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Walden University 2022

Abstract

Strategies Leaders of STEM-Focused Education Nonprofit Organizations Use to Engage
Hiring Corporations

by

Andrew Joshua Kanas

MBA, Moravian College, 2018 BA, Moravian College, 2016

Consulting Capstone Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

May 2022

Abstract

Some leaders of nonprofit Science Technology Engineering and Math (STEM) focused nonprofit education organizations lack strategies to engage STEM-focused hiring corporations to support their organizations' missions. Nonprofit leaders are concerned about engaging individuals, organizations, and government entities to help support sustainability. Grounded in human capital theory, the purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education organizations use to engage STEM-focused hiring corporations to support their nonprofit organizations' mission. The participants consisted of five board members of a nonprofit partner organization in the U.S. state of Florida who successfully managed STEMfocused stakeholder engagement. Data from semistructured interviews, company documents, a Baldrige Performance Excellence Program analysis, and academic and professional literature were analyzed using thematic analysis. The thematic analysis results revealed four thematic findings: networking, partnership, mission alignment, and communication. Based on research findings, a key recommendation for STEM-focused nonprofit education leaders is to increase engagement of STEM-focused hiring organizations to achieve strategic objectives and fulfill their mission. The implications for positive social change include the potential to increase the number of qualified applicants for STEM-focused corporate positions, which may benefit local communities by increasing employment and tax revenue.

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Dedication

I want to dedicate this study to my future wife, Taylor; my mom, Sharon; my dad, Andy; my sister, Jessica; my pappy, Edwin; my grandma, Nancy; and my pop-pop in heaven, Andrew. Without you all in my life, I would not be the person I am today.

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Section 1: Foundation of the Study

In this research, I used the Baldrige Excellence Framework to discover strategies that leaders of nonprofit education programs in the science, technology, engineering, and math (STEM) sector use to engage with STEM-focused corporations. I followed the Consulting Capstone guidelines for Walden University's Doctor of Business Administration (DBA) program. The study involved a partnership between Walden University and a client organization in which I served as both the consultant and researcher to the client organization.

Background of the Problem

Educating students about, and encouraging their involvement in, STEM-focused careers is a key function of leaders of STEM-focused education nonprofit organizations. Barkatsas et al. (2019) explained that a demand for STEM-trained individuals is continually increasing in the 21st century due to technological, governmental, and industrial personnel demands. As demand rises, a gap exists between hirable workforce and open positions. The leaders of STEM-focused education nonprofit organizations often lack the necessary involvement of STEM-focused corporations in addressing this shortfall.

The leaders of STEM-focused education nonprofit organizations rely heavily on support from donors to support and execute the goals of their organization. Leaders of STEM corporations also find it necessary to engage with the education organizations to fulfill their workforce demands. Many leaders of STEM-focused education nonprofit organizations lack the resources and strategies necessary to engage STEM-focused

corporations. The background of this problem centers on the strategies of engagement available to STEM-focused education nonprofit organizations in working with STEM-focused corporations. As leaders of STEM-focused education nonprofit organization look to achieve their goals, engagement is crucial for the success of their missions.

Problem Statement

In 2016, U.S. businesses lost approximately \$160 billion annually because of unfilled jobs (McDonough, 2017). According to the United States Bureau of Labor Statistics (2020, Table 1.11), a projected 10.5 million STEM occupations will exist by 2028. The general business problem is that leaders of STEM-focused corporations need to incorporate strategies with STEM-focused education nonprofit programs to gain access to a pool of hirable STEM candidates. The specific business problem is some leaders of nonprofit STEM-focused education nonprofit organizations lack strategies to engage STEM-focused hiring corporations to support nonprofit STEM organizations' missions.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations to support their nonprofit organizations' mission. The targeted population for this study consisted of five leaders of a nonprofit U.S. STEM-focused education nonprofit organization. The leaders of the STEM-focused education nonprofit organization were appropriate for the study because they had exhibited success in developing and implementing successful strategies to gain support from STEM-focused hiring corporations. The contribution from the findings of this study may reveal

strategies that the leaders of STEM-focused education nonprofit organizations can use to engage support from STEM-focused hiring corporations. The implications for positive social change include the ability for students who participate in STEM-focused education nonprofit organizations to have expanded career options with STEM-focused hiring corporations.

Nature of the Study

A researcher selects among quantitative, qualitative, and mixed methods (Sachdeva, 2009). The research method for this study was qualitative. By using a variety of data collection techniques, such as interviews and documents, a qualitative researcher can obtain information to explore the phenomena of interest (Saunders et al., 2015). The qualitative research method was appropriate for this study because the study's intent was to explore rather than examine a phenomenon. Qualitative research provides a means to explore strategies whereas a quantitative method centers on examining variables' characteristics or relationships (Cecez et al., 2020). Quantitative researchers use statistical data collection and analysis techniques to test a theory (Green & Salkind, 2017). The mixed method is a combination of both quantitative and qualitative techniques (Saunders et al., 2015). I opted against using the mixed-method approach because I did not combine qualitative and quantitative methods. Because the purpose of this study was to explore successful strategies, as opposed to examining variables' characteristics or relationship, the qualitative method was selected.

Regarding the research design, the single case study was appropriate for this study because it involved analyzing multiple data sources. A case study consists of collection

and analysis of multiple sources of data (Patton, 2015). Specifically, I conducted semistructured interviews and reviewed company documents and research organization websites to discover effective strategies for nonprofit STEM-focused education nonprofit organizations to effectively engage STEM-focused corporations. I served as a consultant with a single client under the standard policies and procedures of the Walden University Consulting Capstone.

Research Question

What strategies do leaders of STEM-focused education nonprofit organizations use to engage support from STEM-focused hiring corporations to support the nonprofit STEM organization's mission?

Interview Questions

- 1. What techniques do you use to communicate with STEM-focused hiring corporations?
- 2. What strategies do you use to engage hiring corporations for financial support?
- 3. How do you create and maintain relationships with STEM-focused hiring corporations?
- 4. What strategies do you use to engage STEM-focused hiring corporations to support the nonprofit STEM organization's mission?
- 5. How do you assess the effectiveness of your strategies to achieve the desired performance?

6. What additional information might you share regarding effective strategies your organization's leaders use to engage support from STEM-focused hiring corporations?

Conceptual Framework

The conceptual framework for this study was the human capital theory. In 1958, Mincer introduced human capital theory (Mincer, 1997). The theory conceptualizes of human capital in an organization's stakeholder's education and professional development have an economic value to an organization. In addition, Schultz (1993) reinforced Mincer's original theory by contributing an idea that human capital has the potential to grow an organization's income faster opposed to real capital. Through the lens of human capital theory leaders of organizations have a different approach to operations within the workforce. The human capital theory can help guide the study by providing a framework in which employees are an organization's biggest capital asset.

Researchers have identified the definition of human capital theory as additional assets of an organization by an employee's skills and education. Unfilled positions, through the lens of human capital theory, can provide information and motivation for leaders to consider opportunities to strengthen human capital assets with strategic access to qualified candidates (Drobny, 2017). With the contribution of human capital theory, STEM-focused hiring corporations can find motivation in engaging with STEM-focused hiring organizations to support the nonprofit organization's mission.

Operational Definitions

Competitive advantage: A state that occurs when an organization has an increased skill set compared to other organizations in similar areas of interest (Coff & Raffiee, 2015).

Leadership: A process that occurs when an individual has influence on other group members (Northouse, 2019)

Nonprofit organizations: Organizations that qualify for tax-exempt status. The leaders of these organizations are focused on fulfilling a mission that is related to a cause or societal betterment. Organizations that are categorized under the 501(c)(3) code under the Internal Revenue service are not profitable for any services (Paxton et al., 2020).

Science, technology, engineering, and mathematics (STEM): Education that promotes the awareness and knowledge of subjects relating to science, technology, engineering, and mathematics (Saracoglu & Karaoglan, 2019).

Organizational productivity: The efficiency and effectiveness with which an organization performs. Organizations with higher organizational productivity tend to have more success than organizations with lower productivity (Wright & Constantin, 2021).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions in research occur when a researcher perceives information relating to the research as factual (Sebele-Mpofu, 2020). Furthermore, the notion related to the assumption cannot be further investigated to support the idea. The first assumption of this

study was that the Baldrige Excellence Framework was a suitable framework for the client organization and could assist with increased performance. I also assumed that the participants in the study provided truthful and precise interview responses and that the other study data were similarly accurate. An additional assumption was that the partner client's organizational data would be accessible to me at the time of the research.

Limitations

Limitations refer to a weakness in a study that a researcher cannot resolve (Saunders et al., 2015). This study was a qualitative single case study, which entails limitations outside of the organization of the study. The participants had limited knowledge outside of their demographic and STEM organization. The participants with limited knowledge outside of their demographic pose concerns. Thus, their views may not be pertinent outside of nonprofit STEM education programs. The participants provided expertise from a nonprofit organizational outlook. Thus, a limitation of the study is that it may not reflect the outlook of STEM-focused partnering corporations.

Delimitations

A delimitation in research occurs when a researcher creates boundaries of a study (Saunders et al., 2015). In this study, the participants were members of a single STEM nonprofit educational program. The research from this study includes no participants outside of the nonprofit sector. In addition, the demographics of the participants may not be reflective of STEM nonprofit educational programs in other areas.

Significance of the Study

The results of this study may provide value to any STEM-focused education nonprofit organization by exploring effective strategies to engage STEM-focused hiring corporations. Campion et al. (2019) explained that staffing unfilled positions could create numerous challenges for organizations. The results of this study may help STEM-focused corporations become more involved in programs that will lead to a larger talent pool. Implications for positive social change include the potential for leaders of organizations to become more involved in programs that may help increase the employable workforce. In addition, the leaders of STEM-focused education nonprofit programs may be able to achieve or buttress the necessary resources to educate more qualified students to fill open STEM positions for benefiting society.

Contribution to Business Practice

This qualitative single case study may contribute to nonprofit STEM organizational practice by discovering effective strategies to engage STEM-focused hiring corporations to support the mission of partnering nonprofit STEM organizations. The recruitment practices correlate with the financial performance of the organization (Jashari & Kutllovci, 2020). Recruitment is key with engaging STEM-focused hiring corporations because STEM-focused education nonprofit organizations help close the gap between students' unawareness of STEM employment opportunities and employers' ability to hire STEM candidates. The findings from this study may help the leaders of STEM-focused education nonprofit organizations to engage STEM-focused hiring

corporations to employ STEM graduates, which may help to improve the performance of the hiring organization.

Implications for Social Change

STEM-focused education nonprofit organizations help motivate and educate youth regarding a career path in STEM (Wang & Frye, 2019). Identifying effective strategies to engage STEM-focused corporations may contribute to filling positions and helping hiring corporations gain a competitive advantage while supporting a nonprofit STEM organization's mission. The implications for positive social change are educating graduates who can benefit society by providing qualified hirable candidates to STEM-focused hiring corporations. The findings from this study may also contribute to the surrounding communities' tax revenues by providing students direction towards a career path and lowering unemployment.

A Review of the Professional and Academic Literature

The purpose of this study was to explore strategies leaders of STEM-focused education nonprofit organizations use to elicit support from STEM-focused hiring corporations to fulfill their nonprofit organizations' mission. The research in the literature review consists of peer-reviewed scholarly journals, government statistics, and economic reports. To find literature for the review, I used Walden University Library databases, including EBSCOhost and the Thoreau Multi-Database Search, and the search engine Google Scholar. The keywords used in searches were human capital, STEM, human capital theory, human resource, employee recruitment, talent management, organizational workforce, and stem education. The literature review provides context on

the relevance of human capital theory as a contribution to STEM-focused hiring corporations. To comply with Walden DBA requirements, 75 of the 88 (85%) articles were published within the past 5 years.

Human Capital Theory

In 1958, Mincer introduced the concept of human capital, which is the idea that education and professional development holds economic value. Moreover, human capital theory defines employees as a contribution to an organization's economic value (Azatovna, 2019). In 1970, Schultz confirmed that organizations receive a higher income due to "human" capital than "real" capital (Azatovna, 2019). The intent of the literature review is to provide a critical analysis and synthesis of human capital theory and its applicability to STEM-focused education nonprofit programs and corporations.

Using an economic lens, human capital signifies the education, training, and professional development that an individual contributes to an organization. Drobny (2017) explained that an organization's human capital does not cease to exist even when key individuals die. Human capital is continuous and requires replacement. Human capital refers to the idea that the contribution of knowledge an individual retains can generate considerable capital for an organization. Rupietta and Backes-Gellner (2019) researched the concept that organizational leaders can generate superior innovation performance by managing their human capital. They studied the Swiss manufacturing sector to determine whether appropriate management of human capital leads to a positive generation of incremental innovation performance for organizations. Human capital not

only has positive effects on performance but it also offers a competitive advantage to organizations.

An individual's skills are assets to an organization according to human capital theory. Coff and Raffiee (2015) explained that sustained competitive advantage occurs if the individuals inside an organization have firm-specific skills. One element of competitive advantage is interfunctional coordination. Interfunctional coordination utilizes all resources in the organization to produce a good or service (Gould, 2019). Utilizing human capital to its full potential helps lead to a competitive advantage. Khanna et al. (2014) conducted a research study on over 5,700 directors from 650 firms on the Fortune 100. The authors discovered that human capital could lead to opportunities to create a competitive advantage. A competitive advantage allows an organization to be profitable (Gould, 2019).

Disruptions in labor productivity can diminish an organization's competitive advantage. Della Torre et al. (2018) conducted a study of 1,911 manufacturing firms in Italy to determine the effects of human capital and labor productivity and the relationship to new hires, voluntary turnover, and percentage of college graduates. The researchers identified that new hires disturb the relationship between human capital and labor productivity. New hires can lack workforce experience that enriches human capital (Azatovna, 2019). The education of an employee can lead to increased human capital.

Educating students with STEM concepts can impact the success of the student. As Saracoglu and Karaoglan (2019) noted, prior studies have shown that children who receive early education tend to work at jobs with higher statuses as adults. Erosa et al.

(2010) conducted a quantitative analysis to identify the relationship between human capital and total factor productivity of education and income. In the analysis, Erosa et al. discovered a positive relationship between education and income in the United States. This positive relationship can correlate to human capital within an organization and the importance of education. Furthermore, Affandi et al. (2019) researched the relationship between economic growth and human capital. The authors concluded that enhancing education could increase human capital and help economic growth.

Success in an organization is imperative for an organization to remain in operation. Pease et al. (2014) explained that human capital contributes to success in an organization. Unger et al. (2011) conducted a research study to analyze the relationship between human capital and entrepreneurial success. In analyzing 70 independent studies, Unger et al. discovered a positive relationship between human capital and entrepreneurial success. Human capital is an important consideration for any organization.

Human capital refers to an individual's abilities that provide a competitive advantage to an organization (Khanna et al., 2014). Studies have shown that substantial human capital can increase the economic growth of an organization and community. Understanding an organization's human capital in any industry is crucial for success (Pease et al., 2014). Human capital is an effective tool for solving business issues and adding value to an organization's bottom line.

The education of employees to help further their skill sets is imperative for the success of an organization. Lòpez Castellano et al. (2019) explained that the role of education increases an employee's worth to an organization. Employees who receive

additional education will help improve their performance within an organization.

Training and continual development will not only help an employee but the organization as a whole.

Education is an important element of any individual's success within an organization and increases human capital. Nellia (2018) explained that the continuation of education within an organization promotes more robust performance and allows organizations to differentiate themselves from competition. Employees who continue their education will enhance and add value to the organization's human capital.

Investment from an employer in an employee's education is pertinent, but the investment from an early age in a child's life for education is crucial. As previously noted in the literature review, prior researchers have discovered that individuals who participated in early education tend to work at jobs with higher statuses as adults (Saracoglu & Karaoglan, 2019). Education is, thus, important for students and employees as individuals and the organizations for whom they work. Promoting employee education will accumulate human capital for an employer.

Investment from an organization in human capital is an essential process for increased organizational performance. Organizations that invest in human capital have had a stronger performance. Bentley and Kehoe (2020) discovered, in researching commercial banks from 2002 to 2014, that significant investment into human capital results in higher performance within an organization. This finding shows that an organization benefits significantly from investing in its human capital.

Education is an essential element of human capital. As society develops with technological advancements, the demand for new education has increased. Akoi and Yesiltas (2020) introduced the idea that human capital is the intermediary of organizational performance and human resources development practices. As the increase of human capital is warranted in an organization, skilled individuals will be sought to fulfill the gaps that exist in the organization. The knowledge gained from training and educational programs will help certify and inform individuals interested in subjects to study. For this study's purpose, STEM-focused education nonprofit programs are the catalyst to supporting the idea of human capital.

Leaders of organizations can utilize human capital as a consideration for expenses when allocating budgetary educational resources. Marginson (2019) explained that human capital regulates the productivity of labor and earnings of an organization. Moreover, as productivity grows because of an increase in human capital, the earnings for an organization will increase. The consideration of human capital as a budgetary item is an important consideration for leaders of an organization, given the financial contribution of human capital and the resulting increase in labor productivity and earnings (Akoi & Yesiltas, 2020).

Leaders of organizations that adequately manage human capital have a competitive advantage over organizations that do not consider human capital an element of their organization. Canibaño and Potts (2019) explained the perspective of human capital as a network of knowledge that contributes to the advancement of economics

within an organization. Educational efforts of individuals within an organization increase the human capital of an organization, which results in higher productivity.

Leaders of organizations recruiting candidates must ensure commonality among skillsets. The human capital theory emphasizes the importance of education as the maximization of productivity within an organization (Wright & Constantin, 2021). As organizations increase their workforce population, leaders' consideration of education and human capital impact is essential. Leaders of organizations have a responsibility to ensure that the productivity of the organization's workforce is high.

