with the various segments of its customers (Table 12). However, it is unclear whether MOA's business leaders track and review the effectiveness of these engagements. While one-way public comment provides a forum, twice yearly for Customers and Committee Volunteers to make themselves hears, it is unclear if a process exists for these stakeholders to communicate concerns that they are not comfortable voicing in the public forum. Additionally, it is unclear that a centralized repository exists within MOA to store, classify categorize, and aggregate the data collected from its various listening posts for analysis and to improve its overall customer service levels. Business leaders of MOA have tracked some data regarding communication to and from the customer service center as well as the [redacted] center. However, no measures were made available regarding customer satisfaction and dissatisfaction. The organization has used

feedback received from previous conference experience surveys to improve future offerings. Beyond that, it is unclear whether MOA's business leaders have a defined process in place to recruit or retain customers and track the associated service level throughout the various systems. MOA does not appear to possess an organization-level centralized system for soliciting, reviewing, analyzing, and managing customer complaints, but instead, its leadership relies on various principals to manage complaints from its customer segments.

MOA's business leaders actively engage with its known community through various forums. However, it is unclear how often it engages with the local or regional community to communicate the services it provides, the needs it has, and potentially increase its donor, volunteer, and paid workforce pool. Business leaders of MOA indicated that it orients the community and committee volunteers in the values of MOA. However, this orientation does not appear to translate to the entire volunteer workforce, so that these employees are also part of the 'One MOA' banner of organizational unity. Furthermore, MOA's senior leaders assert that restrictions are in place that limits its ability to have potential customers. However, the organization can still extend the reach of its mission and raise awareness by engaging with 'potential customers' without providing access to the secured system and patient-level data that is available to others.

It does not appear that senior leaders are aware of changing needs far in advance to facilitate a long-term proactive response to build their workforce capability and capacity, and lesser still, the needs of its volunteer workforce. This issue may bear some relation to the lack of a transparent process that consistently and directly ties the action

plans to the strategic objectives, so opportunities may exist to track effort and resources expended without a defined objective. Regular monitoring in this area may be one way to avoid going off track with already limited resources. Additionally, it is unclear if the organization can track its capabilities down to the department level to obtain an accurate account of the consumption or demand of those resources.

The process by which the organization manages its volunteer workforce is unclear, even though the organization indicated that it manages both its paid and volunteer workforce in alignment with strategic goals. Based on available information, it is unclear if there is a systematic process in place for managing the volunteer workforce. However, the addition of the volunteer coordinator position in 2017 may provide clarity of process and focus in this area.

It is unclear if an enterprise-wide learning and development system exists within MOA's infrastructure that supports its workforce from the executive level down through the departments to the frontline employee level. Subsequently, it is not apparent that the organization has a structured career progression process in place for its entire workforce. Additionally, the volunteer workforce career progression is of an informal and ad-hoc nature, with no apparent process defined for preparing the workforce to assume positions of greater responsibility. Finally, while there may be a succession plan in place for senior level positions, it is unclear if the organization has plans and processes in place to manage succession planning for key positions in its key work processes.

Results strengths. There is a persistent challenge for business leaders of nonprofit organizations to identify and select actionable performance measures of

operational effectiveness. Business leaders of MOA have successfully derived and used an assortment of measures to assess its performance over time, while other measures are still in their infancy. The organization has demonstrated strengths in its results in the following areas:

[redacted]

- Emergency preparedness and disaster recovery
- Security awareness and cybersecurity
- Contractor Performance Assessment Reporting System
- Workforce turnover and retention

[redacted]

- Fiscal responsibility

[redacted]

From 2013 to 2016 MOA's senior leaders have been monitoring its performance across various applications [redacted] (Figure 12). Eighty percent of applications profiled exhibited favorable steady improvement in usability [redacted]

Business leaders of MOA indicated that they have a defined business continuity plan in place and which it uses to execute its disaster and emergency preparedness drills. Department leaders review and revise their business continuity plans quarterly, and accountable teams review departmental input semi-annually to determine if changes in information technology or facility needs are necessary. At least twice a year, a third-party entity conducts table-top and crisis drills with the senior leadership, and designated teams within the MOA organization coordinate fire drills for its workforce at the operational facilities. However, it is unclear if the hot site receives similar testing and evaluation.

Annually, MOA's senior leaders contract with a third party to conduct physical and electronic security and penetration testing of its facility and computer network respectively. MOA's information technology department also conducts system scans of the network several times a week and raises awareness within the workforce by mandating completion of security assessment learning modules. The information technology department periodically employs phishing and social engineering tactics to assess the effectiveness of its workforce security training. Finally, access to the corporate network is permissions driven as required, and on a need to know basis. MOA's business leaders shared two years of average scores from 2015 to 2016 (Figure 15), and the data shows the beginnings of a favorable improving trend which should continue in the next years.

AGENCY[redacted] evaluates MOA's performance on an annual basis according to the guidelines established in the Contractor Performance Assessment Reporting System manual. From 2014 to 2016, MOA has received ratings of Very Good across all six

categories of assessment: (a) cost control, (b) management, (c) quality, (d) regulatory compliance, (e) schedule, and (f) small business utilization (Figure 16). MOA fell short in 2014 for regulatory compliance and received a satisfactory rating, but since that time, has received a Very Good rating.

MOA's business leaders shared workforce turnover data from 2014 to 2016 (Figure 17) for new hires and permanent employees. The trends indicate turnover in the permanent workforce of over 20% and for new hires over 3%, with steady increases for the stated timeline. The voluntary turnover comes at a significant cost to nonprofits, and negatively impacts the performance as well as the sustainability of the organization (Selden & Sowa, 2015). Subsequently, it is in the best interest of the organization to engage and retain both its high performers and high-potential employees. The Guidestar 2016 Nonprofit Employment Practices Survey indicated that nonprofit turnover was approximately 13 to 19%, so MOA's performance in this area is not too far off track. MOA's business leaders also shared its retention rates for permanent employees (Figure 18) for the same duration, and the data indicated a favorable increasing trend that began at around 75% in 2014 and last recorded exceptional progress at 97%.

The primary strategic goal of MOA is to increase the number of [redacted] (Figure 28). While the growth has been slow (Figure 29), the overall trend has been a positive one, peaking at just over 34,000 [redacted], despite the continued trend of [redacted] outstripping [redacted] by a factor of 2:1, and still falling far short of the [redacted] demand [redacted].

While MOA's tax status precludes it from making a profit, stakeholders expect

the organization to exercise sound financial decisions. Aside from the 22% spike in registration fees (Figure 23) to keep abreast of and institute necessary system improvements, MOA's senior leaders have since kept registration fee increases below 3%. During tax years 2014 to 2016, MOA has maintained a surplus of revenue for administering the NETWORK, whereas in previous years from 2012 to 2013, it broke even. From 2012 to 2013, MOA enjoyed significant revenue surplus from its Data Analytics (Figure 24), with those surpluses tapering off in the more recent years. The organization's operating reliance factor, presently holding at 0.97 indicates that the organization is capable of meeting its financial obligations, as is its ability to meet its short-term obligations as shown by the current ratio of 2.21 (Figure 27).

Results opportunities. Business leaders of MOA have been slow to develop and grow performance measures or indicators to track the achievement and effectiveness of their operations. Subsequently, some opportunities for improvement include:

1. Facilities performance
2. Cybersecurity
3. Customer service, satisfaction, and dissatisfaction
4. Workforce performance
5. Governance
6. Supply chain

MOA's business leaders maintain and operate two primary facilities and a hot site, with the latter housing mission-critical applications for the [redacted] center and matching systems. The mid-Atlantic region is prone to tropical storms, tropical cyclones,

and hurricanes in the last quarter of the year, and in light of the recent passage of Hurricane Michael in October 2018, it would appear that the location of the hot site some 11 miles away could become inoperable like the primary site. While the proximity of the hot site to the primary operating locations is convenient and readily accessible to staff, the potential for service interruption and its impact on lifesaving decisions is unacceptable.

MOA's information technology team appears to be performing superbly, managing its corporate and matching network while interfacing with its member's [redacted] facilities, and [redacted]. While MOA's security protocols restrict data input to a predefined format, there is a possibility that a partner network or internal entity can compromise MOA's network, and negatively affect the system. MOA's business leaders shared some data regarding average security awareness scores (Figure 15), however, considering the importance and criticality of the matching system, it was not clear if the organization engaged in other security or countermeasures to protect the system.

