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Disrupted leadership: strategies and practices of leaders in a VUCA world

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DISRUPTED LEADERSHIP: STRATEGIES AND PRACTICES OF LEADERS IN A VUCA WORLD

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DEDICATION

To the light of my life, my husband, Dave. There are no words to describe the love, joy, and peace you have brought into my life. You inspire me with your optimism and continued courage in taking on every obstacle that confronts you. Thank you for your unconditional and steadfast love. To my sons, Josh and Jordan, you have made my life magic, and I could not imagine this journey without you. I thank God every day for giving me the honor and privilege of being your mother. To the one who has created it all and continues to pour blessings into my life, God. To God be the glory.

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VITA

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ABSTRACT

As the world becomes increasingly interconnected through intricate networks in technology-laden environments, leadership has become exponentially more complex. This VUCA (volatile, uncertain, complex, and ambiguous) context disrupts long-held leadership constructs. Historically, leaders have been able to reflect on past decision making to guide their current and future decisions. No longer is this practice viable; leaders now require new skills to lead competently in this rapidly iterating ecosystem. With its challenges, this dynamic environment also offers opportunities for those who are able to capitalize on the next waves of disruption. Social entrepreneurs, tackling the world's most pressing challenges, are leading systems-wide changes within this technology-driven context. With a heightened awareness of these global issues, employing contextual intelligence to capitalize on new and innovative social solutions through creative destruction enables leaders to exploit this technology-rich landscape to expand their social impact.

Consequently, this phenomenological qualitative study utilized semi-structured interviews to investigate the best practices and strategies employed by Ashoka Fellow social entrepreneurs who are leading change successfully within this VUCA context. In addition, this study explored the challenges these entrepreneurs encountered while leading, the ways in which they evaluated their success, the role that technology played day-to-day, and what recommendations they would make to future leaders of systems-wide change. Through this study, 30 key findings surfaced in relation to successful practices and strategies for leading systems-wide change in a technology-rich VUCA ecosystem.

Chapter 1: Introduction

> [T]echnology *is* changing everything. As digitization, advanced analytics, and artificial intelligence (AI) sweep across industries and geographies, they aren't just reshaping the competitive landscape; they're redefining the organizational imperative: adapt or die….Wait and see is not an option; it's a death sentence. (De Smet & Gagnon, 2018, p. 1)

Navigating in a VUCA World

At a time of increasing technological advancement, the world is concurrently facing political instability, deteriorating environmental conditions, poverty, and an imbalance in the distribution of wealth (Senge, Hamilton, & Kania, 2015; UNDESA, 2015a). This new technologically-intense landscape is *volatile*, *uncertain*, *complex*, and *ambiguous*. It is referred to as a *VUCA* world (Brodie & Fraizer, 2018a; Johansen, 2007, 2012, 2017; Petrie, 2011).

VUCA was a term first coined following the Cold War to depict a new form of unpredictable military engagement (Stiehm, 2002; Codreanu, 2016) and has been increasing focus of new and ongoing research. Although this term was initially utilized in the military, in the late 1990s it became a conceptual framework for the present and future leadership landscape (Johansen, 2012, 2017; Stiehm, 2002). Dynamically shifting circumstances make projections uncertain as a multitude of influences need to be taken into account (Shaffer & Zalewski, 2011). With an increased degree of interconnectedness and networks created through rapidly iterating technology, leaders are hard-pressed to determine logical cause-and-effect relationships, creating ambiguity

in decision making (Paparone & Topic, 2011). As a result, no longer are leaders able to assess, develop, and implement viable strategies from their past experiences.

Today's global leaders continue to face opportunities and challenges of unprecedented magnitude while in a rapidly transforming and increasingly digital global landscape (Bradley, Loucks, Macaulay, Noronha, & Wade, 2015; Brodie, 2017). With innovations rapidly iterating—creating rapid systemic shifts such as the blockchain (Underwood, 2016), artificial intelligence (Migliore & Chinta, 2017), virtual reality (Hall & Takahashi, 2017), and cloud computing (Kushida, Murray, & Zysman, 2015) technology is the impetus for societal changes at a scale not witnessed since the inception of the printing press (Bolden & O'Regan, 2016; Brodie & Fraizer, 2018a, 2018b). Leaders now face an environment rife with complexity and opportunity where the evolution of technology continues to shift the digitization of governments, organizations, systems, and structures,

The Shifting Landscape and Technology

This evolutionary pace of technology continues to give rise to innovative solutions that have the potential to impact global issues such a poverty, hunger, and inequity (Fraizer, 2009; Mehta, Zappe, Brannon, & Zhao, 2016; Morrar, Arman, & Mousa, 2017). In an effort to alleviate these challenges, social innovations, the sum total of concepts, organizations, and ideas that collectively work to meet these social needs across sectors, are continually being developed and implemented (Morrar et al., 2017; Salim Saji & Ellingstad, 2016). Using technology as a lever in this development process, leaders can capitalize on new solutions that have the potential to create

foundational social shifts (Brodie & Fraizer, 2018a, 2018b; Fraizer, 2009) such as the eradication of poverty and global climate issues (UNDESA, 2015b).

The last three industrial revolutions have also witnessed foundational changes, such as the steam engine and the harnessing of electricity, which have paved the way to the transformative shifts in what is being described as the Fourth Industrial Revolution or "Industry 4.0" (Celaschi, 2017; Geissbauer, Vedso, & Schrauf, 2016; Morrar et al., 2017; Okano, 2017; Roblek, Meško, & Krapež, 2016; Weyer, Schmitt, Ohmer, & Gorecky, 2015). Industry 4.0 is reflected by the blending of digital, material, and biological systems, changing the global context from the use of technology to one where the lines between the digital and material become blurred (Morrar et al., 2017; Schwab, 2016). Furthermore, according to Weyer et al. (2015), "…in Industry 4.0, field devices, machines, production modules and products are comprised as Cyber-Physical Systems (CPS) that are autonomously exchanging information, triggering actions and controlling each other independently" (p. 50). The possibilities of this decentralized, integrated environment connecting billions of people via technology with unparalleled processing capability, unrestricted storage, and access to knowledge are limitless (Schwab, 2016).

For example, the decentralization of these technologies has manifested in products, services, and businesses cropping up like Uber and Alexa blending artificial intelligence in ways that are accessible to a broader audience. Uber utilizes machine learning, a subset of artificial intelligence, to create seamless peer-to-peer ridesharing experiences for their drivers and riders. This technology has created a multitude of transportation opportunities for individuals as well as businesses for drivers. Uber's

machine learning uses large amounts of data through their mapping technologies in real-time to identify optimal drop off and pick up points, discern suspicious accounts, and even give recommendations on restaurants through businesses such as UberEATS (Turakhia, 2017). Another example of readily available technologies connecting people, communities, and countries in a rapidly iterating and dynamic world is Amazon's virtual assistant, Alexa, an Internet connected, sensor enabled smart-home technology that takes the user's commands and responds vocally to them aiding people in their day-to-day task, such as turning off and on lights, getting weather information, and shopping (Burkett, 2018).

Decentralization has catalyzed an even more pronounced ability to collaborate, giving access to opportunities that have fewer geographical and monetary constraints. It is now easy to connect with someone on another continent in real-time with just a few computer key strokes to initiate a video call, post on social media, or use a messaging application. For instance, four billion people, which is over half the world's population of 7.6 billion ("World Population," n.d.), have Internet access today (MacDonald, 2018) a growth of 25 % since 2015 (ICT Data and Statistics Division, 2015). In addition, it is forecasted that Internet user penetration will increase from 49 % in 2018 to 54 % by 2021(Statista, n.d.-b).

Over time, digital opportunities will increase exponentially with emerging technologies at the forefront, such as new artificial intelligence, robotics, the Internet of Things, and 3D printing (Morrar et al., 2017; PWC, 2018; Schwab, 2018). It is the proliferation of easily accessible technologies, the convergence of opportunities, education for social innovation, and a shift toward a more sustainable society which

opens doors for leaders. As access increases and barriers to entry lower, these technologies are even more crucial for those leaders with a social mission to capitalize and integrate such opportunities as they discover them.

Today's Leadership Landscape

These aforementioned technologies have been a driver of the increased speed, complexity, and interconnectedness of our world which has opened doors for global leaders, in particular those with a social mission (Fraizer, 2009). These technological changes have also diminished boundaries: geographic, cultural, and societal (Bradley et al., 2015; Codreanu, 2016; Johansen, 2007, 2012, 2017; Johansen & Euchner, 2013; Kaivo-oja & Lauraeus, 2018; Petrie & Leslie, 2014), creating a new leadership environment. This transformative role of technology has given access to the greater world, leading to more transparency and uncovering the needs of the leader and the environment in which they operate (Agarwal, Bersin, Lahiri, Schwartz, & Volini, 2018; Codreanu, 2016), driving movements to address needs globally (Brilliant, 2013).

The inception of the UN Sustainable Development Goals (SDGs), for instance, is just such a movement where world leaders coming together to determine a holistic methodology to address the world's pervasive problems (UNDSEA, 2015). With technology continuing to connect people globally, it has also heightened the awareness of social issues such as those outlined by United Nations' 17 SDGs which include: no poverty, zero hunger, clean water, reduced inequality and climate action (Fraizer, 2009; UNDESA, 2015a). These partnerships, such as the growing number of UN Partnerships (UNDESA, 2015b), demonstrate that there is an increasing emphasis on people and organizations uniting to create the change envisioned (Agarwal et al., 2018; Fraizer &

Shah, 2015a, 2015b; Senge et al., 2015). As the world continually becomes more interconnected through the advancements of technology (Bradley et al., 2015; Johansen, 2012, 2017; Petrie, 2011), a growing number of individuals organizations continue to drive grassroots efforts to lead social change (Agarwal et al., 2018; Fraizer, 2009) in tackling inequalities and human needs worldwide.

Just as technology has raised more awareness of global social needs, in this digitally connected environment, current and future leaders face an increasing number of choices in which to receive information and communication (Bradley et al., 2015; Brodie, 2017; De Smet & Gagnon, 2018). To negotiate this uncertain, interconnected, and digitally-driven world, the leaders of today and tomorrow may employ skills and strategies unknown or unfamiliar to their predecessors (Petrie, 2011). Therefore, in the future, successful leadership will not result from the old paradigms of traditional leadership frameworks (Bolden, 2011; Elkington, Pearse, Moss, Van der Steege, & Martin, 2017; Mehra, Smith, Dixon, & Robertson, 2006), as they are not fully equipped to handle technology's impact on social and business structures. Instead, research reflects that new leadership strategies are required, such as systems thinking (Osborn, Hunt, & Jauch, 2002; Ramosaj & Berisha, 2014; Rios et al., 2018; Schneider, Wickert, & Marti, 2017; Senge et al., 2015) contextual intelligence (Khanna, 2014, 2015; Kutz, 2008a, 2017; Kutz & Bamford-Wade, 2013; Leavy, 2013; Masciulli, 2011) and metacognitive strategies (Avolio & Hannah, 2008; Black, Soto, & Spurlin, 2016; Chua, Morris, & Mor, 2012; Davis, Curiel, & Davis, n.d.; Swart, Chisholm, & Brown, 2015).

The Future's Leaders

The pace of change continues to quicken, begging the question whether leaders are prepared for the next wave of disruption to embrace future opportunities and challenges. Understanding the strategies necessary for a VUCA world leader is essential for current and future social leaders (Brodie & Fraizer, 2018b). Historically, leaders have been able to reflect on past decision making to guide their current and future decisions (Codreanu, 2016; Kaivo-oja & Lauraeus, 2018; Petrie, 2011). No longer is this practice viable; leaders now require new skills to lead competently in this rapidly iterating ecosystem (Petrie, 2011), such as systems thinking, contextual intelligence, and metacognitive strategies.

This leadership skills gap was explored in a 2018 Deloitte report noting that only 14 % of 1,600 CEOs interviewed felt confident their organizations would be ready to fully harness this new complex environment. It was also noted that this challenge was due, in large part, to executives focusing on traditional business models versus looking for the opportunities that come with this new environment (Deloitte Development, 2018). Knowing that CEOs feel ill-prepared for this rapidly escalating digital landscape in these increasingly-complex and intricately-connected economies and governments, the need for adept leaders who can capitalize on this new complex environment is essential (IBM, 2010). According to IBM Tech Trends Report (2014), "[a] full 90% of organizations do not have all the skills they need to be successful. More than 65% of global leaders cite 'talent and leadership shortages' as their #1 business challenge" (p. 11). Therefore, discerning the leadership strategies that serve this VUCA environment is an essential step for current and future leaders (Gentry & Sparks, 2012).

Systems thinkers. According to Senge et al. (2015), “The deep changes necessary to accelerate progress against society’s most intractable problems require a unique type of leader – the system leader, a person who catalyzes collective leadership” (p. 27). Systems leaders, repairing what is broken so as to systemically eradicate the world’s most pressing social issues, look at any solution as one of not just solving a singular challenge or problem but one based in finding and identifying the root cause (Fraizer, 2009; Martin & Osberg, 2007; Surie, 2017). Systems leaders not only see the complex interconnected global challenges of today’s world but also have the ability to act are essential to moving the needle forward on the world’s most persistent needs such as, poverty eradication, zero hunger, and reduced inequality, as identified in the UN SDGs (UNDESA, 2015a). Systems leadership can only occur by looking at the whole of the system and its interrelated networks.

Contextual intelligence. Understanding the context of leadership is eloquently described in the words of Plato, “the true pilot must pay attention to the year and seasons and sky and stars and winds, and whatever else belongs to his art if he intends to be really qualified for the command of a ship”. To lead effectively in today’s complex global environment that is reliant on layers of networked systems, context is vital (Khanna, 2014; Masciulli, 2011). Global leadership does not occur without a surrounding ecosystem, and contextual intelligence fosters an understanding of how a leader and context mutually impact each other allowing the leader to consider the dynamic nature of their environment (Osborn et al., 2002). According to Kutz and Bamford-Wade (2013), contextual intelligence considers the “complexity within the construct of ‘context” (p. 67). In addition, as stated by Masciulli (2011) “Contextual

intelligence is conscious, questioning, calculating, reflecting, and problem solving…and needs to be interrelated into the operation of practical intelligence and the other traits of effective leadership" (p. 74). This level of contextual understanding allows leaders to contrast and compare different worldviews and cultures to inform their leadership decisions in this fast-paced, rapidly-iterating global ecosystem.

Metacognitive strategies. A crucial component of effective leadership is an enhanced degree of metacognition, or an understanding of one's own thinking as well as the elements and conditions that impact that thinking (Black et al., 2016; Davis et al., n.d.). As posited by Avolio and Hannah (2008), metacognitive ability can accelerate leadership learning by allowing leaders to identify, make sense of, and learn from their experiences. According to Proust, "[t]he real voyage of discovery consists not in seeing new landscapes, but in having new eyes" (Proust as cited by Cashman, 2008, p. 158). In the process of sense-making, leaders must be willing to challenge what is known, and learn from their actions, to enable them to develop the most appropriate adaptive responses for the future (Hannah, Uhl-Bien, Avolio, & Cavarretta, 2009). Therefore, leaders with competent metacognitive skills are able to identify and address potential reasoning challenges by developing a strategy to think about their thinking. Developing the skills to quickly learn and adapt is increasingly becoming more crucial, as the global context continues to be more volatile, uncertain, complex, and ambiguous. Thus, in a swiftly moving VUCA environment, metacognition is an essential and constant iterative learning process.

Creative Destruction and Social Entrepreneurs

In the uncertain leadership ecosystem left in technology's wake, change must therefore be identified and exploited through creative destruction (Caballero, 1990; Marcotte, 2014). Creative destruction, a theory rooted in economics, describes the process through which entrepreneurs disrupt current and often entrenched systems and structures, displacing them with new innovative solutions (Schumpeter, 1934). In addition, complimentary to Schumpeter's original theory, Kirzner (2009), states that these entrepreneurs also can discover untapped opportunities that they then capitalize on which do not destroy the current system but add to it (Marcotte, 2014). Literature suggests that social entrepreneurs utilize this process of creative destruction for social innovation and are equipped to do so (Ganzaroli, Noni, & Pilotti, 2014; Martin & Osberg, 2007; Tapsell & Woods, 2008).

The framework of social entrepreneurship is continually evolving and adapting as social entrepreneurs focus on developing social impact by creating and implementing system solutions to address social challenges (Dacin, Dacin, & Tracey, 2011;Fraizer, 2009). Due to this constant flux and adaptation, understanding and capturing various definitions in relation to social entrepreneurship is essential. Within the scope of these definitions, social leaders are an integral part of the continued growth of social movements (Agarwal et al., 2018), addressing the collective needs of hunger, poverty, and inequity globally (Brilliant, 2013). Bill Drayton, founder of Ashoka the largest organization connecting social entrepreneurs globally, describes these social entrepreneurs as those who identify the challenges in any situation, determine how to address them, organize teams to make it happen, and then lead collective action

adapting when and where necessary (Brooks, 2018). As a result, these socially minded mission-driven leaders transform systems that address social needs and create lasting change (Agarwal et al., 2018; Brilliant, 2013; Dacin et al., 2011).

Social entrepreneur Leila Janah, for instance, founded Samasource which leverages technology to provide jobs for marginalized women and youth (Brown, 2017; Dolan, 2011; Fox, 2011). Operating in Kenya, India, Uganda, and the United States, Samasource provides work connecting data projects through the Internet to these marginalized communities. Additionally, Janah founded Samaschool in the United States to train their workforce in digital skills and job readiness (Dolan, 2011; "Samasource," n.d.). With these skills and jobs, women and youth are able to break the cycle of poverty by leveraging the gig economy (Fox, 2011) as a stepping stone to outside employment.

Another such example is social entrepreneur Bradley Myles, the Executive Director and CEO of Polaris (Skoll, n.d.). Utilizing data to fight the global issue of human trafficking, Polaris works to find the systemic causes of the modern slavery trade (Skoll, n.d.). Polaris uses a three-part system of responding to the victims of trafficking, equipping stakeholders and communities to educate and prevent trafficking, and to disrupt the systems and structures of human trafficking, a social issue affecting well over 100 thousand victims worldwide in 2017, almost double from the previous year (Statista, n.d.-a). The Polaris Project's global and national hotlines and BeFree Textline serve as not only support to those impacted by trafficking but also to accumulate data to "understand the scope, size, and systems of modern slavery" ("Polaris Project," n.d., para. 7). Their data informs a multitude of entities such as law enforcement with

actionable information, aids in discerning gaps in resources and services as well as assisting in bringing together the United States and global organizations to collaborate on eradicating human trafficking.

With such experiences, these social entrepreneurs have deep understanding of the ecosystem they are working to change. Holistically addressing the entire ecosystem of the society being served enables social entrepreneurs to fully address the interrelated networks to create lasting change (Martí & Mair, 2009). As networks are looked at as complex systems rather than independent components, there is greater chance for success rather than working to fix only one component (Dees, 2001; Drayton, 2002; Fraizer, 2009; Senge, 2006). A systems approach to social needs, therefore, creates a better chance for sustainable and lasting change (Fraizer, 2009; Martí & Mair, 2009). The proliferation of these social movements has given rise to a social entrepreneurship academic programs (Fraizer, 2009), with multitudes of students who potentially do not completely understand the systems they are working to impact (Martin, 2016; Papi-Thornton, 2016). Furthermore, the 2000% increase in social movements as measured by the UN (UNDESA, 2015b) is further evidenced by the wider availability of social entrepreneurship degrees and programs across the globe (Papi-Thornton, 2017).

However, academic institutionalization of social entrepreneurship programs, designed to educate students on how to develop social change solutions, have broadened the awareness and expanded the field of social entrepreneurship (Gunn, Durkin, Singh, & Brown, 2008; Mirabella & Eikenberry, 2017; Sassetti & Marzi, 2018). Although this awareness has encouraged more engagement academically (Brock & Steiner, 2009; Sassetti & Marzi, 2018), these academic programs also shift one of the

premises of how social entrepreneurs frequently identify and address social change (Papi-Thornton, 2016). Often, a person with exposure to the pressing need, by experiencing it first hand or by knowing those impacted, understands the context of the social issue and is compelled to act. This knowledge can aid in addressing the systemic changes necessary (Martí & Mair, 2009; Papi-Thornton, 2016).

Although local embeddedness is not a requirement to addressing social challenges, as evidenced in the scale of Muhammad Yunus' microfinance work as a social business as well as Samasource's outreach in multiple countries (Dacin et al., 2011; Yunus, 2010; Yunus, Moingeon, & Lehmann-Ortega, 2010), proximity does allow the social entrepreneur the opportunity to experience the context of the system in need of support. First-hand or proximate experience is one that social entrepreneurship programs are challenged in replicating (Martin, 2016; Papi-Thornton, 2016). As a result, a portion of new students of social entrepreneurship are organically disconnected (Martin, 2016) from the environment they are working to address, creating the opening for the student to impose their own culturally-driven biases within the chosen solution (Papi-Thornton, 2017).

Statement of the Problem

As this volatile, uncertain, complex, and ambiguous ecosystem is not only new but also continues to rapidly iterate, current and future leaders then need to be equipped to identify foundational leadership strategies, best practices, and learned lessons for success (Brodie & Fraizer, 2018a, 2018b). With global needs continuing to gain more awareness through technological advancements, many of these current and future leaders have aligned with social causes. This sentiment is evident as a rising

social mindset and movement noted by, Agarwal et al. (2018) in the Deloitte Insights report which state, “86 % of millennials think that business success should be measured in terms of more than just financial performance” (p. 4). Socially-minded skills assist these mission driven leaders in creating a systemic impact on current and future generations making change in the social sector.

Although the business of the social entrepreneur can be amorphous and rapidly changing, understanding the practices to continually improve and update their theories and practice is an essential component of success (Martin & Osberg, 2015). To remain relevant in this innovative, fast-paced, and disrupted world paradigm, there is a critical need to not only reimagine the rules of leadership but also to develop new ways to educate and improve the performance of leaders allowing them to navigate as well as harness this complex environment (Brodie & Fraizer, 2018b). As a result, leadership paradigms are being reevaluated and reformulated to thrive in this new dynamic environment (Bolden, 2011; Cook, 2016; Kaivo-oja & Lauraeus, 2018).

The rapidly iterating business landscape calls for transformational shifts in leadership to leverage new technologies in tackling the world’s seemingly intractable problems (Bolden & O’Regan, 2016). Creative destruction is a process of the VUCA ecosystem by which leaders identify, create, and capitalize on opportunities within the complexity. Social entrepreneurs, as systems leaders, are positioned to exploit this technologically-driven, values-based, interconnected environment (Fraizer, 2009; Senge et al., 2015). Thus, this research seeks to better understand the necessary strategies and practices which aid global leaders in leading social entrepreneurship endeavors to effectively capitalize on this volatile, uncertain, complex, and ambiguous landscape.

Purpose Statement

The purpose of this study is, therefore, to understand: the common leadership strategies and practices that social entrepreneurs employ, the challenges that social entrepreneurs face in their leadership journey, the practices social entrepreneurs use to measure leadership success, the role of technology in their day-to-day leadership, and the recommendations they have for future social entrepreneurs.

Research Questions

The following research questions (RQ) guided this study, pertaining to systems-wide change:

RQ1: What common leadership strategies and practices do social entrepreneurs employ?

***RQ2*:** What challenges do social entrepreneurs face in their leadership journey?

RQ3: How do social entrepreneurs measure leadership success?

RQ4: What is the role of technology in your day-to-day leadership?

RQ5: What recommendations would social entrepreneurs make for future leaders of systems-wide change?

Significance of the Study

The relevance of this study and its findings will be crucial for current and future leaders to lead effectively in this new interconnected, complex, and volatile environment. As John Chambers, executive chairman of Cisco Systems, states:

> If you are a leader in today's world, whether you're a government leader or a business leader you have to focus on the fact that this is the biggest technology transition ever. As leaders, if you don't transform and use this technology

> differently–if you don't reinvent yourself, change your organization structure; if you don't talk about speed of innovation–you're going to get disrupted. And it'll be a brutal disruption, where the majority of companies will not exist in a meaningful way 10 to 15 years from now. (Kirkland, 2016, para. 1)

Although leadership strategies have been studied historically (De Smet & Gagnon, 2018; INSEAD, 2016; Tal & Gordon, 2016), gaps in the literature calls for even deeper understanding in addressing how to lead and make changes in the social domain within the context of the VUCA world. This research aims to contribute additional insights into the evolving practices of leadership in a dynamic ecosystem aiding current and future leaders of social change, talent development of these leaders, as well as higher education leadership programs.

Significance for current and future executive leaders. Understanding and investing in what constitutes effective leadership practices are essential factors to increasing viability and impact of current and future executive leaders in today's environment (Kaivo-oja & Lauraeus, 2018). The need is particularly pressing within a technologically-driven ecosystem (Bunker, Gechman, & Rush, 2012; De Smet & Gagnon, 2018). Within this new dynamic culture, the way work is done is changing from the historical top-down leadership (De Smet & Gagnon, 2018) to structures that accommodate more decentralized and distributed nature of organizations (INSEAD, 2016; Kirkland, 2016; Klenke, 2016; Tal & Gordon, 2016). This study identifies common leadership practices, challenges, and measurements of success in a swiftly moving and complex landscape. Findings aim to aid current and future leaders in identifying and

understanding the strategies necessary redefine and reshape their leadership for optimal success within this new dynamic ecosystem.

Significance for talent development programs. More organizations must work to develop their human capital (World Economic Forum, 2016) as new skills are necessary to remain relevant and competitive within this new dynamic and intricately connected ecosystem (Petrie, 2011). "The traditional model of a charismatic leader who gets results by force of will has long proved expensive and is fast becoming outdated" (De Smet & Gagnon, 2018, p. 9). The capability to extract optimal opportunity from complex and dynamic environment is a crucial lever to building organizational effectiveness (Axon, Friedman, & Jordan, 2015). In the 2015 report from Axon et al., Chairman and CEO of Fluor, David Seaton, states "We're called on to be prepared for the challenges of a rapidly changing world. This means being ready for emerging markets, adjusting our strategies, being agile and flexible, serving clients more effectively, and thinking and acting more globally" (p. 3). Ensuring relevant and competitive development of human capital is critical to overall organizational success. The findings from this research provides more understanding of the needs of organizational leaders in a VUCA environment, and the critical strategies and practices necessary to integrate into talent development programs to ensure addressing those needs.

Significance for graduate education. Findings from this study can also offer more insights into the development of leadership courses, such as MBA programs. Graduate management education has consistently been a springboard for those entering the business world (Boyatzis & Saatcioglu, 2008), therefore, maintaining

relevance is crucial. Understanding of the foundational practices and strategies that lead to organizational success in this technologically-driven and complex environment is imperative for MBA programs to remain applicable in a rapidly iterating landscape (Adams Becker et al., 2017). According to Elmuti, Minnis, and Abebe (2005) there is an "increasing gap between the demand for qualified leaders and their availability" (p. 1022), which raises a fundamental and pressing concern for the industry (IBM, 2014).

Limitations and Assumptions of the Study

Limitation and assumptions have the potential to impact the results of the study and the scalability to the general population (Creswell, 2013). It is assumed that the research participants will be fully transparent and able to articulate their experiences providing the insights and information requested. It is also assumed that leaders employ leadership strategies and practices that they can describe and explain (Simon, 2011).

Definition of Terms

The definitions listed below are identified terms used in this research and how they are defined in this study:

- *4th Industrial Revolution and Industry 4.0* is a new era of CPS systems which share information and abilities, where the physical and the digital converge (Weyer et al., 2015).
- *Decentralization* refers to the broadening scale of access to technology related hardware, software and applications due to rapid technological advancements; leadership decentralization is a management paradigm which allows for more distributed decision-making, power, and control, resulting in a flat versus tall hierarchical structure (Uhl-Bien & Arena, 2018).

- *Digital Disruption* describes, in principle, the chaotic impact of technology upon the world as a whole and in its subsets of governments, business markets, academia, and the general populations, allowing incumbent organizations and long-standing institutions to be overturned (Bradley et al., 2015; Weill & Woerner, 2015).
- *Ecosystem* is an intricate network of interdependent entities focused on the development and dispersion of value, cutting through numerous and sometimes complex networks to deliver a smooth experience for the end user (Berman & Marshall, 2014).
- *Metacognitive strategies* are the methods utilized by leaders to aid in making sense of their leadership experiences to transfer and adapt the learning to new contexts (Avolio & Hannah, 2008; Olivares, 2011).
- *Social entrepreneurs* are individuals who focus on a vision to develop and maintain social value, identify and engage in opportunities that move that goal forward, continually innovate, adapt, and grow while maximizing limited resources and exhibit increased accountability to the stakeholders they serve (Dees, 2001).
- *Social entrepreneurship* is the combining of resources in new and innovative ways to capitalize on opportunities to address social challenges and/or effectuate social change (Mair & Martí, 2006).
- *Social innovation* is the ideas, concepts, and organizations that work to address systemic social challenges, creating shared value with stakeholders (Edwards-Schachter & Wallace, 2017).

- *VUCA is a*n acronym that was devised by the US Army War College to describe post-Cold War warfare (Stiehm, 2002), which now describes popularly is used to depict the current organizational landscape as volatile, uncertain, complex, and ambiguous (Codreanu, 2016; Johansen, 2007, 2012, 2017; Johansen & Euchner, 2013; Rodriguez & Rodriguez, 2015; Sarkar, 2016).
- *Zeitgeist* literally translated means “Spirit of the Times” (Crowley, 1994, p. 97), which symbolizes a defining overarching cultural paradigm that embodies the intellectual and moral environment of a particular era (Mayo & Nohria, 2005).

Summary

Chapter 1 introduced the opportunities and challenges of leading, learning, and thriving in a new iterative global ecosystem described as volatile, uncertain, complex, and ambiguous. The VUCA landscape is also introduced as the impetus of a neo-Schumpeterian framework of creative destruction, shifting the paradigm of social leadership. Delving into the overarching concept of social innovation as a driving force for current social movements, Chapter 1 also introduced and explored the role of social entrepreneurs within this structure, identified the need for a systems mindset in addressing social challenges, and introduced the dynamic VUCA ecosystem in which leaders find themselves functioning. This chapter looked at the challenges leaders face in functioning effectively within this rapidly iterating landscape and the need to identify the foundational strategies and practices that lead to success in this new paradigm. In order to remain competitive, leaders must address the skills gap (IBM, 2010) and integrate the skills necessary for success. As leaders continue to evolve and complexity increases, findings from this study will aid in identifying strategies to help narrow the

skills gap by contributing to best practices to lead in a VUCA world. This introduction segues into Chapter 2 which provides a conceptual literature review of these concepts.

Chapter 2: Literature Review

This chapter presents a review of the literature in central components of leadership in a volatile, uncertain, complex and ambiguous leadership landscape. To provide an overview of seminal, theoretical, and professional literature, this chapter includes today's leadership landscape, the role of social innovation, creative destruction, social entrepreneurship, the VUCA ecosystem, and today's social entrepreneur leaders. The literature evaluated for the background research was derived from myriad sources in the areas of leadership, technology, and leadership competencies as well as the perspectives of well-respected subject-matter experts.