Innovation in an organization is crucial for the perpetuation of continued growth. Sun et al. (2020) researched leaders from 400 research and design firms and discovered that innovation performance growth occurs human capital is high. Human capital and innovation consist of creating a structure for an organization for growth. Leaders of an organization who desire innovation should consider human capital as an ability to grow innovation.

For this study, human capital theory was an essential framework because it provides STEM-focused organizations the opportunity to understand the benefits of STEM-focused education organizations. Resources from STEM-focused education organizations help provide students with skill sets desired by leaders of STEM-focused organizations. STEM-focused education organizations can provide students with the resources they need to contribute to the human capital of their hiring to the STEM-focused organization. Thaler et al. (2017) explained that individuals who are qualified and motivated increase organizational performance.

Other Theories of Consideration

The concepts of the human capital theory were the most appropriate to this study because STEM-focused education program participants can be an asset to an organization. I also considered social cognitive career theory and corporate social responsibility theory. These theories were closely related to the theory but did not provide the precise background to base the study on. Human capital theory correlated with the intent of the study and provided a suitable framework for it.

Social Cognitive Career Theory

The first theory considered for this study was the social cognitive career theory. The foundational background of social cognitive career theory relates to the process of how career selection occurs. Social cognitive career theory identifies three main aspects of career selection: (a) interest development, (b) decision-making, and (c) success achievement (Dziak, 2020). The decision-making component aligned with this study's emphasis on the choices made by students in a STEM-focused education program to pursue corporate employment in STEM.

Social cognitive career theory is a defining theory for educational programs that supports the concept of growth and encouragement for students towards a specific career. According to the theory, career aspirations lead to self-efficacy which encourages a student to have a specific interest because of their surroundings (Nugent et al., 2015). I strongly considered social cognitive career theory for a framework of this study because it identifies important elements of an educational programs impact on a student. However, I concluded that human capital theory was more applicable to STEM-focused

corporations. Social cognitive career theory still contributed to the study overall, as a guidance framework for the concept of educational programs and the benefits they provide.

Corporate Social Responsibility

Corporate social responsibility theory was the second consideration for the framework of this study as it is a parallel for the concept of corporate partnerships with nonprofits. Corporate social responsibility is a theory that defines the obligation and responsibility of a corporation to society (Baumgartner, 2014). The theory aligned with the purpose of this study, which was to discover the strategies that leaders STEM-focused nonprofit education programs use to elicit support from STEM-focused corporations.

A tenet of corporate social responsibility theory is that a corporation's resources can benefit society. Corporate social responsibility theory identifies a framework of assistance from corporations to help provide growth in communities (Dunn & Harness, 2018). Growth in communities assists in the evolution of society. From a corporation standpoint, corporate social responsibility theory is a unique business theory, as it does not yield any immediate financial benefits. The framework of corporate social responsibility theory aligned with the purpose of this research but does not directly correlate with the strategies of nonprofits.

Social cognitive career theory and corporate social responsibility theory were both considerations as frameworks for this study. Social cognitive career theory provides the proof of investment that a STEM education program would provide. Corporate social responsibility provides a framework for the participation of a corporation in a nonprofit

STEM program. The purpose of this study was to discover strategies that the leaders of STEM-focused education programs use when partnering with STEM-focused corporations to full their nonprofit organizations' mission. Human capital theory was useful in showing the investment and benefit from a corporation aspect and the benefits of an educational program.

STEM-Focused Education Programs

The concept of STEM education in the 21st century has grown due to demand from governmental and industrial personnel. According to Barkatsas et al. (2019), growth in industries relating to STEM has resulted in emerging new job opportunities. Because of the continued advancements in technology throughout the 21st century, demand for individuals trained in STEM increases at record rates globally. To combat the demand, U.S. government officials have requested additional training and support for STEM subjects both during and after school. STEM-focused education programs concentrate on educating individuals interested in careers with STEM-focused organizations. The purpose of STEM-focused programs is to create knowledge and awareness (Levanova et al., 2020). As STEM-focused organizations grow, the talent pool from STEM-focused education programs will help contribute to the overall human capital and help enhance performance.

STEM-focused education programs assist with the development of students and the preparation for employment at a STEM-focused organization. In their cross-sector research project, Ralls et al. (2020) found that STEM education promotes professional learning among students. The authors' findings support that STEM-focused education

programs are essential to the development of students who may pursue employment in a STEM-focused organization.

In addition to the benefits for a STEM-focused organization, STEM-focused education programs provide benefits to student participants and contribute to their overall advancement. Ralls et al. (2020) explained that students who participate in STEM-focused education programs have a higher potential in performance at universities. Participating in STEM-focused education programs prepares a student for future endeavors in the field of STEM. By applying their skills learned in a STEM-focused education program, students can outperform individuals who have not participated in STEM-focused education programs.

Early career development is also imperative to students who wish to work at STEM-focused organizations. Wang and Frye (2019) explained that STEM-focused education programs for early-stage career development influence middle school-aged students. Students who have the opportunity to have career development before graduation have a unique opportunity. STEM-focused education programs provide an opportunity to not only educate students but prepare them for future careers.

Some research shows that students find STEM teaching in classrooms to be engaging. In a qualitative research study of a group of teachers in Turkey, researchers found that teachers who implement STEM curriculum have more engaged students (Dönmez & Tasar, 2020). STEM is a valuable technique to engage students during class as well. The concept of STEM education can also prepare students for many practical career techniques.

Research shows that STEM-focused education programs provide students with the tools they need to pursue 21st century job vacancies. Margoudi and Kiritsis (2015) explained that industrial training at an early age can prepare students to help assist with the talent gap occurring in the 21st century. Training students in industrial fields to help with the talent gap will assist with the economy's growth (Wang & Frye, 2019) STEM-focused education programs allow students to understand areas in the industries that relate to manufacturing.

STEM-focused education programs assist students to prepare for the competencies that employers demand in the workplace. English (2017) explained that STEM programs have an emphasis on problem solving and innovation. Educating students on problem solving and innovation will help them prepare for future careers. Students who participate in STEM-focused education programs have an advantage from students who haven't participated in a STEM-focused education program.

The demand for STEM skill competencies is continually growing in workforce. STEM education is an integral element to the introduction and engagement of students in STEM careers (Holmes et al., 2018). Korea is a nation that implemented STEM curriculum in their schools to increase their competitiveness in the STEM-career fields (English, 2017). STEM education helps students develop a competitive advantage among students who have no engagement to the STEM field.

Moreover, STEM-focused education programs introduce students to industries relating to STEM. Gong and Mohlhenrich (2019) explained that after a study of 44 students, a positive correlation exists between STEM education programs and interest in

STEM-related job opportunities. In addition to the concept of interest, the study also showed a positive correlation for re-enrollment in STEM-focused education programs. Engaging students in education programs is highly pertinent to the success of retaining information from a student. STEM-focused education programs have a positive relation to introducing STEM-focused industries to students.

STEM-focused programs allow students to have the ability to succeed in the rapidly changing environment of technology. Holmes et al. (2018) conducted a research study of 6492 students from Grades 3 to 12. The study analyzed student's aspirations for STEM careers. The study identified that STEM-focused education programs and initiatives help improve STEM participation and aspiration for a STEM career. STEM-focused educational programs can increase aspirations for STEM-focused corporations.

STEM-focused corporations occasionally have a perceived career barrier regarding gender. Falco and Summers (2019) conducted a study of 88 high school-aged girls and determined counseling intervention for the encouragement of STEM could increase the self-efficacy for STEM careers in high-school-aged girls. STEM-focused education programs additionally provide girls the opportunity to understand and have career development in STEM.

Perceptions of careers are always important in the eyes of students. Christensen et al. (2014) researched 364 high school students participating in a math and science program connected to a university. The study examined the dispositions of the students and their views towards STEM. The study discovered that the students who participated in the program had a higher deposition to STEM than a student who was not involved in

the program. Furthermore, the study also identified that the students had a similar perception to employees in the field of STEM.

Students develop aptitudes based on experiences that occur and introductions to new ideas. Educating students in areas that they may be unaware of help to foster new opportunities. Blotnicky et al. (2018) conducted a research study with a sample of 1,448 Canadian students from Grades 7 to 9. The study was to explore the understanding of STEM careers by the students. The study showed that students have minimal knowledge of STEM careers from Grades 7 to 9. The education of STEM in schools, according to Blotnicky et al. (2018), may increase the overall awareness for careers in STEM and lead to more engagement.

In addition to developing aptitudes, STEM-focused education programs help promote learning within STEM subjects. Hakovirta and Lucia (2019) explained that informal STEM education will help promote the gap in education that leads to STEM careers. Students who participate in STEM-focused education programs better understand STEM careers than nonparticipants of STEM-focused education programs (Falco & Summers, 2019). In addition, the informal education of STEM-focused education programs contributes to the fulfillment and obtainment of STEM-focused employment.

There are many different techniques to measure college success. To understand the success of the college, some may proclaim that successful employment after college is pertinent. Bottia et al. (2018) researched high school students who participated in STEM-focused programs throughout their tenure in grade school. The study showed that students who participated in STEM-focused educational programs in school had a higher

success rate in college compared to students not introduced to STEM. Engagement in STEM-focused programs helps educate students to transition into STEM-focused careers.

STEM-focused programs help introduce students and engage them in the idea of STEM at an early age. Students who can understand what STEM consists of are more likely to have an interest in STEM-focused careers. Holmes et al. (2018) conducted a research study of 6,492 students from years 3 to 12, and their occupational choices. Students who understood STEM from a parent who was involved or involvement in STEM education programs showed a positive correlation to having understanding and aspirations of STEM careers. The study showed that STEM-focused programs and awareness would help to contribute to gaining interest in STEM-focused education programs. As technology advances, STEM-focused careers will increase in demand. STEM-focused education programs can help educate and bring awareness to students who may be able to contribute to the goal.

STEM-focused education programs allow students to understand STEM-related concepts in education. Holmlund et al. (2018) interviewed 34 educators involved in STEM education. The results yielded that the educators expressed a positive correlation to aptitude and knowledge in science and mathematics if the students were introduced to a STEM-focused education program. STEM-focused education programs help students with knowledge and aptitude in science and mathematics.

While educational concepts are very helpful for STEM education, STEM education programs also create career interest. Miller et al. (2018) conducted a research study that consisted of 46 institutions. The study examined career interest after

participation in a STEM-focused educational program. The study results identified that 40% of the students who participated in the STEM-focused educational program showed a career interest in a STEM-focused career. STEM-focused programs help incite career interest and also provide resources for students.

STEM-focused education programs offer resources to individuals of a minority group. Hasanah and Tsutaoka (2019) studied the barriers of STEM careers and the assistance that STEM-focused education programs have to eliminate the barriers.

Minority students who have fewer resources have an opportunity to participate in STEM-education programs and have an increased advantage to start a career in STEM. Because STEM-focused education programs are in addition to traditional education, students who have participated in the programs have additional skillsets that traditional education students do not have.

STEM-focused education programs introduce students to careers in STEM.

STEM-focused education programs create a positive engagement with STEM and generate awareness for STEM careers (Means et al., 2016). Employers in STEM fields benefit from STEM-focused education programs as they are provided with direct engagement of future potential employees. STEM-focused education programs also create assistance in career choices for the attendant of the program.

Nugent et al. (2015) conducted a study to determine the factors of STEM-focused education towards career orientation. The researchers interviewed 800 students from 19 different states in the US. The study identified STEM-focused education programs to have a positive relation to the career orientation in a student. Students who participated in

the STEM-focused education programs had a positive outlook towards STEM careers. Careers such as science and engineering have a higher engagement with students who participated in STEM-focused education programs.

STEM-focused education programs also contribute to confidence in a student's decision-making process when it comes to program and degree completeness. Huziak-Clark et al. (2015) examined 250 students that participated in a STEM-focused education program. The research yielded results to identify that students who participated in the STEM-focused program had a greater confidence and strive to complete their degree in STEM. Students who participate in STEM-focused education programs have an ability to have a stronger confidence in completing their STEM-focused degree.

Career selection is an activity that typically occurs after grade-school students finish their education. Turner et al. (2019) conducted a research study of 366 high school students participating in STEM courses. The study identified that students who participated in STEM-focused education courses had an interest towards STEM careers. The study did not prove the identification of action towards a STEM career but measured a significant correlation to the positive interest of a STEM career. STEM career interest is essential to a STEM corporation's existence, as employees are crucial to the operation.

According to the National Center for Education Statistics (2012), the increase in engineering and science degrees was only 47.9%, while other countries have had an increase of 200%. Jones et al. (2018) explained that there is a general necessity for a pipeline in STEM education in for all students. The continued need for STEM

occupations requires STEM education and awareness for students. STEM-focused education programs help bridge the gap between awareness and STEM careers.

Career preparedness is an element of all students' lifecycles that is an essential part of education. Students who participate in extracurricular activities have an awareness of activities outside of typical academia. Kendricks et al. (2019) discovered that students who participate in STEM programs have an 88% likelihood of starting a career in the STEM field. Students who engage in STEM programs can develop other skills that are not provided in school curriculum today. Furthermore, the awareness that STEM-focused education programs create for students, help them prepare for the future.

Strategies for STEM-focused education programs for parents are also integral as the parents need to understand the impact of STEM-focused education programs on their student's future. Ju et al. (2020) explained after a study of five parents and two staff members of an out-of-school STEM program, that three main elements to consider helping cater to the parents (a) parent network, (b) accessible locations, and (c) intriguing program fliers. Creating these elements for a STEM-focused education program will increase the engagement of parents and students (Ju et al., 2020). STEM-focused education programs with the assistance and encouragement of parents will also increase participation.

Leaders of STEM-focused education programs can utilize activities to engage students in the participation of STEM education. Abdullah et al. (2019) explained a strategy in Malaysia of smart control helicopters and the successfulness of education in

STEM techniques. STEM-focused organizations utilize numerous strategies to encourage and teach concepts. STEM activities help engage students in STEM-focused education.

STEM-focused education programs along with engaging students also provide opportunities for students to get the practical knowledge to obtain a STEM-focused career. Students who engage in STEM-focused education programs develop scientific and engineering skills that help them for future interests in STEM careers (Krajcik & Delen, 2017). Engineering and scientific skills are essential to many STEM-focused careers. STEM-focused education programs assist students with developing skill sets to advance in STEM-focused careers.

Multiple attributes affect a student's decision of a future career and the interest they gain throughout school. In addition, main external factors affect the aspirations of students towards a specific career. Mau and Li (2018) conducted a research study of 21,444 ninth-grade students. In the study, the authors discovered that math interest and science self-efficacy are two of the main predictors that affect STEM career aspirations. STEM-focused education programs help encourage math interest in students.

The influence on career aspirations of a student during their grade school tenure is highly important. Kitchen et al. (2018) conducted a research study of 15,002 college students, 845 of which participated in a high school-organized STEM summer program. The study looked at the career aspiration of students who participated in the STEM summer program, how it affected their career aspiration. The researchers identified that students who understand the relevance of STEM, have a 1.8 times chance aspiring to a STEM career. This study identified that students who participate in STEM programs can

understand the importance of a STEM career. Furthermore, students who participate in STEM-focused education programs have the potential for stronger career aspirations towards a STEM-focused career.

Students who participate in STEM-focused educational programs have a stronger interest in STEM-focused careers. Mau and Li (2018) explained that STEM focused careers are a growing global phenomenon. Gaining workforce for STEM-focused careers is crucial for the success of the continual growth. STEM-focused nonprofit education programs are a way for students to engage in STEM and grow interests and career aspirations in STEM.

Nonprofit Organizations

The definition of a nonprofit organization is an organization that can provide services without any profit. According to the Internal Revenue Service, nonprofit organizations must be exclusively for (a) religious, (b) charitable, (c) scientific, (d) testing for public safety, (e) literary, and (f) educational, or other criteria purposes (Exempt Organization Types, 2020). A nonprofit organization's purpose is to execute a designated task to help enhance a specific area of interest. Nonprofit organizations require a motive or cause that helps drive the activities for the organization.

Leaders of nonprofit organizations typically rely on funding from donors to support the goals of their organization. United States households donated approximately 2% of their annual income to nonprofit organizations (Kim et al., 2021). Funding is a crucial and integral component to a nonprofit as the funding contributes to the overall

effectiveness of the operation. Nonprofit organizations need to ensure donor participation is active, or survival may be challenging.

Fulfilling a vision for a nonprofit is a strategic goal of nonprofit organizations. Donors who contribute financially rely on the organization's vision to be the guiding factor of their donations. Bradford (2021) explained that donors who align with a nonprofit organization show activism by donating towards the cause. Nonprofit organizations create an awareness that aligns with donors to help create a movement towards action. Nonprofit organizations help align individuals with specific circumstances that relate to a goal.

Volunteer-Based Nonprofit Organizations

Volunteer-based nonprofit organizations are very prevalent in the nonprofit sector. As leaders of nonprofit organizations rely heavily on the participation and support from volunteers. Paxton et al. (2020) conducted a study of 90,000 nonprofit missions and discovered that the approach of nonprofit missions is to connect to volunteers' emotions to evoke participation. Participation is necessary to operate a nonprofit as a strategy for a nonprofit creating a mission statement to evoke the emotion of the public may assist in the participation of volunteers.

Numerous nonprofit organizations exist with similar mission statements; the relationship and identity of a nonprofit organization also contribute to the level of engagement. Mitchell and Clark (2021) conducted a study of 51 service-delivery volunteers, which proved that a nonprofit's brand is another guiding factor to the contribution of participation in volunteers. A brand is an essential element of a nonprofit

organization to gain a competitive advantage among other nonprofits with similar missions.

Mission Statements of Nonprofit Organizations

Leaders of nonprofit organizations are tasked with the opportunity to create missions for the nonprofit. Nonprofit missions correlate to the engagement of the stakeholders. Research has shown that organizations' leaders that evoke reciprocity create an extra avenue for donations (Kim et al., 2021). In conjunction with the mission, the leader of the organization has a special task to ensure that they are utilizing their marketing strategies adequately. Nonprofit organizations leaders who understand their donors and can cater to their emotions will receive an increase in giving.