MOA's business leaders shared that it conducts customer satisfaction surveys with its members [redacted]. However, the organization did not provide performance measures or indicators related to customer satisfaction and dissatisfaction. Business leaders of MOA can collect data on the volume of calls to and from its customer service center, the [redacted] center, as well as regional administrator activity, so I would expect to see measures from these areas over time.

MOA's business leaders shared some measures of workforce performance relating to turnover and retention of both new hires and permanent employees. However, there may be other measures that business leaders of MOA can readily capture to demonstrate how they are performing in this area. Perhaps MOA's leadership already possesses those measures, but I was unable to make such a determination based on the data provided. It was unclear if the organization identifies members of the workforce for potential leadership positions, then encouraged growth and development accordingly. MOA's senior leaders indicated that it had experienced an increase of 11% in personnel, but it was not clear what proportion of the existing workforce filled these vacancies.

Overall, MOA appears to have good governance practices in place to oversee and conduct operations. However, the BOD assesses itself and the CEO, and this may cause some measure of concern regarding a lack of impartiality, accountability, and trust. Additionally, it was unclear if the BOD engaged in professional development and ongoing learning.

MOA's senior leadership organizes its operational supply chain into five components (Figure 11). Since it deemed these components essential to achieving its mission, I expected to see specific performance measures for each of these components. MOA's business leaders shared that it contracts with two vendors for electronic match notification to ensure the messages are successfully transmitted but provided no further information.

Section 4: Executive Summary of Key Themes

Project Summary

Business leaders of nonprofit organizations face increasing scrutiny to demonstrate operational effectiveness through actionable performance measures (Abdel-Maksoud, Elbanna, Mahama, & Pollanen, 2018). Nonfinancial performance measures provide the opportunity for nonprofit organizations to showcase their efforts and program successes better and demonstrate efficient use of resources in pursuit of the organizational mission (Lecy & Searing, 2015). During this study, I explored the strategies that business leaders of nonprofit organizations use to identify and select actionable performance measures of operational effectiveness.

Business leaders of nonprofit organizations can use the data from this single case study to identify and select actionable performance measures of operational effectiveness to replace or supplement existing performance measures. The use of the Baldrige Criteria for Performance Excellence as the basis for examining all aspects of the organization may both encourage and equip business leaders of nonprofit organizations to improve operational outcomes, results, growth, and sustainability.

Contributions and Recommendations

Implications for Social Change

The implications for social change from the findings of this qualitative study include encouraging local business managers of nonprofit organizations to achieve consensus on measures of effectiveness, increased collaboration to grow the framework of measures, sharing of knowledge and best practices, and increased understanding of the

effectiveness of nonprofit organizations beyond financial measures. Additionally, charity watchdogs can incorporate these measures of effectiveness of nonprofit organization outputs, outcomes, and impact in conjunction with financial measures as part of ongoing reporting to educate stakeholders, funders, and donors. Local business managers of nonprofit organizations can also report and communicate their achievement of outcomes with nonfinancial measures of effectiveness that resonate with society. Society's adjustment to the nonfinancial measures of nonprofit organization effectiveness could, in turn, encourage nonprofit watchdogs to report these measures in addition to the financial ratios and permit nonprofit organizations to focus on their mission of serving the community.

The strategies, processes, and results outlined in this doctoral study may be of interest to business leaders of nonprofit organizations in identifying and selecting performance measures of operational effectiveness. The strengths of the process and results in this single case qualitative study may encourage positive social change by encouraging business leaders to adopt or replace existing measures. Similarly, the opportunities for improvement in processes and results may help business leaders further explore their operations, question the status quo, and emerge enlightened to tackle current challenges and ensure the sustainability of the organization for the long term.

Recommendations for Action

There are limitations to what nonprofit organizations can consistently report to the IRS regarding its financial activities per IRS Form 990. Subsequently, business leaders can use this information to provide a standard frame of reference to evaluate the financial

performance nonprofits (Garven et al., 2016; Liket & Maas, 2015) has been used in many instances to showcase these organizations in an unfavorable light. Increased demand for accountability and transparency from external stakeholders, funders, and donors is pressuring business leaders of nonprofit organizations to demonstrate operational effectiveness through the development and use of performance measurement systems (López-Arceiz et al., 2017).

During this single case study, the client organization demonstrated evidence-based practices, with processes ranging in maturity from an approach to integration and results ranging from initial levels of infancy to definitive trends over time. Based on the results of this study, the client organization is not fully using the volunteer workforce in a unified manner, specifically those not serving on the BOD. I recommend the organization considers using customer relationship (retention) management software to track its non-BOD volunteers regarding expertise and organizational involvement and engage with them outside the regularly scheduled seasonal events to keep them engaged and motivated. Doing so may also help the organization grow its volunteer community, improve its outreach efforts, as well as communicate the mission to those outside the immediate [redacted] community. Additionally, the organization's use of a customer relationship (retention) management application may help to track repeat volunteers, illustrate the recruitment efforts of the volunteer and paid workforce, and permit the organization more directed engagement with the volunteers as opposed to the present seasonal mode of engagement. This way the organization can track this hidden workforce

from recruitment through to termination and demonstrate the value this workforce segment brings to the organization.

Regarding community, the data indicates that the client organization is not fully using its social media platforms. This no-cost engagement platform can much information and yield dividends in support of the organization's mission. I recommend that the organization update social media portals not frequently used with links to posts from its active platforms. Many social media platforms contain insights or summary pages that organizations can customize for specific reporting purposes to show an array of metrics: page views, likes, followers, reach, mentions, engagement, impressions, locale, including hashtag analytics for special events tracking.

It was unclear how the organization modeled core values and ethics to the workforce other than gathering data during the annual workplace dynamics survey. To ensure that business leaders consistently deploy this across the workforce, I recommend the organization procures training that exemplifies reinforcing desirable practices and behaviors through workshops, seminars, case studies, and moral dilemmas. Additionally, the organization can make the training experience relevant by tailoring some content based on real or recent situations. The organization can measure workforce participation following the completion of the exercises and assess its effectiveness during its annual survey or at other times of the year.

The BOD and senior leaders evaluate the alignment between strategic plans and operational project plans. As evidence of governance accountability, I recommend that the organization periodically engage an independent third-party entity in evaluating the

alignment of project plans to the associated strategic plans as well as the internal assessment. Additionally, the third party should conduct a gap assessment and address deficiencies accordingly through discussion and mentoring.

The organization has put some effort into collecting customer information from its listening posts. However, it does not appear that a centralized repository exists that houses this data for detailed analysis and review. I recommend the organization considers using a customer relationship (retention) management application to gather all such information in the same repository so they can proactively support customers and their interaction with the [redacted] center, customer service center, and regional administrators.

Community engagement is an area in which the organization has an opportunity to improve, specifically those outside of the immediate [redacted] community. The organizations' primary goal is to increase the number of [redacted], and it can do so through community engagement, getting the word out regarding its mission, increasing awareness, and going so far as facilitating individuals to register as a [redacted] donor. I recommend the organization capitalize on its use of the social media platforms in conjunction with the volunteer workforce to boost the donor pool.

Although the organization does not know its workforce needs in advance, it had expended some effort at shoring up the skillsets when it determines that a deficiency exists. I recommend that the organization consider centralizing its workforce capabilities by using human capital management software that may allow it to track certifications, areas of expertise, renewals of certifications, ongoing education, health and exercise programs, educational reimbursement, and other aspects of its workforce. The use of

human capital management may permit the organization to proactively build upon existing skills, grow the capabilities of others, and best of all, easily collect performance measures and assess its workforce performance.

The organization may gain greater visibility into its career progression and succession planning by expanding its use of the human capital management to centrally monitor and track members of its workforce who demonstrate a potential for leadership or other professional advancement opportunities. I also recommend that the organization identify key positions that are not necessarily of a leadership role, but whose absence may adversely impact the organization's ability to effectively execute its mission, and grow or develop high potential performers to assume those roles. Following this recommended course of action may provide a measure of operational stability and organizational sustainability.

The organization operates out of two facilities within walking distance of each other. Regarding performance measures for facilities (Koleoso, Omirin, & Adewunmi, 2017), I recommend the following activities that it can conduct itself or through a third party:

- Facility condition or cleanliness,
- Safety inspections
- Maintenance backlog
    - Preventive maintenance schedule compliance
    - Corrective maintenance schedule compliance
    - Preventative maintenance/corrective maintenance ratio

- Training hours
- Responsiveness to unplanned maintenance
- Quality of work completed
- Satisfaction with work completed
- Repeated issue tracking, and so on (Koleoso et al., 2017).