The VUCA Ecosystem

After the demise of the Berlin Wall, the U.S. Army War College (USAWC) found itself in a conundrum, entering a time of peace. Its response was to create a new "acronymized mantra" (Stiehm, 2002, p. 6), VUCA, to address this new volatile, uncertain, complex, and ambiguous environment indicating a unique and complex type of warfare (Codreanu, 2016; Saleh & Watson, 2017). According to Stiehm (2002), the acronym's first specific reference appeared in 1990 in the initial course of the students' leadership training and has since become an overarching theme of the USAWC's curriculum. This new leadership landscape was further explained by Magee (1998) in a report from the Department of Command, Leadership, and Management, USAWC as:

> …a world order where the threats are both diffuse and uncertain, where conflict is inherent yet unpredictable, and where our capability to defend and promote our national interests may be restricted by materiel and personnel resource

constraints. In short, an environment marked by volatility, uncertainty, complexity, and ambiguity. (p. 1)

This new environment results in rapidly evolving contexts in which decisions are made and leaders must act. In this leadership paradigm they find themselves enmeshed in increasingly-complicated and multifaceted roles that extend beyond that of their networks and organizations (Codreanu, 2016; Magee, 1998). As the world continues to evolve and technology infiltrates systems, structures, and organizational foundations, leaders find themselves in a volatile, uncertain, complex, and ambiguous landscape that had once only been coined as a context for a modern type of warfare.

Although the term VUCA has its foundation in the U.S. Army, it has not only entirely permeated the military it can now be found in the business world. When the September 11, 2001, attacks occurred on the Twin Towers in New York, this terminology gained an even stronger foothold as it was descriptive of a new unexpected, chaotic, and violent type of warfare (Kaivo-oja & Lauraeus, 2018). Thereafter, VUCA remained associated within the scope of the military and national security until the same type of chaotic contextual challenges were being faced within the corporate landscape. Following the worldwide financial disaster that occurred in 2008 and 2009, this terminology was used to characterize the dynamic environment marked by: the increase in changes including speed, volume and scale; the unpredictability of the environment; the ensuing confusion; and having to contend with a multitude of meanings that did not exist prior to the global crisis, as noted in Figure 1 (Kaivo-oja & Lauraeus, 2018).

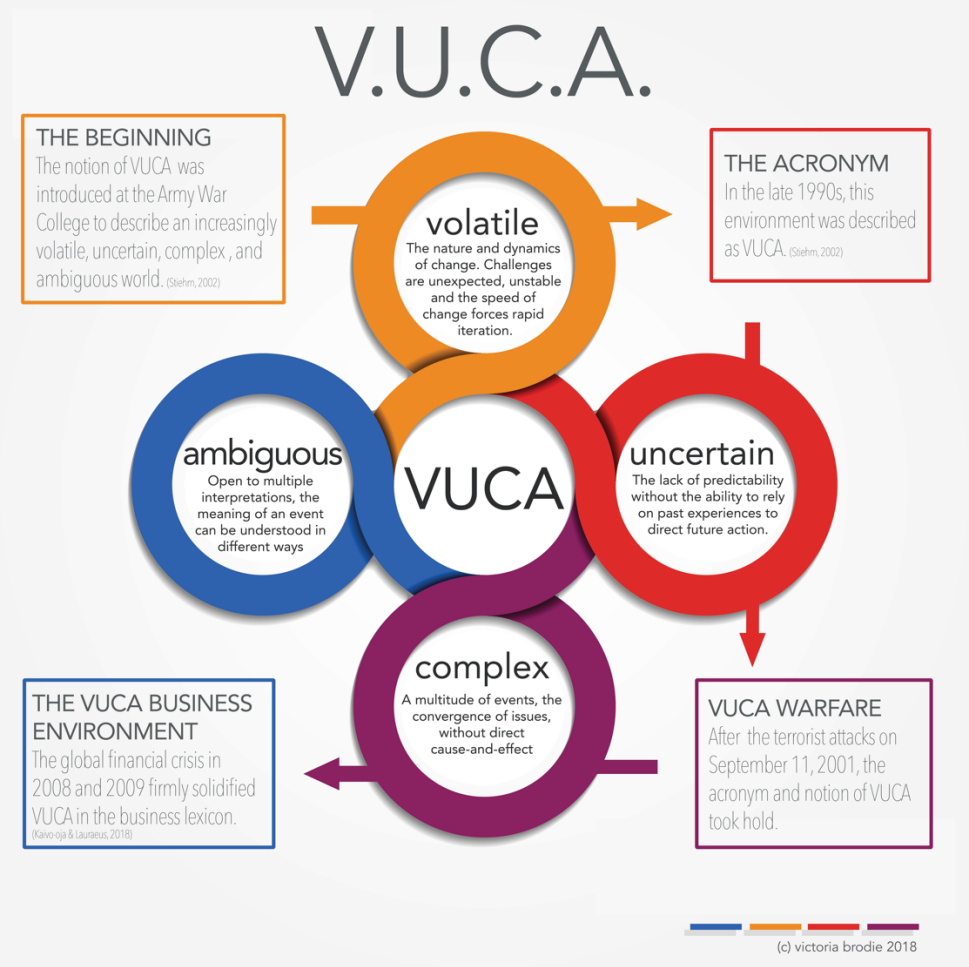

Figure 1. VUCA timeline. From "The VUCA Leader," by V. Brodie, 2018 (https://thevucaleader.com/vucatimeline/). Copyright 2018 by Victoria Brodie. Reprinted with permission.

VUCA landscape background. In a perpetually changing environment, leaders need to rapidly adapt, flex, and respond to global challenges of ever-increasing complexity (Bernstein, 2014; Horney, Pasmore, & O'Shea, 2010; Johansen, 2007, 2012, 2017; Johansen & Euchner, 2013; Petrie, 2011; Rodriguez & Rodriguez, 2015; Saleh & Watson, 2017). Today, a Google keyword search for VUCA yields over 386,000 results with new and updated entries procuring approximately 17,800 per month. Most of these entries fall within the professional realm, indicating an interest in understanding this dynamic environment. Although this VUCA landscape can be defined, it is mercurial

in that it is in a state of continuous flux. According to Bolden and O'Regan (2016) this swiftly shifting environment tests a leader's efficacy in making decisions, strategizing, and executing tasks at peak levels in their every-day work. In further exploration of this new leadership environment, Rodriguez and Rodriguez (2015) in conceptual research focusing on future leaders, what they term as a "Cloud Leader," identified the need for learning agility and self-awareness to engage in and make sense of this new VUCA environment. In addition, case study research conducted by Wilson and Smith (2016) found participants noted information, agility, restructuring, and experimentation as key skills in effectively navigating a complex and dynamic environment. As noted by Bennett and Lemoine (2014a), these are tough times for leaders and although globalization has offered opportunities, it has also created an even more distinct need for agility within this complex framework.

In this interconnected and complex environment, leaders face changes in global contexts and situations that seemingly appear from thin air yet have the power to impact even the most entrenched of organizations (Bolden & O'Regan, 2016). The challenges presented by this dynamic landscape, of volatility, uncertainty, complexity, and ambiguity are precipitated by transformational technological shifts, extreme changes in mobility of people and goods, and the radical connectivity of our world (Codreanu, 2016). As the environment continues to evolve and shift, it is increasingly clear that the solutions that worked yesterday will not be the solutions that work tomorrow.

Volatility. Change in the digitally-disrupted organizational environment is rapidly iterating, intermittent, unstable, and unpredictable (Bennett & Lemoine, 2014b; Bradley et al., 2015; Horney et al., 2010; Saleh & Watson, 2017). The term volatility

conceptualizes the conditions of rapid, voluminous (Swarbrick & Stearman, 2012), and sudden multi-faceted fluctuations that occur economically, politically, and geographically (Codreanu, 2016), often on a large scale. According to Kail (2010b), it is "…a state of dynamic instability brought about by drastic, violent, and rapid shifts" (p. 2). Moreover, volatility is present when change happens not only at a rapid pace but also without any repeatable patterns or predictable trends (Sullivan, 2012). In this environment, change is constant and cannot be predicted as it does not replicate past experiences to draw from historical best practices. This rapid cycling of unpredicted change leads (Bradley et al., 2015) to the increased need for accelerated decision making, the need for leaders to shift to proactive, and away from reactive, decision making. According to Codreanu (2016) this volatile environment deters leaders from using the filter of past experiences to discern future decisions.

Uncertainty. A VUCA environment is fraught with a lack of clarity that impedes a leader's capability to conceptualize risks and issues facing their organizations (Kail, 2010a). This lack of knowledge leads to the inability of leaders to infer future needs from past experiences (Bennett & Lemoine, 2014a; Saleh & Watson, 2017) preventing relevant and accurate forecasting, making the future more uncertain (Horney et al., 2010; Shaffer & Zalewski, 2011; Swarbrick & Stearman, 2012). According to Shaffer and Zalewski (2011) leaders are barraged with seemingly endless information and communication that cannot be founded on prior contexts; as a result, leaders need to foresee the likely outcomes of their decisions understanding that their predictions are uncertain. In addition, Paparone and Topic (2011) note that the substantial quantity of multi-layered interactive variables makes leader's evaluations, deductions, and

decisions about the future much more like an educated guess than an empirically driven conclusion. Bennett and Lemoine (2014b) further add that the challenge of connecting the dots in this environment will demand leaders be more agile in their approach and flexible in their solutions for the future.

Complexity. The digitally driven environment is rooted in networks of competing constituencies intricately interwoven in a web of hyper-connectivity (Bennett & Lemoine, 2014a; Rodriguez & Rodriguez, 2015). Considering that the world's connectivity is making geographical boundaries permeable, technology is increasing the mobility of people around the globe, with the Internet bringing together diverse ideas and opinions (Codreanu, 2016), leaders must exhibit strategic thinking skills, tolerance, and clarity (Johansen, 2012). In this new environment, complexity refers to "…the countless events involved and the degree of interconnectedness among them that result in randomness and unpredictability rather than certainty" (Paparone & Topic, 2011, p. 51). Bolman and Deal (2017) further posit that to be effective, leaders need to assess and respond to the many intricate layers of interdependencies, synthesizing data to deliver innovative insights driving future scenarios that have little resemblance to the world today. Moreover, as noted by Johansen (2007, 2012, 2017), when coupled with these challenges, big data is overwhelming organizations, propelling the need to understand, make sense of, and act on that which is relevant and necessary.

Ambiguity. When the above conditions exist, any definitive answer is difficult to ascertain (Swarbrick & Stearman, 2012). This environment leaves leaders without absolutes, compelling decisions to be exclusively made within the context they are in, which is often difficult to understand. Incomplete information, varied interpretations of

that information and, at times, intentional “smoke screens” all are sources of ambiguity within the organizational landscape (Bolman & Deal, 2017). According to Shaffer and Zalewski (2011), “Instead of being confronted with recognizable solutions based on the application of acceptable models, participants find themselves confronted with quandaries, dilemmas, puzzles, and paradoxes” (p. 68). Often, experts are called to assess and advise, yet do so with contradictory definitions of the problem itself (Shaffer & Zalewski, 2011). As noted by Codreanu (2016), this environment is unwieldy for leaders who have been accustomed to certainty. The new ambiguous world will crucify those who lead with certainty and celebrate those who lead with clarity (Johansen, 2012, 2017). As technology increasingly permeates worldwide, this VUCA ecosystem continues to challenge standards disrupting leadership and organizational paradigms.

VUCA drivers. The complex and dynamic environment is propelled by the convergence, of what is described as the six-mega trends by Elkington, van der Steege, Glick-Smith, and Breen (2017): “globalization, technology, digitization, individualization, demographic change, and the environmental crisis” (p. 254). These powerful forces are driving disruptive changes and impelling transformative innovations, creating a landscape that is quickly becoming the new normal for leaders. It is through the filter of opportunity within this new context that leaders can embrace edgy thinking from either living on the edge or being driven to the edge (Currie, 2012) by the six-mega trends.

Technology and innovation have rapidly engulfed the present world and will irrevocably shift the future. As stated by Rick Haythornthwaite, Chairman of Centrica and MasterCard, “Leaders face shifts in global markets and circumstances that can come from nowhere and impact the destinies of even the largest companies and

undermine even the most powerful of governments and global institutions" (Bolden & O'Regan, 2016, p. 441). Digital disruption is driving change. Leaders have the option to either use this as a call to transform by developing new attitudes and approaches to leadership or choose not to and face the consequences.

Disruptive innovation. Technology has become pervasive within society, driving a cultural transformation as well as organizational volatility, disrupting a multitude of industries (Bradley et al., 2015; Petrie, 2014). The original theory of disruption addressed a paradigm change by which new organizations had begun to erode revenues against the formerly dominant competitors; these new businesses rapidly iterate a product or service that ultimately outpaces the incumbent (Christensen, Craig, & Hart, 2001; Christensen, 2006; Hopp, Antons, Kaminski, & Salge, 2018). According to McKendrick (2015), this disruption evolves when an organization develops something that becomes a tool for unserved or under-served markets and this innovation then goes on to grow to where it replaces or puts extreme pressure on the dominant players in the industry. The automotive industry is an example of this type of disruption, with taxis being replaced by decentralized ride-sharing companies which, in turn, has shifted people's relationship with cars and their perceptions of transportation, disrupting the way the automobile industry conducts business (Wessel, 2015).

Organizations are rapidly acknowledging the need to not only to adapt to but also to anticipate technological changes (Evans & Becerra, 2015). According to Evans and Becerra (2015), Amazon, led by Jeff Bezos, "…seized the strategic opportunities presented by each successive wave of disruption, cannibalizing its own business where necessary" (p. 12). Moreover, Hopp et al. (2018) suggest that businesses that want to

adapt successfully to disruption need to do so holistically, even “willing to eventually cannibalize their own revenues to compete” (para. 10). The challenge to keeping up with disruption lies in the speed at which technological innovations are being created, demanding leaders keep up the pace or lose their competitive footing. A lower market share is an indication of reduced business performance.

Digital transformation aids in improving business performance in a measurable way. The impetus for this change is the inevitable arrival of a force powerful enough to reshape the organizational landscape faster than any period in history: digital disruption (Bolden & O’Regan, 2016; Bradley et al., 2015; Johansen, 2017). Bradley et al. (2015) describe digital disruption through the concept of a vortex:

> A vortex exerts a rotational force that draws everything that surrounds it into its center. The Digital Vortex is the inevitable movement of industries toward a ‘digital center’ in which business models, offerings, and value chains are digitized to the maximum extent possible. (p. I)

This digital vortex is systemically disrupting economies and cultures, forcing established organizations to face a multitude of potential challenges in maintaining their position if there is a technology that can disrupt their industry. As stated by Bolden and O’Regan (2016) disruptive technologies are transforming historical business paradigms, irrevocably altering the rules of leadership.

Disruptive technologies. The idea that disruption would occur as a symptom of technology first arose in the 1995 article, “*Disruptive Technologies: Catching the Wave*.” The authors introduced the idea that technology would upend the existing economy, in what they called, disruptive technology (Bower & Christensen, 1995). Examples of this

type of disruptive technology have been found in many sectors, from phones to photography to cloud computing (Tate, 2012). The new technologically-driven VUCA environment is shifting from an individual-centered economy to an everyone-to-everyone paradigm (Berman & Marshall, 2014). According to Berman and Marshall (2014) in their survey of 1,100 businesses and government executives as well as 5,000 consumers spanning 15 countries, it was suggested that rapid iteration of technology will fragment value chains, industries will converge, and new ecosystems will emerge. In light of these technological advancements, an overview of seven emerging technologies are addressed in this review

Blockchain overview. The popularization of blockchain began with the work of Nakamoto (2008), *Bitcoin: A Peer To Peer Electronic Cash System*, which demonstrated how this technology could be used to develop cryptocurrencies. Although it is uncertain if Nakamoto is a pseudonym for an unknown person or a group, the paper published is largely credited with the introduction of Bitcoin in 2009, the first application of blockchain (Marr, 2018). According to Marr (2018), blockchain began to separate from Bitcoin in 2014 with the insight that it could be used for more than cryptocurrencies.

Blockchain's innovative distributed ledger enables dispersion through a multitude of computers in the network, therefore eliminating a single administrator or hub. The use of this peer-to-peer network has the potential to eradicate third-party certifying organizations, such as a financial institution. According to Umeh (2016), "Blockchain uses cryptography and the power of distributed computing to provide a digital trust mechanism over the Internet" (p. 59). This ledger registers unique transactions that,

although they are private, can be authenticated. According to Nowiński and Kozma (2017), blockchain's original application was in the form of cryptocurrencies such as bitcoin, but its uses can be disseminated well beyond that of the financial industry of which some are still being discerned, although many, like the music industry, have already begun to utilize. Blockchain has the potential to create a systemic disruption that has not been witnessed since the inception of the Internet (Nowiński & Kozma, 2017).

Cloud computing overview. Cloud computing has revolutionized the computing industry by taking a cost prohibitive, scarce resource and not only making it abundant but also drastically cutting costs, making it accessible to a wider audience (DaSilva, Trkman, Desouza, & Lindič, 2013; Sultan, 2013). Ray (2016) defines cloud computing as an expedient, abundant, structure of an on-demand system that allows access to a "shared pool of configurable computing resources" (p.1) which can be quickly distributed and released with negligible supervision.

Cloud computing gives access to supercomputing through a multitude of devices reaching collective assets in the cloud. This global access to information has eliminated the need for on-premises data centers or servers, transforming in a fully-unutilized way how information is accessed, utilized, and shared. Infrastructures are being created that drive innovative ecosystems, production platforms, and the global marketplace (DaSilva et al., 2013; Hammoudi, Aliouat, & Harous, 2017; Kushida et al., 2015). As discussed by Kushida et al. (2015), the disruption that is being witnessed in cloud computing is so pervasive that even those at the forefront of these innovations are being impacted by

rapidly trending new disruptions. As cloud computing continues to develop and transform, more industries will be affected and, in turn, the leaders who guide them.

Artificial intelligence (AI) overview. The concept of AI arose over seventy years ago, although the inception of the first prototypes did not arrive until 1943. It was during World War Two, which brought together mathematician Alan Turing and neurologist Grey Walter, that AI found its first steps. Walter designed one of the first robots and Turing developed the Turing Test, setting the standard for intelligent machinery. Since then, AI has steadily gained ground with science fiction driving much of the conversation in the 1950s through AI's influence in *2001: A Space Odyssey*, featuring HAL9000 (BBC, n.d.). After a period of stalled progress, understanding the commercial applications for AI revived the research, eliciting scientist Rodney Brooks' paper Elephants Don't Play Chess. It was in this paper that Brooks broached the need to look at AI, not from a top-down methodology but from a bottom-up method "grounded in the physical world" making high levels of abstraction concrete (Brooks, 1990, p. 3). This breakthrough ushered-in the inception of the iRobot in 2002, the military PackBot in bomb diffusion, speech recognition on the iPhone in 2008, the NAO robots showing their synchronized dance skills in 2010, IBM's Watson on Jeopardy in 2011, and the self-driving car in 2014 (BBC, n.d.).

AI continues to disrupt not only everyday operations for businesses, it also impacts people's lives on a daily basis. Narula (2018) noted that common examples are digital applications such as *Waze*, which gathers anonymized data from smartphones to gauge traffic patterns allowing the application to make predictive suggestions based on their proprietary algorithms and mapping the fastest routes in real-time for users.

Ridesharing applications, such as Uber and Lyft, use machine learning through a *heat map* to determine estimated times of arrival for rides as well as determining optimal pickup locations (Narula, 2018). Senders et al. (2018) discussed that machine Learning, a current application of AI, was founded in the concept of computers learning "…from large complex datasets without being explicitly programmed" (p. 29). In contrast to these concepts, there are also many who believe AI will never reach the capabilities of understanding in reading human nuances. As stated by Peter Schank (2017) "[m]odern AI is about key words and search not about ideas" (para. 9). In a sample dialogue, Schank describes the power play behind the words being stated that a computer would be unable to recognize the "context and inferences and intent" (para. 10). Although big data is being mined and analyzed by computers, it is still a tool without the capabilities of cognition.

According to Migliore and Chinta (2017), Big Data technologies are being utilized by executive leaders to better understand the consumer as well as their motivations for purchasing, utilizing machine learning algorithms to "ingest large data sets to categorize, analyze, and refine model testing with new data points" (p. 49). The management of large data sets, and their analysis, especially when the complexity of the information makes human analysis prohibitive, makes machine learning a viable solution to build predictive models (Migliore & Chinta, 2017).

Virtual reality overview. Van Kerrebroeck, Brengman, and Willilams (2017) posit that virtual reality is a computer-based technology that immerses a participant in a simulated real-environment experience. Using this technology allows the participant to sense as if they are present in the experience. Moreover, Steuer (1992) defines virtual

reality as "…a real or simulated environment in which a perceiver experiences telepresence" (p. 7). This concept focuses on the relationship between the participant as well as their mediated environment in which they are interacting, as opposed to the idea that virtual reality is information which is just transferred (Nah, Eschenbrenner, & DeWester, 2011; Steuer, 1992). The most critical components of virtual reality are interactivity and immersion (Nah et al., 2011).

Marr (2017) argues that businesses have found this type of immersive experience, from external marketing and customer service to internal professional training and development, can enhance their organizations. Additionally, simulated worlds enable the creation of ecosystems utilized for certain purposes, such as a meeting room, office space, or areas to brainstorm (Dodgson, Gann, & Phillips, 2013). According to Dodgson et al. (2013) in the case study of IBM they found:

> Because of their immersive nature, visualization capacities, and opportunities for serendipity, virtual worlds enriched communications, shared understanding, and enabled learning across organizational and other boundaries – disciplinary, geographical, professional – in ways other information and communications technology could not achieve. (p. 1369)

Hall and Takahashi (2017) state that virtual and augmented reality will move society from observation to immersion. For leaders, this technology not only improves the quality of the end product, it also shortens the time and cost during the iteration process for product development, allowing organizations to virtually prototype, reducing costs and time from inception to the finished product.

Internet of things overview. The McKinsey Global Institute's report, *The Internet of Things: Mapping the Value Beyond the Hype* (2015), discusses the impact of the Internet of Things (IoT). McKinsey defines the "…Internet of Things as sensors and actuators connected by networks to computing systems. These systems can monitor or manage the health and actions of connected objects and machines. Connected sensors can also monitor the natural world, people, and animals" (p. 1). According to the McKinsey report, after reviewing nearly 300 IoT applications, there were nine settings identified capturing the use of IoT: "human, home, retail environments, offices, factories, worksites, vehicles, cities, and outside" (p. 3). Of these nine settings, it is anticipated that the IoT "could unleash as much as $2.3 trillion in new economic value worldwide by the year 2025" (Pellet, 2015, p. 59).

A research study by Ray (2016), expanded the definition of the IoT by combining it with the cloud. Ray (2016) defines the IoT cloud as a framework to interconnect the physical and virtual from those that exist currently and are still evolving, developing a network of information and communication technologies. These intricate networks then integrate into the cloud system generating greater connectivity of these virtual physical smart systems. According to Ray (2016), the IoT cloud includes Industry 4.0, the smart industry, enabling production systems and sites to be built interconnected, intelligent, and autonomous. This concept can also be identified in the personal realm with intelligent systems, such as refrigerators, intelligent lights, home security, along with smart energy, water, and gas meters to optimize usage (Ray, 2016).

Researchers Mack and Veil (2017) describe the IoT as a network where "cyber-physical systems" work together in conjunction through "unique addressing schemas"

(p. 80). These scholars also identify three areas of application: monitoring and control, using machines to accumulate sensor data to allow humans to track and adjust their condition anytime; big data and business analytics, sensors collecting massive amounts of data to be analyzed by intelligence tools; and information and sharing, IoT devices aiding in information sharing and collaboration between humans and machines. The IoT impacts a multitude of settings and environments such as people, healthcare, private and public life, homes, markets, workplaces, factories, transportation and logistics, cities etc. (Mack & Veil, 2017; Manyika, Chui, Bisson, Woetzel, Dobbs, Bughin, & Aharon, 2015). The blending of IoT and Industry 4.0 closes the gap between the physical world and virtual, allowing humans to be connected anytime, anywhere, with anyone and anything (Mack & Veil, 2017). As stated by Mack and Khare (2015) “As new technologies effect [sic] the organizational and social environment with a temporal delay, we are currently at the edge of significant changes in organizations driven by information technology and the Internet” (p. 4). Although these potential technological disruptors could cause challenges, they also have the potential to “transform how people live and work, create new opportunities or shift surplus for businesses and drive growth or change comparative advantages for nations” (Kaivo-oja & Lauraeus, 2018, p. 29).

Real-world and technology convergence: Industry 4.0. Throughout human history, society has witnessed three cycles of industrial revolutions. The First Industrial Revolution, during the 1700s, ushered in machines that replaced human muscle with steam and water power; the Second Industrial Revolution, a century later, witnessed the inception of railroads, the telegraph, and electricity; and in the Third Industrial

Revolution was even more technologically advanced replacing analog and mechanical devices automating production (Schwab, 2016). Building on the Third Industrial Revolution's technological advances, the world now sits on the brink of the Fourth Industrial Revolution, a global movement as disruptive as it is innovative.

Industry 4.0 a brief history. The Fourth Industrial Revolution, described as "Industry 4.0", originated in Germany at the Hanover Fair in 2011 (Morrar et al., 2017). According to Morrar et al. (2017), the original inception of Industry 4.0 was devised as a tactic to diminish the impact of rivalry from "…increasing competition overseas and to differentiate German and European Union industries from other international markets" (p. 14). The German administration also looked to utilize intelligent monitoring within their manufacturing chain as cost reduction and decision-making measures, ultimately to improve their ability to be more competitive within the German economy (Morrar et al., 2017).

Industry 4.0 today. Schwab (2016) notes that although some see the Fourth Industrial Revolution as an extension of the Third Industrial Revolution, there are distinct reasons as to why this revolution is dramatically different. Schwab (2016) further contends that the Fourth Industrial Revolution ushers in a time of velocity never before witnessed, an unparalleled scale, as it permeates through demographic, geographic, and cultural boundaries, and exponential impact in disrupting foundational systems and structures. This revolution is the impetus for new phase of disruptive change "…characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres" (Schwab, 2016, para. 2). As noted by Celaschi (2017), convergence of an exponential number of cost-effective technologies becoming

readily available, minimally invasive, and widespread are characteristics of this new cycle. These enabling technologies with integrated sensors will expand from 4.9 billion in 2015, to 20.7 billion in 2020. According to Mazali (2017) AI can already be discerned in society from self-driving cars to drones as well as assistants, such as Alexa or Google Home, to voice translation software. Furthermore, the integration of the virtual world of digital information and the real world of production factories merges systems together blending a multitude of sectors: people, process, machines, spaces, and products. Also noted by Mazali (2017), this revolution melds automation with networked connections through the IoT systems, allowing for not only adaptability but also with shifts from process to specialization. The “cyber-physical systems” home-in on the creation of data through the filter of analytics which are able to be processed exponentially faster than the physical only manifestations (Baldassari & Roux, 2017, p. 20).

***Industry 4.0 disruption*.** The use of these merged paradigms is likely to reduce costs and provide more efficiency to production chains, transportation, and communication providing openings for new innovations for economic growth (Roblek et al., 2016). A study conducted by Bedard-Maltais of the Business Development Bank of Canada (2017) found that 40 % of small to mid-sized manufacturers have implemented 4.0 projects and are finding “…increased productivity, lower costs and improved product quality” (p. 2). Although Schwab (2016) notes that these same convergences, if not human-centered, could lead to greater inequality as technology disrupts labor markets without commensurate new job openings. In a two-year project of three case studies using a multi-dimensional quantitative and qualitative design, Weiss, Huber,

Minichberger, and Ikeda (2016) explored the usability and reception of manufacturing robotic prototypes in relations to human-robot collaboration. It was determined that there is still a need to improve the collaboration between the robot, developed with AI, and their human partners and the human partner remained fearful of being replaced by their robot counterpart. As Schwab (2018) and Morrar et al. (2017) discuss, there are concerns as to whether this technology driven cycle will have a positive impact upon humanity, therefore, there are those advocating to monitor innovations through a social perspective. With another iteration of industry rapidly approaching, the social leaders of today, and those of future generations must adapt to disruption as never before (Bradley et al., 2015; Johansen, 2017; Petrie, 2011). This study seeks to uncover the structures, competencies, and strategies that best serve these social entrepreneurial leaders.

The New Systems Thinking Leader

"The deep changes necessary to accelerate progress against society's most intractable problems require a unique type of leader—the system leader, a person who catalyzes collective leadership" (Senge et al., 2015, p. 27). As the world grows increasingly connected and interdependent through technology, the global leadership landscape is becoming more complex. Arnold and Wade (2015) note that within this network of technology, international trading connects economies world-wide and creates powerful reticulated feedback loops. Looking at this intricate environment, it is becoming increasingly difficult to use reductionism (Lezak & Thibodeau, 2016; Vemuri & Bellinger, 2017) to analyze one element of a system, as these systems are progressively more dependent on contingent components. In the case of systems

thinking, these intricate networks are addressed and analyzed as a whole (Lezak & Thibodeau, 2016; Senge, 2006). Systems thinking is a relatively new area of research, yet there have already been several theorists examining and working to define this holistic process, a few of whom are listed in Table 1.

Table 1

Systems Thinking Theorist Definitions

Theorist	Systems Thinking Definition
Richmond	The ability to discern reliable inferences regarding behavior by understanding the underlying structure (Richmond, 1994).
Senge	A filter which highlights patterns of change, an interrelationship between things as a whole rather than fixed snapshots (Senge, 2006).
Sweeney and Sterman	The capability to represent and evaluate complexity using: • understand how the behavior of a system arises from the interaction of its agents over time (i.e., dynamic complexity); • discover and represent feedback processes (both positive and negative) • hypothesized to underlie observed patterns of system behavior; • identify stock and flow relationships; • recognize delays and understand their impact; • identify nonlinearities; • recognize and challenge the boundaries of mental (and formal) models (Sweeney & Sterman, 2000, p. 250).
Hopper and Stave	As a set of Systems Thinking Characteristics: • Recognizing Interconnections • Identifying Feedback • Understanding Dynamic Behavior • Differentiating types of flows and variables • Using Conceptual Models • Creating Simulation Models • Testing Policies (Stave & Hopper, 2007, p. 8)

(continued)

Theorist	Systems Thinking Definition
Kopainsky, Alessi, and Davidson	In addition to Hopper and Stave's definition, Kopainsky, Alessi, and Davidson include understanding of long-term preparation, response loops, non-linear associations among variables, as well as collective strategizing spanning an company (Kopainsky, Alessi, & Davidsen, 2011).

Arnold and Wade (2015), in a comparative review of systems thinking literature, arrived at definition for systems thinking as a combination of "synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviors, and devising modifications to them in order to produce desired effects. These skills work together as a system" (p. 675). Systems thinking leaders look at and understand not only their own context but how their organization falls within the environment, seeking to address systemic societal concerns knowing this foresight benefits the greater system in which they reside (Draper, 2016; Senge et al., 2015). This technologically-driven environment has generated a significant burgeoning in the number of tools available to these holistic-thinking leaders, who will, in turn, use them to create collective success (Senge et al., 2015). The digital environment has also opened the doors to innovative ideas and solutions to help empower new systems thinking leaders to take on social challenges (Brilliant, 2013; Brodie & Fraizer, 2018b). These leaders are forming movements and have become the catalyst for a shift in the Zeitgeist (Agarwal et al., 2018).

Contextual Intelligence Leadership

Zeitgeist, a German word that literally translates as Zeit, meaning "time", and Geist, meaning "spirit" or "ghost", represents the mood of the overall cultural and intellectual condition that is prevalent at a specific time (Crowley, 1994). In their (2005)

article, Mayo and Nohria note that, in order to capitalize on the spirit of the times, a leader must have contextual intelligence. In addition, Khanna (2014) posits that to understand the spirit of the times within a leader's sphere, the knowledge that this context shifts based on culture, demographics, economics, as well as other factors, is crucial to effective global leadership. The concept of contextual intelligence was popularized by Yale psychologist Robert Sternberg (1984) in his work on the Triarchic Model of Intelligence. Within his greater research, Sternberg focused on the three tenets for the need to look at intelligence contextually: to generate an external standard that goes beyond a mere IQ test, to address the nature of intelligence as it relates to the external world, and to study intellect as it pertains to real-life behaviors (Sternberg, 1984). Sternberg (1984) defines, "… intelligence in context as consisting of purposive adaptation to, shaping of, and selection of real-world environments relevant to one's life" (p. 271). Moreover, contextually defined intelligence consists of not only being able to understand the spirit and relevance of the surrounding environment but also being able to adapt to and shape that environment (Brown, Gould, & Foster, 2005).