Governance of Nonprofit Organizations

A governing body for a nonprofit organization is important to organize and strategize to obtain their mission. The board of directors of a nonprofit organization provides an opportunity to provide the strategic outlook for a mission. Aulgur (2016) explained that a board of directors needs to clearly understand their role in a nonprofit organization to have effective participation. Nonprofit organizations structure a board of directors to help the nonprofit organization succeed.

A nonprofit board of directors is a group of members that are tasked with utilizing their unique skills and bringing resources to help fulfill the nonprofit's mission. Northrop (2018) explained that the fundamentals stages of an effective board of directors are (a) organizing/founding, (b) governing, and (c) institutional. The three stages of a board of directors are essential as the nonprofit organizations require the three steps to operate

effectively. The board of directors in a nonprofit organization is continually evolving and is never static.

There are many reasons why nonprofit board members join a nonprofit and become involved in the organization's mission. Miller-Stevens and Ward (2019) explained that (a) organizational commitment, (b) personal growth, (c) recognition, and (d) socialness are all latent factors that entice board members of a nonprofit organization to participate in a nonprofit volunteer board. As volunteer board members typically have skillsets to offer outside of the direct mission of the nonprofit, leaders of nonprofit need to utilize all resources they have available.

The members of the board of directors of a nonprofit organization directly correlate to the mindset of the nonprofit organization's leader. Olinske and Hellman (2017) surveyed 300 nonprofit directors and discovered that the effectiveness of the board of directors determines the burnout of a leader. The board of directors contribute to a significant amount of the performance of a nonprofit. It is crucial as a nonprofit grows, that they ensure the board members are effectively selected.

When a nonprofit leader is selecting members to participate in the board of directors it is essential to have diversity. Buse et al. (2016) conducted a research study of 1456 nonprofit and discovered that the more gender and racially diverse a board of directors group is the less negative impact on diversity practices. It is important for nonprofit organizations to have a consideration for both gender and racial diversity when selecting a board, as it will help in the decision-making practices. Gender and racially diverse nonprofit board of directors behave less inclusively.

Nonprofit Strategies for Partnership

Leaders of educational nonprofit organizations have an opportunity to partner with for-profit organizations to help reach a similar goal. LeBlanc (2019) proposed a strategy that nonprofit organizations that help with professional growth can utilize a model to partner with for-profit organizations. The concept of partnership shows organizations that can benefit from the professional growth given by the nonprofit to participants. The involvement from a for-profit organization may help them with goals such as recruitment or professional development.

Corporate partnership is an essential tool for funding from a perspective of a nonprofit. Hommerovà and Severovà (2019) conducted a research study of 313 nonprofit organizations in the Czech Republic. The study identified corporate sponsors as one of the most significant types of funding outside of public administration. Nonprofit organizations can benefit from understanding the potential that corporate sponsorship/partnership can offer. In addition, Hommerovà and Severovà (2019) explained that crowdfunding is a new tool for nonprofits to help multiple organizations identify a nonprofit online. Online presence is very important to the partnership element of a nonprofit organization.

Partnerships between nonprofit organizations and businesses, also known as a cross-sector partnership, are when a company and a nonprofit organization find a shared value between both of their organizations. Àlvarez-Gonzalez et al. (2017) explained that cross-sector partnerships help both nonprofits and businesses align their goals, and both mutually benefit from the partnership. A nonprofit organization will not always have the

finances but may have the resources to help a business create value. It is the transfer of value that cross-sector partnerships help both businesses succeed in reaching their missions.

Sharing of resources and partnership through a shared mission helps cross-sector partnerships to foster. MacDonald et al. (2019) examined 94 multi-stakeholder partnerships and the strategies that keep partnerships positive (a) partners informed, (b) coordinating interactions, and (c) managing ongoing learnings for both partners. As cross-sector partnerships flourish, it is essential for both stakeholders in the partnership to maintain communication and help educate one another with goals and missions. A cross-sector partnership can create competitive advantages for both the nonprofit and corporation.

Cross-sector partnerships have many intricacies when it comes to driving a successful partnership. Vestergaard et al. (2021) explained that nonprofit organizations need to ensure that their mission is also in consideration when an organization joins a cross-sector partnership. Nonprofit organizations and corporations have a unique opportunity when they join a cross-sector collaboration. Both organizations can utilize the other organization's strength to help drive their mission forward.

Partnerships with firms and nonprofits help organizations create a universal path of resources. Feilhauer and Hahn (2021) conducted a research study that consisted of 31 interviews of 33 experts from firms and the nonprofits they partnered with. The researchers identified that the partnership creates a unique framework in which both the nonprofit and partnering firms benefited greatly. The researchers identified three drivers

that contribute to the desire for partnership (a) constraint driven, (b) faster achievement, and (c) recognition driven. This type of partnership eliminates the necessity for dependency on an individual and more of a dependency on the partnership in a whole. Constraint driven is the idea of either a nonprofit or a firm not having the adequate resources that a partnership could offer. Partnership among leaders may result in faster achievement results. Recognition driven is a benefit that firms receive as the consumers of their organization products or service can see the social interaction and public assistance from the organization. The idea of the workforce drivers of motivation for an organization contributes to the idea that the benefit for both nonprofit organizations and firms is significant.

Cross-sector partnerships help organizations close gaps in their social and business goals. Schmid and Almog-Bar (2020) explained how nonprofit organizations operate to gather resources to mobilize missions and create services to fulfill their mission. Businesses have the social obligation of helping their communities. With a cross-sector partnership between non-profit and for-profit organizations, organizations can help fulfill their missions together and utilize their resources to help satisfy their needs.

Although business leaders occasionally find partnerships with nonprofits to be cumbersome, strategies to create sustainability among partnership participants are essential. Watson et al. (2020) researched five caste studies involving nonprofit engagement and determined three mechanisms for nonprofit sustainability partnerships (a) agent control, (b) resource integration, and (c) value empathy. Agent control is

defined as the conveying of interests in the partnership. Resource integration is presenting all resources of the organization to present value to the partnership. Value empathy is the integration of resources to create a partnership that is beneficial for both parties that are involved in the transaction.

There are many motives for a cross-sector partnership in the nonprofit sector.

Ahmadsimab and Chowdhury (2021) examined the two longest-duration nonprofit organization partnerships and discovered three distinct mechanisms for managing tensions in a nonprofit organization partnership: (a) negotiating activity scope, (b) monitoring and learning, and (c) modifying organizational practices. Negotiating activity scope entails a nonprofit organization and partnering business to understand the commitments within the partnership to ensure participation. Monitoring and learning occurs during the process of the partnership in which adaption and changing may occur to better suit the partnership. Modifying organizational practices is the last mechanism in which organizations can mold their business practices to fit their partner organization more effectively.

When a partnership is enacted between leaders of a nonprofit and for-profit organization, it is recommended to strategize on the process to ensure the facilitation of an adequate partnership. Parris and Broussard (2020) researched an organization that is very successful at cross-sector partnerships and explained its strategies to (a) share information on current partnerships, (b) identify opportunities for priorities that are shared, and (c) develop strategies that promote collaboration. By sharing information on current partnerships, the organizations will be able to understand the current climate of

the nonprofit. In addition, priorities that can have a collective effort will help mutually benefit both organizations.

Leadership in STEM-Focused Nonprofit Organizations

The leadership technique that is most appropriate for a STEM-focused nonprofit organization is the transformational leadership style. The transformational leadership model was introduced in 1992 by Bryman and is a model that promotes extending outreach and partnership (Northouse, 2019). Nonprofit organizations will benefit from having a leader who mirrors transformational leadership style as they are able to promote characteristics that are imperative to a nonprofit organization.

Leaders of nonprofit are required to be creative and innovative in the way they work. Transformational leadership model promotes team members to work towards a goal and have continued change and innovation (Faupel & Suess, 2019). Teamwork and innovation are two essential elements of nonprofit organizations. As nonprofit organizations continue to engage volunteers, board members and employees, transformational leaders help unify through teamwork.

Transformational leadership style also empowers employees to have a sense of attachment to their organization. Peng et al. (2020) discovered that transformational leadership style directly influences an employee's commitment to the organization.

Because nonprofit employees are sometimes volunteer, transformational leadership helps support the idea of the importance of commitment with an organization. To add, transformational leadership style empowers employees to have a sense of ownership and belonginess which is crucial to a nonprofit.

Leaders of nonprofit organizations have a strong focus on the mission. Leaders of nonprofit organizations need to strategize around the mission to have efficiency. Brimhall (2019) explained through transformational leadership style the mission of an organization will be nurtured. In addition to nurturing a mission statement, group work is another imperative task for a nonprofit. Transformational leadership inspires inclusion and teamwork in an organization.

Transformational leadership promotes proactive behaviors within volunteers of a nonprofit organization. Do Nascimento et al. (2018) conducted a study of 141 volunteers of a nonprofit organization. In the study, leaders who exhibited transformational leadership style had a positive correlation to proactive behavior from the volunteers who worked with them. Having leaders who promote proactive behaviors will help a nonprofit exhibit a competitive advantage and more effectively fulfill their mission in their organization.

Transformational leaders help with retention of employees and the satisfaction of work. Almas et al. (2020) conducted a study of 417 volunteers from 17 nonprofit organizations, the study identified that leaders who exhibit a transformational leadership style have a higher retention rate of volunteers than the leaders who do not.

Transformational leadership in the lens of a nonprofit organization is also essential to assist with retention. Nonprofits who have leaders that exhibit transformational leadership styles will have stronger satisfaction and retention.

Commitment and retention are closely related in which a volunteer is given a choice, and it is the responsibility of the leader to ensure the choice is to stay committed.

Peng et al. (2020) explained that a transformational leader has the ability to engage employees and volunteers by reiterating the impact of their work on the organization.

Transformational leadership style incorporates the leader as a team player and supports the volunteer/employee by emphasizing the vision of the organization and identifying the unique contribution of every member.

As members of a nonprofit organization seek to find a leader for their organization, a leader who embodies a transformational leadership style will prove beneficial to the organization. Islam et al. (2021) explained that a transformational leader gains more trust in an organization than leaders who adopt other leadership styles. As a nonprofit has growth, ensuring a leader who instills trust will help contribute to growth. Nonprofit organizations will benefit from a transformational leader.

Transition

Section 1 contains the introduction to the business problem that leaders of nonprofit STEM-focused education nonprofit organizations lack strategies to engage STEM-focused hiring corporations to support nonprofit STEM organizations' missions. In addition to the business problem, Section 1 contains a discussion of the research and interview questions, implications of positive social change, and the conceptual framework. Furthermore, the literature review contained strategies on how leaders of nonprofit organizations can engage organizations to support their mission and human capital theory. Human capital theory was chosen as the framework of this study because it addresses the concept of STEM-focused hiring corporations supporting the mission of STEM-focused education nonprofit organizations. Leaders of STEM-focused education

nonprofit organizations will benefit from understanding strategies to engage STEMfocused hiring corporations to support their missions.

The purpose of this qualitative single case study was to explore strategies that leaders of STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations in fulfilling their nonprofit organizations' mission. Leaders of STEM-focused education nonprofit organizations can utilize the findings in this study to help implement strategies to successfully engage STEM-focused hiring corporations in supporting their missions. STEM-focused hiring corporations can also utilize the findings of this research to better understand the importance of why supporting the missions of a STEM-focused education nonprofit organization will benefit their corporation.

In Section 2, I reintroduced the purpose statement for the study and reviewed my role as the researcher. In addition to the purpose statement, Section 2 includes a review of the (a) participants, (b) research method and design, (c) population and sampling, (d) ethical research, and (e) information pertaining to the data. In Section 3, I provided an overall assessment of the study, with an assessment and consideration of the Baldrige framework. Section 3 also contains the implications that emerged from the results of the study.

Section 2: The Project

In Section 2, I provide an overview of the project. The section includes the following content: (a) purpose statement, (b) role of the researcher, (c) participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection instruments, (h) data collection technique, (i) data organization techniques, (j) data analysis, and (k) reliability and validity. I define the approach I used to conduct this study. The discussion includes the techniques and strategies that comprised the research and design.

Purpose Statement

The purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education organizations use to engage STEM-focused hiring corporations to support the nonprofit organizations' mission. The targeted population for this study comprised five leaders of a nonprofit U.S. STEM-focused education organization. The leaders of the STEM-focused education organization were appropriate for the study because they had been successful in developing and implementing strategies to gain support from STEM-focused hiring corporations. The findings of this study may help leaders of STEM-focused education organizations to promote positive change by understanding successful strategies they can use to engage support from STEM-focused hiring corporations. The implications for positive social change expanding the career options of students to include STEM-focused hiring corporations.

Role of the Researcher

The role of the researcher is to collect sources of information and analyze the data and information collected to address the research problem. As a researcher, it is essential to develop recommendations based on the findings of the investigation (Levitt et al., 2021). The researcher's primary goal is to provide deliverable conclusions derived from the literature and data gathered.

I had no existing direct relationship with the participants of this study or the topic itself. Previously, I served as a liaison for community outreach for a STEM-focused corporation. In addition, I participated in STEM-focused education programs in both financial and operational aspects. In this study, I served as a researcher and consultant to the leaders of a STEM-focused nonprofit education program.

A researcher's role concerning ethics is to ensure that all research protocols conducted within a study are ethical. The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (NCPHSBBR), which was created as part of the National Research Act of 1974, produced the *Belmont Report* in 1978 to define the role of ethical research (Earl, 2020). The *Belmont Report* established three sections of guidelines for research involving human subjects: (a) boundaries between practice and research, (b) basic ethical principles, and (c) applications (NCPHSBBR, 1979). The *Belmont Report*'s fundamental ethical principles are essential as a researcher who wants to conduct any research ethically. The basic ethical principles are (a) respect for persons, (b) beneficence, and (c) justice (NCPHSBBR, 1979). The

researcher's role is to follow the proper ethical principles in conducting research (Kimmelman, 2020).

To mitigate bias and the action of negating viewing data through a personal perspective, I utilized multiple techniques. One technique to mitigate bias is to have obedience towards the research question and the interview questions. Strict adherence to the research and interview questions will allow the researcher to avoid bias. Interview protocol will ensure that the interviews among participants are consistent and do not vary, which can create bias. Another way a researcher can prevent bias is to anonymize the data to ensure no personal perspective saturates the data (Junghans & Jones, 2007). I was unable to treat data gathered from semistructured interviews as anonymous, but I kept my promise of confidentiality. In addition, I provided the study participants with copies of all interviews to ensure data validation. Because I used an interview protocol (see Appendix A), I was able to ensure that all participants in the interview process experienced a similar procedure. An interview protocol assists in structuring the researcher's approach to an interview (Yin, 2018). I applied the interview protocol ensuring a structured process to avoid deviation.

Participants

I conducted semistructured interviews to obtain data pertaining to the research question. The participants of the study are crucial to obtaining information to address the research problem and answer the research question (Saunders et al., 2015). The participants of this study were five individuals who were members of a STEM-focused nonprofit educational organization. The participants also were required to have a

leadership role in the organization. The eligibility criteria for this study required the participants to have direct involvement with the client organization.

Walden University's Consulting Capstone faculty and staff facilitated my introduction to the executive director of the study organization, which provided the opportunity for me to access the participants of this study. School officials created a contract to formalize the relationship between the school and client organization; the contract provides the client organization with consulting services and the researcher with an opportunity to have access to a partner organization. The strategy for establishing a working relationship with participants is to show the value of the study and provide continued communication between participants and researcher. To start communication, I placed a telephone call with email follow-up requesting the organization's participation. Mozersky et al. (2020) conducted a research study of 30 individuals. The study showed that most participants wanted to know how their answers contributed to the overall analysis. To engage the study participants, I promised to provide a comprehensive analysis to all participants when I completed my investigation.

Research Method and Design

Research Method

A researcher has the option to choose among (a) qualitative, (b) quantitative, and (c) mixed methods for research. Following the Walden University Consulting Capstone program guidelines, the qualitative research method was the required research methodology for the capstone program (Walden University, 2021). Qualitative research allows a researcher to gain insights into a participant's data by organizing it after

collection and interpreting it through various processes (Gringeri et al., 2013). With the qualitative research methodology option for this study, I was able to interpret data gathered from the participants to contribute strategies for leaders of STEM-focused nonprofit education programs.

The qualitative research method was the most appropriate for this study. Utilizing various data collection techniques, such as interviews and documents, a qualitative researcher can obtain information to explore the phenomena of interest (Saunders et al., 2015). The qualitative research method was appropriate for this study because the study's intent was to explore rather than examine a phenomenon using quantitative data. Qualitative research provides a means to explore strategies rather than a quantitative method, which involves examining variables' characteristics or relationships (Cecez et al., 2020). Quantitative researchers use statistical data collection and analysis techniques to test a theory (Green & Salkind, 2017). The mixed method is a combination of both quantitative and qualitative techniques (Saunders et al., 2015). Because I relied on a qualitative approach only, a mixed-methods approach was not appropriate. Because the purpose of this study was to explore successful strategies, as opposed to examining variables' characteristics or relationships, the qualitative method was the most appropriate.

Research Design

After choosing the qualitative research method, I focused on selecting the appropriate research design to support the study. Qualitative researchers choose from five types of research designs, including (a) ethnography, (b) case study, (c) phenomenology,

(d) narrative analysis, and (e) grounded theory. Each research design has special characteristics that define the design of the research. Researchers who choose an ethnographic qualitative design usually collect data over a long period time of data collection through active life participation in the research setting. An ethnography contains information regarding behavioral patterns and beliefs of a community or ethnic group (Blommaert et al., 2010). Researchers who choose to conduct a phenomenological study analyze a specific the lived experience of a group of people. The phenomenological research design contains a direct collection of experiences with a specific group of individuals (Smith et al., 2009). Researchers who choose the narrative design study a specific person and their specific stories (Patton, 2015). A case study is a collection of pertinent information to help discover strategies leaders utilize (Yin, 2018). Lastly, a grounded theory study is the collection of data to explain a process (Charmaz, 2006).