Given the recent tropical storm Michael that passed through the region in October 2018, I highly recommend that the organization consider using cloud-hosted virtual servers that are accessible from anywhere to host its hot site. While the hot site is convenient to the current workforce, its presence in the mid-Atlantic region and current proximity to the operational facilities is cause for concern. MOA's workforce's use of the remote facility may permit the organization to remain operational in the event a catastrophic natural disaster. Business leaders of the organization may alleviate concerns regarding exposure of proprietary knowledge through an appropriately structured contract.

The opportunity for improvement in cybersecurity stemmed from the fact that mission-critical infrastructures require adherence to the highest standards for data integrity, resiliency, and information security mainly where such systems do not exist in isolation, but instead, use other networks (Knowles et al., 2015). For MOA, failure in this area may result in a waste of limited [redacted] if the organization does not conduct the matching process promptly, or worse, expiration of the [redacted]. MOA's operations are reliant upon external parties to input data, and so the potential exists for an external network to compromise the system if appropriate security measures are not in place. Organizations have a choice between adhering to guidelines or regulations, with

the former requiring voluntary compliance, the latter requiring mandatory compliance, and neither providing sufficient robustness on their own (Knowles et al., 2015). Subsequently, business leaders of the organization can ensure the security and reliability of their information systems by employing a combination of both practices and remaining vigilant.

Customer service, satisfaction, and dissatisfaction represented another area for improvement. The organization provided some performance measures regarding application usability, and if not currently available, I recommend the organization considers providing pre-recorded mini orientation sessions, scheduled webinars, online help, or an option for members to provide comments and feedback for those applications. Additionally, much like the organization does with its educational learning modules, I recommend the use of application post-use surveys to capture actionable customer responses, which it can then use as an indicator of engagement and customer satisfaction. The organization indicated that it monitors regional meeting attendance and administrator support usage, and increases engagement when the engagement level falls below 75%. I recommend that the organization use the customer relationship (retention) management application to keep a closer eye on member activity and engage with them more frequently, as opposed to waiting for them to fall below the threshold. I also recommend that the organization consider using net promoter scores to proactively gauge customer satisfaction.

For workforce performance, the organization provided information on turnover and retention. I recommend that the organization go a step further by monitoring the first-

year voluntary termination rate for an indication of fit, perhaps examining voluntary, involuntary, and high-performer turnover, in addition to the measures it provided (Figure 17). Some examples of additional rate measures I would like to see are internal referrals, internal hires, external hires, and the ratio of internal to external hires. As an aside, while the organization did not provide information relating to its workforce climate, some examples of measures I would expect to see are employee net promoter scores, training hours (task and cultural), the percentage of vacation days used (indicative of healthy work-life balance), time to fill positions, and absenteeism rates.

As stated previously, the BOD evaluates themselves and the CEO. However, there may be cause for some concern regarding the validity of the self-assessment. For a more comprehensive and impartial perspective of BOD governance, I recommend that an independent third party entity evaluate the BOD individually and collectively, review those results with the group. Additionally, the third party should conduct a gap assessment, and work with the BOD to strengthen the areas in which they are deficient through training, coaching, and mentoring.

Based on the operational supply chain defined by the organization (Figure 11), I would expect to see results for each of the five components. I discussed facilities and cybersecurity previously, but from an information technology perspective, I recommend the organization monitor the matching and response times for the other categories of [redacted] donation, data accuracy/inaccuracy, tests of system failover, and tests of the hot site activation. The organization indicated that it used two vendors for the electronic match notification process, and I would recommend, if not already done, that

they periodically switch the notification service priority and maintain performance measures for both systems. I would also recommend that the organization periodically exercise its backup and redundant systems to ensure their system readiness.

Qualitative researchers wishing to build on this research effort may choose to conduct a multiple case study of nonprofit organizations in the same subsector as the client organization. However, the uniqueness of the circumstances surrounding this organization presents particular challenges when trying to equate the operational aspects of this organization to similar organizations in other countries. While there are organizations in foreign countries performing somewhat of a similar service or function, the level of regulation, reach, and resources may make the comparison more challenging. However, I recommend further research into the nonprofit sector using both qualitative and quantitative methods, with the latter becoming more helpful as performance data comes available.

References

Abdel-Maksoud, A., Elbanna, S., Mahama, H., & Pollanen, R. (2018). The use of performance information in strategic decision making in public organizations. *International Journal of Public Sector Management, 28,* 528-549. doi:10.1108/IJPSM-06-2015-0114

Adesoro, O., Shumba, C., Kpamor, J., Achan, J., Kivumbi, H., Dada, J., . . . Baba, E. (2016). Health worker perspectives on the possible use of intramuscular artesunate for the treatment of severe malaria at lower-level health facilities in settings with poor access to referral facilities in nigeria: A qualitative study. *BMC Health Services Research, 16,* 2-11. doi:10.1186/s12913-016-1811-x

Aich, S., Muduli, K., Onik, M. M., & Kim, H. C. (2018). A novel approach to identify the best practices of quality management in SMES based on critical success factors using interpretive structural modeling (ISM). *International Journal of Engineering & Technology, 7,* 130-133. doi:10.14419/ijet.v7i3.29.18540

Albliwi, S. A., Antony, J. J., Abdul, S., & Lim, H. (2015). A systematic review of lean six sigma for the manufacturing industry. *Business Process Management Journal, 21,* 665-691. doi:10.1108/BPMJ-03-2014-0019

Al Nahyan, M. T., & All, S. F. (2017). Key enablers of effective implementation of TQM in royal jet airways. *Advances in Decision Sciences, 2017,* 1-10. doi:10.1155/2017/3197585

Andrevski, G., Richard, O. C., Shaw, J. D., & Ferrier, W. J. (2014). Racial diversity and firm performance: The mediating role of competitive intensity. *Journal of*

Management, 40, 820-844. doi:10.1177/0149206311424318

Antony, J., Gijo, E. V., Kumar, V., & Ghadge, A. (2016). A multiple case study analysis of six sigma practices in indian manufacturing companies. *International Journal of Quality & Reliability Management, 33*, 1138-1149. doi:10.1108/IJQRM-10-2014-0157

Antony, J., Rodgers, B., & Cudney, E. A. (2017). Lean six sigma for public sector organizations: Is it a myth or reality? *International Journal of Quality & Reliability Management, 34*, 1402-1411. doi:10.1108/IJQRM-08-2016-0127

Aquilani, B., Silvestri, C., Ruggieri, A., & Gatti, C. (2017). A systematic literature review on total quality management critical success factors and the identification of new avenues of research. *The TQM Journal*, *29*, 184-213. doi:10.1108/TQM-01-2016-0003

Arena, M., Azzone, G., & Bengo, I. (2015). Performance measurement for social enterprises. *Voluntas, 26*, 649-672. doi:10.1007/s11266-013-9436-8

Arino, A., LeBaron, C., & Milliken, F. J. (2016). Publishing qualitative research in academy of management discoveries. *Academy of Management Discoveries*, *2*, 109-113. doi:10.5465/amd.2016.0034

Arshad, R., Omar, N., Bakar, N. A., & Nasor, N. M. (2015). Exploring performance measurement from the perspective of social impact. *Malaysian Accounting Review*, *14*(2), 137-154. Retrieved from http://digital.ptar.uitm.edu.my

Arya, A., & Mittendorf, B. (2015). Career concerns and accounting performance measures in nonprofit organizations. *Accounting, Organizations and Society*, *40*,

1-12. doi:10.1016/j.aos.2014.10.002

Assarlind, M., & Gremyr, I. (2014). Critical factors for quality management initiatives in small-and medium-sized enterprises. *Total Quality Management & Business Excellence*, *25*, 397-411. doi:10.1080/14783363.2013.851330

Atchan, M., Davis, D., & Foureur, M. (2016). A methodological review of qualitative case study methodology in midwifery research. *Journal of Advanced Nursing*, *72*, 2259-2271. doi:10.1111/jan.12946

Austin, Z., & Sutton, J. (2014). Qualitative research: Getting started. *Canadian Journal of Hospital Pharmacy*, *67*, 436-440. Retrieved from http://cshp.ca/productsServices/cjhp/index_e.asp

Baillie, L. (2015). Promoting and evaluating scientific rigour in qualitative research. *Nursing Standard*, *29*, 36-42. doi:10.7748/ns.29.46.36.e8830

Balau, M. (2015). The influence of market context on business strategy, competitor imitation and operational effectiveness. *Acta Universitatis Danubius: Oeconomica*, *11*(4), 33-40. Retrieved from http://journals.univ-danubius.ro/index.php/oeconomica