As leadership takes place within an ecosystem, understanding that the leader and context reciprocally impact each other allows the leader to consider the dynamic nature of their environment (Osborn et al., 2002). According to Kutz and Bamford-Wade (2013), contextual intelligence takes into account the "complexity within the construct of 'context" (p. 67). As Kutz (2008a) states, "a leader with contextual intelligence will exhibit these characteristics, skills, and behaviors: future-minded, an influencer, they will ensure an awareness of mission, be socially minded, culturally sensitive, exhibit multicultural leadership, and be able to diagnose context" (p. 27). A leader who is

contextually intelligent is able to adapt, learn, and shift even in a dynamic and volatile environment (Kutz, 2008b, 2008a; Kutz & Bamford-Wade, 2013). Developing a contextual map consists of steps as shown in Kutz's Contextual Intelligence Circumplex 3.0 (see Figure 2).

As the world becomes increasingly interconnected and contextually driven, global leaders are anticipated to both achieve results and manage intricate networks of relationships spanning countries and cultures (Reiche, Bird, Mendenhall, & Osland, 2017). This concept is further evidenced in an applied cognitive task analysis study by Osland, Oddou, Bird, and Osland (2013), showing that global leaders stress boundary spanning as a core element of working with a multitude of stakeholders. This level of contextual intelligence combined with problem solving, strategic thinking, and global skills were necessary to manage the multiplicity of dimensions which span interdependent rapidly changing systems, values, and behaviors (Osland et al., 2013). A growing number of leaders displaying contextual intelligence, systems thinking, and similar traits are turning their attention to addressing social challenges in addition to the bottom line (Agarwal et al., 2018).

Figure 2. Contextual Intelligence Circumplex™. From *Contextual Intelligence,* (p. 19), by M. Kutz, Cham, Switzerland: Palgrave McMillan. Copyright 2017 by Palgrave McMillian. Reprinted with permission.

Metacognitive Strategies

As the world becomes increasingly more complex, leadership paradigms from more stable times are no longer appropriate. This new VUCA environment continually confronts leaders with complex and unique challenges calling for metacognitive strategies to extract the learning from each leadership experience (Avolio & Hannah, 2008; Bunker et al., 2012). According to Bunker et al. (2012) a leader must be "deliberate, mindful, and genuine about stepping outside the fray to reflect on the process" (p. 290). A metacognitive strategy enables leaders to be more aware of their thinking and the biases that might interfere with appropriate action (Black et al., 2016; Davis et al., n.d.). Metacognition, or thinking about thinking, aids in recognizing when and how thinking impacts the interpretation of the experiences, and how to adapt and respond to each experience in a more thoughtful rather than automatic fashion (Baron, Rouleau, Grégoire, & Baron, 2018). As indicated in a study by Torres, Reeves, Tollman, and Veith (2017) of the Boston Consulting Group, the complexity of organizations over the last 50 years has increased seven % a year. In addition, Torres et al., posit that the practice of metacognition, a time to examine underlying assumptions and beliefs, is a casualty of this dynamic and changing environment.

Metacognitive strategies are the methods utilized by leaders to aid in making sense of their leadership experiences to transfer and adapt their learning to new contexts (Avolio & Hannah, 2008). One such strategy involves mindfulness. In a mixed method study using a quasi-experimental sequential cohort design connecting mindfulness with leadership, Baron et al. (2018) discovered that mindfulness was positively associated with authentic leadership, reporting that participants were able to

use mindfulness to focus attention on the experience as it was happening, find clarification in values, and use them to determine coherent and appropriate action. In addition, Baron et al. (2018) furthered this initial research in an empirical study demonstrating a positive correlation between mindfulness and leadership flexibility. The positive and significant results showed that mindful leaders are better able to demonstrate flexibility in their leadership behaviors. As stated by Bunker et al. (2012), a reflective practice allows leaders to use pattern recognition to make sense of the context they are in to become strong problem solvers in a VUCA environment.

The Role of Social Innovation

Social innovation has existed for centuries yet its definition is still ambiguous (van der Have & Rubalcaba, 2016). Fortunately, in the last decade, social innovation has received rapidly-growing interest, from both an academic and a policy perspective (van der Have & Rubalcaba, 2016). Social innovation can occur through private, public sector or community organizations from for-profit firms using corporate social responsibility programs to individual social entrepreneurs (Phillips, Lee, Ghobadian, O'Regan, & James, 2015). Recent research has highlighted the interdependence that social leaders, working within a large organization or alone, have with the social structures with which they interact (Cajaiba-Santana, 2014). van Wijk, Zietsma, Dorado, Bakker, and Marti (2018) note that "[s]ocial innovation efforts depend not only on the will of the actors to see them through but also on the institutional conditions that frame them" (p. 4). In practice, social innovation is dynamic and interactive, involving a wide range of social leaders and organizations (Phillips et al., 2015), including social entrepreneurs, and the institutions and social structures which concurrently can enable

or constrain their innovative efforts (Cajaiba-Santana, 2014). As one of the first to address how technology impacts social innovation agents, this study aligns with the Systems of Innovation Approach proposed by Phillips et al. (2015), in which social entrepreneurs exist within a system of social innovation, a “set of interrelated sub-systems” that are independent yet interactive and collective (p. 450).

Due to the shift to examining greater social challenges and issues faced world-wide, systems thinkers have begun to step into defining, developing, and scaling solutions. Social innovation, a term that has a much-debated and varied history, has received increased consideration in the last ten years as the term has diffused into policy and practice domains (van der Have & Rubalcaba, 2016). According to van der Have and Rubalcaba (2016), the term is currently considered rather ambiguous with its research and consequent knowledge being generated in a fragmented manner. In an attempt to reduce this ambiguity, Edwards-Schachter and Wallace (2017) conducted a review of literature of social innovation in a study covering sixty years, 252 definitions, and 2,339 documents and determined that there are three interconnected and developing areas within social innovation: societal transformation, aspirations of sustainable growth, and a “progressive delimitation of the services sector” (p. 73). These results were reflective of the more global characterization of the term as a transformative process eliciting systemic shifts (Edwards-Schachter & Wallace, 2017; Mehta et al., 2016; Salim Saji & Ellingstad, 2016). Social innovation is comprised of the ideas, concepts, and organizations that work to address systemic social challenges, creating shared value with stakeholders (Edwards-Schachter & Wallace, 2017). In large

part, social innovation is driven by the entrepreneurs who seek to solve pressing social issues (Tapsell & Woods, 2008).

Creative Destruction

Within the framework of a rapidly iterating world, the decentralization of technology has been an impetus driving need and opportunity within the social and business sector. This tension, between need and opportunity, is not new. There are many theorists who provide insights into this economic ecosystem. Joseph Schumpeter and Israel Kirzner's theories explore the role of creative destruction and the entrepreneur within a dynamically shifting environment.

In 1934, Austrian economist Joseph Schumpeter discovered the significant role held by entrepreneurs while formulating his theory of microeconomic development. Schumpeter's theory focused on the entrepreneur as the locus of innovation, with the premise of entrepreneurs developing new products and processes that would usurp the incumbent organizations (Caballero, 1990; Dees, 2007). In this theory, Schumpeter (1934) argues that the entrepreneur plays a fundamental and active part in process of "creative destruction", or restructuring of market economies (Caballero, 1990; Marcotte, 2014; Tapsell & Woods, 2010). According to Caballero (1990), although Schumpeter's theory was initially a dynamic of entrepreneurship, the same framework is relevant in the field of social entrepreneurship. Dees (2007) echoes this paradigm, stating that "social and business entrepreneurs uncover or create new opportunities through a process of exploration, innovation, experimentation, and resource mobilization" (p. 26).

A second theorist, Israel M. Kirzner, developed what is known as the Kirzerian theory in 1973, stating that the part of the entrepreneur is merely as the alert observer.

Kirzner (2009) stated the entrepreneurs' “equilibrative role stemmed not from his autonomously introducing change into existing market relationships, but from his ability to notice, earlier than others, the changes that have already occurred… appear[ing] in the form of profit opportunities” (p. 148). In Kirzner’s theory the entrepreneur is the procurer of identifying and exploiting change opportunities, not the catalyst of the change itself.

Although neither theory addresses the humanitarian nature of the social entrepreneur’s attention on the human condition of the marginalized or underserved, they do provide a framework of the entrepreneurial foundation of the social entrepreneur within a dynamically changing environment. In the arena of social and business entrepreneurship, both the early exploiter and the change agent apply (Marcotte, 2014). Utilizing both of these entrepreneurial competencies, social entrepreneurs are a part of the destructive and generative process of creative destruction and, as well capitalize on opportunities as they arise. Within the current incarnation of creative destruction in a technologically-driven, rapidly iterating global landscape, there are a unique set of skills necessary to lead within the social sector. To further examine the topic of social innovation vis-à-vis social entrepreneurship, entrepreneurship itself, and its economic role must be explored. Moreover, leading researchers in the area of social entrepreneurship, Martin and Osberg, state that “[t]he word ‘social’ simply modifies entrepreneurship” (2007, p. 30). Therefore, examining the historical roots of creative destruction sets the foundation of the entrepreneur and their economic impact.

Social entrepreneur and entrepreneurship. Social entrepreneurship, as a an important means of community and economic development, has been practiced for

hundreds of years albeit under different names (Brodie, Silk, Phillips, & Fraizer, 2017; Dees, 2001; Fraizer, 2009; Fraizer & Madjidi, 2011). The first academic appearance of the phrase “social entrepreneurship” occurred in 1964 and the field of research in the subject took off in the early 2000s (Rey-Martí, Ribeiro-Soriano, & Palacios-Marqués, 2016). One of the greatest challenges in furthering the research in this field, however, is the lack of a unified definition for social entrepreneurship itself (Abu-Saifan, 2012; Bacq & Janssen, 2011; Brodie et al., 2017; Forouharfar, Rowshan, & Salarzehi, 2018; Mair & Martí, 2006). This lack of a unifying paradigm hinders research (Abu-Saifan, 2012) and reveals that the idea of social entrepreneurship is “fragmented” with “no coherent theoretical framework” (Macke, Sarate, Domeneghini, & Silva, 2018; Weerawardena & Sullivan Mort, 2006, p. 21), although it is largely believed that the principal intent of these undertakings is to mitigate pressing social issues in underserved areas (Dacin, Dacin, & Matear, 2010; Grimes, McMullen, Vogus, & Miller, 2012; Salim Saji & Ellingstad, 2016; Tapsell & Woods, 2008). For example, Martin and Osberg (2007) posit that social entrepreneurs identify an opportunity in a disparate area with an “unjust equilibrium” that cannot be righted on its own. The social entrepreneur then steps in to create a working solution that becomes the foundation to diminishing the inequalities, “releasing trapped potential or alleviates the suffering of the target group” through developing a new stable equilibrium (p. 35). Most social entrepreneurship definitions include new ways to reallocate resources and exploit opportunities to foster social benefit as the primary objective to elicit change and meet social needs (Abu-Saifan, 2012; Dees, 2001; Salim Saji & Ellingstad, 2016).

As indicated, there are a multitude of definitions for what social entrepreneurship entails (see Table 2). Dacin et al.'s (2010) literature review, determined there were 37 distinct definitions in the current literature, and noted: "This current state of conceptual confusion serves as a barrier to cross-disciplinary dialogue and theory-based advances in the field" (p. 38). Some studies employ definitions that range from being inclusive to exclusive in scope. As an example, Mair and Marti (2006) use an inclusive definition that defines social entrepreneurship as a practice of coalescing resources in unique way to "pursue opportunities to catalyze social change" (p. 37). This definition does not relegate the activities of a social entrepreneur to a specific business sector but includes multiple ways to affect change, whereas Lasprogatu and Cotten (2001) state that social entrepreneurships must be a nonprofit entity, setting the context of social entrepreneurs only within the realm of not-for-profit structures. The latter definition is exclusive and eliminates many other forms of social entrepreneurship, thereby impeding the advancement of this field of study. Consequently, with social entrepreneurship consistently gaining academic and professional attention yet continuing to be fragmented, there is a compelling need for a concise and systemic outlook on social entrepreneurship (Macke et al., 2018). In the area of social entrepreneurship, several organizations coalesce and support social entrepreneurs under a common mission.

Table 2

Social Entrepreneurship/Social Entrepreneur Definitions

Author	Definition
Alvord, Brown, & Letts	[C]reates innovative solutions to immediate social problems and mobilizes the ideas, capacities, resources, and social arrangements required for sustainable social transformations (Alvord, Brown, & Letts, 2004, p. 262).
Ashoka	Social entrepreneurs are individuals with innovative solutions to society's most pressing social, cultural, and environmental challenges. They are ambitious and persistent — tackling major issues and offering new ideas for systems-level change ("Ashoka," n.d., para. 2).
Bornstein	[T]ransformative forces: people with new ideas to address major problems who are relentless in the pursuit of their visions, people who will simply not take 'no' for an answer, who will not give up until they have spread their ideas as far as they possibly can (Bornstein, 2004, pp. 1–2).
Dees	Social entrepreneurs play the role of change agents in the social sector, by: • Adopting a mission to create and sustain social value (not just private value), • Recognizing and relentlessly pursuing new opportunities to serve that mission, • Engaging in a process of continuous innovation, adaptation, and learning, • Acting boldly without being limited by resources currently in hand, and • Exhibiting heightened accountability to the constituencies served and for the outcomes created (Dees, 2001, para. 16). [A] process that catalyzes social change and addresses important social needs in a way that is not dominated by direct financial benefits for the entrepreneurs (Mair & Martí, 2006, p. 36).

(continued)

Author	Definition
Martin & Osberg	[T]he Social Entrepreneur aims for value in the form of large-scale, transformational benefit that accrues either to a significant segment of society or to society at large targeting the underserved, neglected, or highly disadvantaged population that lacks the financial means or political clout to achieve the transformative benefit on its own (Martin & Osberg, 2007, p. 34).
Skoll Foundation	[S]ocial entrepreneurs open up the space for solutions to take root, scale and become the foundation of profound social transformation (The Skoll Foundation, n.d.-a, para. 3).
Schwab Foundation	[S]ocial entrepreneurs are driven by values: dignity, access to opportunity, transparency, accountability, equity, and empowerment. They are passionate about the problem they are trying to solve and keep their social mission front and centre as they scale up their impact (Schwab Foundation for Social Entrepreneurship, n.d., para. 7).
Yunus	It describes an initiative of social consequence created by an entrepreneur with a social vision (Yunus, 2010, p. 4).

Social entrepreneurship organizations. Ashoka is a pioneer in the area of social entrepreneurship and is the foremost network of social entrepreneurs globally. Founded in 1980 by Bill Drayton, with over 3,300 Fellows in 93 countries providing financing, support services, and a network connecting the business and social sectors worldwide (“Ashoka,” n.d.). Ashoka fosters the co-creation of innovative solutions through a multitude of networks to enable scale and social impact. Integrating solutions engaging social, political, and private stakeholders, social entrepreneurs are able to scale more effectively and influence a greater number of people, creating a greater impact (Ashoka, 2014). Although they are considered the pioneer of the social

entrepreneurship field, Ashoka has continued to shift and grow, managing and capitalizing on the collective digital and social trends.

Bill Drayton argues in his paper, *Collaborative Entrepreneurship: How social entrepreneurs have learned to tip the world by working in global teams*, that in a rapidly iterating context when foundational systems are continually changing, it is the social entrepreneur's job to make systemic transformations for the benefit of everyone (Drayton, 2011). To address the dynamic VUCA environment that has shifted the social entrepreneurship landscape, Ashoka identified a new framework with four elements: empathy, teamwork, new leadership, and changemaking. To ensure "empathy-based" ethics are practiced as a foundation of daily interactions, empathy is necessary when the rules cannot keep up with the pace of change. Teamwork is required to optimize the ability to engage in and capitalize on all the potential opportunities in this dynamically changing environment. New leadership empowers all to not only be part of the team but also to lead by initiative while continuing to keep the system thinking framework context to move solutions forward and create positive social outcomes. Changemaking is the ability to "freely and effectively innovate for the good of all" ("Ashoka," n.d., para. 7). These foundational tenets support and guide the work of Ashoka and social entrepreneurs worldwide. Drayton (2002) posits that the social entrepreneur must first and foremost have a "powerful, new systems change idea" that they relentlessly pursue until completion. In addition to this overarching context, social entrepreneurs must exhibit: "creativity, widespread impact, entrepreneurial quality, and strong ethical fiber" (p. 124). Bill Drayton and Ashoka identify social entrepreneurs as people with innovative solutions to the world's most challenging issues. Social entrepreneurs are those who

are ambitious, resilient, and committed to reaching their goals in taking on crucial social issues through fostering, developing, and implementing unique ideas for large-scale systemic change (Fraizer, 2009).

The Schwab Foundation for Social Entrepreneurship, a nonprofit impartial organization, was started in 1998 with the goal of promoting the field of social entrepreneurship. The promotion occurs through identifying and highlighting the foremost social entrepreneurs globally, building a community of social entrepreneurs to connect, support, and collaborate with to generate solutions, as well as fostering the next generation of social leaders ("Schwab Foundation for Social Entrepreneurship," n.d.).

The Skoll Foundation was created in 1999 by Jeff Skoll to help further his "vision of a sustainable world of peace and prosperity" (The Skoll Foundation, n.d.-b, para. 1). As a dedicated organization for social entrepreneurship, the Skoll Foundation works to make a global impact through connecting with and investing in social entrepreneurs who are working to solve the world's most critical challenges. To date, the Skoll Foundation has invested $470 million globally and awarded 106 organizations and 126 social entrepreneurs in 179 countries with the Skoll Award (The Skoll Foundation, n.d.-c). In 2003, the Skoll Foundation granted the University of Oxford, Said Business School, the funds to develop the Skoll Centre for Social Entrepreneurship (Skoll, n.d.).

With a strong academic footing along with a global professional organizational structure, the Skoll Foundation and Skoll Center are clear as to what defines social entrepreneurship: "the practice of combining opportunity, innovation, and resourcefulness to address critical social and environmental challenges" (Skoll, n.d.,

para. 1). This context of social entrepreneurship is further developed into distinct characteristics by Roger Martin and Sally Osberg, former CEO and President of the Skoll Foundation, (2015) as:

- The identification of a stable but inherently unjust equilibrium that causes the exclusion, marginalization, or suffering of a segment of humanity–a group that lacks the financial means or political clout to effect transformational change.
- The development, testing, refining, and scaling of an equilibrium-shifting solution, deploying a social value proposition that has the potential to challenge the stable state.
- The forging of a new stable equilibrium that unleashes new value for society, releases trapped potential, or alleviates suffering. In this new state, an ecosystem is created around the new equilibrium that sustains and grows it, extending the benefit across society. (Martin & Osberg, 2015, p. 10)

This extensive equilibrium-focused account of social entrepreneurship helps add context to the role of a social entrepreneur. Understanding the explicit characteristics of this type of leader allows for a more concise research framework as well as more succinct professional boundaries.

Another powerful supporter of social entrepreneurship is Acumen; incorporated in 2001. Acumen invests in people who are taking-on the challenge of poverty to help everyone live in dignity, not dependence. They work with entrepreneurs to build "sustainable solutions to big problems of poverty" ("Acumen," n.d., para. 2). The world these leaders and entrepreneurs face is becoming more chaotic, buffeted by the rapid advancement of technology. It is a VUCA world, unknown to previous generations of

leaders, and understanding its complex and dynamic nature supports current and future leader success.

Social business. One of the challenges of organizations within the market sector is that these businesses are often not designed to alleviate social issues and, in many cases, they can even exacerbate issues such as poverty, the environment, and social inequalities (Yunus, 2008). The term Social Business was coined by Nobel laureate Mohammed Yunus who said,

> a social business is designed and operated as a business enterprise... but with the profit-maximization principle replaced by the social-benefit principle. Rather than seeking to amass the highest possible level of financial profit to be enjoyed by the investors, the social business seeks to achieve a social objective. (Yunus, 2008, p. 10)

In hoping to further refine the idea of what a non-dividend social business owned by investors is and is not, Yunus developed seven key commonly held characteristics and principles:

> 1. business objective will be to overcome poverty, or one or more problems (such as education, health, technology access, and environment) which threaten people and society; not profit maximization;
> 2. financial and economic sustainability;
> 3. investors get back their investment amount only. No dividend is given beyond investment money;
> 4. when investment amount is paid back, company profit stays with the company for expansion and improvement;

5. gender sensitive and environmentally conscious;

6. workforce gets market wage with better working conditions; and

7. do it with joy. (Yunus, 2010, p. 3)

Yunus' seven key principles are echoed in a narrative synthesis of relevant literature regarding social businesses by Mahfuz Ashraf et.al. in 2018, which distilled five descriptive themes of social business (see Table 3).

Table 3

Key Themes of Social Business

Key Aspects	Social Business
Mission and outcomes	To solve any specific social problem independently and sustainably through innovative solutions Initial investments are recoupable where the subsequent profits are reinvested The positive social impacts are the outcomes to measure the success
Characteristics of business	SBs are non-dividend and social benefit maximizing organizations Follow a business model with a very specific type of strategy Profits are reinvested continually
Key Aspects	Social Business
The operation	SBs follow a process where a specific the market is served The price of products or services are fixed before the business begins its operation
Resource utilization	The investors invest initially to provide fund to run an SB Partnership with other organizations
Environmental considerations	Addressing environmental concerns is one of the seven principles of an SB

There are two distinct sectors of businesses, those that focus on maximizing profits and those that address social issues (Yunus, 2010). Social business is related to social entrepreneurship in that it utilizes the ability to combine resources in new and unique ways, as well as integrating innovation to solve systems in which a challenge exists. Social businesses are distinctive in that they have a vision to eradicate social issues and yet they still follow a traditional business model (Yunus, 2017). Although similar to traditional organizations, social businesses are run as a "non-dividend paying

business" (Mahfuz Ashraf, Razzaque, Liaw, Ray, & Hasan, 2018, p. 3). The investments made are purely to mitigate the social issue.

Within the realm of social businesses there are two different models of operation, the first is ownership by investors reinvesting all profits back into the business and the second is ownership by those who need the help and the profits benefit them as well as their communities (Yunus, 2010). According to Yunus, Sibieude, and Lesueur (2012), "Social business involves interaction with the players in an ecosystem that it helps build by creating new 'hybrid values chains' with local entrepreneurs" (p. 72). The social business structure has gained ground impacting global communities in the vision to eradicate poverty with 45 investments in eight regions, globally reaching 550 clients for every USD invested in 2016 (Yunus Social Business, 2017). To further examine the field of social innovation vis-à-vis social entrepreneurship, entrepreneurship itself, and its economic role must be explored. Moreover, leading researchers in the area of social entrepreneurship, Osberg and Martin, state that "[t]he word 'social' simply modifies entrepreneurship" (2007, p. 30). Therefore, examining the historical roots of creative destruction sets the foundation of the entrepreneur and their economic impact.

Maker movement. Furthering this social movement and empowering future generations, the Maker Movement enables individuals to create innovative technology-based solutions (Galvin, 2017; Hatch, 2018). A movement of technologically-savvy young Makers are beginning their exploration of discovery-based learning focusing on real-world problems using creativity, critical thinking, innovation, and collaboration as early as kindergarten, inspiring young communities of learners to tackle global and local social issues (Langley, Zirngiebl, Sbeih, & Devoldere, 2017; Metz, 2018). These

potential future social entrepreneurs, with the advent of accessible and affordable technology, ease of collaboration through global networks, and the rise of social movements, are poised to take on systemic social challenges (Hatch, 2018; Langley et al., 2017). Spreading innovation, the Maker Movement has integrated successfully in a myriad of incarnations through the public and private sectors aiding new and budding entrants into the social entrepreneurship field.

Today's Social Entrepreneur Leaders

As the world becomes increasingly connected and networked through technology, there are a variety of opportunities for social entrepreneurial leaders, from building social capital to increasing scalability. According to Dr. Larry Brilliant (2013), President of the Skoll Global Threats Fund:

> Social entrepreneurs aren't traditional activists. They don't often drive millions of people to the streets, but they do seek to create social change that can scale up. Scale is what separates good from great, the well-intended from the truly transformative. (p. 26)

Creating social change means engaging and influencing those around you and potentially those at great distances. With the ability to connect to millions of people regardless of geography, scaling can be accomplished much more effectively and, as stated by Dr. Brilliant, "lasting change happens by engaging and affecting large numbers of people" (p. 26). It is through innovation, connectivity, and creative destruction that climate change, poverty, water security, healthcare, as well as many other challenges can be addressed and mitigated (Brilliant, 2013).

Social entrepreneurship has seen a renewed burgeoning fueled by the shift in zeitgeist. As noted by Langley et al. (2017), within this socially-driven context, technology has opened the space and opportunity for more people to start their own businesses, making social entrepreneurship an increasingly viable option. Moreover, as these businesses scale, global leaders engage in leadership dynamics that address their needs as well as incorporating structures, such as social enterprises, to embrace the dynamic, complex VUCA environment to best serve their missions (Agarwal et al., 2018). In this volatile, complex, uncertain, and ambiguous ecosystem, social entrepreneurs of the 21st century have a multitude of tools at their fingertips to take-on the most radical and challenging global problems, to move the needle on the UN SDGs and impact the world for future generations. The contexts and structures within which these social leaders operate must be considered in determining how best to lead now and in future social enterprises.

Leadership structures in a VUCA environment. How to lead in a rapidly changing and complex environment is a growing topic of interest. As evidence, a Google keyword search for “VUCA leadership”, today yields approximately 80,700 results with 3,370 new and updated entries within the last month. In addition, as technology continues to transform and decentralize organizational structures, it is largely being acknowledged that the historical theories will no longer be sufficient (Bennis, 2007; Bolden, 2011; Elkington, Pearse, et al., 2017; Lichtenstein & Plowman, 2009; Mehra et al., 2006) in managing the intricacies of this landscape. While seminal leadership philosophies comprising of transformational leadership (Burns, 1978), authentic leadership (Avolio & Gardner, 2005), and servant leadership (Greenleaf,

1977) are focused on an individual leader, many new theorists have addressed the distributed and decentralized frameworks (Tal & Gordon, 2016) as structures for leaders to use in this complex global landscape. In a bibliographic analysis, Tal and Gordon (2016) indicated that although transformational leadership dominates the field of leadership research, the theories of collective, distributed and shared, and complexity leadership are on the rise as well as those centered on group dynamics. As stated by Tal and Gordon (2016), the intricacies and ambiguity of the leadership environment make it is increasingly apparent that the heroic leader role may not be able to fulfill the needs of this dynamic landscape, one leader may not have the full arsenal of skills necessary to implement effectively. Therefore, shared or collective leadership may be the best solution for this leadership challenge (Tal & Gordon, 2016).

In addition to Tal and Gordon's research, O'Connell (2014) identified three domains of emergent leadership theories: complexity, strategic leadership theories; shared, distributed, relational leadership theories; and authentic leadership. Given the context of the rapidly evolving and complex nature of business, the research done for this review addresses distributed and shared leadership, collective, and complexity leadership.

Distributed and shared leadership. The distributed leadership theory has seen rapid growth in research since the early 2000s. In addition, much of the research is considered analogous to that of shared leadership. Drath, McCauley, Palus, Van Velsor, O'Connor, and McGuire (2008) discuss the team as shared/distributed leadership being the main point of influence as a group "interaction and shared understanding that create leadership influence" (p. 639). In this structure, leadership is a social process that

engages in horizontal influence, accepting responsibility of leadership from peers where, in turn, all members are leaders and followers (Drath et al., 2008).

Due to the preponderance of disparate information on this subject, in a examination of literature on distributed leadership, Bolden (2011), identified three concepts that appear to resonate within most distributed leadership research:

1. Leadership is an emergent property of a group or network of interacting individuals,
2. There is openness to the boundaries of leadership,
3. Varieties of expertise are distributed across many, not the few. (p. 257)

Although much of the distributed leadership literature is derived from an educational setting, there are many organizational contexts in which this leadership structure would thrive. One such potential application can be seen in Scrum, an agile software development framework. In Scrum, according to Srivastava and Jain (2017), there are varied sources of leadership within each group and, although there is a scrum master managing the outcomes, the team forms its own distributed leadership structure. Within this framework, teams are “self-reliant, self-organized, self-led, and self-managed to achieve shared business and project goals” (Srivastava & Jain, 2017, p. 294). In Srivastava and Jain’s (2017) qualitative research conducted in two stages spanning 75 projects it was discovered that over 60 % of the groups indicated that the leadership is “process-oriented and can be practiced on situational, shared or rotational basis among all team members” (p. 304). These teams distribute and share leadership based on the most effective pathway to achieve the stated goals.

Complexity leadership. As stated by Drath et al. (2008): “Complexity theory seeks to avoid both reductionism and determinism through holism” (p. 640). The result of an increasingly intricate leadership landscape, Complexity Leadership Theory was first proposed by Uhl-Bien, Marion, and McKelvey (2007) upon the foundation of focusing on leadership within rapidly iterating systems of casually interrelating agents. This theory was designed as a framework to study emergent leadership dynamics as a complex adaptive system addressing the bureaucratic organizational entanglement that cannot be separated from the leadership role (Lichtenstein & Plowman, 2009). Further research on this concept of complexity leadership indicated that adaptability is a key component in conjunction with an adaptive space which fosters the “… rich interconnectivity (i.e. complexity) of a networked system and its agents to ‘meet complexity with complexity” (Uhl-Bien & Arena, 2017, p. 19). Using the Complexity Leadership Theory, it is the leader’s responsibility to function in three different leadership paradigms: entrepreneurial, guiding innovation; operational, transforming innovation to results; and enabling, allowing for the continued viability of the organization (Uhl-Bien & Arena, 2017).

Collective leadership. Collective leadership corresponds to the theories of shared/distributed leadership as well as the foundation of complexity leadership (Drath et al., 2008). In this style of leadership, “collectives are complex relational systems, and as such leadership consists of interdependent connections that ensure the fulfillment of leadership roles through interactions that create larger structural patterns, often with both stable and dynamic characteristics” (Cullen-Lester & Yammarino, 2016, p. 174). Although there has been significant research devoted to this emerging theory, scholars

note there is a need for more empirical studies as well as refinement as to the definition of the theory. In addition to the structures within which social leaders best function, an equally important facet of consideration involves the competencies that each leader has developed in working with others.

Leadership competencies in a VUCA world. According to O'Driscoll (2016), "Today, organizations around the globe are being sucked into a VUCA vortex that has wiped out more than half of the Fortune 500 since the year 2000" (p. 76). It is evident that leading in today's complex global environment has become a pressing cultural challenge and the world economic system has set a premium on a new type of leader, one who is VUCA-ready (Bunker et al., 2012). Researchers Elkington, Pearse et al. (2017), using the Delphi technique to interview global leaders, determined that leaders must procure and develop a robust skill set even as they work continuously to shape their worldviews while understanding human and social capital, to be able to cultivate an attitude that is flexible, nimble, and malleable to enhance their leadership capacity. Even within the literature discussing global leaders in a VUCA environment, there is much discussion, contradiction, and projection. Discerning the type of leader is as complex as the environment they are destined to serve in.