The single case study was appropriate for this study because it allowed me to analyze multiple forms of data to identify effective strategies that the leaders of STEM-focused nonprofit education organizations can use to engage STEM-focused hiring corporations in hiring students. I conducted semistructured interviews and reviewed documents and research organization websites. The intent of a single case study design is to assist a researcher in discovering strategies that leaders use (Anafra & Mertz, 2015). To research effective strategies as a consultant with a single client according to the standard policies and procedures of Walden University's Consulting Capstone, I determined that a single case study was the most appropriate design for this consulting capstone because of my aim of identifying effective organizational strategies.

Population and Sampling

The population of this study consisted of five board members of a nonprofit organization in Florida in the United States. The client organization selected for the consulting capstone engages numerous members of the community who volunteer to assist in fulfilling the mission of the nonprofit. Walden University matches a student and organization, and the student serves as a student-consultant. I selected the three members of the nonprofit because they are the most active and have the best understanding of the organization. The participants have the most knowledge and active participation in STEM-focused nonprofit education programs.

I selected participants using purposive sampling. Purposive sampling involves selecting individuals who have the appropriate knowledge to contribute specific data to a research topic (Saunders et al., 2015). The stakeholders from the client organization who participated in this study were able to contribute specific data to answer the research question. By using purposive sampling, I could ensure that the participants were able to contribute to an informative interview. Qualitative researchers have numerous techniques to ensure data saturation in their research. A few techniques for data saturation are (a) member checking, (b) triangulation, and (c) transcript review (Bougie & Sekaran, 2019). In this study, I used all three techniques to ensure data saturation in the study. It is imperative as a researcher to utilize data saturation techniques to ensure the content validity of the research (Yin, 2018).

Ethical Research

In response to the unethical research practices conducted during the Second World War, U.S. lawmakers passed the National Research Act, which was signed into law in 1974 by President Nixon. After the act's passage, institutions conducting research created institutional review boards (U.S. Food and Drug Administration, 2019). The IRB became responsible for identifying the ethical practices and principles relating to behavioral research. The IRB presently provides reviews of research studies that request the participation of human subjects. Any federal or federally funded study that has human participants must be reviewed by the IRB (U.S. Food and Drug Administration, 2019). Walden University's IRB is responsible for the review of ethical practices and principles relating to behavioral research conducted at the institution.

During the execution of the research and the invitation for participation, all participants received a written consent form that explicitly defined their involvement in the research. In addition, the consent form contained information that explained the participant's ability to withdraw from the study without any penalty. There were no incentives to participate in this study, other than the contribution to additional research in the client's area of interest. I informed the participants of all requirements of the research study before data collection began.

To maintain the confidentiality of participant identities, I created generic labels, such as Participant A. The alphabetical labels were assigned by order of interview and have no other miscellaneous bearing. Moreover, the data collected will be stored securely for 5 years to protect the confidentiality of all participants involved. Because this research

study follows the Walden University DBA Consulting Capstone parameters, the research practices fall under the parameters of the IRB pre-approved conditions. The approval number for this research study is 07-30-20-1020011.

Data Collection Instruments

As the researcher in the study, I served as the primary instrument to collect data. Bougie and Sekaran (2019) explained that in a qualitative research study, the researcher is the primary instrument to collect data and create a protocol to remove bias and assumptions. There are many methods to collect data for research. I gathered data from (a) semistructured interviews, (b) informal interviews, and (c) analysis of company documents.

A semistructured interview allows for dialogue between the participant and the facilitator of the interview. Saunders et al. (2015) explained that a semistructured interview allows the interviewer to ask open-ended questions that allow for a discussion with the participant. The semistructured interview method was the main data collection instrument for the research study. For the context of this study, the interview questions are six open-ended semistructured interview questions. The interviews were administered in the same process, including asking the same order of interview questions as shown in Appendix B.

Informal interviews are another technique researchers can use to have an open dialogue with a participant. The informal interview is a way for informal conversation between the participant and interviewer (Saldaña, 2015). The informal interview technique is utilized for conversations regarding the Baldrige framework to gain

Information regarding the client's organization between the leader contact and researcher.

Informal interviews occur numerous times to create and develop the consulting

framework necessary for this study. As a researcher, data collection tools are imperative
to the success of the research.

Company documents are another resource to gather necessary data to help facilitate research. Saunders et al. (2015) explained that company documents contain information contributing to the overall research and data collection. The company documents will contribute by connecting information and research from the participants. Furthermore, the company documents include descriptions of key factors of strategic importance to the organization's leaders.

Data Collection Technique

A semistructured interview allows for dialogue between the participant and the facilitator of the interview. The disadvantages to a semistructured interview are the addition of bias and not a complete structured answer (Yin, 2018). The method in which the semistructured interview data will be collected is through audio recording, which will then be transcribed. The advantage of audio recording is to accurately capture all conversations that occurred during the interview. The value of reviewing company documents is the ability to discover comprehensive data on the client organization. The disadvantage of using company documents as a resource for data collection is that the documents might not contain data that are relevant to the study.

During the data-collection process, I will use member checking to ensure the information collected is accurately represented. The member checking step is explained

in the interview protocol (see Appendix A). Member checking is a process by which a researcher can validate and discover the credibility of the data (Saunders et al., 2015). In addition, I will also have artificial intelligence software perform a transcript review in conjunction with the recording to ensure everything is appropriately interpreted. I collected data following the interview protocol shown in Appendix A. Reflective journals were used as a tool to capture emerging themes and to assist with mitigating bias and prejudice.

Data Organization Techniques

The data that was collected is stored on a cloud-based secure drive that will continually keep the data stored and readily accessible. The data are categorized and organized in the drive and properly labeled. Yin (2018) explained that data organization in the data collection stage is pertinent to accessing the information. All data are stored following the guidelines set by the IRB. In addition, the files, including the raw data, will be stored securely for five years to protect and maintain confidentiality. All data was properly organized in cloud storage, so the analysis is an effective process.

Data Analysis

Ensuring that researchers obtain data credibility and similarity between responses is pertinent to the overall validity of the study. Triangulation is a method in which a researcher validates data (Yin, 2018). There are four different types of triangulation in qualitative research, (a) data triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) methodological triangulation. I used methodological triangulation

as the method utilized in this study. To gain triangulation in this study, the comparison of numerous sources of data will help with the comprehension of the phenomenon.

The collection of the data occurred with recordings and scripts of semistructured interviews with leaders of the client organization. In addition, I gathered and analyzed company documents to help augment the data gathered in the interviews. After the collection of data, I then imported the data in chronological and informational order to help streamline the research process. In analyzing the data, I discovered patterns that are unique to the responses that were gathered. NVivo software was used to discover important patterns that arrived from the interviews and company information. Yin (2018) explained that patterns in data help identify strategies that may contribute to the discovery of the phenomenon. NVivo has functionality that analyzes the scripts and company information and provides themes. After the themes were identified, I compared correlational literature to help focus and contribute to the business problem. The data analysis that occurred focused on specific key themes and related the key themes to relevant literature to help contribute to strategies of the business phenomenon.

Reliability and Validity

Reliability

Reliability is deemed as the consistency of data throughout a period of time (Saunders et al., 2015). Three are three types of reliability, (a) test-retest reliability, (b) internal consistency, and (c) inter-rater reliability (Marshall & Rossman, 2016). Test-retest reliability is the method by which an analysis of a group of people is performed and then conducted a second time to compare results. Internal consistency is a technique that

occurred in this study because similar results on topics that related to each other were expected to have a correlation. Interrater reliability is the action of having multiple observers look at data to interpret and identify the deviation. Removal and identification of bias contribute to the reliability of a study (Yin, 2018). By collecting data through a reflective journal, I was able to identify bias and prejudice. Methodological triangulation and member checking are two methods that are utilized in this study to help assist with the avoidance of bias and obtain internal consistency. In addition to results displaying reliability, it is pertinent for the results to also be valid.

Validity

Validity is the precision of results that match the intent of the study. There are four elements of qualitative research that contribute to the validity of a study, (a) credibility, (b) transferability, (c) dependability, and (d) confirmability (Yin, 2018). Credibility is seen as the level of the account from the participants. Because this is a case study of a single client, the credibility will closely relate to the research topic.

Transferability is the flexibility of the results to be transferred to another context.

Member checking is a tool that can help the researcher review their interpretations with the participants and accurately present the data and information they provided.

Dependability ensures that a study can be replicated, yielding the same results. To achieve dependability in this research study, current literature was referenced to help identify similar research that applies to the study. Confirmability is the ability of the results to be understood by others. As a researcher, the (a) documentation of methodological triangulation, (b) participant transcript review, (c) member checking, and

(d) data interpretation will contribute to the confirmability of the study as well as the dependability, transferability, and credibility.

Transition and Summary

In Section 2, I reintroduced the purpose statement for the study and reviewed my roles as the researcher. In addition to the purpose statement, I reviewed the (a) participants, (b) research method and design, (c) population and sampling, (d) ethical research, and (e) information pertaining to the data collection, organization, and analysis. In Section 3, I provide an overall assessment of the study, with an assessment and consideration of the Baldrige framework. Section 3 will also contain the implications received from the results of the study.

Section 3: Organizational Profile

In Section 2, I reintroduced the purpose statement for the study and reviewed my roles as the researcher. In addition to the purpose statement, I reviewed the (a) participants; (b) research method and design; (c) population and sampling; (d) ethical research; and (e) data collection, organization, and analysis. In Section 3, I provide an overall assessment of the study, which includes consideration of the Baldrige Excellence Framework. Section 3 will also include discussion of the study's implications for professional practice and positive social change.

Key Factors Worksheet

Organizational Description

The purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations to support the nonprofit STEM organizations' mission. The client organization, FND, a pseudonym, functions as a nonprofit organization and qualifies as an exempt organization under Section 501(c)(3) of the Internal Revenue Code. FND currently operates in Florida in the United States. FND provides services to help engage the youth in STEM.

Organizational Environment

Product Offerings. The volunteers and employees of FND provide STEM educational resources to students of all ages to expose, empower, and engage them.

Services and resources provided by volunteers and employees of FND include (a) hands-on educational programs, (b) contests, (c) challenges, (d) clubs, (e) activities, and (f)

workshops. Currently, all programs occur in Florida in the United States. FND also occasionally partners with other nonprofit organizations, educational programs, and corporations to provide funding, expertise, or new audiences to their programs. FND strives to serve its client base by offering unique experiences to excite and engage.

Mission, Vision, and Values. FND's board of directors strive to ensure that their mission aligns closely with their actions in providing STEM resources and services. All members of FND closely align with the organization's mission statement, although there is no vision or values statement. FND's mission statement is to "expose, engage, and empower our youth to be the innovators of tomorrow through education in Science, Technology, Engineering, and Mathematics." Although FND does not expressly state this anywhere in its organizational documents, from a consulting observation the organization strongly emphasizes supporting underprivileged and underrepresented communities in addition to all students.

Workforce Profile. The workforce of an organization can include individuals working in numerous capabilities to support the mission of an organization in a (a) permanent, (b) temporary, (c) volunteer, or (d) contract capacity. FND has one permanent contract employee, numerous volunteers, and three contract/consultant positions. The key drivers that engage the employees and volunteers are the new opportunities presented through STEM education. FND does not have any formalized special health and safety requirements.

Assets. FND's assets currently consist of technology, furniture, and equipment. FND also has the intellectual property of numerous STEM educational resources. FND's total assets equaled \$67,215.77 for October 2021.

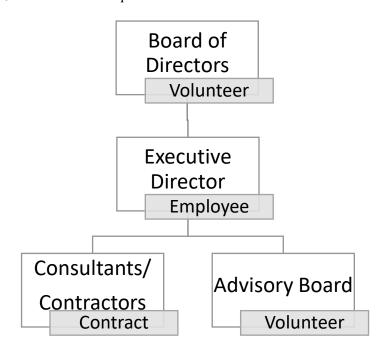
Regulatory Requirements. FND is incorporated under Florida's Not For Profit Corporation Act, Florida Statutes Chapter 617 as a 501(c)(3) tax-exempt nonprofit organization. Because FND operates as a nonprofit organization, it must adhere to the regulations provided by Florida's Not for Profit Corporation Act. Furthermore, FND adheres to all federal, state, and local operating laws and regulations. FND ensures compliance by contracting attorneys and accountants to ensure legal and financial compliance.

Organizational Relationships

Organizational Structure. The organizational leadership structure of FND, as pictured in Figure 1, contains an executive director who oversees a board of directors and an advisory board. The only employee of FND is the executive director, who operates as a 1090 consultant. The board of directors and advisory board all consist of volunteers. FND leaders contract and seek out consultants for their business's legal, accounting, guidance, and educational affairs. The leadership system within the organization has the executive director as the spokesperson for the organization, who makes critical organizational and operating directives. The board of directors all vote on necessary organizational and operational decisions during board meetings.

Figure 1

FND Organizational Leadership Structure



Customers and Stakeholders. The key customer group for FND is school-aged children from prekindergarten to precollege graduation. The market segment is anyone located within the state of Florida. The stakeholders of the organization are (a) participants, (b) volunteers, (c) employees, (d) philanthropy organizations, (e) donors, (f) board members, (g) parents, (h) other organizations that serve the youth, and (i) partners. The key requirement or expectation of the services provided by FND is that they have an educational value that contributes to the overall outreach of STEM.

Suppliers and Partners. FND's leadership relies strongly on governmental and private alliances from partners that provide financial, knowledge, and locational support. FND's leadership utilizes partnerships to help gain awareness for STEM through the partner's resources. Although FND does not have contractual partnerships, the programs that FND operates typically have partnerships that support the specific event. FND continually seeks new partnerships to help support its mission.

In addition to the partnerships, FND seeks suppliers to help with materials and giveaways for their educational programs. FND leaders continually adapts to what is provided by suppliers to help entice engagement in their numerous educational programs. The suppliers can also be considered joint partners if the materials are provided at a discount or donation. All suppliers and partners of FND help support the organization's mission.

Organizational Situation

The purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations to support the nonprofit organizations' mission. FND operates in a unique competitive environment in an industry that is continually expanding. Leaders of FND leverage numerous strategic techniques to understand and manage their performance and current market position. In this section, I will identify the key performance indicators of FND.

Competitive Environment

Competitive Position. FND is a relatively small nonprofit organization with only one employee currently. The industry and market that FND serves is continually growing, and FND is one of the few STEM nonprofit educational organizations in the area. The competitors that FND has are organizations that are educating children in different areas outside of STEM. Furthermore, FND has an opportunity to help educate and engage students about STEM as the youth progress in their education career.

Competitiveness Changes. The STEM industry is a continually growing industry. According to the United States Bureau of Labor Statistics (2020, Table 1.11), a projected 10.5 million STEM occupations will exist by 2028. The demand for STEM occupations is expanding, and the need for awareness is increasing. These changes are creating a strong necessity for programs such as those provided by FND. Furthermore, technology is continually advancing, allowing for FND to have a competitive advantage and gain opportunities for innovating and collaborating with their programs.

Comparative Data. Comparative data are very limited in this industry as the incumbents and established programs are continually changing in direction. FND's leaders measure similar educational programs that offer STEM-focused designs to understand participation and community support. In addition, FND's leaders also measure other nonprofits to identify areas of improvement with grant writing and corporate donations. FND's leadership spends time looking at comparative data and understanding new and innovative ways to expand their product offerings and adjust to their market needs.

Strategic Context

To understand the strategic context of an organization, understanding both the strategic advantages and challenges is necessary. One of the strategic advantages of FND is the experience and curriculum that the organization currently possesses. FND offers a creative and interactive STEM-focused curriculum because of the expertise of its stakeholders. The strategic challenge for FND leaders is the continued growth that is necessary to help advance the nonprofit organization's mission. FND strives to expand the outreach of STEM awareness by increasing its footprint.

Performance Improvement System

Financial support and funding from (a) corporate, (b) governmental, (c) foundational, or (d) individual sources is an important metric that FND continually monitors to improve performance. In addition, the leaders of FND request feedback for their programs after completion. FND's board members continually review performance at board meetings to detail and understand areas of improvement and create plans to execute enhancements. The performance improvement system is a continually evolving system in FND as the business model matures.

Leadership Triad: Leadership, Strategy, and Customers

Leadership

The techniques that a leader uses to interact with their organization can determine how it operates. Alqatawenh (2018) explained that the leadership style could impact the change management process and the overall performance of an organization. FND's

leadership strongly supports a team environment. All decisions for FND are voted on and must reach a census agreement. The members of FND strongly support their leadership.

Senior Leadership

Because of the relative size of FND, senior leadership consists of the board of directors and executive directors. The executive director and all board members coordinate efforts to measure and identify results stratified from decisions they make in their monthly meetings. The executive director operates with a transformational leadership style by embodying teamwork (Saunders et al., 2015). FND's senior leadership strives to communicate and engage with their workforce, partners, and customers to deploy their vision. The board members and executive director continually assess current and future organizational performance to ensure growth.

Deploying Vision and Values. The senior leadership at FND continues to evaluate their values and vision to ensure that their mission statement is accurate to their beliefs and values. In creating FND, the executive director, who at the time was the only member, developed a mission statement that embodied their personal and professional beliefs. FND's executive director conducts continuous conversations with senior leadership to ensure they deploy their vision and values at every program and their online presence. The senior leadership of FND identifies their values and ensures that they continually adapted and deployed.

Two-Way Communication and Focus on Action. FND encourages two-way communication by providing performance measuring questionnaires to gauge participants' and volunteers' comments and concerns. FND stakeholders all participate in

action planning by gauging current and future goals. In addition, all board meetings contain an agenda that follows previous months' action items and follows up with new action items. FND stakeholders focus on action through their mission plan and explanation during programs. The executive director of FND emphasizes teamwork and two-way communication and does not make all critical decisions for the organization.