Baldridge Performance Excellence Program. (2017). *2017–2018 Baldrige excellence framework: A systems approach to improving your organization's performance*. Retrieved from https://www.nist.gov/baldrige/publications/baldridge-excellence-

framework/businessnonprofit

Balfaqih, H., Nopiah, Z. M., Saibani, N., & Al-Nory, M. T. (2016). Review of supply chain performance measurement systems: 1998–2015. *Computers in Industry*, 82, 135-150. doi:10.1016/j.compind.2016.07.002

Banuro, F. Y., Ntiri-Ampomah, A., & Banuro, J. K. (2017). Contradictions in TQM implementation: A proposed balance from the Ghanaian perspective. *TQM Journal*, *29*, 564-578. doi:10.1108/TQM-11-2016-0103

Barata, J., & Cunha, P. R. (2017). Synergies between quality management and information systems: A literature review and map for further research. *Total Quality Management & Business Excellence*, *28*, 282-295. doi:10.1080/14783363.2015.1080117

Barnham, C. (2015). Quantitative and qualitative research. *International Journal of Market Research, 57,* 837-854. doi:10.2501/IJMR-2015-070

Bartuševičienė, I., & Šakalytė, E. (2013). Organizational assessment: Effectiveness vs. efficiency. *Social Transformations in Contemporary Society, 1*, 45-53. Retrieved from http://stics.mruni.eu/annual-journal

Başerer, D. D., Başerer, Z., & Tüfekçi Akcan, A. (2016). Ethical principles and violations in academy: A qualitative study. *Journal of Higher Education & Science*, *6*, 242-251. doi:10.5961/jhes.2016.160

Baškarada, S. (2014). Qualitative case study guidelines. *Qualitative Report, 19,* 1-18. Retrieved from http://nsuworks.nova.edu/tqr

Beer, H. A., & Micheli, P. (2017). How performance measurement influences

stakeholders in not-for-profit organizations. *International Journal of Operations & Production Management, 37,* 1164-1184. doi:10.1108/IJOPM-08-2015-0481

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *Nursing Plus Open, 2,* 8-14. doi:10.1016/j.npls.2016.01.001

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research, 15,* 219-234. doi:10.1177/1468794112468475

Bevan, M. T. (2014). A method of phenomenological interviewing. *Qualitative Health Research, 24,* 136-144. doi:10.1177/1049732313519710

Birkinshaw, J., & Haas, M. (2016). Increase your return on failure. *Harvard Business Review, 94*(5), 88-93. Retrieved from http://hbr.org

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A

tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26,* 1802-1811. doi:10.1177/1049732316654870

Bjerke, M. B., & Renger, R. (2017). Being smart about writing SMART objectives. *Evaluation and Program Planning, 61,* 125-127. doi:10.1016/j.evalprogplan.2016.12.009

Blouin, M. C., Lee, R. L., & Erickson, G. S. (2018). The impact of online financial disclosure and donations in nonprofits. *Journal of Nonprofit & Public Sector Marketing, 30,* 251-266. doi:10.1080/10495142.2018.1452819

Boateng, A., Akamavi, R. K., & Ndoro, G. (2016). Measuring performance of non-profit organisations: Evidence from large charities. *Business Ethics: A European Review, 25,* 59-74. doi:10.1111/beer.12108

Bollegala, N., Patel, K., Mosko, J. D., Bernstein, M., Brahmania, M., Liu, L., . . . Weizman, A. V. (2016). Quality improvement primer series: The plan-do-study-act cycle and data display. *Clinical Gastroenterology and Hepatology, 14,* 1230-1233. doi:10.1016/j.cgh.2016.04.042

Borgianni, Y., Cascini, G., & Rotini, F. (2015). Business process reengineering driven by customer value: A support for undertaking decisions under uncertainty conditions. *Computers in Industry, 68,* 132-147. doi:10.1016/j.compind.2015.01.001

Boswell, J., & Corbett, J. (2015). Embracing impressionism: revealing the brush strokes of interpretive research. *Critical Policy Studies, 9,* 216-225. doi:10.1080/19460171.2014.971039

Bourne, M., Franco-Santos, M., Micheli, P., & Pavlov, A. (2018). Performance

measurement and management: A system of systems perspective. *International Journal of Production Research*, *56*, 2788-2799. doi:10.1080/00207543.2017.1404159

Bowden, C., & Galindo-Gonzalez, S. (2015). Interviewing when you're not face-to-face: The use of email interviews in a phenomenological study. *International Journal of Doctoral Studies*, *10*, 79-92. Retrieved from ttp://ijds.org/Volume10/IJDSv10p079-092Bowden0684

Breja, S. K., Banwet, D. K., & Iyer, K. C. (2016). Towards sustainable excellence: Strategic analysis of deming prize winning companies. *TQM Journal*, *28*, 390-410. doi:10.1108/TQM-09-2012-0070

Buathong, S., & Bangchokdee, S. (2017). The use of the performance measures in Thai public hospitals. *Asian Review of Accounting*, *25*, 472-485. doi:10.1108/ARA-03-2017-0043

Calabrese, A., & Corbò, M. (2015). Design and blueprinting for total quality management implementation in service organisations. *Total Quality Management & Business Excellence*, *26*, 719-732. doi:10.1080/14783363.2014.881970

Cámara, S. B., Fuentes, J. M., & Marín, J. M. (2015). Cloud computing, Web 2.0, and operational performance: The mediating role of supply chain integration. *International Journal of Logistics Management*, *26*, 426-458. doi:10.1108/IJLM-07-2013-0085

Carnochan, S., Samples, M., Myers, M., & Austin, M. J. (2014). Performance measurement challenges in nonprofit human service organizations. *Nonprofit and*

Voluntary Sector Quarterly, *43*, 1014-1032. doi:10.1177/0899764013508009

Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *Qualitative Report, 21,* 811-831. Retrieved from https://tqr.nova.edu

Chadha, R. (2017). Value through continuous improvement. *FAIMA Business & Management Journal*, *5*(1), 50-51. Retrieved from http://faimajournal.ro

Chan, N. N., Walker-Gleaves, C., & Walker-Gleaves, A. (2015). An exploration of students' lived experiences of using smartphones in diverse learning contexts using a hermeneutic phenomenological approach. *Computers & Education*, *82*, 96-106. doi:10.1016/j.compedu.2014.11.001

Charles, C., & Kim, M. (2016). Do donors care about results? An analysis of nonprofit arts. *Public Performance & Management Review, 39*, 864-884. doi:10.1080/15309576.2015.1137775

Christoff, P. (2018). Running PDSA cycles. *Current Problems in Pediatric and Adolescent Health Care*, *48*, 198-201. doi:10.1016/j.cppeds.2018.08.006

Cochran, C. (2015). *ISO 9001:2015 in Plain English*. Chico, CA: Paton Publisher.

Cooper, D. J., Ezzamel, M., & Qu, S. Q. (2017). Popularizing a management accounting idea: The case of the balanced scorecard. *Contemporary Accounting Research*, *34*, 991-1025. doi:10.2139/ssrn.2765258

Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*, 89-91. doi:10.1188/14.ONF.89-91

Coronado, F. C., & Cancino, C. A. (2016). Choosing performance measures for incentive

compensation: Experimental evidence. *Personnel Review*, *5*, 850-870. doi:10.1108/PR-12-2014-0287

Crowfoot, D., & Prasad, V. (2017). Using the plan–do–study–act (PDSA) cycle to make change in general practice. *InnovAiT*, *10*, 425-430. doi:10.1177/1755738017704472

Cugini, M. (2015). Successfully navigating the human subjects approval process. *American Dental Hygienists Association*, *89*(Suppl. 1), 54-56. Retrieved from http://jdh.adha.org

Dai, N. T., Kuang, X., & Tang, G. (2018). Differential weighting of objective versus subjective measures in performance evaluation: Experimental evidence. *European Accounting Review*, *27*, 129-148. doi:10.1080/09638180.2016.1234402

Dana, J., Dawes, R., & Peterson, N. (2013). Belief in the unstructured interview: The persistence of an illusion. *Judgment and Decision Making*, *8*, 512-520. Retrieved from http://journal.sjdm.org

Danese, P., & Bortolotti, T. (2014). Supply chain integration patterns and operational performance: A plant-level survey-based analysis. *International Journal of Production Research*, *52*, 7062-7083. doi:10.1080/00207543.2014.935515

[redacted]

Donnelly, P., & Kirk, P. (2015). Use the PDSA model for effective change management. *Education for Primary Care*, *26*, 279-281. doi:10.1080/14739879.2015.11494356