The extant literature covers a multitude of competencies that are necessary for leaders to navigate an increasingly dynamic world, although they vary as to context and purpose. When looking at leadership competencies necessary in a global context, there is more clarity but still no consistent framework. For example, many researchers utilize the VUCA acronym to explain a model to navigate this intricately-networked, complex environment (Codreanu, 2016; Johansen, 2007, 2012; Lawrence, 2013). In Johansen's

work (2007, 2012), the primary leadership principles are vision, understanding, clarity, and agility. Codreanu (2016) adds to this literature, using vision, understanding, clarity, and agility to build the foundation of his VUCA Action Framework. In addition, Hinssen (2015) further expanded this concept by adding letters to create another framework, VACINE: velocity, agility, creativity, innovation, network, and experimentation. Lastly, the framework developed by Moore (2015), the SCAILES model, strategic, complex, adaptive, innovative, learning, and emergent system, extends complex adaptive systems and broadens the scope to address the needed preemptive and inventive proficiencies, concentrated on learning, as the requirement for future accomplishments.

Beyond acronyms, Axon et al. (2015) holistically conclude that a VUCA-ready leader's two critical capabilities are: the ability to manage complexity as well as global business. Along with these two central traits, leadership agility is at the forefront of literature on VUCA leaders (Axon et al., 2015; Codreanu, 2016; Horney et al., 2010; Johansen, 2017), as are strong ethics, psychological safety, and empowering others to self-organize (Giles, 2016). Moreover, the "Agile Model," developed by Horney and O'Shea (2015), foresees change, engenders confidence, originates action, unshackles thinking, and assesses results, and addresses these critical capabilities in a dynamically evolving environment. Although scholars have attempted to identify, define, and develop methodologies and competencies to succeed in this new complex environment, there is little consensus in that approach. A historic review on the study of leadership competencies provide much guidance as to how these skills were identified and clarified.

Competencies: A brief history and expert insights. The initial foray into the dissemination of leadership skills began with the work of David McClelland (1973), whose work was prompted by the wide-spread use of intellect and ability tests to allow for a more comprehensive assessment framework. These competencies were measures of knowledge, abilities, skill, and characteristics that were based in outcomes not intellect. As an extension of McClelland's work, Boyatzis (1982), studied 2,000 managers in 12 organizations, resulting in a proposed 21 characteristics of his competency model for management. Boyatzis' work brought competencies into the realm of business, setting the stage for decades of future research and exploration of competencies as a leadership measurement tool. To illustrate the penetration of competencies over the last three decades, Korn Ferry, a leading executive recruitment firm, created a highly-regarded global competency framework known as the Leadership Architecture. This structure aids in the assessment of the strengths and weakness of the employee themselves or of others and can be utilized to determine skill profiles (Korn Ferry, 2014).

In many quantitative analyses using data gathered from Lominger and PDI Ninth House, Korn Ferry developed a global competency framework identifying 38 competencies organized within 12 clusters that fall inside four factors (Korn Ferry, 2014; see Table 4). Since its inception, Korn Ferry's core leadership competency work has permeated the organizational landscape as a premier assessment tool.

Table 4

The Leadership Architecture: Global Competency Framework

Factor I: Thought	**Factor II: Results**
A. Understanding the business	D. Taking initiative
5. Business insight	2. Action oriented
11. Customer focus	27. Resourcefulness
17. Financial acumen	E. Managing execution
35. Tech savvy	15. Directs work
B. Making complex decisions	25. Plans and aligns
8. Manages complexity	38. Optimizes work processes
12. Decision quality	F. Focusing on performance
32. Balances stakeholders	1. Ensures accountability
C. Creating the new and different	28. Drives results
18. Global perspective	
19. Cultivates innovation	
33. Strategic mindset	
Factor III: People	**Factor IV: Self**
G. Building collaborative relationships	J. Being authentic
6. Collaborates	10. Courage
9. Manages conflict	36. Instills trust
20. Interpersonal savvy	K. Being open
21. Builds networks	29. Demonstrates self-awareness
H. Optimizing diverse talent	30. Self-development
4. Attracts top talent	L. Being flexible and adaptable
13. Develops talent	3. Manages ambiguity
14. Values differences	22. Nimble learning
34. Builds effective teams	26. Being resilient
Factor III: People	**Factor IV: Self**
I. Influencing people	31. Situational adaptability
7. Communicates effectively	
16. Drives engagement	
23. Organizational savvy	
24. Persuades	
37. Drives vision and purpose	

Note. Adapted from the *Korn Ferry Leadership Architect™ library*, by Korn Ferry, 2014, Korn Ferry Leadership Architect: Global competency framework, p. 28. Copyright 2014 by Korn Ferry.

Global competencies for leaders. Global leadership competencies as defined by Jokinen (2005) are the comprehensive characteristics that allow people to implement their jobs that fall outside their own nationality, regardless of education or cultural history, type of job, or what business they are from. In addition, an extensive review of the literature on global leadership development as well as global leadership competency, Cumberland, Herd, Alagaraja, and Kerrick (2016) identify three competency domains: personality characteristics and disposition; information and abilities; and actions. Cumberland, et al. list 17 competencies related to global leadership through their assessment of instruments:

1. Adaptability; flexibility
2. Agreeableness
3. Conscientiousness
4. Cultural sensitivity
5. Emotional intelligence
6. Extroversion; sociability
7. Inquisitiveness; curiosity
8. Open-mindedness; nonjudgmental; low ethnocentric attitudes
9. Openness to experience
10. Optimism
11. Resilience
12. Self-awareness
13. Self-efficacy
14. Stability; stress tolerance; low neuroticism

15. Tolerance for ambiguity
16. Tenacity
17. Values; integrity; character (Cumberland et al., 2016, p. 306)

After completing their research, Cumberland et al. (2016) note the lack of literature available addressing the topic of global leader competencies, especially those relating to specific contexts and conclude that "[w]ith increasing globalization, there is greater urgency to prepare leaders to operate in complex business environments involving diverse stakeholders" (p. 312). Seeking to do just that, this study hopes to identify any core competencies shared among social entrepreneurial leaders.

Core competencies for future leaders. In 2016, the World Economic Forum sought to ascertain the core leadership competencies necessary for future-ready leaders, performing a survey sample representing over 13 million workers spanning nine industries. The resulting report, *The Future of Jobs*, noted three top competencies necessary in 2020: "cognitive abilities, systems skills, and complex problem solving" (World Economic Forum, 2016, p. 21). Within this report, cognitive abilities are further delineated into various skills: cognitive flexibility, creativity, logical reasoning, problem sensitivity, mathematical reasoning, and visualization. Systems skills are also defined in more detail as: judgment and decision making and systems analysis (World Economic Forum, 2016). In addition to the skills identified by the World Economic Forum, O'Brien and Robertson (2009) used a quantitative survey study of 117 global participants, assessing agility, resilience, foresight, self-mastery, g-localism, intuition, presence, and creativity, to determine if leaders are future-ready (p. 377). In their analysis, O'Brien and Roberson concluded that present-day and emergent leaders are ill equipped for future

leadership trials. In particular, younger leaders are lacking self-mastery, authenticity, and presence, whereas older leaders are challenged with inventiveness and glocalism. More recently, a Delphi study conducted by Elkington et al. (2017), determined that "leaders need to acquire and hone a hefty skill set as well as continually shaping their worldviews (context) … to develop an effective mindset that is agile and adaptable in a fast changing and volatile world" (p. 1051).

There are differing studies with divergent results and identifying and understanding the core competencies necessary to lead in the current VUCA landscape is a nascent research area. Moreover, Cumberland's competencies of self-awareness, emotional intelligence, and others allude to a set of higher-order strategies necessary to utilize these competencies effectively in this dynamically-changing environment.

Summary

Leaders are awakening to a world where seemingly intractable global challenges are emerging and being acknowledged, creating a shift in the zeitgeist (Agarwal et al., 2018). To take on this century's great challenges, leaders must not only look at the world and its systems holistically, they must also identify and understand how to lead effectively in this new volatile, uncertain, complex, and ambiguous world (Brilliant, 2013). The pace of change is only going to increase as is the intricacy of its networks, unparalleled to in any time in history, demand old leadership rules be thrown out and rewritten (Bolden & O'Regan, 2016; Bunker et al., 2012; Codreanu, 2016). This dynamic iterative environment brings challenges and opportunities (Schwab, 2016).

Chapter 3: Research Design and Methodology

Introduction

The purpose of this qualitative phenomenological study was to explore the lived experiences of global leaders from the perspective of Ashoka Fellows who reside in the United States. This chapter identifies and explores the qualitative research design used in this study, highlighting information regarding the survey design, the participants, IRB guidelines, data collection, and data analysis methods.

Re-Statement of Research Questions

This chapter describes the research techniques that were applied to achieve the objectives of this study, which is to primarily answer these four research questions pertaining to systems-wide change:

***RQ1*:** What common leadership strategies and practices do social entrepreneurs employ?

***RQ2*:** What challenges do social entrepreneurs face in their leadership journey?

***RQ3*:** How do social entrepreneurs measure leadership success?

RQ4: What is the role of technology in your day-to-day leadership?

***RQ5*:** What recommendations would social entrepreneurs make for future leaders of systems-wide change?

Nature of the Study

Leadership, in any capacity, is dependent on the ecosystem in which the leader resides. Consequently, the study of leadership needs to holistically take the entire leadership environment into account. Therefore, qualitative research as the "process of naturalistic inquiry that seeks in-depth understanding of social phenomena within their

natural setting or context" (Klenke, 2016, p. 6) used in this study as a process of naturalistic inquiry in a qualitative design framework (Merriam, 2009). Qualitative research is founded in the interpretive understanding of the human experience (Flick, 2007) adding value, particularly to the study of leadership, thereby enabling "extensive thick descriptions" (Klenke, 2016, p. 11) of the issue or challenge being researched. In addition, Creswell (2013) posited that the foundation of qualitative research is in the exploration of a problem or issue, to gain an intricate and detailed understanding that is best attained through direct contact with people. Gathering this descriptive data in close proximity to the participant to discover the why and how of the phenomena, as opposed to using quantitative research to quantify the issue with numerical data which is not proximate to the respondents and the issue being studied. In the qualitative research framework, the objective is the exploration of "how a social experience is created and given meaning" (Denzin & Lincoln, 2011, p. 8).

Philosophical assumptions. Within the qualitative research method, many researchers agree there are four underlying philosophical assumptions and although understanding these assumptions is critical for qualitative research. According to Klenke (2016), the four underlying philosophical assumptions of the qualitative research process are: ontology, epistemology, axiology, and methodology, which are described below:

- *Ontology:* Embraces the concept of multiple realities shaped by the context in which they exist, developing themes from these perspectives.
- *Epistemology:* Works to get close to participants to collect the subjective evidence from individuals.

- Axiology: Actively understands that investigation is value-laden and report the values that create the narrative of the research as well as reporting those values and biases of principal investigator.
- *Methodology:* Utilizes inductive logic from the source rather than from a theory, using an evolving design in the process of the investigation which is dictated by the context of the study.

Research approaches. Every researcher has a choice among multiple methods to approach their research. According to Creswell (2013), there are five distinct qualitative research approaches to inquiry: (a) narrative, (b) case study, (c) grounded theory, (d) ethnographic, and (e) phenomenological research. Narrative research, also known as narrative inquiry, is the process of collecting stories from participants that recount the lived experience. These stories are collected through interviews, data collection, and observations. Case study research is a methodology that analyzes a specific case or numerous cases, which are bound by time and location, to develop a deeper understanding of that specific case or cases. Interviews, observations, documents and artifacts, are used to develop applicable themes (Creswell, 2013). Grounded theory is a organized methodology through the gathering and analysis of data, develops a theory to explain a particular social process or interaction which has been formed by the opinions of the group being researched. Theoretical sampling, coding processes alongside a comparative method to analyze, and memos, are used to shape and guide subsequent stages of data collection (Creswell, 2013). Ethnographic research is performed through “prolonged immersion” with a specific social group (Klenke, 2016, p. 193). Within this context, principal investigator, as a member of the

group, can interpret patterns of interaction in a “culture-sharing group” for an extended period of time (Creswell, 2013, p. 92). Phenomenological inquiry investigates the “lived experience” of individuals who share a common phenomenon in order to discover the shared meaning of this experience. It is a “rigorous descriptive-analytic” (Klenke, 2016, p. 212) method using a data collection method of interviewing those sharing the “lived experience”.

Strengths and weaknesses of qualitative research. Qualitative research design centers on the non-numerical organization of data to uncover patterns and themes associated with the qualities or characteristics of a phenomenon providing a deep understanding of complex human behavior, emotion, and personality traits. In contrast, according to Carr (1994), quantitative research uses a systematic linear approach that utilizes numerical data to measure a phenomena and to discern findings. Even though historically research has been biased toward quantitative studies, both strengths and weaknesses are noted in qualitative and quantitative lines of inquiry.

Context-driven qualitative research gathers rich data from a select sample of participants, although in contrast, the limited sampling can be viewed as a potential weakness in generalizing the results (Carr, 1994). In addition, although a strength of qualitative research is founded in the proximity to the participant, this proximity can also be construed as a weakness. The inability of the principal investigators to disengage their own experiences from the participants’ can result in subjectivity. Even though this closeness can bring greater depth of understanding, it is imperative to not become overly enmeshed within the inquiry.

Methodology

The research methodology utilized for this study was phenomenology, which is considered not only a research method but also a philosophical movement (Klenke, 2016; Merriam & Tisdell, 2016; Moustakas, 1994). Largely founded in the research of the German mathematician Edmund Husserl, phenomenology focuses on the "discovery of meanings and essences of knowledge" of the consciousness and the concrete through the process of ideation where meaning is associated with an object (Moustakas, 1994, p. 26). Considered the father of phenomenology, Husserl posited that phenomenology is a "science of consciousness" where both the real and consciousness occur at the same time as a study of human experiences inside what he described as the "life world" (Klenke, 2016, p. 209). Hence, phenomenology is the study of the participant's lived experience brought to a conscious level to determine the essence of the meaning of the participants' shared phenomena (Giorgi, 2012).

There are two classical approaches to view experiences and analyze data in phenomenological research, interpretive and descriptive, also known as hermeneutics and transcendental. Developed by Martin Heidegger, a student of Husserl, the hermeneutic approach is based in the idea that humans exist in an interdependent world with reciprocal relationships between humans and objects. Therefore, hermeneutical phenomenological research is not only descriptive, it is also an "interpretive process in which the researcher makes an interpretation (e.g., the researcher 'mediates' between different meanings) of the meanings of this lived experience" (Creswell, 2013, p. 80). This philosophical approach makes an intuitive leap

beyond transcendental phenomenology to ascertain obscured meanings (Klenke, 2016).

This research study utilized the transcendental phenomenological approach, a philosophy largely developed by Husserl and later transformed to a qualitative method by Moustakas (1994). Where hermeneutics utilizes a reflective practice in interpreting texts and history to develop a greater understanding of an experience, transcendental phenomenology uses meaning as the core tenet for collecting data to explain the spirit of the human experience focusing on the participants descriptions (Creswell, 2013; Larkin, Eatough, & Osborn, 2011; Moerer-Urdahl & Creswell, 2004; Moustakas, 1994). For the purpose of this study, the transcendental philosophy guided the research in the framework of setting aside all preconceived thoughts and ideas of an experience to observe and gather data from an unencumbered ideology allowing the most authentic value of the experience to naturally emerge (Finlay, 2009; Giorgi, 2012; Sheehan, 2014). As stated by Moustakas (1994):

> Phenomenology, step by step, attempts to eliminate everything that represents a prejudgment, setting aside presuppositions, and reaching a transcendental state of freshness and openness, a readiness to see in an unfettered way, not threatened by the customs, beliefs, and prejudices of normal science, by the habits of the natural world or by knowledge based on unreflected everyday experience. (p.41)

Structured process of phenomenology. Phenomenological research explores the essence of the lived experience of individuals who share a common phenomenon, such as social leadership within a VUCA environment. This methodology allows the

conscious experience to be construed from a first-person perspective of the phenomenon (Klenke, 2016). Within this context, a system and structure need to guide the organization and collection of data. According to Creswell (2013), initially the principal investigator must discern if a phenomenological research design is appropriate for the problem being explored. If so, then the phenomena being studied must be identified. Once these steps have been achieved the five-step procedure, introduced by Moustakas (1994), can be utilized

Moustakas five-step procedure.

1. *Achieving epoch* is the removal of personal attachment or biases from the experience, checking predetermined ideas of the phenomenon and bracketing those assumptions (Giorgi, 2012; Klenke, 2016; Moerer-Urdahl & Creswell, 2004).
2. *Horizontalization* uses the entire body of transcripts and all with equal value, distinguishes specific statements in the interview transcripts identifying the participants' individual experiences of the phenomenon (Giorgi, 2012; Klenke, 2016; Moerer-Urdahl & Creswell, 2004).
3. *Establishing meaning units and themes* is a process to break down the equal statements eliminating those that are irrelevant to the phenomenon as well as those that overlap. This process ends with statements that illuminate the phenomenon being researched which are then transcribed into the language of, in this case, social leadership (Giorgi, 2012; Klenke, 2016; Moerer-Urdahl & Creswell, 2004).

4. *Developing textural and structural descriptions* is the dissemination of the narrative of “what” was experienced in textural explanations and “how” it was experienced in structural explanations (Klenke, 2016, p. 215; Moerer-Urdahl & Creswell, 2004, p. 30). This process clarifies the structures of the experience.
5. *Essence of experience* uses the synthesized textural and structural explanations to build a combined account of the phenomenon (Giorgi, 2012; Klenke, 2016; Moerer-Urdahl & Creswell, 2004). In a process that Moustakas calls, the “intuitive integration of the fundamental textural and structural descriptions into a unified statement of the essences of the experience of the phenomenon as a whole” (Moustakas, 1994, p. 100).

The methods used in a transcendental phenomenological research approach are systematic and disciplined, bracketing out assumptions of the phenomenon being researched (Creswell, 2013; Finlay, 2009; Moerer-Urdahl & Creswell, 2004; Sheehan, 2014). This approach minimizes personal opinions to be as unfettered from bias or preconceived ideas as possible, to use a beginner’s mind to be open to what is being relayed by the participant. Through that system and structure, the discoveries are allowed to emerge naturally (Moustakas, 1994).

Appropriateness of phenomenology methodology. Leadership and its manifestation are reliant on the ecosystem in which leaders reside (Osborn et al., 2002). Therefore, the study of leadership must include the networks, complexities, and interconnectedness of each particular leadership position. Bryman (2004) posits that qualitative research addresses a contextual understanding: leader behavior which is understood in the context of meaning systems utilized within specific groups. Qualitative

research and phenomenology in particular, enable proximity to the participants capturing these subjective experiences through in-depth interviews to discover the best strategies and practices of the social leaders as they reside in the context of a VUCA ecosystem. As global leadership continues to shift and change due to the complexity and interconnectedness of the world, delving into the lived experience of those leading through and thriving in this environment brings valuable insights into this new dynamic leadership environment.

Strengths. Finlay (2009) discusses the four core strengths of phenomenological research. The first strength is the capturing of the lived experience in all of its complexity and ambiguity to gain first-hand insights into what the phenomenon means to the participant. This study of the subjective lived experiences of everyday leadership in their present context to explore the "lifeworld" (Finlay, 2009, p. 475) of the participant within the specific leadership landscape.

The second strength identifies the foundation of phenomenological research as the process of being open to how the phenomenon will unfold within the research. This foundational tenet requires the bracketing out any preconceived understandings to view the study with a beginners mind or with "disciplined naivete" (Giorgi as cited in Finlay, 2009, p. 476). This process connects directly with the experience rather than thinking about the experience retrospectively (Finlay, 2009).

The third strength lies in the inherent depth of description that comes from phenomenological research. Finlay (2009) further posits that in the descriptions of the lived experience, the richness and depth toe the line between art and science. By utilizing the direct words of the participants through interviews, rich descriptions can be

evoked. “[P]henomenological description aims to capture layers of complexity tapping the ambiguity and contradictions inherent in all experience” (Finlay, 2009, p. 476).

The fourth strength is the relational process that can occur between participant and researcher. This relational process has the potential to be transformational for both parties. At times, this phenomenological process elicits a level of self-reflection and exploration allowing the participant and researcher to construct new meanings beyond the prior preconceptions and potential prejudices that can aid in developing new concepts and frameworks (Finlay, 2009). For example, in Finlay’s research, she notes one study of a woman who lived with disability that through the collaborative in-depth research the woman gained valuable insights that shifted her identity. During this same study, the researcher’s preconceived ideas around disability came into question and he was able to reframe them and, in turn, aid in breaking down these widely held assumptions within his profession (Finlay, 2009). As evidenced by the strengths noted, the use of phenomenological research will enable a deeper understanding of the lived experience of these social leaders.

Weaknesses. As noted in the literature, there are some potential challenges associated with phenomenological research. One of these challenges lies in the bracketing process. This setting aside of preconceived notions or knowledge of the phenomenon is also known as *epoche*. Although *epoche* is a unique process to phenomenology, there is concern as to the extent a researcher is able to bracket their own experiences (Merriam & Tisdell, 2016). In addition, Finlay (2013) states that knowing exactly what to bracket out and how bracketing should be done is essential yet a very subjective process (Creswell, 2013). There is also a debate among authors as to

whether bracketing is useful or even possible (Finlay, 2013). Adding to the complexity of the challenge of bracketing, it has been noted that there are few sources to even help ascertain a strategy for carrying out the process of bracketing (Creswell, 2013; Klenke, 2016). An additional challenge within phenomenological research is the use of philosophical constructs to guide the research. As noted by Creswell (2013) "phenomenology requires at least some understanding of the broader philosophical assumptions" (p. 83) which can be abstract and difficult to comprehend relative to the framework of the study. Creswell also contends that finding participants who have experienced the same phenomenon could be challenging, yet is essential to ascertaining the common essence of the shared lived experience (Creswell, 2013).

Research Design

Leadership does not function in a vacuum. Therefore, examining and exploring a phenomenon in a descriptive qualitative study, such as phenomenology, enables the capturing of the subjective experiences of the leader (Klenke, 2016). In particular, the volatile, uncertain, complex, and ambiguous landscape, the context in which much of leadership now exists, influences the choices and strategies these leaders make (Osborn et al., 2002). To ascertain the richest data which "sheds light on the complexities, ambiguities, and multifarious nature of leadership in context" (Klenke, 2016, p. 333) the population of this study were leaders who had demonstrated success within the social sphere.

Analysis unit. Therefore, the unit of analysis for this study was a social entrepreneur who was also a designated Ashoka Fellow. These social entrepreneurs are assessed through rigorous application process encompassing Ashoka's criteria for

fellowship. Those who apply must “demonstrate unrivaled commitment to bold new ideas and they prove that compassion, creativity, and collaboration are tremendous forces for change” (“Ashoka,” n.d., para. 5). Ashoka Fellows are vetted leaders and experts in their specific field, components which make them ideal for this research study.

Population. With the volatile, uncertain, complex, and ambiguous leadership landscape facing organizations today (Goh & Press, 2018; Johansen & Voto, 2013; Petrie, 2011), social leaders face challenges and opportunities in a hyper-connectivity, increasingly global, and intricately networked world (Brilliant, 2013; Codreanu, 2016; Kaivo-oja & Lauraeus, 2018). Knowing that a multitude of leaders feel unprepared to tackle this new disrupted, dynamic, and iterative environment (Goh & Press, 2018; IBM, 2010), shifting leadership capabilities is essential to developing a new type of leader who will thrive (Abbatiello, Knight, Philpot, & Roy, 2017). Moreover, Abbatiello et al. (2017) of Deloitte Consulting posit that “organizations do not just need more strong leaders, they need a completely different kind of leader” (p. 77). This new leadership landscape is demanding organizations focus not only on their employees and consumer but also on their positive influence on society at large (Agarwal et al., 2018) adding to upswell of socially driven impact (Brilliant, 2013). Due to these reasons, the population for this study was comprised of leaders who are successfully driving social change in this complex ecosystem. The population for this study was leaders who are social entrepreneurs and Ashoka Fellows. These leaders were drawn from the Ashoka website.

Sample size. The goal in qualitative research is to ascertain as much descriptive detail about a phenomenon as possible. To accomplish this level of detail, the sample size needed to remain relatively small (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016). In discerning this information, the intent is to ensure saturation of the phenomenon by including enough participants (Merriam & Tisdell, 2016). Such as, Merriam and Tisdell (2016) state "[i]f the purpose is to maximize information, the sampling is terminated when no new information is forthcoming from new sampled units; thus *redundancy* is the primary criterion" (p. 202). Creswell (2013) indicates that an ideal sample size in a phenomenological study would be between 5 to 25 participants. Therefore, in this endeavor, the study used a sample size of 10 and used purposive sampling inclusive of specific criterion utilizing maximum variation.

Purposive sampling. This nonprobability sampling technique is utilized within qualitative research to ascertain the most effective sample through deliberate choice. According to Creswell (2013), the three consideration of this type of sampling are: deciding upon the participants, they type of strategy involved, and the number of participants in the sample. Phenomenology, by definition, requires that all participants have experience with the phenomenon being studied within the research (Creswell, 2013; Merriam & Tisdell, 2016). In addition, for the purpose of this study, maximum variation, selecting participants from a broad spectrum (Etikan, Musa, & Alkassim, 2016), as well as criterion were applied as the strategy to designate the social entrepreneurs to be interviewed to achieve optimal saturation. Using purposive sampling, the participants selected had shared a common lived experience of being a social leader within a technology-rich ecosystem.

Participation selection and sampling frame creation. The participants for this study included Ashoka Fellow social entrepreneurs. To begin a master list of participants, the publicly available Ashoka website was accessed at https://www.ashoka.org. The website offers public listings of all Ashoka Fellows in the United States and where each Ashoka Fellow page lists social entrepreneur's name and organizational website. The list of potential participants was curated from this organizational website to procure contact information and stored in an Excel spreadsheet. This spreadsheet included: first name, last name, organization, phone number, e-mail address, and mailing address for each entry. The following steps were used to compile potential participant information:

1. The researcher accessed a web browser and visit https://www.ashoka.org/en
2. From the Ashoka website's top navigation menu, the clicked "Our Network"
3. From the dropdown menu selected and clicked "Ashoka Fellows"
4. On the resulting page, scrolled down to locate "Find Ashoka Fellows" text box
5. Under the text box, clicked on the orange link labeled "search options"
6. Three new text boxes appeared below the "Find Ashoka Fellows" text box
7. Using the text box labeled "Filter by Country", selected "United States" from the dropdown menu
8. After selecting "United States", clicked on the "search" button. As of December 2, 2018, this result yielded 235 Ashoka Fellows
9. Visited each Fellow's organization's website;
10. Searched publicly accessible contact information for the e-mail address, phone number, and mailing address for each Fellow.

11. When unable to procure this information on the Fellow's website, they accessed the LinkedIn profile of the Fellow to obtain the contact information necessary.
12. Columns were added to note if potential participants meet inclusion criteria to determine feasibility as a participant and eliminated those who do not meet this criterion.
13. Columns were added to identify geography and industry sector for maximum variation.
14. Utilizing the maximum variation enabled sample to be diverse and further cull the list of potential participants.
15. An updated list was kept allowing for those participants who chose to participate but wished to withdraw from the study.

Criteria of inclusion. The participant needed to meet the following inclusion criteria to be considered for the study:

- An Ashoka Fellow, and
- Resides in the United States.

Criteria of exclusion. The criteria for exclusion were as follows:

- Any participant unwilling to be audio or video recorded for the interview,
- Any participant who is a non-English speaker,
- Any participant not available to be interviewed prior to February 28, 2019.
- Any participant who is unwilling to acknowledge consent of participation verbally or via e-mail in the study.

Purposive sampling maximum variation. To ensure a diverse and rich list of participants, the criteria for maximum variation for heterogeneity sampling was applied in relation to:

1. Geographic location—which will be noted and assessed to ensure participants are from varying regions within the United States, and
2. Social innovation sectors—which will be assessed to ensure a broad cross section of industries are applied in the participant base.

Protection of Human Subjects

The protection of human subjects has been a significant concern in academic research since the mid-1970s. To combat the use of inappropriate and sometimes dangerous unregulated research, the National Research Act was enacted in 1974. This law marked the inception of the National Commission for the Protection of Human Subjects (United States, 1978). This research study has been developed in a manner that is in accordance with Pepperdine University's guidelines to protect human subjects through Institutional Review Board (IRB) protocol. The requirements noted follow Title 45, Part 46 of the U.S. Code of Federal Regulations. All Pepperdine University students conducting research on human subjects are required to meet the IRB standard for data collection process prior to contacting participants (see Appendix A).

Informed consent. IRB protocol necessitates Informed consent as a foundational element of conducting research with human subjects (Pepperdine University Institutional Review Boards, 2009). The following steps were used to obtain informed consent from each participant:

1. Each potential Ashoka Fellow was phoned and/or e-mailed utilizing a standardized recruitment script (see Appendix B). This script gave information on the researcher and serves to measure the Fellow's interest in being a participant in the study.
2. After contact was been established and interest shown, the potential participant was e-mailed the recruitment /informed consent letter (see Appendix C).
    a. The standardized recruitment letter contained information on the objective of the study, the data collection process, the nature of the study, and informed the potential participant that if they chose to participate they would be interviewed either by audio or video and these sessions will be recorded.
    b. For the potential participant to fully comprehend the importance of the study and their part in that process, the purpose of the research was included in the recruitment letter to each potential participant. The purpose that was shared with potential participants was to understand: (a) the common leadership strategies and practices that social entrepreneurs employ, (b) the challenges that social entrepreneurs face in their leadership journey, (c) the practices social entrepreneurs use to measure leadership success, (d) the role of technology in their day-to-day leadership, and (e) the recommendations social entrepreneurs would make for future leaders of systems-wide change.

c. This e-mail was a verification of the potential participant's willingness to be included in this study and requested the availability of the participant to be interviewed as well as the preferred medium for communication. It confirmed geography and industry sector to ensure maximum variation.
d. In addition to the recruitment letter the e-mail contained, an informed consent form, intent to destroy all recorded interviews after transcription if desired by the participant, and a copy of the research questions along with the corresponding interview questions.

3. Once participants were confirmed and their willingness to participate was determined, the participant acknowledged consent verbally or via e-mail to the researcher prior to being interviewed.
4. This process was repeated until 10 interviews are conducted.

Confidentiality disclosure. To ensure the confidentiality of all participants, the researcher alone had access to the recorded interviews, as well as the redacted names or potential identifiers within the transcripts. In addition, Zoom encrypts "all presentation content at the application layer using the Advanced Encryption Standard (AES) 256-bit algorithm" (Zoom, 2017, p. 2). Recorded data were saved and stored under pseudonym and transcribed using that protocol, for those participants requesting anonymity in the findings. Subject's names were associated with the recording and pseudonyms (e.g. P1-P15) were used. Subjects were identified as P1-P15 so no records had personally identifiable information. Within three years of the conclusion of the study, all physical

copies, recordings and transcriptions will be erased or destroyed that are stored on the password protected computer.

Storage protocol. "Cloud recordings are processed and securely stored in Zoom's cloud once the meeting has ended" (Zoom, 2017, p. 3). Within 72 hours of the recording, all digital recordings were downloaded and stored electronically on a password secured laptop. After which, all data on the encrypted Zoom server was deleted. The password protected data on the researcher's laptop was stored on a secure cloud server. All local and cloud data will be erased or destroyed within three years of the conclusion of the study.

Information and any known risks associated with participation. Participation in this study poses minimal risk. Due to the length of the interview, there was a slight risk in the participant feeling uncomfortable with the questions or fatigue from the length of time for the interview. If this was the case, the participant was able to choose to leave the study at any time. The interviews and transcripts were held on a password protected laptop and a two-factor authentication password protected secure cloud server so there was minimal risk that the information would be hacked. To further minimize these risks, pseudonyms were used for all participants requesting anonymity.

Risk minimization protocol. There was no known risk to the participants in this study. If at any time the participant wanted to choose to opt out of the study, they could for any reason. The participant could also choose to only answer those questions for which they felt comfortable during the time of the interview.