Governance and Societal Responsibilities

Governance. Board members continually monitor internal and external fiscal accountability in the treasurer's report during every board member meeting. FND also contracts accountants to ensure reliability and accountability in all aspects of FND's fiscal responsibility. FND's senior leadership also measures grants and donations to provide the ability of continuous operation. The governance system of FND is the responsibility of all members; all members review indicators and critical measures at every board meeting to ensure accountability among all operations.

Law and Regulation. Similar to the contracting of an accountant to ensure fiscal responsibility, members of FND have agreed to consult with an attorney that ensures compliance with the guidelines set by the United States 501(c)3 regulations. The governance system set up during all board meetings also reviews any law and regulatory concerns that may prohibit operation for FND. All members of FND prepare policies and regulations to ensure all programs meet local and state laws. All stakeholders of FND are transparent in communication to ensure that everyone involved understands all actions and operations that occur with FND.

Ethics and Society. A goal set by FND's members is to support underprivileged and underrepresented societal groups in the organization's community. Members of FND continually develop new ways to represent and support the societal well-being of their area. The primary mission of FND is to educate, but there are many byproducts of their programs. Some of the by-products are career placement opportunities, increased knowledge, and more robust educational support mechanisms for their community. FND leaders strive to ensure that all programs are ethical and promote ethical behavior.

Missions that support the community are one of FND's main focal points.

Strategy

Strategy Development

Strategic Planning. As a continued process, FND stakeholders discuss strategic planning from short- and long-term scales. Long-term strategic planning consists of conversations of future grants and future educational programs. Over the past year, a long-term goal was to have a full-time employee as the executive director. FND successfully managed to plan and execute that goal. Short-term strategic planning occurs at every board meeting; creating plans for weekly/monthly programs and fundraising are a common discussion point in the board meeting. The strategic planning processes address the potential need for transformational change by identifying areas of improvement. After identifying areas of improvement, the board members vote on prioritizing tasks. Because of the relative size of FND, the organization is very agile, and leaders can pivot without many obstacles.

Innovation. To remain competitive in the STEM-educational program realm, innovation is necessary. FND measures and gauges other competing educational programs to measure their successes and areas for improvement. In addition to the innovation of programs, technology is continually changing, requiring strategic reassessment by FND members to ensure that their strategic planning is current. FND's board members frequently bring up new and innovative ideas to help revolutionize their existing service offerings. Innovation is crucial to FND, as the industry it serves is constantly evolving.

Strategy Considerations. FND has a strong strategic advantage in the expertise and knowledge base of its board members and executive directors. All representatives of FND contain a vast knowledge and background that contributes to a strategic advantage. A current strategic challenge is the lack of financial support contributing to FND's baseline. This concept also contributes to a potential blind spot, in which if FND loses funding, they receive a diminishing return in support for its program. With alienation of a potential blind spot, FND creates strategic plans with deadlines to ensure execution with specific representatives for each goal.

Work Systems and Core Competencies. The strategic partnerships that FND creates throughout their years in operation enable specific expertise in all business core competencies. FND can rely on its partnerships to complete legal and accounting processes that would require a workforce within an organization. The core competencies of the partnerships entail financial, accounting, legal, and consulting support. FND

strategically positions its organization to partner with agencies and organizations that support its mission and help grow its strategic plan.

Strategic Objectives and Considerations. Growth is a primary strategic objective of FND as it is a continuous growth measured by the program's breadth, financials, and membership. A strategic objective of FND is currently to expand its marketing efforts with a potential intern or assistant to help market FND's programs. Membership growth, in addition to the assistance of a marketing individual, is another strategic objective that FND desires to obtain. FND, in comparison to its longer-term planning horizons, its shorter-term strategic objectives are to add additional programs to its offering and complete a mission statement realignment. FND considers and balances the needs of all key stakeholders by gauging feedback and engaging in conversation.

Strategy Implementation

Action Plans and Resource Allocation. The creation of action plans occurs when the identification of a strategic objective occurs. Action plans typically occur at FND board meetings in which an announcement of a strategic objective occurs, and the board members discuss potentially actionable items. After the identification process, an implementation plan occurs in which the executive director delegates to a responsible party the task of implementing the action plan. During consequent board meetings, the executive director follows up to ensure the key outcomes of the action plan are occurring. It is the responsibility of the assigned party to identify the resulting financial obligations of the action plan and to prepare a proposal to present to the board.

Workforce Plans and Performance Measures/Projections. Due to the variably small size of FND, workforce plans are understood by just the board members, as it is essential to keep a board with at least five members. There is no specific workforce plan as of right now for FND. The members of FND gauge performance measures by interaction and performance in programs. In addition, the members of FND also describe performance measures in the beginning stages of the strategic plan. The members of FND identify performance projections and deviate plans to ensure they receive attention in the action plan.

Customers

Customer Expectations

Customer Listening. FND coordinates and works with its customers to ensure a custom program that meets all their needs. Depending on the customer segment, whether the group is a school, community, or individual, members of FND ensure they listen to their customer needs by continually requesting feedback and measuring program engagement. Because the interaction with the clients of FND is fluid, requesting feedback is continuous as questioning is standard in almost every interaction of a program. In conjunction with immediate and actionable feedback, FND also experiences higher enrollment in their programs from word-of-mouth advertising from past clients.

Potential customers of FND are continually solicited by numerous marketing techniques to try to obtain actionable information. Former customers are imperative to the future success of FND as they are occasionally the connection between FND and potential future customers. Word-of-mouth marketing and online solicitation are two

methods that FND utilizes to obtain actionable information regarding interactions with FND programs. Members of FND continually listen to potential customers and ensure that their visions match when designing a program to ensure that the business competencies are similar.

Customer Segmentation and Product Offerings. FND establishes its key customer group and market segment in its mission and company description. Their market segment consists of anyone that is participating in academia. Their customer group depends on the specific demographical program that is FND is soliciting for at the current timeframe. FND has a variety of different program offerings that is not specific to any age group but is tailored on an educational standard. This concept means that the educational aptitude for specific programs could require someone with higher education than other programs. The customer segmentation is program-specific, but the brand and mission of FND are marketed to anyone who is of school age.

The customer segmentation and product offerings work hand-in-hand together. If the identification of customer segmentation comes first, the product offering is then curtailed to the specific customer segmentation. Contrarily if the product offering is given by FND, they seek out a specific customer segmentation. FND continues to identify and adapt product offerings to exceed the expectations of its customer groups and market segments by ensuring customer satisfaction. Members of FND continue to seek out new technologies and experiences that will engage their current customers and new customers to create opportunities to expand relationships. FND gauges their customer involvement in their program and continues to request feedback and suggestions.

Customer Engagement

Relationship Management. Maintaining, creating, and acquiring new customer relationships is important to the success of any organization. FND continues to develop its relationship with customers of FND by continuing to communicate with its customer base. Acquiring customers and building market share starts with the many tactics of FND to broaden its current customer reach. The members of FND create new ways of contacting and engaging customers by in-person, online, and printed communications. FND manages and enhances its brand image by partnerships, new program creations, and adding innovative staff with new outlooks.

Customer Access and Support. Customers can have contact with any member of FND through their telephone numbers. In addition, FND has a website and numerous social media accounts to allow customer access and support with the organization.

Customers of FND require the ability to inquire and have discussions regarding programs with FND staff. FND staff deploys these requirements to all their processes by involving an element of customer support. In-person, online, and over-the-phone contact is readily available for any customer future, past, or present that requires access and support.

Complaint Management. Because of the size of FND, complaints, and dissatisfaction remarks are detrimental to the success of FND. Members of FND, because of the team environment, if a negative complaint was given, the board members would all reflect on the comments. In addition, FND would take the necessary steps to recover the customer's confidence and enhance satisfaction by reaching out to the customer and

explaining what steps resulted from their review. FND ensure new policies or structures are set in place so a complaint with a similar remark will not occur again.

Determination of Customer Satisfaction and Engagement. Customer satisfaction, dissatisfaction, and engagement with FND programs all revolve around participation numbers and the amount of interest that is generated from the programs. Members of FND conduct entry and exit questionaries to understand the competencies obtained during the interaction of a program. Members of FND can determine their program satisfaction levels by the remarks of the participants and the continued enrollment afterward. Other programs similar to FND's programs are monitored by the board members, and discussions occur to maintain competitiveness.

Use of the Voice of the Customer and Market Data. Members of FND continue to have outreach to their customers for ideas and new concepts that they can implement in their program offerings through social media and email. In addition, members of FND continually interpret market data of demographics and other competing STEM-focused programs. FND continues to update and transform its operational decision-making and culture based on its market data and customer's voice. The customer's voice is an inherently important piece of the makeup of FND, and all members recognize its importance.

Results Triad: Workforce, Operations, and Results

Workforce

Workforce Environment

Workforce Capability and Capacity. The board members of FND assess the organization's skills, competencies, certifications, and staffing levels needed by analyzing current funding and the demand of the current and future programs. The external funding of FND is a direct contributor to the capability and capacity of FND's staffing levels. In addition, the skills, competencies, and certifications desired by FND vary depending on both the program necessity and the experience to add to the board.

The recruitment criteria of the new workforce of FND are to add a diverse and unique outlook to the mission of FND. Board members of FND identify areas of improvement in staffing and look to recruit individuals that will fulfill the necessity. The executive director and board members interview the potential new workforce.

Throughout the interviews, members of FND assess the fit of the new workforce member to ensure they fit the organizational culture.

Workforce change management is dependent on the current external funding and demands from customers. The balance between the organization and workforce to ensure continuity is a secure system. Board members of FND are diligent when making decisions regarding the force. The board members continually seek legal and financial recommendations from professionals to ensure safe choices to prepare and minimize the impact of any necessary reductions. If identification of workforce growth occurs, the

board members will discuss potential work systems and organizational structures required to support the development of the necessary workforce.

Work accomplishment at FND occurs on a team basis. Ideas and concerns are welcome at every board member meeting, in which the executive director coordinates conversations and provides unique ways of voting and agreement for anything discussed. Assignment of tasks is one of the methods FND accomplishes work by ensuring tasks will have responsible parties to have completion. FND's board members all have unique competencies which contribute to a rounded organization. Members of FND capitalize on the competencies of their members by assigning appropriate tasks to members who will be able to execute the task successfully.

Workforce Climate. The workforce climate of FND is positive and energetic. The executive director of FND ensures that members are engaged in the mission of FND. Because all members of FND are volunteers, no benefits or services exist for the volunteers. Performance measures and improvement goals for the workplace are set as an organization-wide goal, as all members all strive to hit the same goal. All members of FND promote a similar workforce climate in which they encourage and promote the mission of FND.

Workforce Engagement

Assessment of Workforce Engagement. Measurement of workforce engagement occurs by attendance and participation at board meetings. The size of FND currently only allows for a select few drivers of workforce engagement. Members of FND, because they are volunteers, do not require significant drivers to become engaged. The executive

director's responsibility is to ensure the members have engagement drivers by creating new goals and tasks for the members. If members are not feeling challenged, the executive director can assign new and challenging tasks to help improve the workforce engagement. Because of the size of FND, the executive director has a strong pulse of the members and their current engagement.

Organizational Culture. The culture of FND includes open communication, energizing monthly conversations, and inclusive teamwork. The organizational culture is reinforcement occurs by the executive director who ensures a team decision on any of the organization's forward movement. The mission of FND has undergone changes that all board members voted on. In changing the mission, all members of FND support and value the mission, which aligns the culture appropriately. The executive director empowers the workforce with exciting goals through programs, funding, and partnerships.

Performance Management and Development. FND's workforce performance management system supports high performance. FND's board members all vote on intelligent risk-taking actions and action plans. Members of FND support ethical business practices by continually kickstarting new ideas to support the community. The learning and development of the members of FND continually occurs, as new programs require the breadth of new knowledge. Because of the age of FND, there is no succession planning for management, leadership, or other key positions as of right now. FND is currently in a position of growth and has not yet reflected on career development.

Operations

Work Processes

Product and Process Design. The determination of key product and work process requirements occurs during a program's implementation/planning stage. The process and key product requirement discussion occur at board meetings as an idea flourishes. The key work process for FND includes the executive director identifying areas of improvement and making recommendations to the board for future enhancement. In addition, the executive director, along with the board members, are encouraged to brainstorm regarding new processes to help their current product design. The creation of the product designs occurs with market research, creative incorporation of knowledge, product excellence, customer experience, and consideration of risk. The members of FND work to ensure that the design of their products both engages and excites individuals in the STEM field.

Process Management and Improvement. The most crucial process of FND is funding. Without any proper process to procure and secure funding, FND will not be able to operate. Measuring this key process is a simple process associated with a financial figure. Support processes such as program creation and marketing are necessary to support the key process of procuring funding. Members of FND emphasize making sure that their programs are attractive and beneficial for all parties. The day-to-day operation of these processes ensures that they meet key business requirements by monthly follow-up to ensure that members are actively achieving funding goals.

Supply-Network Management. Currently, FND does not partner with any suppliers to meet their operational needs. The supply network that FND partners with is for financial accounting assistance and nonprofit legal assistance. By partnering with these organizations, FND can ensure they support their strategic objectives. In addition, by subbing the workout to suppliers, members of FND can achieve a greater focus on enhancing customer satisfaction. The executive director of FND communicates with the suppliers to ensure performance expectations are met and evaluates the supplier's performance in conjunction with the board members.

Innovation Management. Decision-making of any type in the organization of FND requires all board members' acceptance. Pursuing strategic opportunities is an integral step of FND's work processes. All board members determine intelligent risks and areas for a strategic opportunity that may yield positive financial and performance rewards. At the same time, board members review current opportunities and strategic processes to ensure that they are appropriate and discontinue if necessary. FND's board members all vote to discontinue pursuing opportunities if counterintuitive to the organization's mission.

Operational Effectiveness

Process Efficiency and Effectiveness. The members of FND put a strong emphasis on managing the cost, efficiency, and effectiveness of the operations. Members of FND manage costs by creating budgets to detail and enforce current and future funding to ensure that appropriate expenditures occur. Members of FND also manage efficiency by designating a specific day once a month to discuss all operational processes. By

creating a specific discussion point, all members can work more efficiently. Furthermore, members of FND also measure their effectiveness by the current and future funding opportunities and the current and future educational programs that they can incorporate.

Security and Safety Preparedness. Because FND operates at a low-security level, the data of FND is stored locally. In addition to the security, FND ensures all their programs meet a safe operating environment in which it is safe for both volunteers and participants. The members of FND review the business continuity of emergencies to ensure that they are prepared for any disaster that may occur. Members of FND are cautious to ensure safety and security for everyone involved in their organization.

Measurement, Analysis, and Knowledge Management

Measurement, Analysis, and Improvement of Organizational Performance

Performance Measurement. Members of FND track data and information on daily operations and overall organizational performance by having separate administrative documents. Strategic objectives such as fundraising and increased program participation are topics that members of FND measure. FND has an annual grant tracking sheet in which they measure the success of each application and determine future goals to achieve. Daily operational data such as financials and marketing objectives are a discussion point in every board meeting. Supporting documents such as balance sheets and income statements support the tracking and information of the daily operations.

Comparative data such as past and future objectives create discussion points for information that supports fact-based decision-making. Members of FND also ensure that all discussions and fact-based decision-making still require a consensus of agreement

from the board. Because of the operational organization, the board members of FND can respond to rapid or unexpected organizational or external changes. FND board members have continued communication which leads to agility in decision-making. All members can provide timely data to react and make accurate decision-making.

Performance Analysis and Review. Key organizational performance measures of FND include financial, participation, and overall growth. Through different administrative documents such as a balance sheet, income statement, grant tracking, and program schedule, members of FND can assess their organizational success, competitive performance, and financial health. Members of FND conduct their meetings with Robert's Rules which enables the organization to review progress on achieving strategic objectives and create action plans. The board members first review the last meeting's discussions during the meetings to ensure continuity. By reviewing and discussing new objectives, members of FND can respond to rapidly changing organizational needs and challenges.

Performance Improvement. Projecting future performance is only obtainable by measuring current and future available funding. Current funding is an excellent benchmark for FND to measure its current performance potential. Future potential funding is difficult as partnerships and grants are sometimes unpredictable. The executive director is astute with STEM technology and continually uses findings from performance reviews to develop priorities for continuous improvement and opportunities for innovation. The executive director continually ensures that suppliers, partners, and collaborators have organizational alignment by continuing communication.

Information and Knowledge Management

Data and Information Verifying and ensuring organizational data quality is essential for FND. Members of FND manage their electronic and other data by ensuring their accuracy through review by board members and subject expert matters contracted to support FND. The executive director collects data and disperses the data utilizing numerous different user-friendly formats to all organizational stakeholders, such as charts, presentations, and graphs. The executive director is responsible for ensuring that the information technology systems are reliable and user-friendly.

Organizational Knowledge Documentation of programs and specific offerings of FND is essential for the transferability of knowledge among the workforce. In addition to documentation, the executive director of FND is responsible for all training and knowledge transfer. Participation is the key indicator of high-performing versus low-performing operations. Organizational learning occurs through constant trial and learning from areas of improvement. FND, because of its infancy, has the opportunity of testing different avenues to find its market fit.

Collection, Analysis, and Preparation of Results

Thematic Findings

The purpose of this qualitative single case study was to explore strategies leaders of nonprofit STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations to support the nonprofit STEM organizations' mission.

The research question was, What strategies do leaders of STEM-focused education nonprofit organizations use to engage support from STEM-focused hiring corporations to

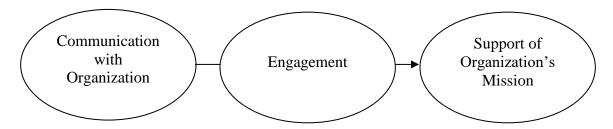
support the nonprofit STEM organization's mission? Semistructured interviews, organizational data, and peer-reviewed articles contributed to the data for this study. The thematic findings from the data analysis provided four themes: (a) communication, (b) mission alignment, (c) networking, and (d) partnership.