Doucerain, M., Vargas, S., & Ryder, A. G. (2016). Mixed-methods research: Integrating qualitative and quantitative approaches to the psychological study of culture. In N. Zane, G. Bernal, & F. T. Leong (Eds.), *Evidence-based psychological practice with ethnic minorities: Culturally informed research and clinical strategies* (1 ed., pp. 147-167). Washington, DC: American Psychological Asociation. doi:10.1037/14940-008

Drohomeretski, E., Gouvea da Costa, S. E., Pinheiro de Lima, E., & Andrea da Rosa Garbuio, P. (2014). Lean, six sigma and lean six sigma: An analysis based on operations strategy. *International Journal of Production Research*, *52*, 804-824. doi:10.1080/00207543.2013.842015

Duarte, N. T., Goodson, J. R., & Dougherty, T. M. (2014). Managing innovation in hospitals and health systems: Lessons from the malcolm baldrige national quality award winners. *International Journal of Healthcare Management*, *7*, 21-34. doi:10.1179/2047971913Y.0000000052

Eckerd, A., & Moulton, S. (2011). Heterogeneous roles and heterogeneous practices: Understanding the adoption and uses of nonprofit performance evaluations. *American Journal of Evaluation*, *32*(1), 98-117. doi:10.1177/1098214010381780

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). *Qualitative content analysis: A focus on trustworthiness*. Sage Open, 4(1), 1-10.

doi:10.1177/2158244014522633

Emanuel, E. J., Wendler, D., & Grady, C. (2000). What makes clinical research ethical? *Journal of the American Medical Association*, *283*, 2701-2711. doi:10.1001/jama.283.20.2701

Eriksson, P., & Kovalainen, A. (2016). *Qualitative methods in business research* (2nd ed.). Thousand Oaks, CA: Sage.

Etchells, E., Ho, M., & Shojania, K. G. (2015). Value of small sample sizes in rapid-cycle quality improvement projects. *BMJ Quality & Safety*, *25*, 1-5. doi:10.1136/bmjqs-2015-005094

Fadaei, M., & Cats, O. (2016). Evaluating the impacts and benefits of public transport design and operational measures. *Transport Policy*, *48*, 105-116. doi:10.1016/j.tranpol.2016.02.015

Famurewa, S. M., Asplund, M., Rantatalo, M., Parida, A., & Kumar, U. (2015). Maintenance analysis for continuous improvement of railway infrastructure performance. *Structure and Infrastructure Engineering*, *11*, 957-969. doi:10.1080/15732479.2014.921929

Figl, K. (2017). Comprehension of procedural visual business process models. *Business & Information Systems Engineering*, *59*, 41-67. doi:10.1007/s12599-016-0460-2

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. Qualitative Report, 20, 1408-1416. doi:http://nsuworks.nova.edu/tqr/

Garven, S. A., Hoffman, M. A., & McSwain, D. N. (2016). Playing the numbers game: Program ratio management in nonprofit organizations. *Nonprofit Management &*

Leadership, *26*, 401-417. doi:10.1002/nml.21201

Gerring, J. (2017). Qualitative methods. *Annual Review of Political Science*, *20*(1), 15-36. doi:10.1146/annurev-polisci-092415-024158

Gill, M. J. (2014). The possibilities of phenomenology for organizational research. *Organizational Research Methods*, *17*, 118-137. doi:10.1177/1094428113518348

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. doi:10.1177/1525822X05279903

GuideStar. (2018). Guidestar. Retrieved from http://www.guidestar.org

Hadi, M. A., & José Closs, S. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International Journal of Clinical Pharmacy*, *38*, 641-646. doi:10.1007/s11096-015-0237-6

Halkjær, S., & Lueg, R. (2017). The effect of specialization on operational performance. *International Journal of Operations & Production Management*, *37*, 822-839. doi:10.1108/IJOPM-03-2015-0152

Hall, J. L. (2017). Performance management: Confronting the challenges for local government. *Public Administration Quarterly*, *41*, 43-66. Retrieved from http://www.spaef.com/paq.php

Hallett, R. E., & Barber, K. (2014). Ethnographic research in a cyber era. *Journal of Contemporary Ethnography*, *43*, 306-330. doi:10.1177/0891241613497749

Hammer, M. (1990). Reengineering Work: Don't Automate, Obliterate. *Harvard Business Review*, *68*(4), 104-112. Retrieved from http://hbr.org

Harris, E. (2014). The Impact of board diversity and expertise on nonprofit performance. *Nonprofit Management & Leadership*, *25*(2), 113-130. doi:10.1002/nml.21115

Hatfield, P. (2018). Teaching notes to accompany case: How helpful are charity watchdog ratings? *Journal of Accounting & Finance, 18*(2), 72-88. Retrieved from http://na-businesspress.com/jafopen.html

Hayfield, N., & Huxley, C. (2015). Insider and outsider perspectives: Reflections on researcher identities in research with lesbian and bisexual women. *Qualitative Research In Psychology*, *12*, 91-106. doi:10.1080/14780887.2014.918224

Ho, J. L., Wu, A., & Wu, S. Y. (2014). Performance measures, consensus on strategy implementation, and performance: Evidence from the operational-level of organizations. *Accounting, Organizations and Society*, *39*, 38-58. doi:10.1016/j.aos.2013.11.003

Hooda, A. (2014). Emergence of business process reengineering: A literature review. *IUP Journal of Information Technology, 10*(3), 61-75. Retrieved from http://www.iupindia.in/Information_technology.asp

Horn, I. S., Taros, T., Dirkes, S., Hüer, L., Rose, M., Tietmeyer, R., & Constantinides, E. (2015). Business reputation and social media: A primer on threats and responses. *Journal of Direct, Data and Digital Marketing Practice, 16*, 193-208. doi:10.1057/dddmp.2015.1

[redacted]

Huang, S., Lee, C., Chiu, A., & Yen, D. (2015). How business process reengineering affects information technology investment and employee performance under different performance measurement. *Information Systems Frontiers*, *17*, 1133-1144. doi:10.1007/s10796-014-9487-4

Hurn, B. J. (2014). Body language-A minefield for international business people. *Industrial & Commercial Training*, *46*, 188-193. doi:10.1108/ICT-01-2014-0004

Internal Revenue Service. (2017, October 25). Tax Information for Charitable Organizations. Retrieved from IRS.GOV: https://www.irs.gov/charities-non-profits/charitable-organizations

Janghorban, R., Roudsari, R. L., & Taghipour, A. (2014). Skype interviewing: The new generation of online synchronous interview in qualitative research. *International Journal of Qualitative Studies on Health and Well-Being*, *9*, 24152-24154. doi:10.3402/qhw.v9.24152

Jiang, Y., Colakoglu, S., Lepak, D. P., Blasi, J. R., & Kruse, D. L. (2015). Involvement work systems and operational effectiveness: Exploring the moderating effect of national power distance. *Journal of International Business Studies*, *46*, 332-354. doi:10.1057/jibs.2014.61

Johnson, J. S. (2015). Broadening the application of mixed methods in sales research. *Journal of Personal Selling & Sales Management*, *35*, 334-345. doi:10.1080/08853134.2015.1016953

Jonker, K., & Meehan, W. F. (2014). Fundamentals, not fads. *Stanford Social Innovation Review*, *12*(2), 55-56. Retrieved from http://ssir.org

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard-Measures that drive performance. *Harvard Business Review*, *70*(2), 71-79. Retrieved from https://hbr.org

Karimi, A., Safari, H., Hashemi, S. H., & Kalantar, P. (2014). A study of the Baldrige Award framework using the applicant scoring data. *Total Quality Management & Business Excellence*, *25*, 461-477. doi:10.1080/14783363.2013.830386

Kaste, K. P., Hoffman, D. R., Caldwell, D. B., Kasdaglis, C. N., & Neville, D. K. (2015). Introducing change into complex cognitive work systems. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. 59, pp. 409-412. Los Angeles: Sage Publications. doi:10.1177/1541931215591086

Kellner, A., Townsend, K., & Wilkinson, A. (2017). The mission or the margin? A high-performance work system in a non-profit organisation. *International Journal of Human Resource Management, 28*, 1938-1959. doi:10.1080/09585192.2015.1129636

Kenyon, G. N., Meixell, M. J., & Westfall, P. H. (2017). Production outsourcing and operational performance: An empirical study using secondary data. *International Journal of Production Economics*, *171*, 336-349. doi:10.1016/j.ijpe.2015.09.017