Voluntary statement. Participation in this research study was entirely voluntary and the participant was able to opt to leave from the study at any point. The participant

could withdraw their consent at any time and stop their participation without repercussion. There were no legal claims, rights or remedies waived by participating in this research study.

Expected benefits of participation and payment or no payment for participation. Although there are no direct benefits for those choosing to participate in the study, it was anticipated that there would be benefits to society. The potential benefit to the participant is the knowledge that their contribution and expertise contributed to the greater body of literature on leadership to assist current and future leaders in a new dynamic global environment. Those who participated were offered a copy of the findings at no cost. There was no payment and/or compensation for being a participant in this study.

Data Collection

This study used interviewing as its method of collecting data. Data collection was an extensive process from gaining permissions to the actual collection and storage of data. Creswell (2013) describes data collection as a series of interrelated actions that reside in a "circle" (p. 145). These actions begin with locating a site or individual and run through the process of gaining data to, ultimately, storing the data (Creswell, 2013). Within this circle of collection qualitative the outcome is language data, unlike quantitative data which is presented in the form of numbers (Merriam & Tisdell, 2016; Polkinghorne, 2005). Although qualitative data can be composed in a myriad of ways, such as, through observation, documents, interviews, and artifacts, phenomenology data collection uses a foundation of multiple, in-depth interviews (Creswell, 2013; Englander, 2016; Merriam & Tisdell, 2016). Through these interviews, the data collected

was a result of the interface between the interviewer and the interviewee (Polkinghorne, 2005).

The participants were interviewed at an agreed upon date and time using Zoom, a video conferencing software. Utilizing an encrypted video conferencing software enabled interview participants to engage within the data collection timeframe as it was not dependent on in-person contact. If there were technical challenges, the interview was conducted through a phone interview. All interviews were recorded using a portable recording device for a phone interview or through the video conferencing software. Only participants amenable to being recorded were selected to participate.

Interview techniques. According to Klenke (2016) "Qualitative interviewing provides a way of generating empirical data about the social world of informants by asking them to talk about their lives" (p. 125). The interview process can provide a descriptive look at the lived experience of a particular phenomenon by utilizing in-depth interviewing techniques. This in-depth interview structure employs an interactive relationship with the participant while exploring the complexities, contradictions, and even counterintuitive matters within the interview (Klenke, 2016). Therefore, the interviews become the construction of knowledge and understanding created by both the interviewer and the interviewee (Klenke, 2016). This construction goes beyond that which can only be observed or that is visible and explores how the participant interprets their lived experience (Merriam & Tisdell, 2016). Adding to the depth of understanding, semi-structured interviews utilize closed and open-ended questions allowing each individual respondent to define the phenomenon in their own unique way and enables a more holistic guide the interview process (Merriam & Tisdell, 2016). Semi-structured

interviewing produces the consistency of structured questions for each participant, yet the flexibility to dig deeper within a line of inquiry (Klenke, 2016). To gain an in-depth level of knowledge, this phenomenological study employed one-on-one, in-depth, semi-structured interviews through an online based video conferencing software, Zoom, or if necessary by phone.

Interview protocol. Utilizing a semi-structured interview protocol "elicit[s] rich, focused, meaningful data that captures, to the extent possible, the experiences of the participants" (Castillo-Montoya, 2016, p. 813). By following a process for each interview, this data, in turn, strengthens the quality of the information procured creating solid foundation of research (Castillo-Montoya, 2016). According to Castillo-Montoya (2016) following a four-step framework to develop a protocol aids in developing an effective research instrument. This framework consists of: aligning interview questions with the guiding research questions, developing inquiry-based dialogue, getting feedback on the interview protocol, and using a pilot for the protocol (Castillo-Montoya, 2016). To elicit rich descriptive data for this study, a protocol of interview question was developed to inform the interview process.

Relationship between research and interview questions. The four-phase approach of Castillo-Montoya (2016) was used to develop the interview protocol for this study. The protocol contained open-ended inquiry to further inform the four guiding research questions. The initial research questions and subsequent interview questions are included in Appendix D.

Validity and reliability of the study. The foundation of quality within all research resets in the rigorous application of structure and process in the

conceptualization of a study (Merriam & Tisdell, 2016). Therefore, to maintain a study's validity and reliability it was paramount to preserve the quality and rigor. Particularly in research spanning the field of leadership, "[r]igor in qualitative data analysis is a requisite for maximizing the potential for meaning making (which is also an essential function of leadership)" (Klenke, 2016, p. 42). Moreover, determining validity of a study rests in the truthfulness of the interpretation whereas the reliability is related to the process in which this truth was determined (Klenke, 2016; LeCompet & Goetz, 1982). Within the body of qualitative research, scholars note five validation strategies to strengthen the credibility of the research being done as:

- *prolonged engagement* with participants to develop and build trust (Creswell, 2013; Klenke, 2016);
- *peer debriefing* with colleagues who are not involved in the research to help ascertain blind spots as well as ask knowledgeable questions to help foster additional meaningful interpretations (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016);
- *member checking or respondent validation* is an informal process of soliciting reactions of participants to assure credibility and respondent review of data ascertain from their interviews (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016);
- *negative case sampling* uses the alternate cases to prove why this research is different enables more comprehensive analysis (Carcary, 2009; Creswell, 2013; Klenke, 2016); and

- *reflexivity* is self-awareness as well as self-reflection of the researcher's preconceived notions and biases which may impact the validity of the study to better monitor and repress them (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016).

To increase credibility and validity within this study, three of the five strategies were applied: prolonged engagement with participants, peer debriefing, and reflexivity. With this foundation of rigor in mind, this study utilized validity and reliability of the data collection instrument through four phases: prima-facie validity, peer-review validity, expert review validity, and instrument reliability.

Prima-facie validity. After an extensive review of literature, this study has interview questions which correspond to each of the guiding research questions. These questions, at face value, appeared to focus on and engage in exploring the phenomenon of the study. These initial questions were iterated and challenged by a peer review panel in the second phase of establishing the data collection instrument's validity.

***Peer-review validity*.** To ensure further validity and credibility of the data collection instrument, a peer review panel assessed the interview questions, playing "devil's advocate" (Creswell, 2013, p. 251) to critically assess and review the application and applicability of the interview questions. The five research questions and corresponding interview questions are found in Appendix D. Feedback from peer-reviewers were sought (see Appendix E). Subsequent changes were made to the order and phrasing of questions within the interview protocol.

After receiving the results from the peer review process, consensus was reached between the peer reviewers. Based on the suggested modifications, interview questions were shifted for clarity. Interview question two was broken into separate questions to identify the education/training or work experiences that helped the leader prepare to lead systems-wide change and additionally the personal characteristics which prepared the leader to lead systems-wide change. One additional modification was accepted to interview question number five to further delineate leadership success. This question was broken into one question delving into the leader's definition of leadership success and one focused on what their description of leadership success looked like. The results of the peer reviewed questions are listed in Table 5.

***Expert review validity*.** For the expert review validity, the researcher's dissertation committee served as the expert panel for the validity review process if consensus is not reached. The expert review committee was comprised of members who have professional and academic knowledge with respect to the research study. As the peer review led to a consensus, it was not necessary to utilize the expert panel to review the interview questions. The final results of the interview questions, aligning with the guiding research questions, include the modifications reached through the peer review consensus process. The results of the expert review validity process and final interview questions are listed in Table 5.

Table 5

Research Questions and Corresponding Interview Questions (Peer Reviewed and Final)

Research Questions	Corresponding Interview Questions
RQ1: What common leadership strategies and practices do social entrepreneurs employ?	IQ 1: What leadership practices and/or techniques have helped you be successful as a social entrepreneur? IQ 2: What education/training or work experiences prepared you to lead systems-wide change? IQ 3: What personal characteristics prepared you to lead systems-wide change?
RQ 2: What challenges do social entrepreneurs face in their leadership journey?	IQ 4: What challenges have you faced in leading systems-wide change within and outside your company? IQ 5: How did you overcome these challenges?
RQ3: How do social entrepreneurs measure leadership success?	IQ 6: How do you define leadership success? IQ 7: How do you describe your leadership success? IQ 8: How do you measure and track your success as a social entrepreneur?
RQ4: What is the role of technology in your day-to-day leadership?	IQ 9: What is the role of technology in your day-to-day leadership? IQ 10: What challenges do you face pertaining to technology in your day-to-day leadership?
RQ5: What recommendations would social entrepreneurs make for future leaders of systems-wide change?	IQ 11: What advice or recommendations would you give to future leaders? IQ 12: Is there anything else you would like to add?

Instrument Reliability

Reliability is concentrated on the replicability of research findings. In such, instrument reliability is determined by the probability that the data collection instrument produces consistent results when used repeatedly (Kumar, 2014). Although there is much discussion over the reliability of qualitative instruments, this controversy is, in large, part driven by the challenge in replicating the exact conditions of the social phenomena under which data were originally (Carcary, 2009; Kumar, 2014). To elicit consistent results over time, the use of an "audit trail" (Merriam & Tisdell, 2016, p. 252) allows the study to be authenticated. To increase a study's trustworthiness, the audit trail details how data were collected, categories ascertained, and how choices were developed during the study (Carcary, 2009). A more detailed description comes from Merriam and Tisdell (2016):

> [G]ood qualitative research gets much of its claim to validity from the researcher's ability to show convincingly how they got there, and how they built confidence that this was the best account possible. This is why qualitative research has a special need for project history, in the form of a diary or log of process. (Richards as cited in Merriam & Tisdell, 2016, p. 252)

- *Recordkeeping*. In an effort to ensure replicability of the study, a recordkeeping method was utilized including consistent documentation of interactions with the data throughout the data collection and analysis process (Carcary, 2009; Merriam & Tisdell, 2016). These records were stored on a password secured laptop.

- *Pilot session.* To strengthen reliability and determine the feasibility of a study, a pilot study was conducted. This pilot was used to help develop, refine, and test data collection instrument prior to the full study being implemented (Darnell, 2018; Kumar, 2014; Reynaldo, 2017).
- *Review frequency*. To ensure added reliability and accuracy of the data, at least two rounds of reviews of the recorded interviews were implemented after collection.

Statement of personal bias. One of the distinctions of the phenomenological method is the call to identify and suspend all biases and presuppositions in regards to the phenomenon being studied (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016). As such, it is imperative to explore and examine "personal prejudices, viewpoints, and assumptions" (Merriam & Tisdell, 2016, p. 27) so as to observe the phenomenon without projecting personal bias which could, in turn, distort or filter the data. In phenomenology, there are two ways to mitigate personal bias, bracketing and epoche.

Bracketing. In the qualitative research process, the researcher serves as a component of the data collection instrument (Creswell, 2013). Therefore, understanding any personal biases that may impact the study is a critical element of the overall research design. This process, bracketing, is the method of identifying any preconceived assumptions or understandings about the phenomenon being studied (Creswell, 2013; Klenke, 2016; Merriam & Tisdell, 2016). In following the practice of bracketing, this researcher has identified these personal biases in relation to the research study:

1. Two decades of experience working with business leaders and entrepreneurs which shapes the way she viewed leadership and entrepreneurs as leaders.
2. Strong technology background from an undergraduate degree in communication which was focused on technology, to years of coding and building websites. This familiarity with technology and the flow of communication and information through technology has shaped the way she approached technology's integration with leadership and social entrepreneurs.
3. Based on past experiences and academic studies in global leadership, has own knowledge of the impact that technology had on leaders and social entrepreneurs.

Epoche. In addition to bracketing, by identifying and acknowledging any potential biases but they also must be set aside through the practice of epoche (Merriam & Tisdell, 2016). Epoche is the method setting aside any preconceived assumptions or understandings about the phenomenon being studied. It is an opportunity to continually identify these biases, through bracketing, and set them aside to see the phenomenon, unencumbered, as it emerges (Finlay, 2009; Giorgi, 2012; Merriam & Tisdell, 2016). A more descriptive explanation comes from Moustakas (1994) as he states that in epoche "no position whatsoever is taken; every quality has equal value. Only what enters freshly into consciousness, only what appears as appearance, has any validity at all in contacting the truth and reality. Nothing is determined in advance" (p. 34). To see the phenomenon as it is unfolding in its true state (Finlay, 2008, 2009, 2013; Giorgi, 2012; Moustakas, 1994), a reflective practice was used, through metacognition and reflective

journaling, to continually reevaluate any potential biases to set aside her experience in the process of epoche.

Data Analysis

"Phenomenology is a rigorous descriptive-analytical approach that is governed by three interrelated processes; phenomenological reduction, description, and search for essences" (Giorgi as cited in Klenke, 2016, p. 212). Once the first step of data analysis has been completed through the bracketing and epoche procedure of phenomenological reduction, the process of data collection and subsequent analysis and the search for essences began. This study's data analysis followed the phenomenological approach as identified from Moustaka's five-step approach: "bracketing and phenomenological reduction; delineating units of meaning, clustering of units of meaning to form themes; summarizing, validating, and modifying each interview; and general and unique themes for all interviews and composite summary" (Klenke, 2016, p. 213–214).

After and throughout the interview process, data analysis began with delineating units of meaning through the process of coding. As stated by Saldana (2016) qualitative code is the piece of data that "symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p.4). In this study, open coding was utilized to help identify any type of data that might be applicable. This process was most relevant at the beginning of the coding to be open to whatever might appear in the interview transcripts (Merriam & Tisdell, 2016). The next step within this process was creating categories from those pieces of data to group together those that appear to have a relationship. This meaning making of the

categorization process is referred to as “axial” or “analytical” coding (Merriam & Tisdell, 2016, p. 206). Although the beginning of this process can incur sizable lists, as the process continues with subsequent interview records, more meaningful expressions of data will occur through the systematic process producing fewer new categories (Merriam & Tisdell, 2016). This iterative coding process developed themes that served to organize repeating ideas within the data. In turn, that thematic grounding led to the “development of higher-level theoretical constructs… when similar themes are clustered together” (Saldana, 2016, p. 199). Utilizing the composite summary process of determining those themes that are deemed as critical to the study versus only minor identifies the overarching themes that are the essence of the phenomenon being studied (Klenke, 2016; Saldana, 2016).

Interrater reliability and validity. Another method adding reliability and validity to a study is through an intercoder agreement. Due to the subjective nature of coding, some researchers use the process of inviting multiple external coders to assess a text to discern if the constructs are shared among them (Creswell, 2013; Klenke, 2016).

Other coders. Intercoder reliability is evaluated with two or more coders categorizing data who use these categorizations to create a numerical index to identify agreement between coders (Klenke, 2016). A high degree of agreement indicates a high level of interrater reliability supporting the research findings as valid and reliable.

NVivo considerations. NVivo is a computer assisted qualitative and quantitative analysis program used to analyze large bodies of text to aid in coding and categorizing data (Klenke, 2016). Although there are strengths of computerized coding, such as reduction of bias, the lack of ability to discern greater contextual awareness and

linguistic nuances makes an external human coder a more suitable option in the study leadership (Klenke, 2016). It was determined that this research study would not utilize NVivo and rather an external intercoder, as aforementioned, to verify and validate the coding of the data.

Increased reliability of information and considerations. Utilizing an audit trail of notes, ideas, and relevant data, will increase the reliability of information. An audit trail was started upon acceptance of participant to the study and continued through the entire scope of the research. In addition, all transcriptions were reviewed a minimum of two times for increased reliability.

Review of transcription considerations. In qualitative interviews, it is imperative to have a though knowledge and understanding of the transcriptions produced as well as the relevant concepts derived from them. Moreover, reviewing the transcripts multiple times can also suggest new related concepts and themes (Klenke, 2016). As such, the transcriptions were reviewed a minimum of two times to fully understand the transcriptions and open the possibility for new connected concepts and ideas.

Summary

This study utilized a qualitative phenomenological methodology to discern the essence of the lived experience facing social leaders in a VUCA ecosystem. Within Chapter 3 there is an overview of the methodology of the study, comprised of an extensive discussion of: the nature of the study, methodology, research design, data collection, interview techniques and protocol as well as techniques for performing valid and reliable research.

Chapter 4: Findings

The purpose of this phenomenological study of social entrepreneurial leaders was to identify the best strategies and practices they employed, the challenges they faced on their journey, how they measured success, technology's role in their leadership, and the recommendations they had for future leaders entering this volatile, uncertain, complex, and ambiguous environment. To ascertain this information, the research study sought to answer the following five research questions:

***RQ1*:** What common leadership strategies and practices do social entrepreneurs employ?

***RQ2*:** What challenges do social entrepreneurs face in their leadership journey?

***RQ3*:** How do social entrepreneurs measure leadership success?

RQ4: What is the role of technology in your day-to-day leadership?

***RQ5*:** What recommendations would social entrepreneurs make for future leaders of systems-wide change?

To fully explore the five research questions, an interview protocol was developed. The interview protocol consisted of eleven open-ended questions designed to respond to the stated research questions which was approved through an inter-rater and validation process. This achieved validity and reliability of the interview protocol through: prima-facie validity, peer-review validity, and instrument reliability. After the interview protocol was deemed appropriate, the following eleven interview questions were employed for this study:

1. What leadership practices and/or techniques have helped you be successful as a social entrepreneur?

2. What education/training or work experiences prepared you to lead systems-wide change?
3. What personal characteristics prepared you to lead systems-wide change?
4. What challenges have you faced in leading systems-wide change within and outside your company?
5. How did you overcome these challenges?
6. How do you define leadership success?
7. How do you describe your leadership success?
8. How do you measure and track your success as a social entrepreneur?
9. What is the role of technology in your day-to-day leadership?
10. What challenges do you face pertaining to technology in your day-to-day leadership?
11. What advice or recommendations would you give to future leaders?

Employing the instrument, participants responded to the eleven interview questions. Each participant answered the questions with as much information as they deemed appropriate. These responses provided rich descriptive data informing the best leadership strategies and practices of social entrepreneurs demonstrating social impact in a VUCA environment. Chapter four provides details on the participants of the study, the data collection process, the data analysis process, and the interrater review procedure as well as detailing the findings derived from each of the interview questions.

Participant

To determine the findings of this research, ten participants were interviewed. The participants interviewed for the study had been awarded an Ashoka Fellowship and met

the criteria for inclusion at the time of their participation. These social entrepreneur leaders were all located in the United States and had demonstrated significant success within the social sector having been vetted by Ashoka through their fellowship process. The social entrepreneurs were chosen from the following industries: workforce development, social justice, career counseling, education, foster care, nutrition, addiction recovery, shared-ride transportation, recycling, as well as diversity, equity, and inclusion to reach maximum variation within industry sectors. The same maximum variation was applied to ensure a variety of geographic locations. The social entrepreneurs interviewed were located in: West Virginia, Texas, Florida, Maine, Minnesota, Oregon, Colorado, Massachusetts, and two located in California.

Data Collection

To attain the participant pool, purposive sampling was utilized. The participants for the study included Ashoka Fellow social entrepreneurs. The data collection process began with a master list of 3142 potential participants which were curated from the publicly available Ashoka Fellow listing on the Ashoka website https://www.ashoka.org. The list of potential participants was refined through the search filter and searching for those Ashoka Fellows in the United States. This refined search produced an initial list of 235 potential participants. After obtaining approval on December 17, 2018, from Pepperdine University's IRB, data collection began on December 19, 2018. Data collection continued from late-December of 2018 until mid-February of 2019. All initial contact with potential participants utilized the standard recruitment script approved through the IRB process.

From December 19 through the end of 2018, 31 recruitment letters were sent to qualified applicants. Of the 31 sent, three replied in the affirmative, eight replied with a response of no interest, and 20 did not respond to the e-mail. Two interviews were procured from the first batch of recruitment letters sent. In January, an additional 71 recruitment e-mails were sent to potential applicants. Of the 71, nine responded in the affirmative, ten responded indicating no interest, and 52 were non-responsive. This second set of recruitment letters yielded eight interviews for a total of ten interviews. Saturation was reached at ten interviews falling well within the range stated by Creswell (2013) as three to fifteen. All interviews were completed by mid-February, 2019.

Each Ashoka Fellow who consented to be interviewed for the study was provided with an interview protocol, and a copy of the IRB approved informed consent detailing the objective of the study, the data collection process, and the nature of the study. This documentation also acknowledged that in giving consent the participant was agreeing to the interview being recorded and that confidentiality would be maintained during the research process. Once consent was acknowledged by the participant, an interview was scheduled using the medium of their choice. Nine of the participants were interviewed using Zoom video-conferencing software, and one participant was interviewed over the phone (see Table 6).

Table 6

Participant Interviews

Participant	Interview Date	Interview Method	Length of Recorded Interview (minutes: seconds)
P1	January 18, 2019	Zoom	33:05
P2	January 18, 2019	Phone	65:21
P3	January 25, 2019	Zoom	63:45
P4	January 25, 2019	Zoom	42:37
P5	February 5, 2019	Zoom	54:03
P6	February 7, 2019	Zoom	48:17
P7	February 8, 2019	Zoom	24:40
P8	February 8, 2019	Zoom	73:42
P9	February 14, 2019	Zoom	37:01
P10	February 15, 2019	Zoom	74:44

Data Analysis

To procure the most descriptive data of the participants' lived experience, the study utilized a transcendental phenomenological research approach through Moustaka's five-step approach: achieving epoch, horizontalization, establishing meaning units and themes, developing textual and structural descriptions, and the essence of the experience (Moerer-Urdahl & Creswell, 2004). Within the transcendental framework, open and axial coding were employed to refine further the recurring themes which appeared throughout the data. The data analysis for this study began with the participant interviews. During each recorded interview the researcher took notes on intriguing ideas or thoughts of the participants lived experience. After each participant interview, the audio recordings were manually transcribed into a Microsoft Word document. While transcribing the recordings the researcher, within the framework of

epoche, used a reflective process to continually evaluate any potential biases to ensure the phenomenon was able to unfold in its true state.

Once the transcriptions were complete, pseudonyms were used to remove all identifying information and labels were assigned for each participant aligned with corresponding interview date (e.g., P1, P2, etc.). These transcripts were then sent to each participant. This process enabled the participant to ensure the accuracy of the transcribed interview. The participant was given a set amount of time to review and respond if they deemed edits necessary. Of the ten transcripts sent for validation from the participants, four responded with their approval of the transcript, two responded with minor grammatical edits, and four acknowledged validation by not responding.

After the transcriptions were updated with the necessary participant edits, the researcher employed a descriptive coding process through open coding to discern initial meanings within the data. While going through the data, horizontalization was utilized and significant statements were noted. To further analyze the significant statements, another Microsoft Word document was created to perform a second pass on the data to discern meaning units. After the significant statements were identified and meanings assigned, themes were documented. The next step entailed developing a Microsoft Excel document to group significant statements by interview questions to compare participant responses. As the significant statements, meaning units, and subsequent themes became clear, the researcher grouped these themes to inform the overarching research question.

Inter-Rater Review Process

To ensure the validity of the data analysis process, an interrater review was conducted. The process of the inter-rater review was performed by two doctoral candidates in the Organizational Leadership program at Pepperdine University in the Graduate School of Education and Psychology. These reviewers were asked to participate due to their knowledge of the subject matter as well as their comprehension and training in transcendental phenomenological data analysis. Once three interviews had been broken into significant statements, descriptive coding assigned, and grouped into themes, each reviewer was sent a copy of the password-protected Excel document to review. All identifying information for the participants was stripped before being amalgamated into the Excel document. In addition to the Excel document, a copy of the research and interview questions was sent to aid in their inter-rater review process. Each reviewer was asked to provide feedback on descriptive coding of significant statements and correlation to theme clusters including appropriateness of naming conventions.

The reviewers responded with a total of four suggested edits to the subthemes and one edit to the naming convention of a main theme. After reviewing the edits and ensuing discussion with the reviewers, one edit to the main theme was adopted and an additional subtheme was added (see Table 7).

Table 7

Inter-rater Coding Table Edit Recommendations

Interview Question	Theme Name	Suggested Edit	Finalized Theme
11	Resiliency	Be Resilient	Commit and be resilient

Note. This table is an example of the proposed suggestions from the inter-rater reviewers based on the coding document provided.

Data Display

The data displayed in the subsequent sections encompass the findings from the research questions and their related interview questions. After analyzing the data for each interview question, common themes were identified and called out. An overview of these themes includes a graph, supporting phrases and descriptions of each theme as well as supporting participant quotes. The visual summation of the participant responses and theme they pertain to within the correlating interview questions is shown in graph form. Within the eleven interview questions, 30 themes surfaced and are displayed within each question. To ensure anonymity of the participants in the reporting of the data, all responses are noted with assigned labels in correlation with the order in which each was interviewed.

Research Question One

The first research question being explored was, “What common leadership strategies and practices do social entrepreneurs employ?” To derive descriptive data on this research question, the study participants were asked three interview questions. The three interview questions which corresponded to research question number one were:

- **IQ1:** What leadership practices and/or techniques have helped you be successful as a social entrepreneur?
- **IQ2:** What education/training or work experiences prepared you to lead systems-wide change?
- **IQ3:** What personal characteristics prepared you to lead systems-wide change?

The section below provides detailed discussion of the responses from the participants as they related to the interview question. These data were used to derive themes which applied to the overall research question.

Interview question 1. What leadership practices and/or techniques have helped you be successful as a social entrepreneur? After analyzing the data from the participant responses to interview question one, three common themes surfaced: (a) Leading with a powerful vision and purpose, (b) Capitalizing on strategic leadership traits, and (c) Fostering teams and partnerships (see Figure 3).

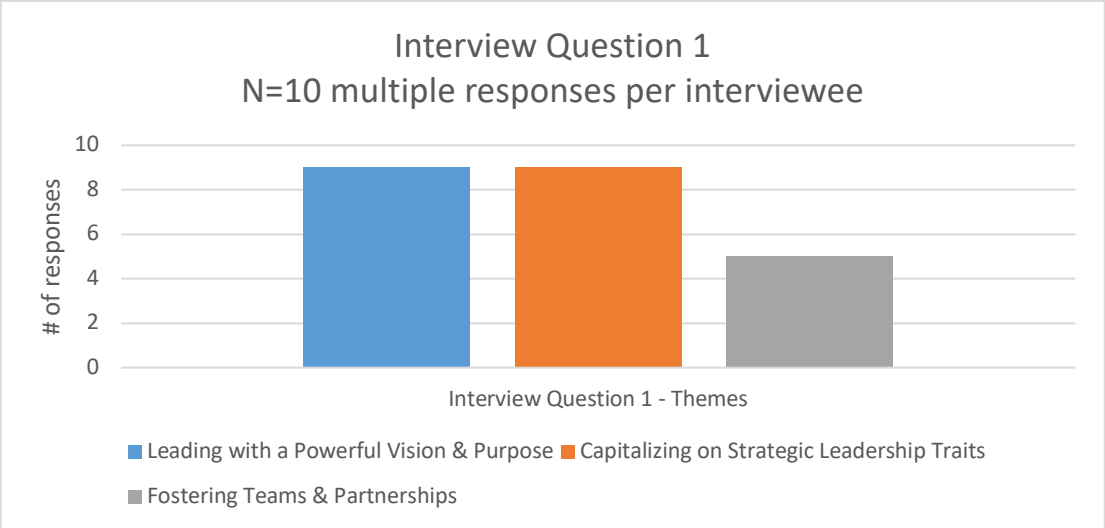

Figure 3. IQ 1: Primary themes for leadership practices and/or techniques for success as a social entrepreneur.

Leading with a powerful vision and purpose. The second theme that arose revealed nine out of the ten participants (90%) believed having a vision and/or purpose was an important strategy when leading systems-wide change. This interview question revealed phrases, opinions, or discussion that were relevant to vision and purpose as a leadership strategy. Listed below are the components respondents noted as best strategies and tactics for leading systems-wide change:

- Having a compelling vision and/or purpose (P2, P3, P4, P5, P6, P7, and P8)
- Sharing and inspiring others with a vision (P2, P3, P4, P7, P9, and P10)

Seven participants (70%) discussed the value of leading with a compelling vision and/or purpose. The following quote from P10 elaborates further on the importance of a compelling vision.

> You have to have a compelling belief and conviction, you have to be able to tell that story, you have to be able to inspire people, you have to be able to get folks to do things that they would not normally do and to get them to do that with the belief that doing it is an expression of their identity. Not for tactical, transactional, not for any of those reasons.... So, it's not about transactional incentives when you're trying to make these big changes. When you're trying to make these big changes it's about getting people to see themselves differently and when they see themselves differently then they will live out whatever narrative that kind of person lives. (P10, personal communication, February 16, 2019)

In addition to crafting a compelling vision, three participants (30%) noted their belief of a purpose greater than themselves driving their vision. The following quotes from P6 and P7 succinctly discuss purpose.

> I was setting out to do something that was important, that was national, that as far as I could tell nobody else was doing...what you're doing is so much more important than you" (P6, personal communication, February 7, 2019).
>
> "I've always thought the work at [Participant Organization] was way bigger than me as just one person. (P7, personal communication, February 8, 2019)

Along with utilizing the strategies of crafting a vision and purpose, six of the participants (60%) spoke to sharing and inspiring others with that vision. The quote below from P2 elaborates further on how a compelling vision can move others.

> "People follow vision, not the mechanics, they follow a dream, a clear and precise and ambitious dream because it brings out the dreamer in them and how they can participate in it, even if just a little bit" (P2, personal communication, January 18, 2019).

***Capitalizing on leadership traits*.** One of the most prevalent leadership practices employed by social entrepreneurs when leading systems-wide change centered on leadership traits. With nine out of ten participants (90%) indicating its importance, a multitude of leadership traits emerged as pivotal to the social entrepreneur's success. The below traits further detail those practices impacting the participants' leadership:

- Passion, commitment, conviction, confidence (P2, P3, P6, P7, P8, P9, and P10)
- Perseverance, tenacity, hard work (P3, P6, P7, and P8)
- Agile learning, open mindset (P1 and P8)
- Humility (P1 and P5)

Seven of the participants (70%) voiced that passion, commitment, conviction, and confidence were an intrinsic part of the leadership strategies and techniques they employ to create social impact. The following quote from P6 further exemplifies the qualities of not only passion but also perseverance as an effective leadership strategy.

> …you go to bed and you get up in the morning and you're able to start again. So, I think you could call it perseverance. You could call it stubbornness. You could call it passion. I would call it being able to get up in the morning and do it again, very practical, very mundane, no glamor here. When you get up in the morning you have new energy to do it again, you can think about it again, and you can think new things again. That's like a really a wonderful thing. (P6, personal communication, February 8, 2019)

***Fostering teams and partnerships*.** The third theme developed was described by five of the ten participants (50%) as the importance of fostering teams and partnerships. The following participant descriptions further detail the strategy of utilizing these critical relationships:

- Intentionally developing and empowering teams; employing distributed leadership (P3, P4, P5, P7, and P9)
- Partnerships, networks of partners (P3, P5, P7, and P9)

Five participants (50%) engaged in the practice of intentionally crafting teams to support their social missions. P7 further explains the importance of developing successful teams to further the organization.

> Even from very early on, even when it wasn't a big team with a huge staff, I tried to give a sense to everyone in the organization that they were a leader and that

> their ideas mattered and their creativity mattered. They had a lot of latitude and authority to get things done as long as it aligned with the mission and the values. I feel like I allowed lots of room for creativity and problem solving at all levels of the organization. I think that's been really important. (P7, personal communication, February 8, 2019)

Although many participants noted the importance of crafting intentional teams, four (40%) specifically discussed the benefits to partnering with others to fill skill gaps as well as fostering external partners to create more momentum for the movement. This competency was noted as a method of generating more complimentary teams and partnerships to better fulfill the social mission. Understanding what skill gaps need to be filled is further explained by P3 in the below quote.