Thematic Finding 1: Communication

Communication strategies are essential for STEM-focused education nonprofit organizations. Trent et al. (2020) explained that communication from a nonprofit directly impacts an organizations' engagement. Communication between a STEM-focused education nonprofit organization to a STEM-focused hiring corporation is essential for the STEM-focused hiring corporation to support the nonprofit STEM organization's mission. The communication strategies identified in the research include (a) emails, (b) telephone calls, (c) in-person meetings, (d) letters, and (e) social media posts. All five interview participants identified emails as one of the most important ways of engaging support from STEM-focused hiring corporations. Figure 2 depicts how communication leads to the support of an organization's mission.

Figure 2

Process for Support of Organization's Mission



Note: Adapted from Communicating our way to engaged volunteers: A mediated process

model of volunteer communication, engagement, and commitment from the Journal of Community Psychology by Trent et al. (2020).

The communication between both organizations provides a unique opportunity to connect and understand their mission and goals. Participants C and E explained that the number of touches with communication is also essential. Participant E expressed that a minimum of four touches a year through the numerous methods of communication is crucial for the support and engagement of STEM-focused hiring corporations. All participants indicated that the method of communication and continued communication with potential and current STEM-focused hiring corporations is essential for the support of the nonprofit STEM-focused education organization.

Thematic Finding 2: Mission Alignment

It is essential for a STEM-focused nonprofit organization to align its mission with the STEM-focused hiring corporation in order to request support. Sloan (2021) explained the presence of a mission statement could alter the perception of an organization.

Through data analysis, a common theme among participants revolved around mission statements and creating a business fit with the partnering STEM-focused hiring corporation. Mission alignment is defined as the action of understanding the problems and goals of the STEM-focused hiring corporation and aligning the STEM-focused nonprofit education organization's mission to support the problems and goals of the hiring corporation.

Mission alignment is also a technique in which leaders of STEM-focused nonprofit education organizations can align their mission with STEM-focused hiring

corporations prior to engaging in conversation, so they have a first-hand understanding of the STEM-focused hiring corporations' motivations. Participants A, C, D, and E explained that mission alignment is crucial and understanding the hiring corporation's mission prior to engagement is essential. It is important to note that a STEM-focused nonprofit education organization is not to strategically change its mission but to find where both the STEM-focused hiring corporation's mission and its mission can align.

Thematic Finding 3: Networking

Strategies to obtain support from STEM-focused hiring corporations can be difficult from the start of creating a connection for communication. Mehrotra and Siraj (2021) explained one of the main purposes of a nonprofit organization is to bring awareness regarding its cause or initiative. In a nonprofit organization, leaders of nonprofit organizations desire avenues to enlighten outsiders about their initiatives and purpose. It is essential that a leader of a nonprofit discovers opportunities to make professional connections.

Participants A, C, D, and E explained that networking and social events relating to STEM are great avenues for STEM-focused nonprofit education organizations to solicit support from STEM-focused hiring corporations. Mandeno and Baxter (2021) described a networking event as an essential activity that creates and maintains connections in a professional environment. Through the finding, a defined avenue for soliciting support is networking events. Leaders of STEM-focused nonprofit education organizations can benefit from participation in STEM-related networking events.

Thematic Finding 4: Partnership

As confirmed in the literature review, a successful strategy of nonprofits is a partnership with corporations. Yin (2021) explained that partnerships between corporations and nonprofit organizations enable value in collaboration. The participants of this study elaborated on their definitions of partnership to create a succinct outlook for STEM-focused nonprofit partnership. The participants explained that if the desired result is support from a STEM-focused corporation, members of the STEM-focused corporation should not only provide financial support. The support should extend to volunteers, mentors, resources, and financial support to strengthen the STEM-focused nonprofit education organization's mission. The list of actions from a STEM-focused corporation is considered a partnership. Participants A, D, and E explained that by having a partnership with a STEM-focused hiring corporation, the members of the corporation are able to better understand the initiative and help support the overall mission. A partnership is essential between STEM-focused hiring corporations and STEM-focused nonprofit education programs to solicit support for their mission.

Product and Process Results

FND's mission is to empower communities to expose, engage, and inspire our youth to be the innovators of tomorrow through STEM education. FND's existence commenced with the Florida Department of State in April 2019. The nonprofit STEM-focused educational organization facilitates (a) hands-on educational programs, (b) contests, (c) challenges, (d) clubs, (e) activities, and (f) workshops to engage students in STEM education. The product and process results section contains explanations on both

customer-focused product and service results and work process effectiveness results.

Customer-Focused Product and Service Results

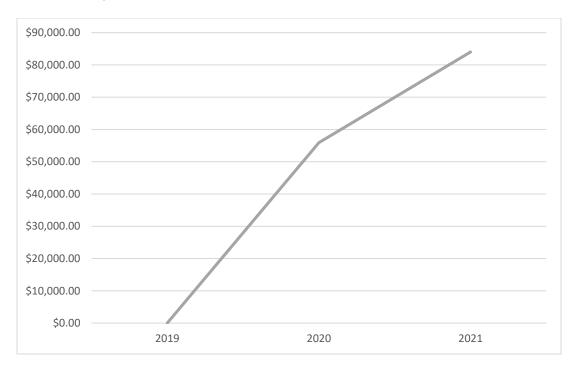
FND's organizational positioning puts its main products and services as a programmatic design. A selection of FND's programs contains pre- and postdeliverable exams that assess the information knowledge retention and aptitude relating to STEM. A key measure outside of the sheer participation numbers of FND's programs would be the retention of students' knowledge from the programs. FND is because their size can cater to their customer's specific product offering needs. The executive director of FND gauges the performance of products by communicating with the customers of FND to understand their indicators of success and improvement.

Work Process Effectiveness Results

Process Effectiveness and Efficiency. FND's mission is to empower communities to expose, engage, and inspire our youth to be the innovators of tomorrow through STEM education. FND's existence commenced with the Florida Department of State in April 2019. The nonprofit STEM-focused educational organization facilitates (a) hands-on educational programs, (b) contests, (c) challenges, (d) clubs, (e) activities, and (f) workshops to engage students in STEM education. As seen in Figure 3, FND leaders have expanded not only the organization's programs but also its funding to support its mission. The assets for FND have grown considerably over the past 3 years.

Figure 3

Asset Growth, 2019-2021



Note. The information for this figure came from financial statement documents of FND for 2019 to 2021.

Safety and Emergency Preparedness. FND complies with all local, state, and federal safety and emergency guidelines. In addition, FND also consults with consultants to ensure safety at all programs. FND has no results of any safety or emergency preparedness concerns throughout the past 3 years in operation. Members of FND ensure that they comply with any regulations that would prohibit the operation or put anyone at risk.

Customer Results

Customer Satisfaction

The members of FND continuously strive to receive positive customer satisfaction, whether it be the stakeholders, parents, or students of the programs. The executive director ensures satisfaction by personal communication with participants. In addition to the individual's perspective towards the program, the executive director also provides pre and postaptitude tests to identify the cognitive acceptance of the programs. Key measures of customer satisfaction for FND programs are the continued interest and engagement of the participants. Engagement is key for all FND programs, and the executive director actively monitors all engagement.

Customer Engagement

Measures of engagement are instantaneous with FND, as the organization requires participation in its educational programs. The executive director and volunteers of FND can closely monitor engagement by visually observing the participation level of the programs. The results differ by program offering depending on the program offering and the age group of the participants. To keep customer engagement results growing, FND expands its products offerings to engage new customers and maintain their current customer relationships. By offering new programs, FND can diversify its market segment and gain more interest in its current program offering as well.

Workforce Results

Workforce Capability and Capacity

The workforce capacity and capability are crucial to the success of FND to promote understanding and awareness of STEM. The executive director of FND outlines key responsibilities and roles necessary for the Board of Directors. Furthermore, the executive director also plays a crucial role in filling all the required positions. The assortment of programs requires volunteer assistance. The board's job is to ensure necessary volunteer positions and staffing occur. These results differ because of the organization's agility to procure volunteers to support its mission. Thus, resulting in an expansive capacity and capability for the organizational workforce performance.

Currently, FND does not have full-time employees, but the executive director is a 1099 contractor. In addition to the executive director, FND hires an accountant to review all financials. With the assistance of the board members, FND can procure consultants for any business challenges to overcome.

Workforce Climate and Engagement

The workforce climate and engagement results are synonymous as the climate and engagement are focused concentrations. The encouragement of engagement is the creation of the executive director, who promotes team building and decision-making. All facilities where members of FND conduct business are borrowed or rented. The climate of FND is an agile organization that continually adapts to new technology and concepts in the STEM field. Through the climate at FND, the organization can engage its

workforce with emerging technologies and programs. The executive director promotes a positive teamwork environment that helps foster creativity and new opportunities.

Workforce Development

FND key measures for workforce development relates to the current business requirements. The executive director of FND has key steps from program results and customer results that yield new workforce requirements. A recent workforce development result is the goal of obtaining a marketing individual to support the business needs of FND. In addition, the executive director is continually adapting to new leadership roles and supporting the board members in any concepts they bring to the discussion. In addition, FND's executive director continually seeks new volunteers to support the organization's mission and helps with developing them into future leaders within the organization.

Leadership and Governance Results

Leadership

The executive director of FND is involved in all aspects of the organization. The mission statement is an essential piece of FND that the Executive Director reiterates throughout interactions with FND stakeholders. By creating a monthly agenda, the executive director establishes a focus on action and encourages discussion regarding the plan's elements. The executive director also sets monthly meetings with board members to help deploy the vision and values and create a two-way communication. In addition to the executive directors' touch, the board members all meet with organization partners to

help make a personal connection with FND to engage them for support. Regardless of the stakeholder, the involvement of the executive director is consistent and present.

Governance, Law, Ethical and Societal Results

The executive director continually confirms compliance with legal, ethical, societal, and government rules and regulations. FND emphasizes ethical decision-making by supporting diverse and underrepresented communities through its programs. In addition, members of FND also employ legal, financial, and nonprofit consultants to support and ensure compliance. FND dedicates all resources to supporting societal contributions and its local community. The structure of 501(c)3 requires certain obligations for FND to adhere to, in which leadership of FND ensures compliance.

Because of the size of FND, there is no specific survey or tool to gauge the effectiveness of the senior leadership.

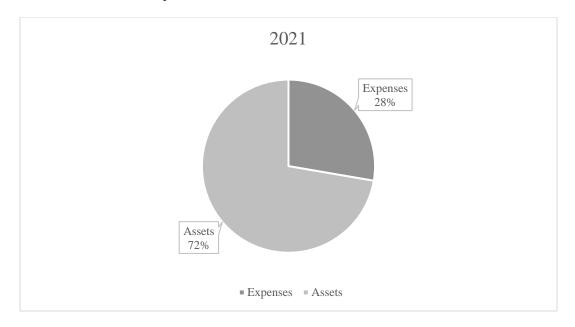
Financial and Market Results

Financial Performance

Due to the maturity of FND, FND has experienced vast organizational growth, but only has a few years of financials. The executive director and board members starting in 2021 actively review all financials monthly. The conversations around the financial statements help steer the organization in conversations regarding donations or volunteers. As displayed in Figure 3, the asset growth of FND has had significant growth. In addition, the organization's growth has not shown an impact on the expenses, as shown in Figure 4. In 2021 the expenses only made up 28% of the organization's total revenue. The organization resulted in an excess revenue of \$39,912.26 before depreciation.

Figure 4

2021 Assets Versus Expenses

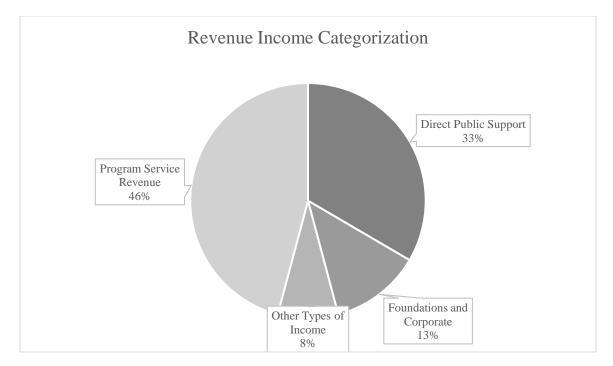


Note. The information in this figure came from the 2021 financial statements of FND.

The financial stability of FND is heavily reliant on grants, donations, and support through funding to support its mission. The executive director has successfully diversified the current support of its programs by having numerous funding sources. As shown in Figure 5, the funding received in 2021 is differentiated and comes from multiple sources. As the organization grows, ensuring diversification will be essential for growth.

Figure 5

Revenue Income Categorization



Note. The information in this figure came from FND's revenue breakdown for 2021.

Utilizing GuideStar to research nonprofits in the same geographical area and genre yielded search results of approximately 314 organizations that mentioned STEM in their mission statement. After examining IRS 990 forms, 14 organizations were in similar financial and operational size. STEM programs have had significant growth over the past five years, resulting in a similar growth trajectory of FND. Numerous organizations had a dramatic decline in 2020 due to the inability to conduct in-person educational programs and have not recovered, unlike the growth of FND.

Strategy Implementation Results

The strategy implementation results consist of new programs that are going to be offered in 2022. In addition to the program expansion, FND is seeking new board

members to support the future business avenues that FND seeks to pursue. These two strategic action plans are derived from the organizational and action plans from past years, enabling growth and expansion. In addition to the organizational strategy, the executive director has made several contributions to partnerships with organizations that will result in future organizational growth. The strategy implementation, by conducting monthly meetings, has yielded future opportunities. By having conversations with board members regarding intelligent risk, the organization can have agility in growth.

Key Themes

Process Strengths

FND has had effective process implementation and enhancement throughout the tenure of this research. The mission statement creates a foundation for the organization to support its actions and discussions to set a trajectory for success. It is essential to note the executive director's involvement and leadership style outlines the organization to have transparent and team-driven communication. The process of communication and operation observed between board members is constructive and supports an active growth model. The members of the board show engagement towards the mission of FND, by attendance statistics in all board meetings and contribute to the overall success.

Process Opportunities

FND has unique opportunities for growth in its current process. Although identifying goals occurs throughout meetings, FND would benefit from a long-term strategic vision to help support its mission. In addition to the strategic vision creation, FND members should set aside time for annual strategic planning to align and create a

vision for the organization and a documented plan to outline future steps. Furthermore, to the strategic planning, an opportunity exists to outline the succession plan formally and organizational hierarchy design created to help support the efforts of the current executive director. Currently, the role of the executive director is not formally documented, and roles and responsibilities cannot easily be duplicated.

Results Strengths

The members of FND have yielded growth successfully from grants, program opportunities, and general fundraising. The executive director's leadership has created a culture to support growth in the organization. In addition to the workforce, the members of FND strive to receive positive customer satisfaction. The utilization of pre- and postaptitude tests contributes to a cognitive identification of success for FND's educational programs. The executive director's participation in the educational program reinforces results that help grow and maintain FND's customer base. As identified in the financial and market results section, FND can keep its expenses low and operate and increase funding. For all of these reasons, FND has significant results strengths.

Results Opportunities

As the organization matures, opportunities for additional funding and grants will occur. FND has opportunities to grow its financing, create more corporate partnerships, and maintain its direct public support and program service revenue. FND also has an opportunity to develop formal customer satisfaction surveys. With formal customer satisfaction surveys, FND will better understand its current customer base and understand its market's desires. In addition, FND will discover new opportunities for growth and

improvement. Another opportunity of FND is to create a full-time position to support the organization's mission. The role of the position would be identical to the 1099 executive director position now, but instead of contract work, the position would consist of fulltime responsibilities. FND would benefit from filling two positions both an individual with a marketing background and an individual who has STEM-focused corporation relationships to join the board. The executive director would also benefit by training an assistant executive director to support and learn the executive director role.

Project Summary

The connection between a nonprofit organization and a corporation with similar missions is beneficial to both organizations. Yin (2021) expressed partnership between nonprofits and corporations leads to constructive collaboration. Leaders of STEM-focused nonprofit education organizations lack strategies to engage STEM-focused hiring corporations to support the nonprofit STEM organizations' mission. The United States Bureau of Labor Statistics (2020, Table 1.11) projected 10.5 million STEM occupations will exist by 2028. It is imperative that STEM-focused education nonprofit organizations create relationships and connections with STEM-focused hiring corporations to strengthen the STEM-focused nonprofit's mission.

This study focused on the successful strategies of the leaders of FND to engage STEM-focused hiring corporations to support FND's mission which is to expose, engage, and empower our youth to be the innovators of tomorrow through education in science, technology, engineering, and mathematics. By collaborating with FND, members of FND were able to provide business operational details and strategic business insight. This

study focuses on the nourishment through education of the future STEM workforce; the framework applied to this study was the human capital theory. The concept of human capital theory supported the framework of this study by supporting the strategy of engaging STEM-focused hiring to corporations to support nonprofit STEM organizations' missions.

Through multiple methods of data collection, including (a) semistructured interviews, (b) informal interviews, and (c) analysis of company documents and utilizing the Baldrige Excellence Framework, I was able to identify four key themes. The thematic findings included (a) communication, (b) mission alignment, (c) networking, and (d) partnership. Leaders of STEM-focused education nonprofit organizations can benefit from applying the four thematic strategic findings. Utilizing the human capital theory and creating a partnership with STEM-focused hiring corporations, STEM-focused nonprofit education leaders will benefit from increased support for their overall mission.

Contributions and Recommendations

Leaders of STEM-focused nonprofit education organizations require the support of their mission from multiple organization stakeholders. By utilizing the Baldrige Excellence Framework and collaborating with FND, I identified STEM-focused hiring corporations as crucial stakeholders of a STEM-focused nonprofit education organization. By identifying successful strategies and recommendations provided in the study, FND may utilize the additional strategies to engage STEM-focused hiring corporations to support its mission. The themes in this study can help organization

leaders create a more substantial business focus towards increasing support from STEMfocused hiring corporations.