Khan, O., Stolte, T., Creazza, A., & Hansen, Z. N. (2016). Integrating product design into the supply chain. *Cogent Engineering*, *3*, 1-24. doi:10.1080/23311916.2016.1210478

Kirkwood, A., & Price, L. (2013). Examining some assumptions and limitations of research on the effects of emerging technologies for teaching and learning in higher education. *British Journal of Educational Technology*, *44*, 536-543. doi:10.1111/bjet.12049

Knapp, J. R., Smith, B. R., & Sprinkle, T. A. (2017). Is it the job or the support? Examining structural and relational predictors of job satisfaction and turnover intention for nonprofit employees. *Nonprofit and Voluntary Sector Quarterly*, *46*, 652-671. doi:10.1177/0899764016685859

Knowles, W., Prince, D., Hutchison, D. D., & Jones, K. (2015). A survey of cyber security management in industrial control systems. *International Journal of Critical Infrastructure Protection, 9*, 52-80. doi:10.1016/j.ijcip.2015.02.002

Knox, C. C., & Wang, X. H. (2016). Capacity to implement performance measurement in small nonprofits. *Journal of Public Management & Social Policy, 22*(3), 1-20. Retrieved from http://jpmsp.com/

Koleoso, H. A., Omirin, M. M., & Adewunmi, Y. A. (2017). Performance measurement scale for facilities management service in Lagos-Nigeria. *Journal of Facilities Management, 15*, 128-152. doi:10.1108/JFM-04-2016-001

Lachapelle, E., Montpetit, É., & Gauvin, J. (2014). Public perceptions of expert credibility on policy issues: The role of expert framing and political worldviews. *Policy Studies Journal*, *42*, 674-697. doi:10.1111/psj.12073

Laihonen, H., & Pekkola, S. (2016). Impacts of using a performance measurement system in supply chain management: A case study. *International Journal of Production*

Research, *54*, 5607-5617. doi:10.1080/00207543.2016.1181810

Lam, M., O'Donnell, M., & Robertson, D. (2015). Achieving employee commitment for continuous improvement initiatives. *International Journal of Operations & Production Management*, *35*, 201-215. doi:10.1108/IJOPM-03-2013-0134

Lasrado, F., & Uzbeck, C. (2017). The excellence quest: A study of business excellence award-winning organizations in UAE. B*enchmarking: An International Journal*, *24*, 716-734. doi:10.1108/BIJ-06-2016-0098

Laverentz, D. M., & Kumm, S. (2017). Concept evaluation using the PDSA cycle for continuous quality improvement. *Nursing Education Perspectives*, *38*, 288-290. doi:10.1097/01.NEP.0000000000000161

Lecy, J. D., & Searing, E. A. (2015). Anatomy of the nonprofit starvation cycle: An analysis of falling overhead ratios in the nonprofit sector. *Nonprofit and Voluntary Sector Quarterly*, *44*, 539-563. doi:10.1177/0899764014527175

Lee, C., & Clerkin, R. M. (2017). Exploring the use of outcome measures in human service nonprofits: Combining agency, institutional, and organizational capacity perspectives. *Public Performance & Management Review*, *40*, 601-624. doi:10.1080/15309576.2017.1295872

Lee, C., & Nowell, B. (2015). A framework for assessing the performance of nonprofit organizations. *American Journal of Evaluation*, *36*, 299-319. doi:10.1177/1098214014545828

Leis, J. A., & Shojania, K. G. (2016). A primer on PDSA: Executing plan–do–study–act cycles in practice, not just in name. *BMJ Quality & Safety*, *26*, 572-577.

doi:10.1136/bmjqs-2016-006245

Leiva, R., Ferrero, I., & Calderón, R. (2016). Corporate reputation in the business ethics field: Its relation with corporate identity, corporate image, and corporate social responsibility. *Corporate Reputation Review*, *19*, 299-315. doi:10.1057/s41299-016-0008-x

Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, *4*, 324-327. doi:10.4103/2249-4863.161306

Leyer, M., Stumpf-Wollersheim, J., & Pisani, F. (2017). The influence of process-oriented organisational design on operational performance and innovation: A quantitative analysis in the financial services industry. *International Journal of Production Research*, *55*, 5259-5270. doi:10.1080/00207543.2017.1304667

Lifebanc. (2018). Retrieved from Lifebanc: https://www.lifebanc.org

Liket, K., & Maas, K. (2015). Nonprofit organizational effectiveness: Analysis of best practices. *Nonprofit and Voluntary Sector Quarterly*, *44*, 268-296. doi:10.1177/0899764013510064

Lleo, A., Viles, E., Jurburg, D., & Lomas, L. (2017). Strengthening employee participation and commitment to continuous improvement through middle manager trustworthy behaviours. *Total Quality Management & Business Excellence*, *28*, 974-988. doi:10.1080/14783363.2017.1303872

Lodgaard, E., Igvaldsen, J. A., Aschehoug, S., & Gamme, I. (2016). Barriers to continuous improvement: Perceptions of top managers, middle managers and

workers. *48th CIRP Conference on Manufacturing Systems* (pp. 1119-1124). Raufoss, Norway: Elsevier Procedia. doi:10.1016/j.procir.2016.01.012

López-Arceiz, F. J., Pérezgrueso, A. J. B., & Torres, M. P. R. (2017). Accessibility and transparency: impact on social economy. *Online Information Review*, *41*, 35-52. doi:10.1108/OIR-09-2015-0296

Macedo, I. M., Pinho, J. C., & Silva, A. M. (2016). Revisiting the link between mission statements and organizational performance in the non-profit sector: The mediating effect of organizational commitment. *European Management Journal*, *34*, 36-46. doi:10.1016/j.emj.2015.10.003

Malterud, K., Siersma, V. D., & Guassora, A. D. (2015). Sample size in qualitative interview studies: guided by information power. *Qualitative Health Research, 26,* 1753-1760. doi:10.1177/1049732315617444

Mathews, D. J., & Jamal, L. (2014). Revisiting respect for persons in genomic research. *Genes*, *5*(1), 1-12. doi:10.3390/genes5010001

Mathur, S., & Asthana, P. N. (2016). The impact of business process reengineering interventions - A case study of state bank of India. *Global Journal of Enterprise Information System, 8*(2), 36-39. doi:10.18311/gjeis/2016/7094

Matthews, R. L., MacCarthy, B. L., & Braziotis, C. (2017). Organisational learning in SMEs: A process improvement perspective. *International Journal of Operations & Production Management*, *37*, 970-1006. doi:10.1108/IJOPM-09-2015-0580

Mayer, I. (2015). Qualitative research with a focus on qualitative data analysis. *International Journal of Sales, Retailing & Marketing*, *4*(9), 53-67. Retrieved

from http://ijsrm.com/IJSRM/Home.html

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion, 30,* 537-542. doi:10.1177/0267659114559116

McKeever, B. S., & Pettijohn, S. L. (2014). The nonprofit sector in brief 2014: Public charities, giving and volunteering. Retrieved from https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-mckeever-pettijohn.pdf

McKernan, E., Kennedy, K., & Aldred, A. (2016). Adopting results based management in the non-profit sector: Trócaire's experience. *Project Management Research and Practice, 3,* 5122-5141. doi:10.5130/pmrp.v3i0.5122

Melão, N. F., Guia, S. M., & Amorim, M. (2017). Quality management and excellence in the third sector: Examining european quality in social services (EQUASS) in non-profit social services. *Total Quality Management & Business Excellence, 28,* 840-857. doi:10.1080/14783363.2015.1132160

Milner, C. D., & Savage, B. M. (2016). Modeling continuous improvement evolution in the service sector: A comparative case study. *International Journal of Quality and Service Sciences, 8,* 438-460. doi:10.1108/IJQSS-07-2016-0052

Mitchell, G. E. (2013). The construct of organizational effectiveness: Perspectives from leaders of international nonprofits in the United States. *Nonprofit and Voluntary Sector Quarterly, 42,* 324-345. doi:10.1177/0899764011434589

Mitchell, G. E., & Berlan, D. (2018). Evaluation in nonprofit organizations: An empirical

analysis. *Public Performance & Management Review, 41*, 415-437. doi:10.1080/15309576.2017.1400985

Molina-Azorin, J. F., Bergh, D. D., Corley, K. G., & Ketchen, D. J. (2017). Mixed methods in the organizational sciences. *Organizational Research Methods, 20*, 179-192. doi:10.1177/1094428116687026

Moreira, M., & Tjahjono, B. (2016). Applying performance measures to support decision-making in supply chain operations: a case of beverage industry. *International Journal of Production Research, 54*, 2345-2365. doi:10.1080/00207543.2015.1076944

Morelli, M. S. (2016). Using the plan, do, study, act model to implement a quality improvement program in your practice. *American Journal of Gastroenterology, 111*, 1220-1222. doi:10.1038/ajg.2016.321

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 29*, 1212-1222. doi:10.1177/1049732315588501

Moullin, M. (2007). Performance measurement definitions: Linking performance measurement and organisational excellence. *International Journal of Health Care Quality Assurance, 20*, 181-183. doi:10.1108/09526860710743327

Movahedi, B., Miri-Lavassani, K., & Kumar, U. (2016). Operational excellence through business process orientation. *TQM Journal, 28*, 467-495. doi:10.1108/TQM-12-2013-0147

Moxham, C. (2014). Understanding third sector performance measurement system

design: A literature review. *International Journal of Productivity and Performance Managemen*t, *63*, 704-726. doi:10.1108/IJPPM-08-2013-0143

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research*. Bethesda, MD: ERIC Clearinghouse.