> "I've always been good at knowing what I don't know, identify gaps and draw people in to fill those gaps for either me or what the organization needed that I could not provide" (P3, personal communication, January 25, 2019).

Interview question 2. What education/training or work experiences prepared you to lead systems-wide change? After analyzing the data from the participant responses to interview question two, two common themes surfaced: (a) Systems leader preparation, and (b) Employing adapted learning (see Figure 4).

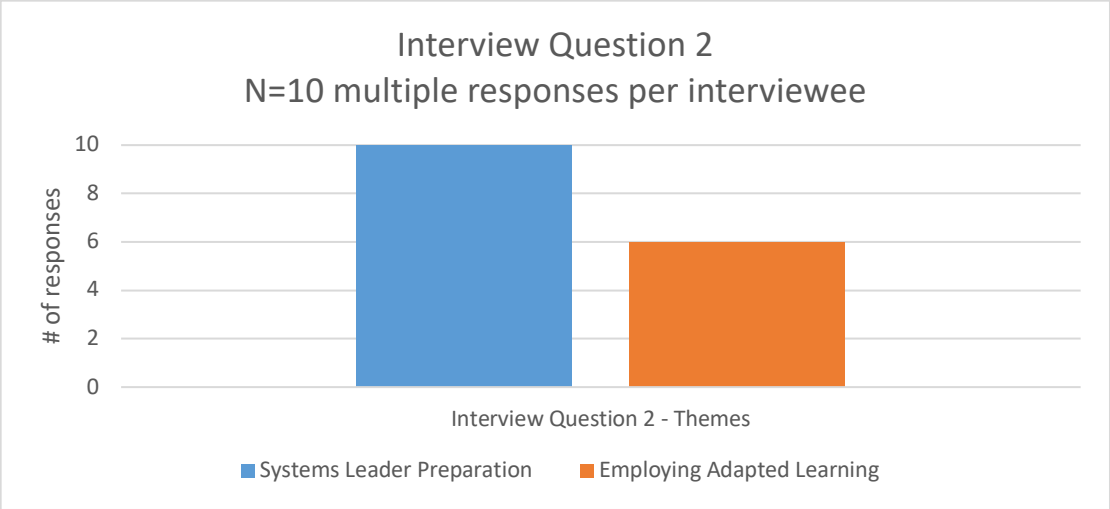

Figure 4. IQ 2: Primary themes for education/training or work experiences that prepared social entrepreneurs to lead systems-wide change.

***Systems leader preparation*.** Leadership preparation takes on many forms. Ten out of ten participants (100%) cited some form of systems leader preparation as a pathway to their success. The following breakdown provides a more in-depth look into the preparation these systems-wide leaders utilized to develop the skills necessary to drive social impact:

- Work and civic experiences, current and historical, developed a foundation to create, grow, and lead a social enterprise (P3, P4, P5, P6, P8, P9, and P10)
- Educational experiences could be directly applied to support the social venture (P6, P7, and P9)
- Life experiences; modeling during childhood and/or finding mentors to engage with (P1, P8, P9, and P10)

Seven of the participants (70%) indicated that their work and civic experiences influenced their success. The quote from P5, demonstrates the implication of civic and business experience.

> Learning a variety of industries in some way shape or form sitting on public company boards and being exposed to big problems….if I had to point to one area of business expertise that's really been helpful, it's my involvement in the civic arena. (P5, personal communication, February 5, 2019)

Formal academic experience added to the foundation of experience for four participants (40%), as represented in the quote from P7.

> I have a master's degree in public affairs and my concentration is in nonprofit management and I have a certificate in social entrepreneurship. I am very formally educated to do this stuff. There are ton of pluses to that. I actually still go back to notes and textbooks all the time. A lot of my friends feel like they got the degree and it never applied to their lives. I'm the opposite, what I studied has been really beneficial. (P7, personal communication, February 8, 2019)

Another four participants (40%) also noted that their life experience prepared them to lead systems-wide change. A quote from P10 expands on their exposure to and experience with hacking which prepared to take on systems change.

> Being a hacker actually helped a lot because hacking, I'm probably in that generation where computers were still new and so the whole thing about hacking in order to hack something, any system, you have to understand it well enough to get it to do something it wasn't designed to do and so that applies to social change, social engineering, all this stuff. I mean I'm hacking now, we hack culture now. (P10, personal communication, February 16, 2019)

Employing adapted learning. The second foundation of leadership preparation is adapted learning. Six of the ten participants (60%) identified specific learning

techniques as a part of their preparation for leading systems-wide change. This learning strategy is further explored in the areas listed below:

- Agile, nimble learning (P1, P2, P7, and P9)
- Learning in real-time; learning organizations (P1, P4, P5, and P7)

Four participants mentioned the use of agile learning to support their preparation to lead. P1 discusses the process of moving forward, pathways, and adapting along the way.

> "There is no perfect path. There are just pathways and every pathway has landmines and you get tripped up on landmines and then you learn and you adapt and you go forward" (P1, personal communication, January 18, 2019).

Of the ten participants, four (40%) indicated that learning in real-time was important to their preparedness. P5 explains further how this adaptive learning style has supported their organization.

> "We are a learning organization. We don't pretend to have all the answers but we are out doing it and gathering data from it and learning from that data and applying it on a current time basis. We are solving a problem" (P5, personal communication, February 5, 2019).

Interview question 3. What personal characteristics prepared you to lead systems-wide change? After analyzing the data from the participant responses to interview question three, three common themes surfaced: (a) Strategic leadership characteristics, (b) The power of agency and (c) A driving purpose (see Figure 5).

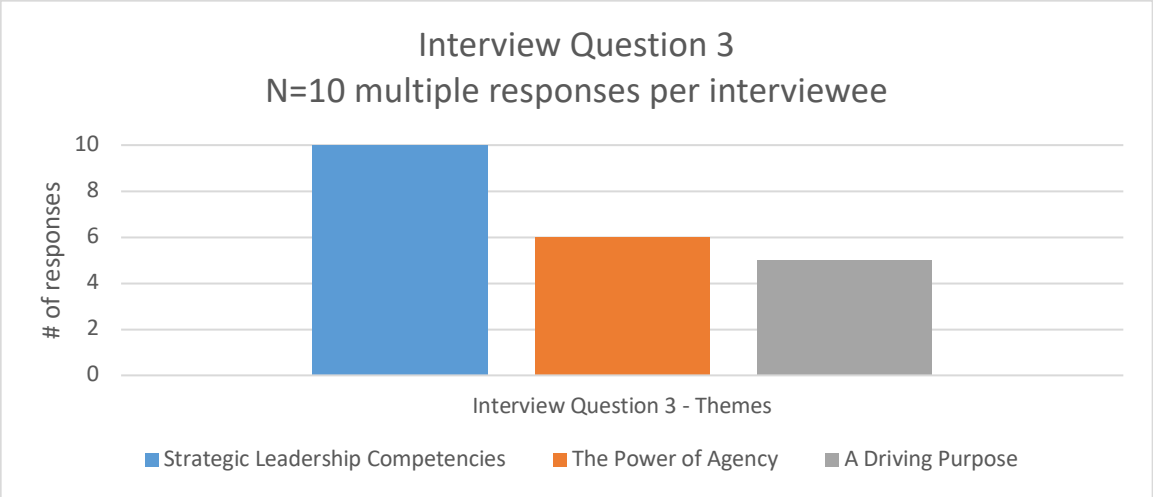

Figure 5. IQ 3: Primary themes for personal characteristics that prepared social entrepreneurs to lead systems-wide change.

***Strategic leadership competencies*.** The first prominent leadership characteristic noted by the participants were leadership competencies that were foundational to their success. Ten of the ten participants (100%) noted specific competencies that enhanced their ability to lead systems-wide change. Below are the strategic leadership competencies utilized by social entrepreneurs when leading systems-wide change.

- Competencies related to cognition; business insight, strategic mindset, metacognition (P1, P3, and P10)
- Competencies related to people; developing talent, builds networks, drives vision (P4, P7, and P8)
- Competencies related to self; courage, instills trust, self-aware, manages ambiguity, being resilient, nimble learning (P1, P2, P3, P5, P6, P7, P8, and P9)

Six of the participants (60%) noted that the core competencies of instilling trust, being self-aware, managing ambiguity, being resilient, and nimble learning were effective

personal characteristics to leading systems-wide change. P4 provides deeper insight into the importance of leading in a complex and ambiguous environment.

> We are by nature working at the boundary of cultural knowledge. If you become a sector leading organization that means you are working on the boundary of what is understood and you are constantly stepping into what we don't know how to do. That's where you better be comfortable with unclarity and be willing to lead against and make decisions against imperfect information. (P4, personal communication, January 25, 2019)

Additionally, P9 discusses the importance of trust as a leadership competency in the following quote.

> "I can engender trust with people very quickly. So because, and this has happened as I've gotten older, I've learned to be more vulnerable and to really show up humbly and vulnerably, I can engender trust with people very quickly" (P9, personal communication, February 14, 2019).

***The power of agency*.** The second leadership characteristic that resonated with systems-wide change leaders was the power of agency. Six of the ten participants (60%) stated that a sense of agency allowed them to prepare for leadership within the social sector. The following sentiments further express how a sense of agency has impacted their leadership abilities:

- A feeling of being able to get things done; foreseeing the goal as achieved (P1, P6, P8, P9, and P10)
- Being ready and willing to engage in battle or fight to achieve the goal (P2, P8, and P10)

Five of the participants (50%) mentioned the sense of being able to get things done or visualizing the goal as being achieved. P8 detailed how foreseeing the goal as completed in their mind was a powerful motivator to fixing the problem. Subsequently, P10 spoke to knowing the role of agency and its importance in leading change.

> For me, I saw recycling fixed in my mind right away ten years ago, I saw it fixed it was like I could envision it. I still can, it's going to be done and that's the kind of shining allure. (P8, personal communication, February 8, 2019)
>
> …for me the assumption that I had agency and importance came with being the first born and I think that assumption of agency is necessary if you're going to change things. Who appointed you to be someone who could just change? Well, kind of, I did. I don't know I just feel like I can. So, I think being imbued with that first bornness helped me a lot. (P10, personal communication, February 15, 2019)

Being willing to engage in battle was also noted by three of the participants (30%) as a crucial characteristic to moving forward in systems-wide change. The following statement from P10 further describes this battle-ready characteristic.

> I think a personal characteristic that doesn't get enough attention is that you have to be determined to fight and that winning doesn't matter. It's not about being able to see your way to victory. It's about being willing to fight and to not quit and to get up when you're knocked down...to keep coming at them until they get tired and just go away...to be willing to take on fights that you can't win. (P10, personal communication, February 15, 2019)

A driving purpose. The third characteristic noted as critical to creating systems-wide change was the sense of a driving purpose. Five of the participants (50%) alluded to a having an underlying purpose as a component to their success. The following phrases provide further insight into this characteristic:

- Underlying motivation for taking on a cause (P1, P2, and P3)
- Steadfastness of vision; seeing the end in mind (P5 and P8)

Two of the participants (20%) noted the importance of being steadfast and driven toward a greater vision, beyond themselves. The following quote from P5 succinctly addresses the power of steadfastness and purpose transcending generations.

> …the largest manmade object under construction today. It is a mountain carving in South Dakota, Crazy Horse. The family has been dedicated to it the last 60-70 years. They have never taken any public sector money for it. I got to know the family over the last 15 years. I sat with the mom who has since died. A wonderful 85-year-old tiny little woman in South Dakota. I said to her, it is too bad your husband, the original sculptor, didn't live to see the completed work and she looked at me with this piercing look and she said 'don't worry, he saw this better than you or I will ever see it'. That's vision. The decades after he died, her remaining steadfast to this vision and in tough times raising all the money privately to continue building this unbelievable structure. That is steadfast. Her family knows the disease of addiction very well. I just said, you are my role model. This is what we hope to be, what we have to be because we are not going to solve this problem in a decade. (P5, personal communication, February 5, 2019)

Research question one summary. The first research question examined, “What common leadership strategies and practices do social entrepreneurs employ?” To explore the guiding research question, three subsequent interview questions were asked of the participants:

- **IQ1:** What leadership practices and/or techniques have helped you be successful as a social entrepreneur?
- **IQ2:** What education/training or work experiences prepared you to lead systems-wide change?
- **IQ3:** What personal characteristics prepared you to lead systems-wide change?

The first research question addressed the leadership strategies and techniques utilized by social entrepreneurs leading systems-wide change. Based on the analysis of the responses from the first three interview questions, the top five themes that surfaced were: Capitalizing on Leadership Traits, A Powerful Vision and Purpose, Systems Leader Preparation, Employing Adapted Learning, and Strategic Leadership Competencies. Within research question one, the most prominent themes representing the best strategies or practices for social entrepreneur leaders were Strategic Leadership Competencies and Systems Leader Preparation. These themes represented 100% of the participants in their responses demonstrating the importance of work, academic, and life preparation as well as leadership competencies as strategies for success in systems-wide change. The findings from research question one, Strategic Leadership Competencies, were represented within the literature discussed in Chapter 2. The responses to the interview questions corresponded to the literature review related to core competencies within the areas of cognition, people, and

self-competencies. In particular, core competencies related to metacognition, building networks, managing ambiguity, being resilient, and agile learning are identified and supported by existing literature discussed in Chapter 2. The findings from the theme of Systems Leader Preparation, specifically of work, life, and academic experiences as leadership strategies, are interwoven throughout the Chapter 2 discussion but not specifically called out. Overall, nine themes were discovered through the three interview questions correlating to research question one. The breakdown of those themes is shown in Table 8.

Table 8

Breakdown of Themes for Research Question One

IQ1. Strategies and Techniques	IQ2. Education, Training, Work Experience	IQ3. Personal Characteristics
Leading with a powerful vision and purpose	Systems Leader Preparation	Strategic Leadership Competencies
Capitalizing on Leadership Traits	Employing Adapted Learning	The Power of Agency
Fostering Teams and Partnerships		A Driving Purpose

Research Question Two

The second research question asked was, “What challenges do social entrepreneurs face in their leadership journey?” To derive descriptive data on this research question, the study participants were asked two interview questions. The two interview questions which corresponded to research question number two were:

- **IQ 4:** What challenges have you faced in leading systems-wide change within and outside your company?

- **IQ 5:** How did you overcome these challenges?

The section below provides detailed discussion of the responses from the participants as they related to the interview question. These data were used to derive themes which applied to the overall research question.

Interview question 4. What challenges have you faced in leading systems-wide change within and outside your company? After analyzing the data from the participant responses to interview question four, two common themes surfaced: (a) Working at the edge of cultural knowledge and (b) Breaking through historical paradigms (see Figure 6).

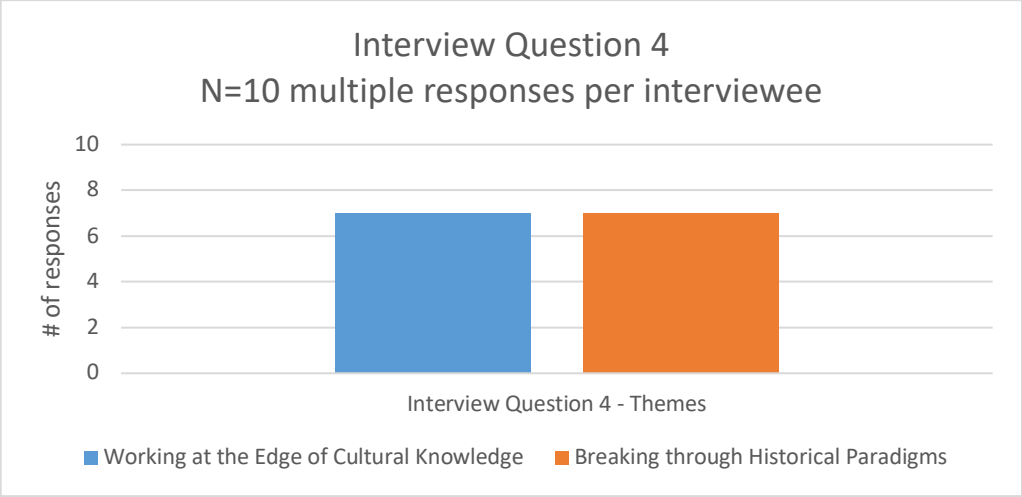

Figure 6. IQ 4: Primary themes for challenges faced in leading systems-wide change inside and outside the company.

***Working at the edge of cultural knowledge*.** The first challenge faced by social entrepreneur leaders is working on the boundaries of knowledge in their fields. Seven of the ten participants (70%) noted the challenge of the lack of cultural knowledge, understanding, awareness, and vision associated with their social endeavor. The following phrases denote a more in-depth analysis of this challenge:

- The systems issue is not fully understood, misunderstood, or there is a lack of awareness; ambiguity (P3, P7, and P8)
- Forging new pathways to create social impact (P1, P3, P6, and P7)
- Reengaging or reigniting vision toward an unclear solution (P2 and P10)

Forging a pathway to create a new social solution resonated with four of the participants (40%) as a challenge they encountered. A quote from P6 speaks to the lack of clarity, direction, and overall ambiguity as they journeyed to reach social impact.

> I had the feeling that I was reaching forward into darkness and kind of feeling my way like I really didn't know what was out there but I knew the direction I needed to go and I could see something at the end of it but how to get from here to there was a big black hole. It wasn't a hole. It was like a big black space and I just kept reaching into it. (P6, personal communication, February 7, 2019)

P7 further illustrates the role ambiguity plays in creating a unique solution to a pressing problem.

> "Systems change almost necessarily involves ambiguity… You are trying to reimagine a whole new way of doing things. In our case, a whole new economy" (P7, personal communication, February 8, 2019).

***Breaking through historical paradigms*.** The second challenge noted was the issues of working to shift entrenched beliefs, incumbent organizations, and historical experiences. Seven of the ten participants (70%) discussed the challenge of breaking through historical paradigms. Listed below are phrases to further inform this challenge:

- Dominance of deep-rooted historical systems; entrenched narratives (P4, P5, P7, P8, and P10)

- Fear of change; fear of failure (P5, P6, P7, P8, and P9)

Historical paradigms in relation to assessments have been noted as a challenge. This quote from P4 expands on the challenge.

> …we have been really dominated by being able to measure one kind of intelligence on high stakes state assessment. There's been tension for 100 years around the disconnect between what we instinctually think matters across a range of student capacity to have schools provide the preparation that a kid would need to thrive in college and the world of work. (P4, personal communication, January 25, 2019)

Within the framework of historical legacies, the below quote from P5 further informs the challenge of battling a legacy of failure in an industry sector.

> …that's the legacy of failure that we have inherited from the addiction field. It is challenging to tell our story in compelling way that convinces whoever it is we're talking to that we're not part of the problem because everything they've ever seen in this field is part of the problem.....one of the first things that I have to do is distance myself, distance ourselves from this very powerful legacy of failure. (P5, personal communication, February 5, 2019)

Adding to the challenge of historical paradigms, the dominance of industry incumbents and systems are discussed in a quote from P8.

> "…when you're trying to fix a system and an industry and there's resistance usually that's because whoever is resisting it is profiting wildly from whatever the problem is that you're trying to fix" (P8, personal communication, February 8, 2019).

Further exemplifying the deep-rooted nature of these broken historical paradigms, P10 discusses the importance of narratives in this challenge.

> …externally the biggest challenge is something I already mentioned before, it's narrative. It's the story that we tell ourselves, what's going on between our ears. It's the biggest challenge to any systems change, because history shows that you can change, actually you can change all of the systems as long as the spirit driving them is the same and are working back to serving the same purpose as the day before. (P10, personal communication, February 15, 2019)

Interview question 5. How did you overcome these challenges? After analyzing the data from the participant responses to interview question five, three common themes surfaced: (a) Tenacity,(b) Intentional adaptation, and (c) The big picture (see Figure 7).

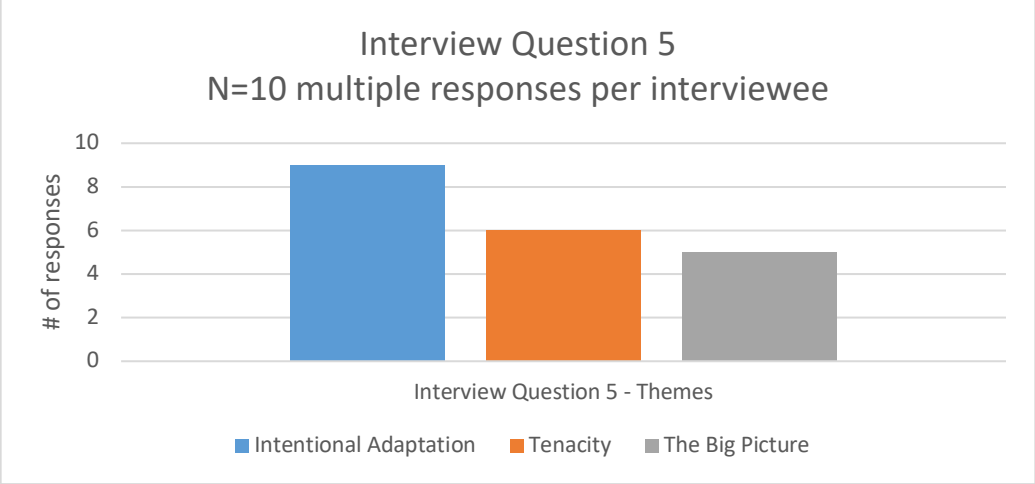

Figure 7. IQ 5: Primary themes for overcoming challenges in leading systems-wide change.

***Intentional adaptation*.** The first solution to overcoming the challenges experienced by social entrepreneur leaders was the use of intentional adaptation. Nine of the ten participants (90%) noted the use of strategic and intentional adjustments to

mitigate challenges. The phrases below give further insight into the multitude of ways leaders intentionally adapted to overcome challenges:

- Contextual intelligence; strategic planning; communication (P1, P3, P4, P5, P6, P7, P8, P9, and P10)
- Intentional metacognitive strategies were employed (P1, P4, and P5)

Understanding and capitalizing on the ecosystem of leadership was a prevailing method of tackling challenges. The following quote from P5 indicated the preemptive nature of being future-minded through proactively identifying potential upcoming trends.

> "…we get deeply involved with the preeminent researchers on the frontier so that our brand is associated with that so we are learning to integrate the knowledge of that in advance of our ability to 'measure' those things" (P5, personal communication, February 5, 2019).

Adding to the concept of contextual intelligence through recognizing the changing environment, P1 discusses the need to innovate and adapt to continue success as a social enterprise.

> "Social enterprises have to keep changing. If they stay the same, it's like a slow death. If you are not changing, you are slowly dying" (P1, personal communication, January 18, 2019).

Utilizing techniques to intentionally innovate and adapt cognition through metacognition was also used to overcome challenges. A quote from P4 addresses the concept of employing questions to reevaluate the foundational paradigms of cognition for social entrepreneurs.

> The question was, what would be able to grow our touch and reach and impact. What were we uniquely good at, beyond a whole school, that was a smaller grain size that could travel in the world, touch more people and still carry enough of our value proposition and that would be relevant and matter to a lot of people. So, we were holding that question and that's a good question set for a social entrepreneur. What does a broad cross section of the nation or the world need that your organization is uniquely able to respond to and that you would be willing to grow that works. That actually turns out to be a really hard question to get a good answer to but it is a really important question as a habit of mind for a social entrepreneur. (P4, personal communication, January 25, 2019)

***Tenacity*.** The second theme for overcoming challenges that arose was tenacity. Six of the ten participants (60%) indicated that utilizing tenacity to overcome obstacles and mitigate challenges was an effective strategy. As noted by P8, a tenacious nature is requisite for success in creating social impact.

> "I tried everything else to get the industry to do the right thing and so that's the only strategy I could finally come up with. After nine years I pretty much ran through everything trying to get the industry to do the right thing" (P8, personal communication, February 8, 2019).

***The big picture*.** Keeping the vision, mission, and purpose at the forefront was the third strategy social entrepreneurs used to overcome challenges. Four of the ten participants (40%) identified keeping people connected to the big picture was essential. P3 elaborates on how the work, combined with the vision aids in moving beyond obstacles.

> And some of it is collecting data to be able to demonstrate to the others who are not doing this work, this is a real problem and it can be solved. Here is the solution looks like and using that to influence. That is how the system is going to change. That is where we are going to have the greater impact. We have to do the work on the ground to be able to create the bigger shift. To be able to move the needle. (P3, personal communication, January 25, 2019)

Research question two summary. The second research question examined, "What challenges do social entrepreneurs face in their leadership journey?" To explore the guiding research question, two subsequent interview questions were asked of the participants:

- **IQ 4:** What challenges have you faced in leading systems-wide change within and outside your company?
- **IQ 5:** How did you overcome these challenges?

The findings for research question two revealed the challenges social entrepreneurs faced in their leadership journey. The most prominent themes that surfaced were Intentional Adaptation, Working at the Edge of Cultural Knowledge, Breaking Through Historical Paradigms, and Tenacity. The response to Intentional Adaptation indicated it was the most pervasive theme with the highest response rate of 90%. With a significant response rate there is a clear correlation to utilizing adaptive strategies to overcome the challenges within a complex environment. The findings from research question two were found in the discussion on the literature; in particular, the use of contextual intelligence in understanding and capitalizing on the current volatile ecosystem and the approach of utilizing intentional metacognitive strategies to

reevaluate historical paradigms. Five themes surfaced for research question two and are shown in Table 9.

Table 9

Breakdown of Themes for Research Question Two

IQ4. Leadership Challenges	IQ5. Overcoming Challenges
Working on the edge of cultural knowledge	Intentional Adaptation
Breaking through Historical Paradigms	Tenacity
	The Big Picture

Research Question Three

The third research question asked was, “How do social entrepreneurs measure leadership success?” To derive descriptive data on this research question, the study participants were asked three interview questions. The three interview questions which corresponded to research question number three were:

- **IQ 6:** How do you define leadership success?
- **IQ 7:** How do you describe your leadership success?
- **IQ 8:** How do you measure and track your success as a social entrepreneur?

The section below provides detailed discussion of the responses from the participants as they related to the interview question. These data were used to derive themes which applied to the overall research question.

Interview question 6. How do you define leadership success? After analyzing the data from the participant responses to interview question six, three common themes surfaced: (a) Progression toward the vision, (b) Developing teams, and (c) Sharing the vision (see Figure 8).

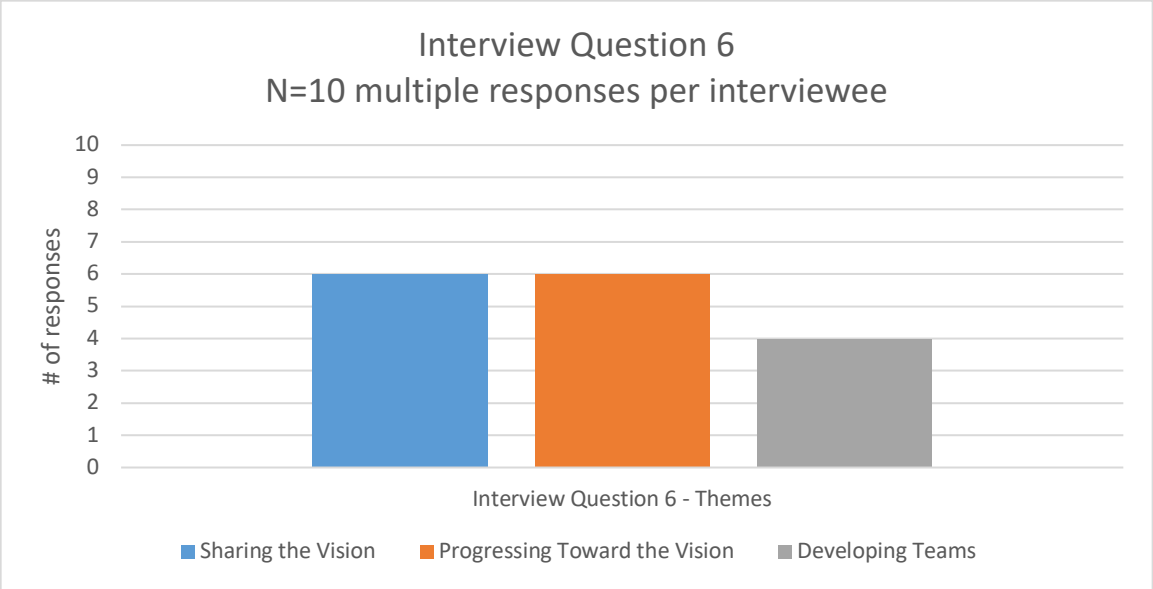

Figure 8. IQ 6: Primary themes for defining leadership success.

Progression toward the vision. The first prominent definition of leadership success encompassed moving forward toward the vision, mission, or goal was a prominent ideology for social entrepreneur leaders to create social impact. Six of the ten participants (60%) discussed the importance of progressing toward their vision. The quotes from P4, P5, and P9 describe their definition of leadership success as moving the vision forward.

> "I would define it as delivering on impact. Executing the work well in ways that are evidence based and clear" (P4, personal communication, January 25, 2019).
>
> Well I think the easy answer to defining leadership success is progress towards a vision and progress towards fulfilling a mission and everything else is kind of, pace. Right, it's timing. It's clearly articulating a vision, a mission and making progress towards them. I think it's that simple. (P5, personal communication, February 5, 2019)

> "It's return on investment, it's dividends, or are you helping people the company was established to help" (P9, personal communication, February 14, 2019)

***Sharing the vision*.** The second definition of leadership success was in a vision being shared. Six of the ten participants (60%) alluded that creating a shared vision was the definition of leadership success, particularly as it pertains to people following a movement. This sentiment is further evidenced in the following quotes from P3 and P10.

> "Creating a shared vision. Igniting passion for a shared cause when we are talking about social issues. A belief that things can be better, a hope" (P3, personal communication, January 25, 2019).

> The leader is the one who can convince you to do something that you would not do otherwise. They could get you to believe in things you would not believe in otherwise and management is kind of rowing that boat but leadership is getting you to think you should climb in the boat in the first place and go on the journey at all. (P10, personal communication, February 15, 2019)

***Developing teams*.** The third definition of leadership success centered on the importance of developing a team. Four of the ten participants (40%) noted that successful leadership entailed developing people and teams. This concept is further expanded through a quote from P7.

> "I think the best leaders are the ones who are cultivating other new leaders… The best leaders bring out the best in each team member and create conditions for each team member to really achieve their potential" (P7, personal communication, February 8, 2019).

Interview question 7. How do you describe your leadership success? After analyzing the data from the participant responses to interview question seven, three common themes surfaced: (a) Crafting intentional relationships, (b) Social impact and moving the needle, and (c) The future plan (see Figure 9).

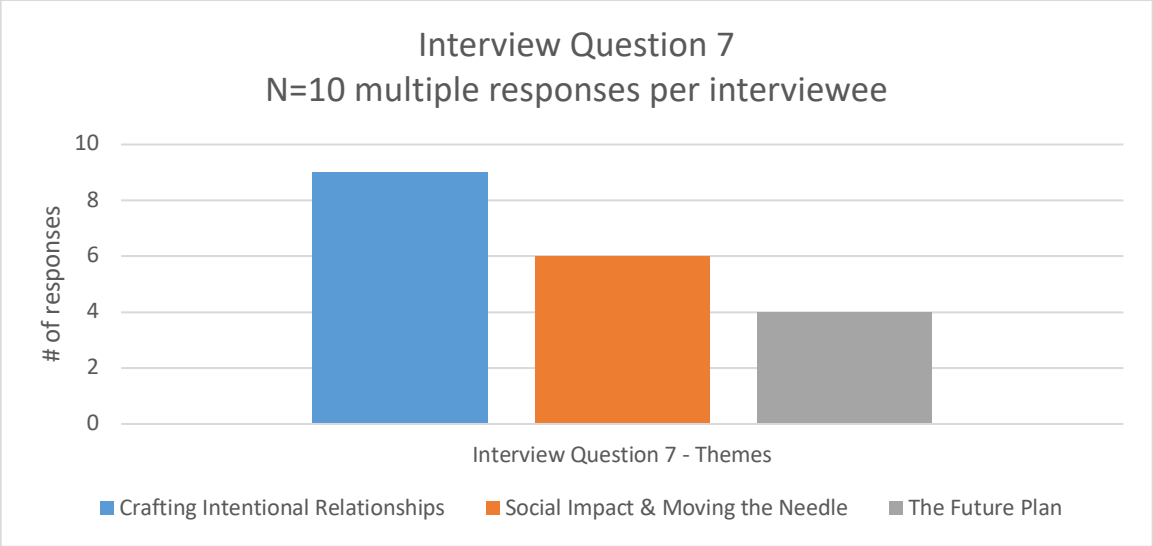

Figure 9. IQ 7: Primary themes for describing the social entrepreneur's leadership success.