Furthermore, the findings in this study also create a connection between partnerships and nonprofits. Ahmadsimab and Chowdhury (2021) explained nonprofit partnerships help support a flourishing relationship between organizations. Throughout the analysis of FND, while utilizing the Baldrige Excellence Framework, the connection between partnerships and nonprofits was evident. Partnerships, specifically in the STEM-focused nonprofit field, would help contribute to STEM growth. Scholars and organizational leaders of STEM can utilize the findings in this study to contribute to strategies to engage the support of STEM-focused hiring corporations for the STEM-focused nonprofit education organization's mission.

Application to Professional Practice

The findings of this study are applicable to professional business practice by creating strategic direction for initiatives to engage support from STEM-focused hiring corporations. Nonprofit organizations lack strategies to engage support for corporations. This study specifically focuses on the relationship in the STEM field. The findings of this study provide strategies that STEM-focused nonprofit education organizations can utilize to further their approach to engaging STEM-focused hiring corporations. This study is relevant to improved business practice, as STEM-focused nonprofit organizations may not have the resources to facilitate numerous strategic initiatives. Through the thematic findings and recommendations, leaders of STEM-focused education nonprofit organizations can benefit from the relevant results.

The purpose of this qualitative single case study was to explore the strategies that leaders of STEM-focused education nonprofit organizations use to engage STEM-focused hiring corporations to fulfill their nonprofit organizations' mission. Leaders of STEM-focused education nonprofit organizations can use the findings of this study to help strengthen their approach to networking and collaboration with STEM-focused hiring corporations. Through (a) communication, (b) mission alignment, (c) networking, and (d) partnership concepts discussed in this study, organizational leaders of STEM-focused education nonprofit organizations can reorganize strategic initiatives to focus on engaging support from STEM-focused hiring corporations. The findings in this study provide a unique outlook of FND and the successes that have derived from their efforts. Leaders of STEM-focused education nonprofit organizations can apply these findings to their professional practice to help engage the support of STEM-focused hiring corporations.

Implications for Social Change

Throughout the DBA program at Walden University, faculty emphasize positive social change as a guiding factor in all decision-making. The conception of understanding how actions impact and lead social change occurred throughout the program. Singh and Misra (2020) explained that organizations are increasing their impact on their local community. As businesses increase their impact on their local communities the conceptualization of corporate social responsibility and contributions must be understood. The provisions of the study will provide benefits to both the local community and the STEM community.

This study contributes to a nonprofit organization's strategic initiatives to engage support from STEM-focused hiring corporations. By receiving additional engagement from STEM-focused hiring corporations, the nonprofit's mission can reach additional participants. With the overarching reach of the nonprofit, additional students will receive an education that will contribute to the increase of STEM-focused positions being filled. As identified in this study, the introduction and engagement of concepts encourage and assist with future interaction.

Furthermore, by engaging more STEM-focused hiring corporations, the education level of the community can increase due to the expanded STEM-focused education nonprofits' efforts by having the support of the STEM-focused hiring corporation. As these concepts will also contribute a life cycle of social change. Once additional students are introduced and educated in the STEM field, the communities that host STEM-focused hiring corporations will see an increase in the amount of positions filled. By having positions filled, the tax revenue from the corporations will also boost the local economy. Although only a few concepts of positive social change are explained in this study, one could conceptualize many social change concepts derived from this study.

Recommendations for Action

This section provides recommendations for FND and other STEM-focused education nonprofit organizations that will benefit from the findings of this study. The purpose of recommendations for action is to provide suggestions for organizations to carry out to help improve their overall operational performance. A major opportunity for action would be the long-term strategic planning of the organization. The long-term

strategic plan can be carried out through a conference, in which all essential stakeholders of the organization, with the mission in mind, create a long-term strategic plan for the organization. In conjunction with the strategic plan, it is recommended that a vision is created to support the organization's mission. During the conference, succession planning and an organizational hierarchy design will also benefit the organization.

Understanding current customer adoption to the programs is another recommendation for further action. A tool to carry out the assessment would be the use of formal customer satisfaction surveys. With this tool, the organizations will be able to assess the current customer aptitude and create strategic initiatives to increase the overall satisfaction of the programs. FND and organizations, similarly, will benefit from having supporting positions that will support the executive director and learn from the role so that transition is fluid.

Throughout the research and analysis, communication is key for engaging STEM-focused hiring corporations. The research identified that having consistent communication and creating a personalized approach, may result in stronger engagement. Partnership with STEM-focused hiring corporations may also contribute to a strategic initiative to engage STEM-focused hiring corporations. With communication and partnership in mind, having the corporation's mission align with the nonprofit's initiative may also lead to engaged hiring corporations. This study can be accessed through ProQuest, and can serve as a conversational discussion piece for conferences and trainings. Overall, with many strategic opportunities, STEM-focused education nonprofit

organizations can utilize this study, for strategic initiatives to engage STEM-focused hiring corporations in their mission.

Recommendations for Further Research

The recommendation for further research provides scholars with an opportunity to researcher the topic of this study. This study provided a literature review section that utilized human capital theory as the conceptual framework of the analysis. As the STEM field grows the opportunity to study human capital theory and the contributions to STEM positions is a potential opportunity for further research. Researchers may benefit from analyzing the strategies utilized to engage STEM-focused hiring corporations further from the limitations provided in this study.

This study presented limitations that researchers can further analyze to support the findings of this study. This study revolved around a single organization, which operates in a demographic that may not be consistent with other areas of the world. As the research provided alluded to specific areas of improvement and opportunities for strategic initiatives, further research can be conducted on STEM-focused education nonprofit organizations from other geographic areas of the world.

The outlook for STEM-focused hiring corporations would pose another avenue for research. As this study's research was from the perspective of a nonprofit, the perspective from a STEM-focused hiring corporation may present similar or contrary results that will help further the research in this area. Another recommendation is to research any of the four thematic findings further as they may contribute to an important element of STEM engagement. Researchers who analyze the concepts of partnership and

mission alignment may find interesting connections in the STEM field. This study provided numerous opportunities for STEM-focused nonprofit organizations to implement strategies, but also provides a unique opportunity for researchers to expand the research of STEM and gain and stronger understanding of the contributions necessary to help engage the future workforce in STEM occupations.

Reflections

The doctoral study process created a unique opportunity for me to understand the concepts of strategy and consulting from a scholastic outlook. Utilizing the Baldrige Excellence Framework, and having a specific organization partnered with me to execute, really helped me apply the concepts that I learned throughout the program. I was fortunate to have the opportunity to be paired with an organization who only was in business for a few months prior to the start of my research. Throughout this process, I was able to grow with the client organization and see at first-hand what challenges occur during the initial stages of starting an organization. I believe one of the notable hurdles that created a very unique obstacle throughout this process was COVID19. The pandemic operationally impacted the economy and all organizations. It was a unique opportunity to research leadership techniques and apply the learnings to what was occurring. I believe the human capital theory, as the framework of this study, also yielded a practical element that is appropriate for the times we are enduring right now post pandemic.

Throughout the journey, I have grown as an individual, student, and employee.

The process has showed me that hard work and persistence will yield results, and without continued attention and patience progress does not occur. I spent countless hours

researching the STEM field and learning new things that I could contribute to my client organization. My client organization was understanding and supportive of all the communication required during this process. In conjunction with the research and findings that will contribute to future action and further research, it is with my strongest hopes that the client organization has continued success that they have shown over the process of my doctoral journey. It is my personal reflection that the consulting capstone provides a beneficial application and approach to the doctoral study process, as it combines research with real-life applications. Without the support of my family, friends, Walden faculty, and employers, the doctoral journey would have been much harder. I am honored to have had the unique opportunity of contributing to such a wonderful goal.

Conclusion

The purpose of the research was to explore strategies leaders of nonprofit STEMfocused education nonprofit organizations use to engage STEM-focused hiring
corporations to support the nonprofit organizations' mission. With the utilization of the
Baldrige Excellence Framework and the partnership with FND, recommendations and
opportunities for growth was formally noted in this study. Through the research process, I
discovered thematic findings of (a) communication, (b) mission alignment, (c)
networking, and (d) partnership. FND and STEM-focused hiring corporation may benefit
from utilizing long-term strategic planning and implementation of the four thematic
findings to engage STEM-focused hiring corporations to support the nonprofit STEM
organizations' mission. Through the implementation of these strategies STEM-focused
education nonprofit organizations will contribute positive social change by creating an

increase in qualified applicants for corporate positions resulting in a positive impact in local communities.

References

- Abdullah, S., Hair, N. H., Roslan, M. R., Daud, N. M., Shah Jaafar, M. A., Beng, G. K., Abdullah, M., Halim, L., Rosli, R., & Ismail, N. D. (2019). Smart control helicopter competition as a STEM outreach program for schools in Malaysia. In M. S. J. Singh, M. T. Islam, M. F. Mansor, S. A. Bahari, & N. M. Daud (Eds.), 2019 6th International Conference on Space Science and Communication (IconSpace2019) proceeding: Advancing space science for societal sustainability (pp. 249–252). https://doi.org/10.1109/IconSpace.2019.8905974
- Affandi, Y., Anugrah, D. F., & Bary, P. (2019). Human capital and economic growth across regions: A case study in Indonesia. *Eurasian Economic Review*, 9(3), 331–347. https://doi.org/10.1007/s40822-018-0114-4
- Ahmadsimab, A., & Chowdhury, I. (2021). Managing tensions and divergent institutional logics in firm–NPO partnerships. *Journal of Business Ethics*, *168*(3), 651–670. https://doi.org/10.1007/s10551-019-04265-x
- Akoi, S. M., & Yesiltas, M. (2020). The impact of human resource development practices on organizational performance: The mediating role of human capital. *Revista de Cercetare Si Interventie Sociala*, 70, 90–118. https://doi.org/10.33788/rcis.70.7
- Almas, S., Chacón-Fuertes, F., & Pérez-Muñoz, A. (2020). Direct and indirect effects of transformational leadership on volunteers' intention to remain at non-profit organizations. *Psychosocial Intervention*, 29(3), 125–132.

 https://doi.org/10.5093/pi2020a17
- Algatawenh, A. S. (2018). Transformational leadership style and its relationship with

- change management. *Business: Theory & Practice*, *19*, 17–24. https://doi.org/10.3846/btp.2018.03
- Álvarez-González, L. I., García-Rodríguez, N., Rey-García, M., & Sanzo-Perez, M. J. (2017). Business-nonprofit partnerships as a driver of internal marketing in nonprofit organizations. Consequences for nonprofit performance and moderators. *BRQ Business Research Quarterly*, 20(2), 112–123. https://doi.org/10.1016/j.brq.2017.01.001
- Anafra, V. A., Jr., & Mertz, N. T. (Eds.). (2015). *Theoretical frameworks in qualitative research* (2nd ed.). Sage.
- Aulgur, J. (2016). Governance and board member identity in an emerging nonprofit organization. *Administrative Issues Journal: Connecting Education, Practice, and Research*, 6(1), 6–21. https://doi.org/10.5929/2016.6.1.1
- Azatovna, A. (2019). Conceptual analysis of education role in economics: The human capital theory. *Journal of History Culture and Art Research*, 8(3), 410–421. https://doi.org/10.7596/taksad.v8i3.2256
- Barkatsas, A., Carr, N., & Cooper, G. (2019). STEM education: An emerging field of inquiry. Brill Sense.
- Baumgartner, R. J. (2014). Managing corporate sustainability and CSR: A conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility & Environmental Management*, 21(5), 258–271. https://doi.org/10.1002/csr.1336
- Bentley, F. S., & Kehoe, R. R. (2020). Give them some slack—They're trying to change!

- The benefits of excess cash, excess employees, and increased human capital in the strategic change context. *Academy of Management Journal*, 63(1), 181–204. https://doi.org/10.5465/amj.2018.0272
- Blommaert, J., Dong, J., & Jie, D. (2010). *Ethnographic fieldwork: A beginner's guide*. Multilingual Matters.
- Blotnicky, K.A., Franz-Odendaal, T., French, F., & Joy, P. (2018). A study of the correlation between STEM career knowledge, mathematics self-efficacy, career interests, and career activities on the likelihood of pursuing a STEM career among middle school students. *International Journal of STEM Education*, *5*(1), 1–15. https://doi.org/10.1186/s40594-018-0118-3
- Bottia, M. C., Stearns, E., Mickelson, R. A., & Moller, S. (2018). Boosting the numbers of STEM majors? The role of high schools with a STEM program. *Science Education*, 102(1), 85–107. https://doi.org/10.1002/sce.21318
- Bougie, R., & Sekaran, U. (2019). Research methods for business: A skill-building approach (8th ed.). John Wiley & Sons.
- Bradford, T. W. (2021). We can fix this! Donor activism for nonprofit supply generation. *Journal of the Academy of Marketing Science*, 49(2), 397–417. https://doi.org/10.1007/s11747-020-00742-2
- Brimhall, K. C. (2019). Inclusion and commitment as key pathways between leadership and nonprofit performance. *Nonprofit Management & Leadership*, 30(1), 31–49. https://doi.org/10.1002/nml.21368
- Buse, K., Bernstein, R. S., & Bilimoria, D. (2016). The influence of board diversity,

- board diversity policies and practices, and board inclusion behaviors on nonprofit governance practices. *Journal of Business Ethics*, *133*(1), 179–191. https://doi.org/10.1007/s10551-014-2352-z
- Campion, M. C., Campion, E. D., & Campion, M. A. (2019). Using practice employment tests to improve recruitment and personnel selection outcomes for organizations and job seekers. *Journal of Applied Psychology*, *104*(9), 1089–1102.

 https://doi.org/10.1037/apl0000401
- Cecez, D., Davison, R. M., Fernandez, W., Finnegan, P., Pan, S. L., & Sarker, S. (2020).

 Advancing qualitative in research methodologies: Expanding horizons and seeking new paths. *Journal of the Association for Information Systems*, 21(1), 246–263. https://doi.org/10.17705/1jais.00599
- Charmaz, K. (2006). Constructing grounded theory. Sage.
- Christensen, R., Knezek, G., & Tyler-Wood, T. (2014). Student perceptions of science, technology, engineering and mathematics (STEM) content and careers. *Computers in Human Behavior*, *34*, 173–186.

 https://doi.org/10.1016/j.chb.2014.01.046
- Coff, R., & Raffiee, J. (2015). Toward a theory of perceived firm-specific human capital. *Academy of Management Perspectives*, 29(3), 326–341. https://doi.org/10.5465/amp.2014.0112
- Della Torre, E., Zatzick, C. D., Sikora, D., & Solari, L. (2018). Workforce churning, human capital disruption, and organisational performance in different technological contexts. *Human Resource Management Journal*, 28(1), 112–127.

https://doi.org/10.1111/1748-8583.12167

- Dziak, M. (2020). Social cognitive career theory (SCCT). Salem Press Encyclopedia.
- Do Nascimento, T. T., Porto, J. B., & Kwantes, C. T. (2018). Transformational leadership and follower proactivity in a volunteer workforce. *Nonprofit Management & Leadership*, 28(4), 565–576. https://doi.org/10.1002/nml.21308
- Dönmez, I., & Tasar, M. F. (2020). A self-study on the values and beliefs of science teachers and their science, technology, engineering and mathematics (STEM) applications. *Participatory Educational Research*, 7(1), 59–79.

 https://doi.org/10.3390/su12062279
- Drobny, P. (2017). The human as capital? A contribution to the critique of the theory of human capital. *Annales Etyka w Życiu Gospodarczym*, 20(5), 92–95. https://doi.org/10.18778/1899-2226.20.5.08
- Dunn, K., & Harness, D. (2018). Communicating corporate social responsibility in a social world: the effects of company-generated and user-generated social media content on CSR attributions and scepticism. *Journal of Marketing Management*, 34(17/18), 1503–1529.

 https://doi.org/10.1080/0267257X.2018.1536675
- Earl, J. (2020). The Belmont Report and innovative practice. *Perspectives in biology and medicine*, 63(2), 313–326. https://doi.org/10.1353/pbm.2020.0021
- English, L. (2017). Advancing elementary and middle school STEM education. *International Journal of Science & Mathematics Education*, *15*, 5–24. https://doi.org/10.1007/s10763-017-9802-x

- Erosa, A., Koreshkova, T., & Restuccia, D. (2010). How important is human capital? A quantitative theory assessment of world income inequality. *Review of Economic Studies*, 77(4), 1421–1449. https://doi.org/10.1111/j.1467-937X.2010.00610.x
- Falco, L. D., & Summers, J. J. (2019). Improving career decision self-efficacy and STEM self-efficacy in high school girls: Evaluation of an intervention. *Journal of Career Development*, 46(1), 62–76. https://doi.org/10.1177/0894845317721651
- Faupel, S., & Suess, S. (2019). The effect of transformational leadership on employees during organizational change—An empirical analysis. *Journal of Change Management*, 19(3), 145–166. https://doi.org/10.1080/14697017.2018.1447006
- Feilhauer, S., & Hahn, R. (2021). Formalization of firms' evaluation processes in cross-sector partnerships for sustainability. *Business & Society*, 60(3), 684–726. https://doi.org/10.1177/0007650319856633
- Gong, X., & Mohlhenrich, E. R. (2019). An integrated secondary school STEM research program: results, challenges, and opportunities. 2019 IEEE Integrated STEM

 Education Conference (ISEC), 76–82.

 https://doi.org/10.1109/ISECon.2019.8882074
- Gould, M. (2019). Sustainable competitive advantage. Salem Press Encyclopedia.
- Green, S. B., & Salkind, N. J. (2017). *Using SPSS for Windows and Macintosh:*Analyzing and understanding data (8th ed.). Pearson.
- Gringeri, C., Barusch, A., & Cambron, C. (2013). Examining foundations of qualitative research: A review of social work dissertations. *Journal of Social Work Education*, 49(4), 760–773. https://doi.org/10.1080/10437797.2013.812910

- Hakovirta, M., & Lucia, L. (2019). Informal STEM education will accelerate the bioeconomy. *Nature Biotechnology*, *37*(1), 103. https://doi.org/10.1038/nbt.4331
- Hasanah, U. & Tsutaoka, T. (2019). An outline of worldwide barriers in science, technology, engineering and mathematics (STEM) education. *Jurnal Pendidikan IPA Indonesia*, 8(2), 193–200. https://doi.org/10.15294/jpii.v8i2.18350
- Holmes, K., Gore, J., Smith, M., & Lloyd, A. (2018). An integrated analysis of school students' aspirations for STEM careers: Which student and school factors are most predictive? *International Journal of Science and Mathematics Education*, 16(4), 655–675. https://doi.org/10.1007/s10763-016-9793-z
- Holmlund, T., Lesseig, K., & Slavit, D. (2018). Making sense of "STEM education" in K-12 contexts. *International Journal of STEM Education*, 5(1), 1–18. https://doi.org/10.1186/s40594-018-0127-2
- Hommerová, D., & Severová, L. (2019). Fundraising of nonprofit organizations:

 Specifics and new possibilities. *Journal of Social Service Research*, 45(2), 181–192. https://doi.org/10.1080/01488376.2018.1479678
- Huziak-Clark, T., Sondergeld, T., Staaden, M., Knaggs, C., & Bullerjahn, A. (2015).