National Council of Nonprofits. (2018). Research, reports, and data on the nonprofit sector. Retrieved from https://www.councilofnonprofits.org/research-reports-and-data-the-nonprofit-sector

Nelson, T. D. (2016). The need for ISO 9001 2015 education. *Quality Management Forum*, *42*(1), 7-10. Retrieved from http://asq-qm.org

Newman, I., Ridenour, C. S., Newman, C., & DeMarco, G. M. (2003). A typology of research purposes and its relationship to mixed methods. In A. Tashakkori, & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 167-188). Thousand Oaks, CA: Sage.

Newman, M. W. (2017). Integrated and collaborative care: Quality improvement in action. *Psychiatric Annals*, *47*, 374-377. doi:10.3928/00485713-20170525-01

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, *18*, 34-35. doi:10.1136/eb-2015-102054

Ogbeiwi, O. (2017). Why written objectives need to be really SMART. *British Journal of Healthcare Management*, *23*, 324-336. doi:10.12968/bjhc.2017.23.7.324

O'Grady, E. (2016). Research as a respectful practice: An exploration of the practice of

respect in qualitative research. *Qualitative Research in Education, 5*, 229-254. doi:10.17583/qre.2016.2018

Onen, D. (2016). Appropriate conceptualisation: The foundation of any solid quantitative research. *Electronic Journal of Business Research Methods*, *14*(1), 28-38. Retrieved from http://www.ejbrm.com/

Onwuegbuzie, A. J., & Byers, V. T. (2014). An exemplar for combining the collection, analysis, and interpretations of verbal and nonverbal data in qualitative research. *International Journal of Education, 6*, 183-246. doi:10.5296/ije.v6i1.4399

[redacted]

O'Reilly, M., & Parker, N. (2013). Unsatisfactory saturation: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, *13*, 190-197. doi:10.1177/1468794112446106

Padela, A. I., Malik, A. Y., Curlin, F., & De Vries, R. (2014). [Re]considering respect for persons in a globalizing worlPark, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought, 3*(1), 1-7. Retrieved from http://www.ejmt.org

Pagell, M., Klassen, R., Johnston, D., Shevchenko, A., & Sharma, S. (2015). Are safety and operational effectiveness contradictory requirements: The roles of routines and relational coordination. *Journal of Operations Management*, *36*, 1-14. doi:10.1016/j.jom.2015.02.002

Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery

or justification? *Journal of Marketing Thought*, *3*(1), 1-7. doi:10.15577/jmt.2016.03.01.1

Parsons, L. M., Pryor, C., & Roberts, A. A. (2017). Pressure to manage ratios and willingness to do so: Evidence from nonprofit managers. *Nonprofit & Voluntary Sector Quarterly*, *46*, 705-724. doi:10.1177/0899764017692037

Pecáková, I. (2016). Pitfalls of quantitative surveys online. *Acta Oeconomica Pragensia*, *24*(6), 3-15. doi:10.18267/j.aop.560

Pimentel, L., & Major, M. (2016). Key success factors for quality management implementation: Evidence from the public sector. *Total Quality Management & Business Excellence*, *27*, 997-1012. doi:10.1080/14783363.2015.1055239

Podgórski, D. (2015). Measuring operational performance of OSH management system–A demonstration of AHP-based selection of leading key performance indicators. *Safety Science*, *73*, 146-166. doi:10.1016/j.ssci.2014.11.018

Popescu, C. R., & Popescu, V. A. (2015). The assessment methodology PDCA/PDSA–A methodology for coordinating the efforts to improve the organizational processes to achieve excellence. *Challenges of the Knowledge Society*, *5*, 693-696. Retrieved from http://cks.univnt.ro/

[redacted]

Prajogo, D., Toy, J., Bhattacharya, A., Oke, A., & Cheng, T. (2018). The relationships

between information management, process management and operational performance: Internal and external contexts. *International Journal of Production Economics, 199*, 95-103. doi:10.1016/j.ijpe.2018.02.019

Prentice, C. R. (2016). Why so many measures of nonprofit financial performance? Analyzing and improving the use of financial measures in nonprofit research. *Nonprofit and Voluntary Sector Quarterly*, *45*, 715-740. doi:10.1177/0899764015595722

Prybutok, G. L. (2018). Ninety to nothing: A PDSA quality improvement project. *International Journal of Health Care Quality Assurance*, *31*, 361-372. doi:10.1108/IJHCQA-06-2017-0093

Psomas, E. (2016). The underlying factorial structure and significance of the six sigma difficulties and critical success factors. *TQM Journal*, *28*, 530-546. doi:10.1108/TQM-04-2015-0049

Ramu, G. (2017). Digging deeper into ISO 9001:2015: Linking opportunities and joy at work. *Journal for Quality and Participation*, *39*(4), 33-36. Retrieved from http://asq.org/pub/jqp

Rawhouser, H., Cummings, M., & Newbert, S. L. (2017). Social impact measurement: Current approaches and future directions for social entrepreneurship research. *Entrepreneurship Theory and Practice*, 1-34. doi:10.1177/1042258717727718

Reed, J. E., & Card, A. J. (2015). The problem with plan-do-study-act cycles. *BMJ Quality and Safety, 25*(3), 1-6. doi:10.1136/bmjqs-2015-005076

Reed, J. E., McNicholas, C., Woodcock, T., Issen, L., & Bell, D. (2014). Designing

quality improvement initiatives: The action effect method, a structured approach to identifying and articulating programme theory. *BMJ Quality & Safety, 23*, 1040-1048. doi:10.1136/bmjqs-2014-003103

Reinke, T. (2015). Transforming health care delivery into a learning health care system. *Physician Leadership Journal*, *2*(6), 12-14, 16. Retrieved from http://physicianleaders.org/news/journals/plj/index

Renedo, A., Marston, C. A., Spyridonidis, D., & Barlow, J. (2015). Patient and public involvement in healthcare quality improvement: How organizations can help patients and professionals to collaborate. *Public Management Review*, *17*, 17-34. doi:10.1080/14719037.2014.881535

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, *11*(1), 25-41. doi:10.1080/14780887.2013.801543

Rooney, T., Lawlor, K., & Rohan, E. (2016). Telling tales: Storytelling as a methodological approach in research. *Electronic Journal of Business Research Methods*, *14*(2), 147-156. Retrieved from http://ejbrm.com

Samman, R. A., & Ouenniche, J. (2016). Continuous quality improvement programs - Part I: Survey, critical analysis and future research directions. *Journal of Developing Areas*, *50*(4), 39-66. doi:10.1353/jda.2016.0152

Sandelowski, M. (2015). A matter of taste: Evaluating the quality of qualitative research. *Nursing Inquiry, 22*, 86-94. doi:10.1111/nin.12080

Sangari, M. S., Hosnavi, R., & Zahedi, M. R. (2015). The impact of knowledge

management processes on supply chain performance. *International Journal of Logistics Management*, *26*, 603-626. doi:10.1108/IJLM-09-2012-0100

Sanger, M. B. (2013). Does measuring performance lead to better performance? *Journal of Policy Analysis and Management, 32*, 185-203. doi:10.1002/pam.21657

Sangwa, N. R., & Sangwan, K. S. (2018). Development of an integrated performance measurement framework for lean organizations. *Journal of Manufacturing Technology Management*, *29*, 41-84. doi:10.1108/JMTM-06-2017-0098

Santa, R., Echeverry, A. M., Sánchez, P. A., & Rios Patiño, J. I. (2014a). System and operational effectiveness alignment: The case of e-government in Saudi Arabia. *International Journal of Management Science and Engineering Management*, *9*, 212-220. doi:10.1080/17509653.2014.905219