***Crafting intentional relationships*.** The first theme to emerge from the description of the social entrepreneur's success was based in supportive relationships to further a social mission. Nine of the ten participants (90%) indicated that crafting intentional relationships was critical to their leadership success. The following descriptions further detail this concept:

- Crafting powerful partnerships and support networks; collective leadership; complexity leadership (P1, P2, P3, P6, P8, and P10)
- Creating and developing talent and teams (P1, P3, P5, P7, and P9)

Six of the participants (60%) indicated that crafting powerful partnerships and networks was an integral part of their success as a social entrepreneur. Many determined that

partnering with local organizations allowed them to effectively reach their demographic as evidenced in the quote from P3.

> How we work is we have usually an international NGO or local NGO we work with in a country where we have a program or multiple NGOs. Sometimes it's a government partner. It is an organization or organizations that usually have influence of local policy, have trusting relationships with the government, they understand how policy and practices changes, and they understand the system of disability and/or institutionalization there. We go in and customize a program. We train their team on how to build capacity for these caregivers. (P3, personal communication, January 25, 2019)

A quote from P8 notes the importance of creating collectives through partnerships and networks to further extend support and social impact.

> …all of the celebs volunteer their time, you know full page ad in Forbes and Fast Company, and Parent magazine, and People magazine, and In Style magazine, and our TV commercials are running in forty-two of the largest cities in the U.S. on ABC, CBS, NBC, Fox. I mean it's about sixty million dollars-worth of free ad space right now. (P8, personal communication, February 8, 2019)

In addition, P10 discusses the intricate network of interdependent connections through their organization creating a strong support collective.

> My current organization has two hundred and thirty-five fellows who lead organizations and have committed to the narrative that we have about people and actually specifically about race, community, and America's future and they are using this our organization's perspective to push their organizations forward.

> So, I feel like our organization and our movement is working. (P10, personal communication, February 15, 2019)

Five participants (50%) noted that talent procurement, development, and retention was an important facet to leadership success. The quote from P5 indicates the value of attracting and retaining a talented team.

> …we continue to attract really talented people and nobody has left. So that speaks volumes about the cause about what's been built here in terms of a structure, an organization that values people and I can't take.... I'll take 10 % of the credit but the rest of it is the team building upon itself. Leadership success – retention. (P5, personal communication, February 5, 2019)

Social impact and moving the needle. The second theme related to the progression toward the goal of social impact. Six of the ten participants (60%) indicated that social impact and moving the needle was a measure of their success. The following phrases further expand on the theme of social impact:

- The ability to scale, grow, and expand social impact (P2, P7, P8, and P10)
- Bolstering internal structures aid in impact metrics; creating more effective metrics or systems (P3 and P5)

Four of the participants (40%) noted that social impact as it relates to the ability to scale, grow, and expand social impact was critical to their description of success. In a quote from P7, progress is denoted through the impact of outcomes.

> For me at a nonprofit a lot of times is a proof is in the pudding kind of deal. The outcomes we are trying to achieve, bringing new investments to the region, training people, getting people in living wage careers once they are finished with

> us. For me, I am judged by how well this organization does. (P7, personal communication, February 8, 2019)

Within the framework of scale, P8 discussed trajectory and reflecting on the actual progress that had been achieved.

> …when I look at where we've come from on a trajectory, it's just the graph it's pretty clear….To know that I've stuck it out and that we've grown to the point where we have nine million labels in use across the U.S. (P8, personal communication, February 8, 2019)

Addressing the topic of creating structures to measure and assess social impact, P5 discussed the development of a specific tool and its impact on the social issue.

> …we've made significant progress, we've invented things that are getting a lot of attention like how to measure wellness. I mean it's one of those staggering things you just can't believe that such a tool didn't exist until we invented it. (P5, personal communication, February 5, 2019)

***The future plan of succession*.** The third indication of success that evolved was the overall vision and trajectory of the leader. Four of the ten participants (40%) indicated that working on the future of the organization and cause was an indicator of their success. This theme is further explained in a quote from P6 noting the compelling need for succession to ensure that the work continues beyond the lifespan of the leader.

> I created this organization to address a need and when it is successful enough for me to leave it and it will still be there and other people do it after I'm gone that will feel successful to me. You have to be able to be replaced, very, very, very,

very important otherwise it dies with you. (P6, personal communication, February 7, 2019)

In addition to the above, P1 noted “if I was gone tomorrow would everything still stand without me…the spirit and mission and the culture would be totally rock solid”. Echoing this sentiment, P4 stated that they are “building a bench. I am constantly getting ready for my own departure”. In conjunction with these comments, P2 also affirmed, “I’m training the next generation or batch of leaders to run with it” adding to the importance of succession as it pertains to the future of the organization, cause, and its legacy.

Interview question 8. How do you measure and track your success as a social entrepreneur? After analyzing the data from the participant responses to interview question eight, two common themes surfaced: a) Social impact metrics and b) Shifting mindset/narrative on social issues (see Figure 10).

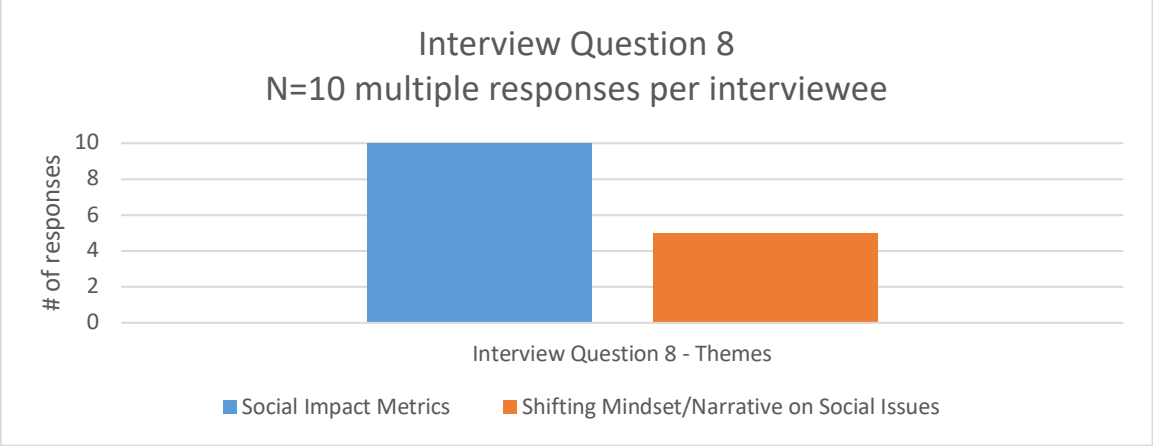

Figure 10. IQ 8: Primary themes for measuring and tracking success as a social entrepreneur.

Social impact metrics. The first prevalent theme noted was the need to employ metrics to demonstrate the forward movement of the organization and its impact. Ten out of ten (100%) indicated that social impact metrics were a crucial measurement of

success for their organization. The following categories listed below further explain the use of social impact metrics:

- Outcome-based social impact measurement (P1, P3, P4, P5, P6, P8, and P10)
- Awareness-based social impact measurement (P2, P8, P9, and P10)
- Innovative social impact metrics; innovative assessment tools (P3, P4, and P5)

Seven of the participants (70%) discussed the use of outcome-based measurement to ensure their social impact. A quote from P3 discussed the levels of outcome-based metrics used to determine impact as well as innovative tool they created to track these outcomes.

> We track it on a lot of different levels. On the child level we collect a lot of child level data, the growth of the child and their anemia status. Those are the most basic. Now we look at feeding practices in a very objective way. We came up with a couple of assessment tools and at the beginning those tools are administered so we can look at pre and post change at the child level, we can also look at it at the institution level, and country level and at a policy level. (P3, personal communication, January 25, 2019)

In addition to the above quote, P5 discussed the importance of meaningful impact metrics. P5 goes on to further explain the systems gap need and the resulting innovative assessment tool that was created to measure this new standard, demonstrating social impact.

> I really do feel like the most important acts of leadership in nonprofit sector is the creative expression of impact metrics that are meaningful externally and hold internally the organizations unique value proposition. We landed a three-

> dimensional definition of student achievement. We created a framework that is pointed to as one of the more important in the Ed sector; broad definitions of achievement that took issues of character and contribution and democratic citizenship and put them together with acquisition of knowledge and skills with a bent towards high cognitive demand aspect of that, together with doing high quality work. Fundamentally grounded in a belief that as adults, we are primarily known by the quality of our work and our character. So, school should be about that. We created a tight evidence-based definition of what student achievement means. Which then set up what you look at. You are not just looking at test scores. You are looking at evidence in these. And then we built a school accountability frame around that and have a credential. Our schools work. You can't use our brand unless you meet a bar of evidence and attainment across these three dimensions of student achievement…We had created a system that met these two things: It was understandable and resonant with a broad swath of people externally, funders, policy makers, parents. And leveraged buy-in from everyone who was associated with us. We need to communally protect the standard. If we are defined together by it, we are stronger than the sum of our parts. (P4, personal communication, January 25, 2019)

A quote from P5 further expands the innovative social impact metrics by creating a new and unique assessment to measure and track their social impact.

> I think the most important way that we measure and track is in the quality of what we do…We're going where no one has ever gone before in terms of delivering peer addiction management coaching on a grand scale and measuring

> every step on the way sixty plus variables that measure wellness. Uncharted waters and so when I first started seeing the data coming from our service delivery I didn't believe it because the results were tenfold better than today's treatment model. We got lucky out of the chute, but now after three plus years of gathering data it's true. Now we're not just talking scores with people, we're talking thousands of people and the results are still there. We couldn't have tracked our success the way our industry tracks success which is one data point for this very, very complex bio-psycho-social-spiritual disease. One data point doesn't measure quality of life, it's not the way we measure disease management in any other context except addiction...That's how we measure it and that's how we track it, we had to invent it. (P5, personal communication, February 5, 2019)

***Shifting mindset/narrative on social issues*.** The second theme noted by social entrepreneur leaders related to building movements and changing paradigms around their social issue. Five of the ten participants (50%) indicated that shifting mindset or narrative on social issues was a primary driver in measuring their success. The following quotes from P9 and P10 demonstrate the importance of measuring a mindset shit and refocused narrative when building a movement.

> My goal is around mindset shift. We're not trying to change the laws first, we're trying to change people's minds. We believe when you believe differently then the laws come to be but if people don't get this and believe it then they're not going to pass the laws or if they do people aren't going to follow them and so they really have to understand in their gut why is what we're doing harmful to children. So that they feel motivated to change…I feel like I'm interested in not

> just being a social entrepreneur but in being a movement builder. So, I look at how many people are in the movement, so we look at how many people attend things that we put on, how many people follow us on social media, how many people are reaching out to us as their go to people as experts on this topic. (P9, personal communication, February 14, 2019)
>
> For me since it's about community building, the two things that [the organization] really does is we do narrative change and community building. So, since it's about community building I measure the same way you measure network strength. You measure it by the number of active nodes and you measure it by the amount of data transmitted or activity conducted. So, for me it is the several hundred leaders. (P10, personal communication, February 15, 2019)

Research question three summary. The second research question examined, "How do social entrepreneurs measure leadership success?" To explore the guiding research question, three subsequent interview questions were asked of the participants:

- **IQ 6:** How do you define leadership success?
- **IQ 7:** How do you describe your leadership success?
- **IQ 8:** How do you measure and track your success as a social entrepreneur?

The findings for research question three revealed the challenges social entrepreneurs faced in their leadership journey. The most prominent themes that surfaced were Social Impact Metrics, Crafting Intentional Relationships, Social Impact and Moving the Needle, Progression Toward the Vision, and Sharing the Vision. The response to Social Impact Metrics indicated it was the most pervasive theme with the highest response rate of 100%. The findings from research question three were found in

the discussion on the literature. In particular, the innovative social impact metrics and innovative assessment tools align with cognitive flexibility, systems skills, and complex problem solving. In addition, from the leadership structures literature collective leadership theory was evident in the findings for the third research question. Overall, eight themes were discovered through the three interview questions correlating to research question three. The breakdown of those themes is shown in Table 10.

Table 10

Breakdown of Themes for Research Question Three

IQ6. Defining Leadership Success	IQ7. Describing Your Leadership Success	IQ8. Measuring and Tracking Success
Progressing Toward a Vision	Crafting Intentional Relationship	Social Impact Metrics
Sharing the Vision	Social Impact and Moving the Needle	Shifting Mindset/Narrative on Social Issues
Developing Teams	The Future Plan of Succession	

Research Question Four

The fourth research question asked was, “What is the role of technology in your day-to-day leadership?” To derive descriptive data on this research question, the study participants were asked two interview questions. The two interview questions which corresponded to research question number four were:

- **IQ 9:** What is the role of technology in your day-to-day leadership?
- **IQ 10:** What challenges do you face pertaining to technology in your day-to-day leadership?

The section below provides detailed discussion of the responses from the participants as they related to the interview question. These data were used to derive themes which applied to the overall research question.

Interview question 9. What is the role of technology in your day-to-day leadership? After analyzing the data from the participant responses to interview question nine, three common themes surfaced: (a) Interconnected ecosystems, (b) Technological tools, and (c) Creative destruction and social innovation (see Figure 11).

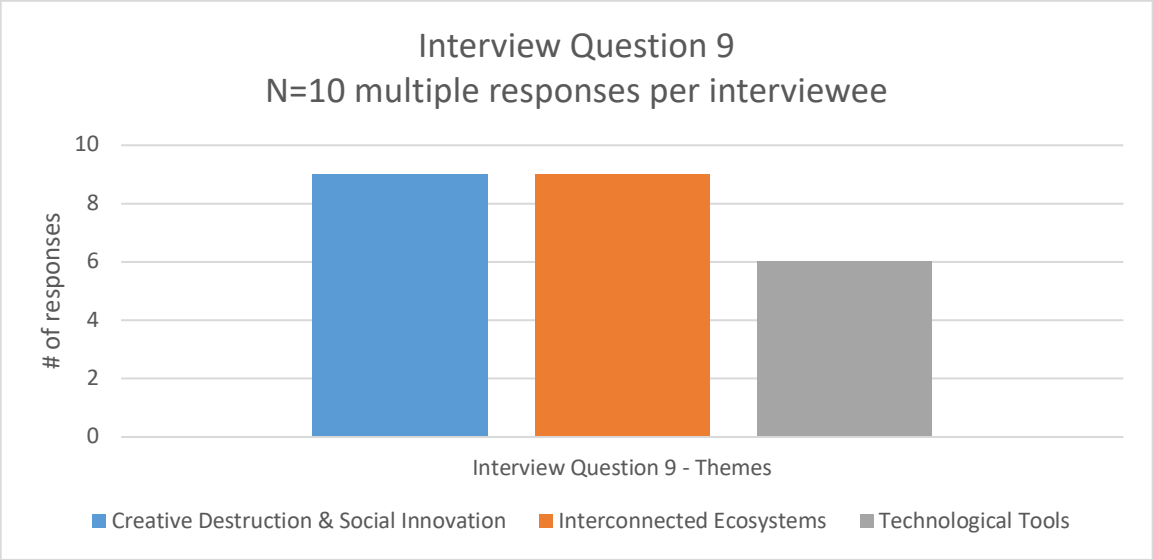

Figure 11. IQ 9: Primary themes for the role of technology in day-to-day leadership.

Creative destruction and social innovation. The most prominent theme analyzed within the data encompassed utilizing technology to employ creative destruction to develop or support social innovations. Nine of the ten participants (90%) discussed the importance of technology in the ability to innovate new solutions for social issues through the process of creative destruction. The following descriptions give an in-depth explanation of use of technology in the creative destruction and social innovation process:

- Technology as the impetus for: organizational scale; impact metrics utilized to scale advocacy support; network growth (P1, P3, P4, P5, P6, P7, P8, P9, and P10)
- Utilizing contextual intelligence; identifying and exploiting the opening/gap to create new technological solutions for social change (P1, P3, P4, P6, P7, P8, and P9)

Nine of the participants (90%) discussed the integral role technology played in scaling their organization. In particular, P3 describes how utilizing the technology of a customized app transformed their ability to build capacity world-wide without the need for extensive training or skill sets.

> …we have always been an organization that does a lot of training, capacity building, and assessment. Historically we have used paper-based tools. We would train our Russian trainers for example and they would have these assessments they would be filling out on paper in Russian and we would have to wait for them to get back to us. Then do data entry into the system, analyze it. It was not timely, allowed for a lot of room for error and it required the person who was implementing these tools had a lot of skills. For example, we trained people how to accurately measure kids then they need to plot their growth on a growth chart. For people who do not have a math education it could take days to train them and there were still could be a decent amount of errors. Now we have basically taken our assessment tools and taken them and put them into an app…Now, a caregiver measures a child they input the numbers in and it automatically plots it on a growth chart and further, there is a report that is

> automatically generated to say ‘this kid hasn’t grown or is anemic and this is what you should do’. So, it allows us to be not only more efficient it allows us to build capacity more quickly and provide a lot more support from afar and place our expertise in areas where it is most needed with a lot less cost. It also tracks our impact generating a lot more data, quality data for us. This helps us to know if we are doing a good job and to continually evolve the way we work. It is also really critical for advocacy. (P3, personal communication, January 25, 2019)

In addition, the practice of creative destruction is prevalent in the use of technology replacing the historic models increasing the economic viability of an organization by expanding into other markets and higher socio-economic regions as explained in a quote from P7.

> I just had this realization that it is critical that we develop businesses that are providing products and services outside the region and are attracting new capital in that then we can start to circulate. And, technology is critical in achieving that…Our newest social enterprise makes shirts out of recycled materials. But what is really innovative is we developed these software-based kiosks that will be placed in baseball stadiums. Fans can customize shirts on this touchscreen kiosk. We’ll make it, print it in West Virginia, and ship it to them. It’s all software-based technology. It’s just incredible. (P7, personal communication, February 8, 2019)

Further quotes from P1, P6, and P8 discuss the impact technology has had on changing their industry and furthering social impact.

> “I don't think you could have built [the Organization] even 25 years ago” (P1, January 18, 2019).
>
> “…the solution to the transportation problem could not exist without technology….It's inalienable from what we do” (P6, personal communication, February 7, 2019).
>
> “…we are just about to launch our first phone to action initiative” (P8, personal communication, February 8, 2019).

The impact of technology, and the process of creative destruction, is further evidenced in a quote from P9 discussing capitalizing on the opportunity to scale in other countries through technology.

> …in terms of scaling it's allowed us to work in... We have a project in Canada and I haven't been to Canada in two years but we are transforming their system. That's pretty cool. It was an experiment but shoot, it worked. So, the first time we went there they were like “It's you! You have legs!” and they're hugging us like TV stars because they've never seen us in person. (P9, personal communication, February 14, 2019)

Contextual intelligence also played a role in technology’s impact on the social entrepreneur’s leadership. Quotes from P7 and P8 demonstrate the intentional scanning for innovative solutions within their ecosystem.

> “I’m not a technology expert but we scanned for the right opportunity and made the right investments and brought on the right team who did have the technology capability” (P7, personal communication, January 25, 2019).

> So that video is really cool and has Ellen Degeneres in it and she's talking about how confusing the labels are...that little video is the viral video we're working on and asking Ellen and all of our celeb friends and all of our big partners to get that video out and in that it's asking people to text “Recycle” to a certain number and that will generate the petitions for mayors and governors and CEOs of companies to get on board with this. So that kind of technology can be good. (P8, personal communication, February 8, 2019)

Also, of note, two of the participants explained that their organizations only exist due to technology. The following quotes from P1 and P6 discuss the foundational role technology plays in the organization.

> I don’t think you could have built our organization even 25 years ago. When we first started it, we bought like the first Sony VX200. It was like the first real under $2000 video camera that was high quality enough. We edited on iMovie and then Final Cut Pro came later. Before that the only way to make real content or share stories in multimedia format was like a 50k massive camera and premier editing software that cost you $100k. You could never have built [the organization] with those platforms. (P1, personal communication, January 18, 2019)

> “So, the very solution I came up with, the social enterprise I came up with exists in technology and nowhere else…” (P6, personal communication, February 7, 2019).

***Interconnected ecosystems*.** The second prominent theme related to the use of technology arose from the use of technology and the systems and structures that move information and communication. Nine of the ten participants (90%) indicated that the

technology of interconnected ecosystems has impacted their organization and leadership within it. The following phrases further exemplify the ways in which this interconnected ecosystem impacted their organizations:

- Digital connection; communication; remote access (P1, P2, P3, P4, P5, P7, P9, and P10)
- Greater access to and availability of technology, lower barrier to entry; ability to scale (P1, P2, P3, P5, P8, and P9)
- The ability to reach a wider audience; transcending geographical boundaries (P1, P3, P4, and P9)

Eight participants discussed the key role that technology played in connecting their organizations and their work. P3 notes in the following quote that the use of technology allows accessibility and efficiency across organizational sectors to streamline their work.

> We also use tools like Wanderlist. I have a weekly call with my cofounder who is the ED to track our agendas. We use it with the development team to track outreach that I am going to be doing, to keep them updated and keep me organized in a way that is accessible to everyone. That helps me in my role. We use Boardbookit as our board portal. It streamlines communication with the board and all documents are accessible to them. It streamlines things and makes them more efficient (P3, personal communication, January 25, 2019)

Additionally, technology has enabled organizations to reach a wider audience regardless of geographical boundaries as explained in a quote from P8.

> Especially since these conflicts of interest were in play, I don't know how we would've built a momentum in society knowing that the industry was against it but

> because we have websites today Disney found out about our labels, NBC Universal found out about our labels, Hallmark Corporation, Whole Foods, everybody was seeing us through the website. (P8, personal communication, February 8, 2019)

A quote from P4 added to the discussion of permeating geographic boundaries as an organization scales and becomes more complex and physically dispersed.

> "The larger you grow the more complex you grow the more geographically distributed you grow there are all kinds of internal technology needs just to run a high performing nonprofit" (P4, personal communication, January 25, 2019).

***Technological tools*.** The third technology theme that surfaced related to the types of technology being utilized to lead a social enterprise. Six of the ten participants (60%) indicated that they employed technological tools to further their impact efforts. These technological tools are further explored in the below phrases:

- Decentralized technologies enables lower barriers to entry; accessibility; efficiency (P1, P3, P6, P7, and P10)
- Accessibility across and through geographic boundaries (P1, P2, P3, P7, and P10)

Five of the participants (50%) noted that the decentralization of technology allowed them access to previously cost-prohibitive technologies. A quote from P1 explains how the ability to access and afford technology allowed the organization to scale.

> …the lower cost in content development tools video cameras high quality HD video cameras at a lower cost, easier editing platforms. With the easier editing platforms, anyone can be an editor now. We hire a lot of interns that don't know

how to edit and they have a one-year internship and they're good then we hire them. (P1, personal communication, January 18, 2019)

Furthermore, a quote from P10 demonstrates the power of distributed technology in coordinating business remotely with geographically dispersed teams.

> think today in these established economies, these stable economies using distributed technology is normal. It's how you get everything done. Our offices are distributed, in fact we don't even have offices. We have teams in different locations, we don't need a static office and using the office suite from Microsoft is sort of standard that's ubiquitous but using tools like Teamwork for management or Hubspot for marketing. (P10, personal communication, February 15, 2019)

Interview question 10. What challenges do you face pertaining to technology in your day-to-day leadership? After analyzing the data from the participant responses to interview question ten, two common themes surfaced: (a) Navigating the VUCA ecosystem and (b) Technological challenges (see Figure 12).

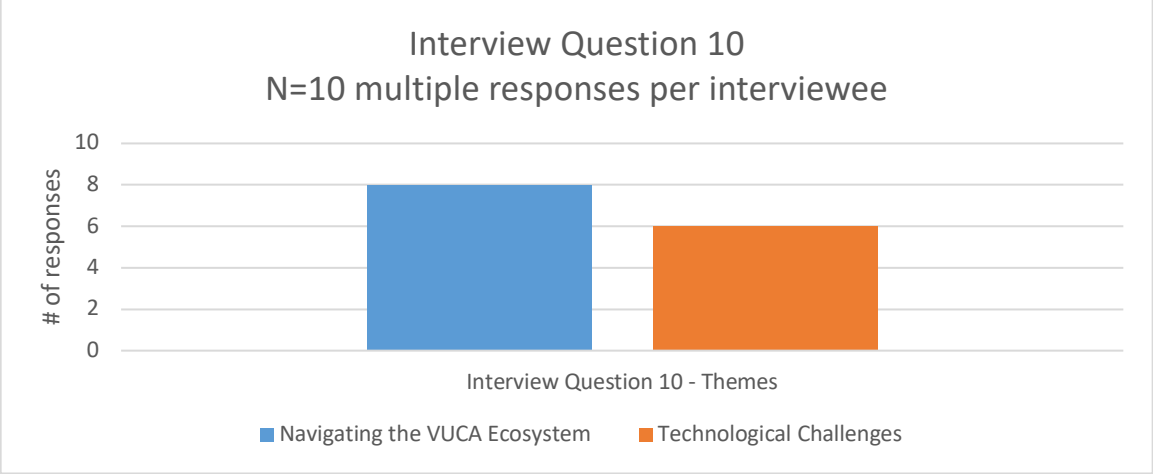

Figure 12. IQ 10: Primary themes for the challenges pertaining to technology in day-to-day leadership.

Navigating the VUCA ecosystem. The most prominent technology challenge that surfaced entailed the volatile, uncertain, complex, and ambiguous environment in which the social entrepreneurs were leading. Eight of the ten participants (80%) indicated that navigating the technology-rich VUCA ecosystem was a challenge they faced. Within this context, here are the descriptive phrases that occurred to give a more in-depth view of this challenge:

- Disruptive innovation; Highly iterative and volatile nature of technology; The cost associated with keeping pace (P1, P4, and P6)
- Complexity of the environment; overwhelming amounts of information; uncertainty (P5, P6, and P8)
- Losing the human component; too much accessibility; loss of privacy (P2, P3, and P9)

Three of the participants (30%) indicated that the iterative costs of keeping up with the speed at which technology innovates was a major concern for their organization. P4 posits the most pressing challenge with technology is the need for high capitalization to enable hiring the talent that can develop the products they need.

> The biggest challenge with technology is competition for high quality staff and capitalization...I can't get great product people. They are in a whole different salary class...Traditional philanthropy is not going to help me compete with annual iterative deep investment, willing to go under and burn Agilent capital. That's an industry that knows how to work with product iteration with the best and brightest people in a whole different economy. I can't compete for the capitalization of that economy or the people. If you are at the cutting edge of a

> tech solution as a nonprofit in education it’s challenging. (P4, personal communication, January 25, 2019)

In addition to the above, P6 notes the need to keep pace with the iterative speed of technology has thwarted efforts to scale effectively.

> So, I invented a solution which is unique for the non-profit world and is successful but I couldn't scale because I couldn't upgrade the technology fast enough and keep up because technology is also a living thing. You build it and then you're not done. You build it and then you have to rebuild it and rebuild it and rebuild it. It's a living thing and it's changing with increasing speed. Rapid iteration and raising capital to do that. (P6, personal communication, February 7, 2019)

Three of the participants (30%) also noted the complexity and uncertainty of this VUCA ecosystem. P8 discusses the iterative speed and prolific nature of technology creating overwhelming amounts of information resulting in challenges with messages being received and heard.

> …we're in a time now where technology is such a flood of information of everything. Horrifically bad stuff and amazingly good stuff but one way or the other it's just coming at us in millions of sound-bytes every nanosecond and that is a challenge with technology. There's no longer a unification. There is to some regard because we have more reach than we ever did … and the fact that we can get things out there quickly and that there are websites and all of that is good but there is a bad side to it too and that's the fact that there is just so much information out there that you could say that you have a solution to change the

> world and really who hears that? So, there's just a lot of noise out there that everybody has to overcome… (P8, personal communication, February 8, 2019)

Technological challenges. The second prominent challenge that arose was in the area of issues with technology itself. Six out of ten participants (60%) acknowledged that they had technological challenges. Listed below are the areas of technology that impacted the social entrepreneurs and their leadership:

- Limited technology infrastructure; access issues (P3, P7, and P9)
- Underutilization of technology; barriers to understanding the technology; comfort level with technology (P2, P5, P7, and P8)

Three of the participants (30%) noted that limited technology infrastructure and inability to gain access to technology were critical challenges they faced with technology. A quote from P7 notes the limited access to the Internet and phone service as a barrier to fully utilizing technology.

> I still spend large parts of my day out of cell service. A lot of our crew don't have Internet access at home. If they do it is not broadband. It's really slow. I feel like rural America still has a long way to go on basic technology infrastructure. (P7, personal communication, February 18, 2019)

Another challenge that surfaced with technology which four of the participants discussed was their comfort level with or underutilization of technology. Although all participants employed technology, there were four who felt the lack of knowledge or comfort with technology impeded their ability to scale their organization. P8 and P7 discuss this challenge as a potentially missed opportunity.

> I think that the lack of really understanding how to utilize that [technology] has stumped us a bit because somebody on our team that does it, she's young and she gets the basics of it but she's kind of learning as she goes. (P8, personal communication, February 8, 2019)
>
> In some ways it has hurt our scale. My lack of comfort with technology. We have a great COO who's working on this. A lot of rural organizations actually, it is hard to scale when you don't have a technologically efficient organization. So, I think it has probably held us back in ways I don't even understand. (P7, personal communication, February 8, 2019)

Research question four summary. The fourth research question examined, "What is the role of technology in your day-to-day leadership?" To explore the guiding research question, two subsequent interview questions were asked of the participants:

- **IQ 9:** What is the role of technology in your day-to-day leadership?
- **IQ 10:** What challenges do you face pertaining to technology in your day-to-day leadership?

The findings for research question four revealed the impact and role of technology in the social entrepreneur's leadership. The most prominent themes that surfaced were Creative Destruction and Social Innovation, Interconnected Ecosystems, Technological Tools, and Navigating the VUCA Ecosystem. The response to Creative Destruction and Social Innovation as well as Interconnected Ecosystems indicated they were the most pervasive themes with the highest response rate of 90%. With a significant response rate in Creative Destruction and Social Innovation there is a clear correlation to utilizing technology as a conduit for creative destruction and innovative

social solutions. Interconnected Ecosystems garnered significant response rates as well indicating the importance of systems and structures within technology and the impact on the flow of information and communication. The findings from research question four were found in the discussion on the literature. In particular, the use of identifying and exploiting technology for social innovation and also utilizing technology as the impetus for scale and network growth correlates with the literature on creative destruction and social innovation. In addition, the VUCA drivers' literature features of disruptive innovation and disruptive technologies. Moreover, within the literature of contextual intelligence leadership the elements of adaptation due to rapidly iterating ecosystem appeared. Five themes surfaced for research question four and are shown in Table 11.