 Assessing the impact of a research-based STEM program on STEM majors' attitudes and beliefs. *School Science & Mathematics*, *115*(5), 226–236. https://doi.org/10.1111/ssm.12118
- Internal Revenue Services. (2020). *Exempt organization types*.

 https://www.irs.gov/charities-non-profits/exempt-organization-types
- Islam, M. N., Furuoka, F., & Idris, A. (2021). Mapping the relationship between

- transformational leadership, trust in leadership and employee championing behavior during organizational change. *Asia Pacific Management Review*, 26(2), 95–102. https://doi.org/10.1016/j.apmrv.2020.09.002
- Jashari, A. & Kutllovci, E. (2020). The impact of human resource management practices on organizational performance case study: Manufacturing enterprises in Kosovo. *Business: Theory and Practice*, 21(1), 222–229. https://doi.org/10.3846/btp.2020.12001
- Jones, J., Williams, A., Whitaker, S., Yingling, S., Inkelas, K., & Gates, J. (2018). Call to action: Data, diversity, and STEM education. *Change*, 50(2), 40–47. https://doiorg/10.1080/00091383.2018.1483176
- Ju, B., Ravenscroft, O., Flores, E., Nacu, D., Erete, S., & Pinkard, N. (2020).
 Understanding parents' perceived barriers to engaging their children in out-of-school STEM programs. 2020 Research on Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT) 2020, 1, 1–
 4. https://doi.org/10.1109/RESPECT49803.2020.9272451
- Junghans, C., & Jones, M. (2007). Consent bias in research: How to avoid it. *HEART*, *93*(9), 1024–1025. https://doi.org/10.1136/hrt.2007.120113
- Kendricks, K. D., Arment, A. A., Nedunuri, K. V., & Lowell, C. A. (2019). Aligning best practices in student success and career preparedness: An exploratory study to establish pathways to STEM careers for undergraduate minority students. *Journal of Research in Technical Careers*, 3(1), 27–48. https://doi.org/10.9741/2578-2118.1034

- Khanna, P., Jones, C. D., & Boivie, S. (2014). Director human capital, information processing demands, and board effectiveness. *Journal of Management*, 40(2), 557–585. https://doi.org/10.1177/0149206313515523
- Kim, S., Gupta, S., & Lee, C. (2021). Managing members, donors, and member-donors for effective nonprofit fundraising. *Journal of Marketing*, 85(3), 220–239. https://doi.org/10.1177/0022242921994587
- Kimmelman, J. (2020). What is human research for? Reflections on the omission of scientific integrity from the Belmont Report. *Perspectives in Biology and Medicine* 63(2), 251-261. doi:10.1353/pbm.2020.0017
- Kitchen, J. A., Sonnert, G., & Sadler, P. M. (2018). The impact of college- and university-run high school summer programs on students' end of high school STEM career aspirations. *Science Education*, 102(3), 529–547.
 https://doi.org/10.1002/sce.21332
- Krajcik, J., & Delen, I. (2017). How to support learners in developing usable and lasting knowledge of STEM. *International Journal of Education in Mathematics, Science and Technology*, 5(1), 21–28. https://doi.org/10.18404/ijemst.16863
- LeBlanc, D. (2019). Marketing through partnerships for professional growth: A model. *Delta Kappa Gamma Bulletin*, 85(4), 52–54.

 https://www.proquest.com/scholarly-journals/marketing-through-partnerships-professional/docview/2456177587/se-2?accountid=201395
- Levitt, H. M., Morrill, Z., Collins, K. M., & Rizo, J. L. (2021). The methodological integrity of critical qualitative research: Principles to support design and research

- review. *Journal of Counseling Psychology*, 68(3), 357–370. https://doi.org/10.1037/cou0000523
- Levanova, E. A., Galustyan, O. V., Seryakova, S. B., Pushkareva, T. V., Serykh, A. B., & Yezhov, A. V. (2020). Students' project competency within the framework of STEM education. *International Journal of Emerging Technologies in Learning*, 15(21), 268–276. https://doi.org/10.3991/ijet.v15i21.15933
- López Castellano, F., García-Quero, F., & García-Carmona, M. (2019). Perspectives on human and social capital theories and the role of education: An approach from Mediterranean thought. *Educational Philosophy & Theory*, *51*(1), 51–62. https://doi.org/10.1080/00131857.2018.1449106
- MacDonald, A., Clarke, A., & Huang, L. (2019). Multi-stakeholder partnerships for sustainability: Designing decision-making processes for partnership capacity. *Journal of Business Ethics*, 160(2), 409–426. https://doi.org/10.1007/s10551-018-3885-3
- Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287–301. https://doi.org/10.1080/03075079.2017.1359823
- Margoudi, M., & Kiritsis, D. (2015). Introducing a unified contemporary approach towards a manufacturing education suited for the needs of the 21st century. *Procedia Engineering*, *132*, 236–241. http://doi.org/10.1016/j.proeng.2015.12.475
- Marshall, C. & Rossman, G. (2016). *Designing qualitative research* (6th ed.). Sage. Mau, W. J., & Li, J. (2018). Factors influencing STEM career aspirations of

- underrepresented high school students. *Career Development Quarterly*, 66(3), 246–258. https://doi.org/10.1002/cdq.12146
- Mandeno, P., & Baxter, W. L. (2021). Six principles for the design of better networking events. *Business Horizons*. https://doi.org/10.1016/j.bushor.2021.06.006
- McDonough, T. (2017). Closing the skills gap: Key learnings for employers and job seekers. *Employment Relations Today (Wiley)*, 43(4), 49–54. https://doi.org/10.1002/ert.21602
- Means, B., Wang, H., Young, V., Peters, V. L., & Lynch, S. J. (2016). STEM-focused high schools as a strategy for enhancing readiness for postsecondary STEM programs. *Journal of Research in Science Teaching*, *53*(5), 709–736. https://doi.org/10.1002/tea.21313
- Mehrotra, A., & Siraj, S. (2021). Social media marketing An effective solution for non-profit organizations. 2021 11th International Conference on Cloud Computing,
 Data Science & Engineering Confluence, 5(1) 1072–1077.
 https://doi.org/10.1109/Confluence51648.2021.9377089
- Miller, K., Sonnert, G., & Sadler, P. (2018). The influence of students' participation in STEM competitions on their interest in STEM careers. *International Journal of Science Education, Part B: Communication and Public Engagement*, 8(2), 95–114. https://doi.org/10.1080/21548455.2017.1397298
- Miller-Stevens, K., & Ward, K. D. (2019). Nonprofit board members' reasons to join and continue serving on a volunteer board of directors. *Journal of Nonprofit & Public Sector Marketing*, 31(1), 61–83. https://doi.org/10.1080/10495142.2018.1526734

- Mincer, J. (1997). The production of human capital and the life cycle of earnings:

 Variations of a theme. *Journal of Labor Economics*, 15(1), 26–47.

 https://doi.org/10.1086/209855
- Mitchell, S., & Clark, M. (2021). Volunteer choice of nonprofit organisation: An integrated framework. *European Journal of Marketing*, *55*(1), 63–94. https://doi.org/10.1108/EJM-05-2019-0427
- Mozersky, J., Parsons, M., Walsh, H., Baldwin, K., McIntosh, T., & DuBois, J. M. (2020). Research participant views regarding qualitative data sharing. *Ethics & Human Research*, 42(2), 13–27. https://doi.org/10.1002/eahr.500044
- National Center for Education Statistics (2012). Higher education: *Gaps in access and persistence study*. https://nces.ed.gov/pubs2012/2012046/chapter6_10.asp
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979). The Belmont report: Ethical principles and guidelines for protection of human subjects of research. US Department of Health and Human Services. https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html
- Nellia, N. (2018). The human capital theory as a methodological foundation of continuous vocational education. *Education: Modern Discourses*, 1, 107–117. https://doi.org/10.32405/2617-3107-2018-1-10
- Northouse, P. G. (2019). Leadership: Theory and practice (8th ed.). Sage.
- Northrop, G. (2018). Building a strong nonprofit board goes beyond best practices. *Generations*, 42(1), 56–60. https://www.jstor.org/stable/26556346

- Nugent, G., Barker, B., Welch, G., Grandgenett, N., Wu, C., & Nelson, C. (2015). A model of factors contributing to STEM learning and career orientation. *International Journal of Science Education*, *37*(7), 1067–1088. https://doi.org/10.1080/09500693.2015.1017863
- Olinske, J. L., & Hellman, C. M. (2017). Leadership in the human service nonprofit organization: The influence of the board of directors on executive director well-being and burnout. *Human Service Organizations: Management, Leadership & Governance*, 41(2), 95–105. https://doi.org/10.1080/23303131.2016.1222976
- Parris, D. L., & Broussard, K. (2020). Feeding collective impact: How to foster cross-sector partnerships that build innovative solutions for social change. *Organizational Dynamics*, 50(4), 1–10.

 https://doi.org/10.1016/j.orgdyn.2020.100803
- Patton, M. (2015). *Qualitative research and evaluation methods.* 4th edition, Sage Publications.
- Paxton, P., Velasco, K., & Ressler, R. W. (2020). Does use of emotion increase donations and volunteers for nonprofits? *American Sociological Review*, 85(6), 1051–1083. https://doi.org/10.1177/0003122420960104
- Pease, G., Beresford, B., & Walker, L. (2014). Developing human capital: Using analytics to plan and optimize your learning and development investments. Wiley.
- Peng, S., Liao, Y., & Sun, R. (2020). The influence of transformational leadership on employees' affective organizational commitment in public and nonprofit organizations: A moderated mediation model. *Public Personnel*

- Management, 49(1), 29–56. https://doi.org/10.1177/0091026019835233
- Ralls, D., Bianchi, L., & Choudry, S. (2020). "Across the divide": Developing professional learning ecosystems in STEM education. *Research in Science Education*, 50(6), 2463–2481. https://doi.org/10.1007/s11165-018-9789-5
- Rupietta, C., & Backes-Gellner, U. (2019). Combining knowledge stock and knowledge flow to generate superior incremental innovation performance Evidence from Swiss manufacturing. *Journal of Business Research*, 94, 209–222. https://doi.org/10.1016/j.jbusres.2017.04.003
- Sachdeva, J. K. (2009). *Business research methodology*. (2nd ed.). Himalaya Pub. House. Saldaña, J. (2015). *Thinking qualitatively: Method of mind*. Sage.
- Saracoglu, D. & Karaoglan, D. (2019). Early childhood education and investment in human capital formation: The case of Turkey in global perspective. *Early Child Development and Care*, 189(4), 569–582. https://doi.org/10.1080/03004430.2017.1332055
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Education Limited.
- Schmid, H., & Almog-Bar, M. (2020). Predictors of success and failure in cross-sectoral partnerships in nonprofit human services: Reflections and challenges. *Journal of Health & Human Services Administration*, 43(3), 268–287.

 https://doi.org/10.37808/jhhsa.43.3.3
- Schultz, T.W. (1993). The economic importance of human capital in modernization. *Education Economics*, 1(1), 13–19. https://doi.org/1080.0964299300000003

- Sebele-Mpofu, F. (2020). Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review. *Cogent Social Sciences*, 6(1), 1-15. https://doi.org/10.1080/23311886.2020.1838706
- Singh, K., & Misra, M. (2020). How to bring positive societal change through Corporate Social Responsibility (CSR)? Modeling the social responsible enablers using ISM-MICMAC. 2020 IEEE Technology & Engineering Management Conference (TEMSCON), 1–6. https://doi.org/10.1109/TEMSCON47658.2020.9140095
- Sloan, M. F. (2021). Transacting business and transforming communities: The mission statements of community foundations around the globe. *Nonprofit & Voluntary Sector Quarterly*, 50(2), 262–282. https://doi.org/10.1177/0899764020948617
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological* analysis: Theory, method and research. Sage.
- Sun, R., Li, S., & Liu, W. (2020). A congruence perspective on how human and social capital affect learning capability and innovation. *PLoS*ONE, 15(4). https://doi.org/10.1371/journal.pone.0231504
- Thaler, J., Spraul, K., Helmig, B., & Franzke, H. (2017). Satisfaction with and success of employee training from a public service motivation perspective. *International Journal of Public Administration*, 40(1), 1–11.

 https://doi.org/10.1080/01900692.2015.1072212
- Trent, S. B., Allen, J. A., & Prange, K. A. (2020). Communicating our way to engaged volunteers: A mediated process model of volunteer communication, engagement, and commitment. *Journal of Community Psychology*, 48(7), 2174–2190.

https://doi.org/10.1002/jcop.22353

- Trochim, W.M.K., The Research methods knowledge base. https://conjointly.com/kb/
- Turner, S. L., Joeng, J. R., Sims, M. D., Dade, S. N., & Reid, M. F. (2019). SES, gender, and STEM career interests, goals, and actions: A test of SCCT. *Journal of Career Assessment*, 27(1), 134–150. https://doi.org/10.1177/1069072717748665
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341–358. https://doi.org/10.1016/j.jbusvent.2009.09.004
- U.S. Department of Labor, Bureau of Labor Statistics. (2020). *Employment in STEM*occupations. (NAICS 31-33) (Table 1.11) https://www.bls.gov/emp/tables/stem-employment.html
- U. S. Food and Drug Administration/Office of Clinical Policy and Programs.(2019). Guidance for institutional review boards and clinical investigators: FDA public health advisory.
- Vestergaard, A., Langevang, T., Morsing, M., & Murphy, L. (2021). Partnerships for development. Assessing the impact potential of cross-sector partnerships. *World Development*, 143(1), 1-11. https://doi.org/10.1016/j.worlddev.2021.105447
- Wang, C. & Frye, M. (2019). Measuring the influences of a STEM enrichment program on middle school girls' self-efficacy and career development. 2019 IEEE Integrated STEM Education Conference (ISEC), 165–168.

 https://doi.org/10.1109/ISECon.2019.8882096
- Walden University (2021, August 25). Center for research quality: Walden research

- ethics and compliance policies. https://academicguides.waldenu.edu/research-center/research-ethics/policies
- Walden University (2021, August 09). DBA Consulting Capstone Manual.

 https://academicguides.waldenu.edu/research-center/program-documents/dba
- Watson, R., Wilson, H. N., & Macdonald, E. K. (2020). Business-nonprofit engagement in sustainability-oriented innovation: What works for whom and why? *Journal of Business Research*, 119, 87–98. https://doi.org/10.1016/j.jbusres.2018.11.023
- Wright, C. F., & Constantin, A. (2021). Why recruit temporary sponsored skilled migrants? A human capital theory analysis of employer motivations in Australia. *Australian Journal of Management (Sage Publications Ltd.)*, 46(1), 151–173. https://doi.org/10.1177/0312896219895061
- Yanzhen, H., Ying, L., & Meiming, W., (2010). The effect on organizational performance by human resource management practices: Empirical research on Chinese manufacturing industry. 2010 International Conference on Management and Service Science, Management and Service Science, 1–6.

 https://doi.org/10.1109/ICMSS.2010.5578011
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.
- Yin. (2021). How multinational corporations and nonprofits collaborate for sustainability: assessing social partnerships from China. Sustainability Accounting, Management and Policy Journal, 12(6), 1289–1311. https://doi.org/10.1108/SAMPJ-04-2020-0104

Appendix A: Interview Protocol

- Interview protocol begins with a connection with another individual who confirmed availability and willingness to participate in study.
- 2. I will then request permission and make known the presence of both audio recording as well as the dialogue will be transcribed.
- I will then address the consent form that was provided prior to the interview.
 Including the part of the form that addresses the ability to withdraw presentation.
- 4. I will ask for verbal agreement for the consent form and then proceed.
- 5. I will then introduce myself to the participant.
- 6. I will then explain the member checking process and schedule a follow-up date to review with the participant.
- 7. I will then annunciate the date, time and location of the interview, along with the participants label, (i.e., Participant A)
- 8. The interview will begin.
- 9. I will ask questions in Appendix B, in numerical order.
- 10. Once all communication has finalized, I will thank the participant and reiterate the date agreed upon for member checking.
- 11. I will stop audio recording.
- 12. The interview protocol is completed.

Appendix B: Interview Questions

- 1. What techniques do you use to communicate with STEM-focused hiring corporations?
- 2. What strategies do you use to engage hiring corporations for financial support?
- 3. How do you create and maintain relationships with STEM-focused hiring corporations?
- 4. What strategies do you use to engage STEM-focused hiring corporations to support the nonprofit STEM organization's mission?
- **5.** How do you assess the effectiveness of your strategies to achieve the desired performance?
- 6. What additional information might you share regarding effective strategies your organization's leaders use to engage support from STEM-focused hiring corporations?