Santa, R., Hyland, P., & Ferrer, M. (2014b). Technological innovation and operational effectiveness: Their role in achieving performance improvements. *Production Planning and Control*, *25*, 969-979. doi:10.1080/09537287.2013.785613

Sarma, S. K. (2015). Qualitative research: Examining the misconceptions. *South Asian Journal of Management*, *22*, 176-191. Retrieved from http://www.sajm-amdisa.org

Schalock, R. L., Lee, T., Verdugo, M., Swart, K., Claes, C., van Loon, J., & Lee, C. S. (2014). An evidence-based approach to organization evaluation and change in human service organizations evaluation and program planning. *Evaluation and Program Planning*, *45*, 110-118. doi:10.1016/j.evalprogplan.2014.03.012

Schlagwein, D., & Bjorn-Andersen, N. (2014). Organizational learning with

crowdsourcing: The revelatory case of LEGO. Jo*urnal of the Association for Information Systems, 15*, 754-778. Retrieved from http://aisel.aisnet.org/jais/

Selden, S. C., & Sowa, J. E. (2015). Voluntary turnover in nonprofit human service organizations: The impact of high performance work practices. *Human Service Organizations: Management, Leadership & Governance, 39*, 182-207. doi:10.1080/23303131.2015.1031416

Sharp, Z. (2018). Existential angst and identity rethink: The complexities of competition for the nonprofit. *Nonprofit and Voluntary Sector Quarterly*, *47*, 767-788. doi:10.1177/0899764018760399

Shin, S. J., Yuan, F., & Zhou, J. (2017). When perceived innovation job requirement increases employee innovative behavior: A sensemaking perspective. *Journal of Organizational Behavior*, *38*, 68-86. doi:10.1002/job.2111

Singh, J., & Singh, H. (2015). Continuous improvement philosophy–literature review and directions. *Benchmarking: An International Journal*, *22*, 75-119. doi:10.1108/BIJ-06-2012-0038

Smith, M., & Bititci, U. S. (2017). Interplay between performance measurement and management, employee engagement and performance. *International Journal of Operations & Production Management, 37*, 1207-1228. doi:10.1108/IJOPM-06-2015-0313

Soysa, I. B., Jayamaha, N. P., & Grigg, N. P. (2016). Operationalising performance measurement dimensions for the Australasian nonprofit healthcare sector. *TQM Journal*, *28*, 954-973. doi:10.1108/TQM-08-2015-0109

Speroff, T., & O'Connor, G. T. (2004). Study designs for PDSA quality improvement research. *Quality Management in Healthcare*, 17-32. doi:10.1097/00019514-200401000-00002

Sriratana, B., & Sharma, A. (2016). Quality improvement and patient safety tools. In E. Fondahn, M. Lane, & A. Vannucci, *Washington manual of patient safety and quality improvement* (pp. 33-44). Philadelphia, PA: Lippincott Williams & Wilkins.

Star, S., Russ-Eft, D., Braverman, M. T., & Levine, R. (2016). Performance measurement and performance indicators: A literature review and a proposed model for practical adoption. *Human Resource Development Review, 15*, 151-181. doi:10.1177/1534484316636220

Starr, M. A. (2014). Qualitative and mixed-methods research in economics: Surprising growth, promising future. *Journal of Economic Surveys, 28*, 238-264. doi:10.1111/joes.12004

Sternad, D., Krenn, M., & Schmid, S. (2017). Business excellence for SMEs: Motives, obstacles, and size-related adaptations. *Total Quality Management & Business Excellence*, 1-18. doi:10.1080/14783363.2017.1300054

Struchens, M., Iiams, M., Sears, R., & Ellis, M. (2016). A deeper dive into the plan-do-study-act cycles and measures. *Proceedings of The Fifth Annual Mathematics Teacher Education Partnership Conference* (pp. 30-36). Washington, DC: Association of Public Land-Grant Universities. Retrieved from http://aplu.org

Syed, R., Bandara, W., French, E., & Stewart, G. (2018). Getting it right! Critical success

factors of BPM in the public sector: A systematic literature review. *Australasian Journal of Information Systems, 22*, 1-39. doi:10.3127/ajis.v22i0.1265

Taher, N. B., & Krotov, V. (2016). Business process reengineering: Addressing sources of resistance and sabotage tactics. *Journal of Competitiveness Studies*, *24*(3), 145-163. Retrieved from http://eberly.iup.edu/ASCWeb/journals_jcs.html

Upadhaya, B., Munir, R., & Blount, Y. (2014). Association between performance measurement systems and organisational effectiveness. *International Journal of Operations & Production Management, 34*, 853-875. doi:10.1108/IJOPM-02-2013-0091

Van Assen, M. (2018). Process orientation and the impact on operational performance and customer-focused performance. *Business Process Management Journal*, *24*, 446-458. doi:10.1108/BPMJ-10-2016-0217

Vaughn, P., & Turner, C. (2016). Decoding via coding: Analyzing qualitative text data through thematic coding and survey methodologies. *Journal of Library Administration, 56*, 41-51. doi:10.1080/01930826.2015.1105035

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*, *37*(1), 21-54. Retrieved from http://misq.org/misq/downloads

Vordenberg, S. E., Smith, M. A., Diez, H. L., Remington, T. L., & Bostwick, J. R. (2018). Using the plan-do-study-act (PDSA) model for continuous quality improvement of an established simulated patient program. *Innovations in*

Pharmacy, *9*(2), 1-6. doi:10.24926/iip.v9i2.989

Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*, *10*(1), 69-80. Retrieved from https://cmawebline.org/publications/maf.html

Wandersman, A., Alia, K. A., Cook, B., & Ramaswamy, R. (2015). Integrating empowerment evaluation and quality improvement to achieve healthcare improvement outcomes. *BMJ Quality & Safety*, *24*, 645-652. doi:10.1136/bmjqs-2014-003525

Wang, W., Wang, B., Yang, K., Yang, C., Yuan, W., & Song, S. (2018). When project commitment leads to learning from failure: The roles of perceived shame and personal control. *Frontiers in Psychology*, *9*(86), 1-12. doi:10.3389/fpsyg.2018.00086

Webber, J. K., Ser, E. M., & Goussak, G. W. (2015). Work habits as positive and negative influence on workplace productivity. *Global Journal of Business Research*, *9*(1), 39-48. Retrieved from http://www.theibfr.com/gjbr.htm

Weckenmann, A., Akkasoglu, G., & Werner, T. (2015). Quality management–history and trends. *TQM Journal*, *27*, 281-293. doi:10.1108/TQM-11-2013-0125

West, J. E., & Cianfrani, C. A. (2017). Beyond the requirements. *Quality Progress*, *50*(4), 46-48. Retrieved from http://qualityprogress.com

Willems, J., Boenigk, S., & Jegers, M. (2014). Seven trade-offs in measuring nonprofit performance and effectiveness. *Voluntas*, *25*, 1648-1670. doi:10.1007/s11266-

014-9446-1

Wilson, J. P., & Campbell, L. (2016). Developing a knowledge management policy for ISO 9001: 2015. *Journal of Knowledge Management*, *20*, 829-844. doi:10.1108/JKM-11-2015-0472

[redacted]

Xu, J., Anders, S., Pruttianan, A., France, D., Lau, N., Adams, J. A., & Weinger, M. B. (2018). Human performance measures for the evaluation of process control human-system interfaces in high-fidelity simulations. *Applied Ergonomics, 73*, 151-165. doi:10.1016/j.apergo.2018.06.008

Yang, Y., Lee, P. K., & Cheng, T. C. (2016). Continuous improvement competence, employee creativity, and new service development performance: A frontline employee perspective. *International Journal of Production Economics*, *171*, 275-288. doi:10.1016/j.ijpe.2015.08.006

Yates, J., & Leggett, T. (2016). Qualitative research: An introduction. *Radiologic Technology*, 88, 225-231. Retrieved from http://radiologictechnology.org/

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*, 311-325. doi:10.1111/ejed.12014

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage.

Zhang, M., Guo, H., & Zhao, X. (2017). Effects of social capital on operational performance: Impacts of servitisation. *International Journal of Production Research*, *55*, 4304-4318. doi:10.1080/00207543.2016.1246764

Zidane, Y. J.-T., & Olsson, N. O. (2017). Defining project efficiency, effectiveness and efficacy. *International Journal of Managing Projects in Business*, *10*, 621-641. doi:10.1108/IJMPB-10-2016-0085