Table 11

Breakdown of Themes for Research Question Four

IQ9. Technology Impact on Leadership	IQ10. Challenges of Technology
Creative Destruction and Social Innovation	Navigating the VUCA Ecosystem
Interconnected Ecosystems	Technological Challenges
Technological Tools	

Research Question Five

The fifth research question asked was, "What recommendations would social entrepreneurs make for future leaders of systems-wide change?" To derive descriptive data on this research question, the study participants were asked one interview question. The interview question which corresponded to research question number five was:

- **IQ 11:** What advice or recommendations would you give to future leaders?

The section below provides detailed discussion of the responses from the participants as they related to the interview question. These data were used to derive themes which applied to the overall research question.

Interview question 11. What advice or recommendations would you give to future leaders? After analyzing the data from the participant responses to interview question eleven, four common themes surfaced: (a) Coalesce a support network, (b) Commit and be resilient, (c) Adopt a learning mentality, and d) Develop a bold vision around your passion (see Figure 13).

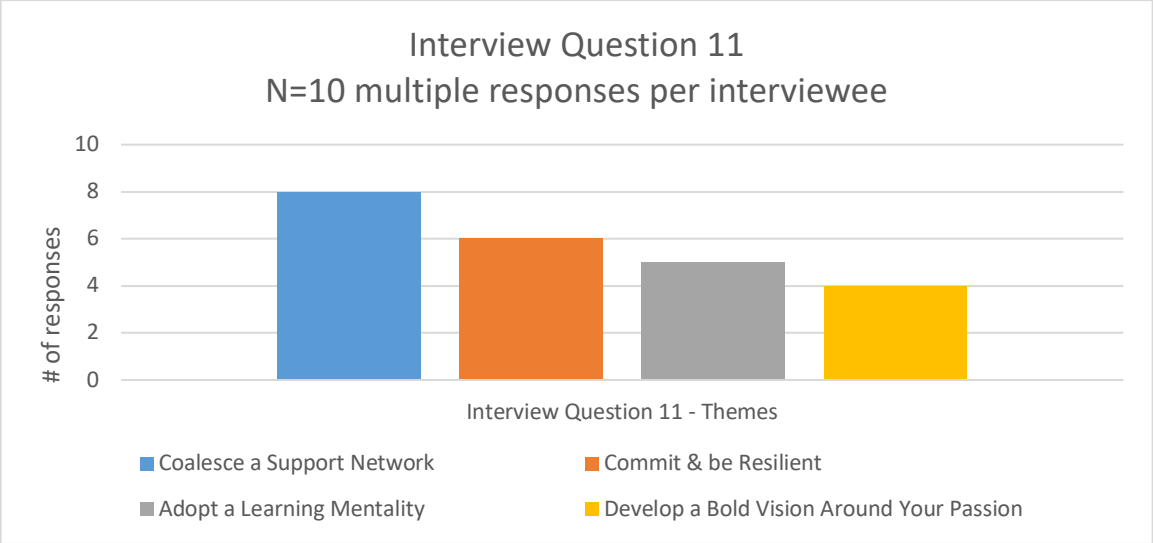

Figure 13. IQ 11: Primary themes for the advice or recommendations for future leaders of systems-wide change.

***Coalesce a support network*.** The primary recommendation for future systems leaders centered on garnering support. Eight of the ten participants (80%) deemed coalescing a support network as a critical component for future leaders. All eight participants indicated that gathering support through mentorship, partnerships, team members, and social entrepreneurship organizations would help future leaders through

the challenges and obstacles encountered in taking-on a social mission (P1, P2, P3, P5, P6, P7, P8, P9). The following quotes from four of the participants further explain the importance of these support networks.

> "Qualities of passion and persistence and having people around you who share your vision and who you respect" (P3, personal communication, January 25, 2019).
>
> With whom can you partner to borrow credibility?' You know having an idea especially an early idea and maybe putting a small team together, maybe and organization with a little angel capital, it sure helps to throw some impressive looking logos on your website or to be able to stand up in front of rotary clubs and tick off your top three or four partners that everybody recognizes in the room. It buys credibility. (P5, personal communication, February 5, 2019)
>
> "The most important thing you can spend your time on is building a team so it is not all about one person" (P7, personal communication, February 8, 2019).
>
> "…surround yourself with a network of other people who have your back" (P9, personal communication, February 14, 2019).

***Commit and be resilient*.** The second area of recommendations fell within committing and being resilient when leading systems-wide change. Six of the ten participants (60%) indicated that commitment and resiliency were critical to success as a social entrepreneur. Below are the phrases that further encapsulate commit and be resilient as a recommendation for future leaders:

- Be hyper committed; don't be discouraged (P1, P2, P6, P8, and P9)
- Naysayers will try to dissuade; people will push back (P2, P3, and P8)

Utilizing hyper commitment and staying the path were prevalent sentiments discussed by four participants (40%) in their recommendations to those stepping into creating social change. The following quote from P8 captures the essence of being committed.

> So, I'd say just know your subject really well and be hyper committed because it will always, just like everything else, it will always cost more, take longer, and have obstacles that you may not even be aware of. I mean I think that that's the most sound advice but for goodness sake step in… (P8, personal communication, February 8, 2019)

In addition to utilizing hyper commitment, knowing there will be naysayer is described in a quote from P9.

> If you do real change people will come for you. They'll let you mess around the edges and if you're not going to threaten them, if it doesn't threaten them if they don't have to lose something or give something up they'll let you do all kinds of stuff but if you're going to do real change people will push back as though they are fighting for their survival because their brains are telling them that they are and you just have to be prepared for that. (P9, personal communication, February 14, 2019)

Another quote from P2 addresses the challenges a future leader might encounter from their families and the need to continue on.

> Don’t stop. Don’t be discouraged, don’t be afraid to dream. Don’t be afraid to dream stupid, crazy, wild-ass dreams. Don’t be afraid to dream it and don’t be afraid to speak it. The world loves dreamers. Don’t be scared away by your family, who don’t really understand us. Families don’t understand dreamers, they

> try to stop dreamer[s] from dreaming and casting vision. Don't let them stop you. I think they do it because they just want you to be normal. They want you live a happy life and a successful life, they want you to live a normal life, an average life, but we're not normal. So, don't be afraid to not be normal. Rock your awkward. (P2, personal communication, January 18, 2019)

***Adopt a learning mentality*.** The third recommendation for future leaders addressed the critical need to have a learning mentality. Five of the ten participants (50%) discussed the importance of adopting a learning mentality. Below are the phrases that encompass the recommendations for adopting a learning mindset:

- It is not a linear path; learn as you go; failure is a part of the journey (P3, P4, P5, and P6)
- Continue self-learning; metacognition (P3 and P9)

Four of the participants (40%) noted that discerning the path, continual learning, and failure are recommended practices for those wanting to step into leading systems-wide change. A quote from P4 further indicates the challenges of leading when confronted with a non-linear path.

> "I knew that riding the wave was inherent in starting anything. There are going to be ups and downs and you just ride it. It is not unique that's happening it is just the nature of it" (P3, personal communication, January 25, 2019).

Furthermore, a quote from P5 expands on the benefits of learning from failure.

> Social entrepreneurs I think tend to come from a pretty smart group of people, high achievers, not used to failing but failure is a big part of being an entrepreneur. You know arguably there is no such thing as failure as long as

> you're learning from whatever it is that happened to you (P5, personal communication, February 5, 2019)

Two of the participants (20%) also indicated self-learning was a valuable skill for future social entrepreneurs to invest in. The practice of metacognition is noted in a quote from P9 to identify and address any limiting beliefs a future leader might encounter.

> …do Brene Brown work or your own set of therapy whatever it is that controls your limiting belief. Whatever messages you've received around you're not good enough or you're too big for your breeches or who do you think you are or somebody else is probably going to do that like you've got to get that business out of your head and so getting your tool, which is you, your tool your head and spirit ready for a journey…get clear on your own limiting beliefs. (P9, personal communication, February 14, 2019)

Develop a bold vision around your passion. The fifth theme that resonated as a recommendation was to craft a vision in relation to a passion. Five out of ten participants (50%) recommended that future systems leaders develop a bold vision around their passion. The below descriptions further expand on the recommendation of the importance of fostering a passion and vision:

- Find something you believe in (P1, P2, P5, and P7)
- Be bold; take-action (P1, P2, P5, and P7)

Four of the participants (40%) determined that finding something to be passionate about was a critical step in success for leaders. P5 further expands on this concept of commitment to a bold vision.

> Well I think the first thing is find something about which you can be passionate forever. I mean to me social entrepreneurship is a lifetime commitment. Now I know that might be a minority view because I think there is a growing sentiment that you can actually be a social entrepreneur as a profession and maybe bounce around causes. I don't know, I don't think I could. So, my advice would be to find one thing, find your crazy horse monument. Something about which you can be steadfast and sincere for the rest of your life… (P5, personal communication, February 5, 2019)

Additionally, four participants (40%) also recommended that the future system leader be bold in their undertaking. Further quotes from P1 and P7 expand on the importance of being bold and taking-action.

> Having some boldness. When you find something you believe magnify it, put it out there, and then the world will support you. That is what we found. You have to be bold you have to magnify it you can't be quiet or subtle. You have to first find something you believe in; once you do then lean into it and be bold and don't be subtle and then you will find people will support you. It may take a long time but be patient… (P1, personal communication, February 18, 2019)

> "You need to be thoughtful and plan but I think what is key is being in motion, taking action, having a willingness to being the risktaker is what's key" (P7, personal communication, February 8, 2019).

Research question five summary. The fifth research question examined, "What recommendations would social entrepreneurs make for future leaders of systems-wide

change?" To explore the guiding research question, one interview question was asked of the participants:

- **IQ 11:** What advice or recommendations would you give to future leaders?

The findings for research question five revealed the recommendations and advice for future systems-change leaders. The most prominent themes that surfaced were Coalesce a Support Network, Commit and be Resilient, Adopt a Learning Mentality, and Develop a Bold Vision Around Your Passion. The response to Coalesce a Support Network indicated it was the most important theme with the highest response rate of 80%. With eight of the ten respondents connecting the concepts of support through mentorship, partnerships, team members, and social entrepreneurship organizations, there was a clear correlation found in the discussion on the literature. In particular, within the literature of leadership structures in a VUCA environment elements of collective leadership where evident. In addition, the literature on competencies emerged within research question four with components of adaptability, resilience, vision, and tenacity. Four themes surfaced for research question five and are shown in Table 12.

Table 12

Breakdown of Themes for Research Question Five

IQ11. Recommendations for Future Leaders	
Coalesce a Support Network	Adopt a Learning Mentality
Commit and Be Resilient	Develop a Bold Vision Around Your Passion

Summary

The purpose of this study was to ascertain the best leadership strategies and practices of social entrepreneur creating systems-change, the challenges these social change agents faced, their measurement for success, the role of technology and its impact, and the advice these leaders had for future leaders upon entering this VUCA environment. To discern this information, eleven interview questions were crafted to explore the following five research questions:

***RQ1*:** What common leadership strategies and practices do social entrepreneurs employ?

***RQ2*:** What challenges do social entrepreneurs face in their leadership journey?

***RQ3*:** How do social entrepreneurs measure leadership success?

RQ4: What is the role of technology in your day-to-day leadership?

***RQ5*:** What recommendations would social entrepreneurs make for future leaders of systems-wide change?

To collect data for the research, a semi-structured interview process with eleven interview questions was utilized. Once the data were collected, they were coded and then validated through an inter-rater review process. This procedure and data analysis garnered a total of 30 themes. Research question one, looking at best strategies and practices of social entrepreneur leaders, elicited prominent themes of Strategic Leadership Competencies, Systems Leader Preparation, A Powerful Vision and Purpose, Capitalizing on Leadership Traits, and Employing Adapted Learning. The themes of Strategic Leadership Competencies and Systems Leader Preparations were the top themes with a participant response rate of 100%. The primary themes elicited

from research question two exploring the challenges social entrepreneur leaders face were Intentional Adaptation, Working on the Edge of Cultural Knowledge, Breaking through Historical Paradigms, and Tenacity. Intentional Adaptation was the most referenced theme with a response rate of 80%. When looking at how social entrepreneur leaders measure leadership success in research question three, the major themes that surfaced were Social Impact Metrics, Progression Toward the Vision, Sharing the Vision, Crafting Intentional Relationships, and Social Impact and moving the Needle. Of the major themes Social Impact Metrics was referenced the most with a participant rate of 100%. Research question four identified the role of technology for the social entrepreneur leader bringing to light the primary themes of Creative Destruction and Social Innovation, Interconnected Ecosystems, Technological Tools, and Navigating the VUCA Ecosystem. Of these themes, Creative Destruction and Social Innovation along with Interconnected Ecosystems garnered a response rate of 90% each. In examining the recommendations and advice for future leaders entering this VUCA environment in research question five, the most prominent themes were Coalesce a Support Network, Commit and Be Resilient, and Adopt a Learning Mentality. Of these themes, Coalesce a Support Network received the highest response rate at 80%. Table 13 demonstrates the overall themes that surfaced during the data analysis procedure.

Table 13

Overall Themes for the Five Research Questions

RQ1	RQ2	RQ3	RQ4	RQ5
A powerful vision and purpose	Working at the edge of cultural knowledge	Progression toward the vision	Creative destruction and social innovation	Develop a bold vision around your passion
Capitalizing on leadership traits	Breaking through historical paradigms	Sharing the vision	Interconnected ecosystems	Coalesce a support network
Fostering teams and partnerships	Intentional adaptation	Developing teams	Technological tools	Commit and be resilient
Systems leader preparation	Tenacity	Crafting intentional relationships	Navigating the VUCA ecosystem	Adopt a learning mentality
Employing adapted learning	The big picture	Social impact and moving the needle	Technology challenges	
Strategic leadership competencies		The future plan of succession		
The power of agency		Social impact metrics		
A driving purpose		Shifting mindset/narrative on social issues		
The Power of Agency				

Chapter 5: Conclusions and Recommendations

As the world becomes increasingly connected through technology-rich environments and rapidly iterating contexts, leadership is becoming progressively more complex. This new volatile, uncertain, complex, and ambiguous environment challenges historical leadership contexts. In the past, leaders were reliant on historical decisions to anticipate and dictate future directions. In a new rapidly iterating ecosystem, this practice has become archaic and is no longer viable. Consequently, current and future leaders are compelled to develop and cultivate new skills to keep pace with this volatile and ambiguous landscape. Although this dynamic environment is challenging to lead within, it is also rife with unique and innovative opportunities for those who are able to identify and exploit the next waves of disruption. This evolutionary pace of technology continues to be the impetus to innovative solutions that have the potential to impact global issues such as poverty, hunger, and inequity.

Social entrepreneur leaders working to tackle the most pressing issues of our time are leading systems-wide change within this technology-laden ecosystem. These successful change agents are utilizing the best strategies and practices to create foundational social shifts such as the eradication of poverty and global climate issues. Within this rapidly iterating landscape, leaders are faced with a multitude of challenges. As such, the findings of this research sought to identify the best practices of these successful social leaders to add to the existing literature, aid current social entrepreneur leaders, and help future systems-change leaders step into this VUCA ecosystem. Chapter five provides a summary of the study's key findings, implications, and recommendations for future research.

Summary of the Study

The purpose of this study was to identify leadership strategies and practices social entrepreneurs utilize in creating system-wide change, the challenges social entrepreneurs face in their leadership journey, the practices social entrepreneurs use to measure leadership success, the role of technology in their day-to-day leadership, and the recommendations they have for future social entrepreneurs. This study utilized qualitative research to discern rich descriptive data on the lived experience of these social entrepreneur leaders. Phenomenology was chosen to explore the lived experience of the social entrepreneur leaders who share a common phenomenon. This research methodology provides a "rigorous descriptive-analytic" (Klenke, 2016, p. 212) through a data collection method of interviewing those who share the same lived experience. To explore this lived experience, five research questions and eleven open-ended, semi-structured interview questions were crafted to inform the study. The guiding research questions are shown below.

***RQ1*:** What common leadership strategies and practices do social entrepreneurs employ?

***RQ2*:** What challenges do social entrepreneurs face in their leadership journey?

***RQ3*:** How do social entrepreneurs measure leadership success?

RQ4: What is the role of technology in your day-to-day leadership?

***RQ5*:** What recommendations would social entrepreneurs make for future leaders of systems-wide change?

A total of ten Ashoka Fellows participated in this study. Ashoka Fellows are vetted leaders and experts in their specific field which made them ideal participants.

These social entrepreneur leaders were identified from the publicly accessible Ashoka website. Of the ten participants, all were located within the United States, and maximum variation was achieved by selecting social entrepreneurs across industry sectors who were also geographically dispersed.

Data collection was comprised of semi-structured interviews. Nine were conducted via Zoom online video conferencing platform, and one was a phone interview. The interviews were held January through February of 2019. To gain descriptive data during the interviews, eleven questions were developed and validated. To ensure instrument reliability, a four-phase approach was used: prima-facie validity, peer-review validity, external expert review validity, and instrument reliability. All participant interviews were recorded and transcribed. After which, the transcriptions were analyzed, significant statements identified, coded, and themes were discovered. To confirm the validity of coding and themes, an inter-rater review process was used. Finally, the research findings were summarized and reported for all themes.

Summary of the Findings

The findings of the research address the lived experience of the social entrepreneur leader in a technology-rich environment. These key findings include the strategies they have utilized, the challenges they encountered, how technology has impacted their leadership, and the recommendations for future systems-wide change leaders. The intent in the research is to provide a context for those seeking strategies to thrive in a VUCA environment and also to provide a roadmap for those who wish to step into creating systems-wide change and social impact. Ten Ashoka Fellow social entrepreneur leaders agreed to participate in the study. The social leaders were chosen

from the following industries: workforce development, social justice, career counseling, education, foster care, nutrition, addiction recovery, shared-ride transportation, recycling, as well as diversity, equity, and inclusion.

These social entrepreneur leaders responded to the interviews sharing candid insights from their journeys of social impact. The eleven interview questions generated a total of thirty themes. The following key themes arose from the interview questions identifying the strategies, measures of success, challenges encountered, the impact of technology, and recommendations for future systems-wide change leaders:

1. Leading with a powerful vision and purpose, capitalizing on leadership traits, and fostering teams and partnerships were all common strategies and techniques of social entrepreneur leaders.
2. Utilizing academic, work, and life experiences as well as employing adapted learning techniques prepared the social entrepreneurs to lead systems-wide change.
3. Strategic leadership competencies with a driving purpose and a sense of agency aligned with the personal characteristics that prepared the social entrepreneurs.
4. Barriers of leading within this environment included working on the edge of cultural knowledge and breaking through historical paradigms.
5. To mitigate challenges, social entrepreneurs utilized intentional adaptation, tenacity, and a constant focus on the big picture.
6. Sharing and moving toward a vision with a team was the common definition of leadership success.

7. Crafting intentional relationships while creating social impact and moving the needle along with a succession plan described most of the participant's view of their leadership success.
8. Success was measured by social impact metrics and shifting mindset and narrative on social issues.
9. Creative destruction and social innovation through an interconnected ecosystem while utilizing technological tools enabled these social entrepreneurs to lead within this environment.
10. The challenge most participants described was navigating the VUCA ecosystem along and subsequently the technological infrastructures that could not keep up and the iterative costs of maintaining pace.
11. Coalescing a support network, committing and being resilient, adopting a learning mentality, and developing a bold vision around a passion were the recommendations these leaders wished to impart to future systems-wide change leaders.

Discussion of Key Findings

The findings from this research address the lived experience of social entrepreneurs leading in a VUCA environment. The findings include: (a) the strategies they employ, (b) the challenges they face on their journey, (c) how they measure their success, (d) the role of technology in their day-to-day leadership, and (e) recommendations to future social entrepreneur leaders. The semi-structured interviews surfaced collective themes within each research question which are discussed in more detail.

RQ1: Strategies and practices employed by social entrepreneurs. The first research question was crafted to elicit the strategies utilized by social entrepreneur leaders when leading in a technology-rich environment. A total of nine themes surfaced for research question one. The most prominent themes were discerned from participant response rates and included Strategic Leadership Competencies (100%), Systems Leader Preparation (100%), Capitalizing on Leadership Traits (90%), A Powerful Vision and Purpose (90%), and Employing Adapted Learning (60%).

Ten out of the ten participants (100%) noted that a key strategy to leading systems-wide change is to engage core leadership competencies. Social entrepreneur leaders noted that the competencies related to self: instilling trust, being self-aware, managing ambiguity, being resilient, and nimble learning (P1, P2, P3, P5, P6, P7, P8, and P9) were crucial to their success. In a volatile and rapidly iterating environment lacking repeatable patterns to form decisions from past experiences (Sullivan, 2012; Johansen, 2017), learning agility, open mindedness, and tenacity (P1, P2, P6, P7, P8, and P9) aid social entrepreneur leaders in furthering their social impact. The competency based leadership skills of cognition, systems abilities, and complex problem solving deemed critical for future-ready leaders (World Economic Forum, 2016) were mirrored and expanded upon in the findings with the competencies of cognition: business insight, strategic mindset, and metacognition (P1, P3, and P10) as well as competencies related to people: developing talent, building networks, and driving vision (P4, P7, and P8) were common skills utilized by the social entrepreneur leaders. These findings also add to the research on increasing connectivity and globalization amplifying

the need to identify and develop leadership competencies (Cumberland et al., 2016), within the scope of social entrepreneur leaders conducting systems-wide change.

Ten out of ten participants (100%) stated that a primary practice of leadership for social entrepreneurs is garnering knowledge through their work, civic, educational, and life experiences. This systems leader preparation is foundational in aiding in the social entrepreneur's systems-wide change. These experiences range from work and civic arenas (P3, P4, P5, P6, P8, P9, and P10) to formalized academic (P6, P7, and P9) through significant life experiences (P1, P6, P7, and P9). Although chapter 2 literature contains components of this type of preparation, it does not specifically reference this type of preparation in detail.

RQ2: Challenges social entrepreneurs face in their leadership journey. The second research question was developed to gather more information about the challenges social entrepreneur leaders face when leading systems-wide change and how they mitigate these challenges. Five themes surfaced in total for research question two. Of those five, four are noteworthy in the responses from participants: Intentional Adaptation (90%), Working on the Edge of Cultural Knowledge (70%), Breaking Through Historical Paradigms (70%), and Tenacity (60%).

Systems leaders within the social sector face a host of challenges and opportunities within a VUCA ecosystem such as, working on the edge of cultural knowledge with a lack of clarity (Bennett & Limoine, 2014a; Saleh & Watson, 2017) while managing ambiguity with few easily recognizable solutions (Johansen, 2017; Shaffer & Zalewski, 2011). Utilizing intentional adaptation through contextual intelligence, scanning the environment around them (P1, P3, P4, P5, P6, P7, P8, P9,

and P10) enable social entrepreneurs to adapt to the lack of clarity and uncertainty inherent in this VUCA landscape. In addition, employing metacognitive strategies (P1, P4, and P5) to reflect on the decisions being made was a technique that facilitated the leader in redefining potentially old or outdated thinking to adapt as needed (Avolio & Hannah, 2008; Bunker et al., 2012). These findings enhance the foundation of literature bringing new insights through the filter of the social entrepreneur leader with contextual intelligence demonstrating how they are able to more readily adapt, learn, and shift in a dynamic and complex environment (Kutz, 2008b, 2008a; Kutz & Bamford-Wade, 2013). Also, expanding the current literature, these findings demonstrate that metacognition is a powerful lever for the social entrepreneur leader in distinguishing when and how thinking impacts the analysis of experiences (Black et al., 2016; Davis et al., n.d.), and how to adapt and respond to each experience in a more intentional rather than unconscious manner (Baron et al., 2018). Metacognitive strategies are the techniques employed by leaders to support making sense of their leadership experiences to transfer and adapt their knowledge to new or different contexts (Avolio & Hannah, 2008).

RQ3: Measuring and defining the success of social entrepreneurs. The third research question was crafted to elicit insights on measuring and defining success for social entrepreneur leaders. Eight themes surfaced for research question three. Of those eight, five received the highest number of responses from the participants. The most prominent themes are: Social Impact Metrics (100%), Crafting Intentional Relationships (90%), Social Impact and Moving the Needle (60%), Progression Toward the Vision (60%), and Sharing the Vision (60%).

Measuring social impact resounded with all the participants, although the method in which this was defined was varied. Outcome-based measurements of social impact (P1, P3, P4, P5, P6, P7, P8, and P10) were prevalent with social innovation appearing in disruptive technology-based metrics developed by the social leader (P3, P4, P5) to measure success. Moreover, one of the foundations of success is reliant on utilizing complexity leadership while capitalizing on collective networks (P1, P2, P3, P6, P8, and P10) to craft intentional relationships through creating and developing teams and talent (P1, P3, P5, P7, and P9). Creating a culture and structure in which social innovation can occur enables social entrepreneurs to envision new solutions (Cajaiba-Santana, 2014). Moreover, the speed at which technology iterates helps facilitate the development of disruptive technologies (Bolden & O'Regan, 2016) which social entrepreneurs are then able to exploit to further their vision (P1, P3, P4, P5, P6, P7, P8, P9, and P10). Within this context, the decentralized nature of technology often brings with it lowered costs or a lowered barrier to entry (Roblek et al., 2016; Schwab, 2016) allowing the social entrepreneur leader the ability to capitalize on new innovations. These findings add to the existing literature from Uhl-bien and Arena (2017) demonstrating that social entrepreneur leaders in this VUCA environment utilize complexity leadership functioning within the contexts of entrepreneurial, guiding innovation, and transforming results.

RQ4: The role of technology in leading a social enterprise. The fourth research question was developed to ascertain a deeper understanding of the impact of technology for the social entrepreneur leader. Five themes emerged from research question four. Four of those themes received the highest response rates which are:

Creative Destruction and Social Innovation (90%), Interconnected Ecosystems (90%), Navigating the VUCA Ecosystem (80%), and Technological Tools (60%).

Utilizing technology as the impetus for creative destruction in order to scale, procure advocacy support, and grow networks is an essential element of leading in a complex environment (P1, P3, P4, P5, P6, P7, P8, P9, and P10). The complexity of this technology-rich landscape is founded in networks of competing constituencies intricately intertwined in a web of connectivity (Bennett & Lemoine, 2014a; Rodriguez & Rodriguez, 2015). Social entrepreneurs scan this complex environment for future opportunities (Kutz, 2008b, 2008a; Kutz & Bamford-Wade, 2013) to adapt and develop innovative technological, social solutions to further their impact (P1, P3, P4, P6, P7, P8, and P9). Within this technology-rich landscape, social entrepreneurs have found that lower barriers to entry for technology (Celaschi, 2017), greater access (P1, P2, P3, P5, P8, and P9), the breaking down of geographical boundaries (P1, P2, P3, P5, P8, and P9), and being digitally connected to their organizations and partners (P1, P2, P3, P4, P5, P7, P9, and P10) have aided in expanding and supporting their social impact.

In a technology-rich environment, social entrepreneurs discover and create new opportunities (P1, P3, P4, P5, P6, P7, P8, P9, and P10). This creative destruction process of investigating, innovating, iterating, and resource utilization (Marcotte, 2014) sets a foundation for social entrepreneurs to develop new processes and products (P1, P3, P4, P5, and P6) that make older incumbents obsolete expanding and combining concepts from the current literature of creative destruction and social entrepreneurship (Ganzaroli, Noni, & Pilotti, 2014; Martin & Osberg, 2007; Tapsell & Woods, 2008). In addition, these findings demonstrate the social entrepreneur leaders' ability utilize

cognitive intelligence to scan their contextually driven ecosystem (Osborn et al., 2002), employ metacognition to assess and adapt (Black et al., 2016; Davis et al., n.d.), allowing them to recognize and exploit opportunities for creative destruction (Kirzner, 2009).

Along with the aforementioned benefits, there are challenges in navigating a VUCA ecosystem. Although much of the decentralization of technology has supported social entrepreneurs, there are those who have found the iterative costs of keeping-up a challenge (P1, P4, and P6). The complexity of the environment with the overwhelming speed and amounts of information and communication (P5, P6, and P8) in addition to too much access, loss of privacy, and the potential loss of the "human" component struck a chord with these social entrepreneur leaders (P2, P3, and P9). This research demonstrates and expands the literature supporting the challenges of a VUCA environment as precipitated by extreme technological shifts, unprecedented movement of products and people, and the hyper-connectivity worldwide (Codreanu, 2016).

RQ5: Recommendations and advice for future systems-wide leaders. This research question was constructed to better understand the ideas the participants had to assist future systems-wide change leaders in entering the arena of social impact. Four themes surfaced from the participant responses. Of those four, three garnered the highest %age of responses which include: Coalesce a Support Network (80%), Commit and Be Resilient (60%), and Adopt a Learning Mentality (50%).

Eight of the ten participants (80%) indicated the compelling need to gather a network of support when starting a social enterprise. In the recommendations of support, mentors, partnerships, team members, and social entrepreneurship

organizations were deemed as important elements in building support (P1, P2, P3, P5, P6, P7, P8, and P9). As the process of building, growing, and sustaining a social enterprise can be daunting with obstacles such as naysayers and people pushing back (P2, P3, P8), it is important to stay committed, to hyper focus, and not be discouraged in following your dream (P1, P2, P6, P8, and P9). To overcome obstacles, navigate the non-linear path knowing that failure is a part of the journey (P3, P4, P5, and P6), adopting a learning mentality (Cumberland et al., 2016) by continuing self-learning and utilizing metacognition (P3 and P9) will help those on their journey of taking on the world's most wicked problems.

Implications of the Study

The purpose of this research was to ascertain the common strategies and practices of social entrepreneur leaders demonstrating social impact in a technology-rich ecosystem. As current and future leaders seek to become more effective in this new interconnected, complex, and rapidly iterating landscape, understanding how to lead and make changes in the social sphere increasingly becomes more pressing (Agarwal et al., 2018; Brilliant, 2013). Therefore, the findings of this study can be used to foster new or improve existing outdated leadership paradigms and practices. In addition, these findings will give added insights into the evolving practices of leadership in a dynamic ecosystem aiding in the edification of current and future leaders of social change, the talent development of these leaders, as well as in the curriculum development of higher education leadership programs. Distilled from the findings of this research, prominent themes surfaced, and relevant implications for leaders within a VUCA ecosystem were developed. These findings speak to current emergent trends in

social entrepreneur leadership and address implications for current and future executive leaders, talent development programs, and graduate education programs.

Implications for current and future executive leaders. As noted by scholars, understanding and investing in what constitutes effective leadership practices are essential factors to increase the viability and impact of current and future executive leaders in today's environment (Kaivo-oja & Lauraeus, 2018). Within this dynamic interconnected culture, reimagining the structure of an organization and leading within it is essential to moving from a historical heroic leadership model to one that focuses on complexity and collective frameworks (De Smet & Gagnon, 2018; Tal & Gordon, 2016). Utilizing intricate relationally driven collectives to capitalize on the complexity of this rapidly iterating environment (Cullen-Lester & Yammarino, 2016; Drath et al., 2008) will increase leadership efficacy. In addition, the findings imply that leaders with core competencies such as cognitive abilities, systems skills, and strategic problem solving (World Economic Forum, 2016) inside this dynamic environment can aid in crafting intentional relationships and supporting networks. Developing leadership skills to accommodate collective and complexity leadership while fostering the competencies to support increasing global connectivity will help future and current leaders meet the needs of leading in this rapidly iterating context.

Implications for talent development programs. As the world continually becomes more complex and intricately networked, developing leaders who have the core capabilities to manage and succeed in this ecosystem is essential. Fostering and developing teams and talent, human capital, is a critical need for an organization to remain relevant in a rapidly iterating context (Petrie, 2011). Ensuring internal leaders

are prepared for these challenges, entails understanding and developing relevant competencies (Cumberland et al., 2016) that foster success in a VUCA environment. The findings of this research suggest that a foundation of (a) cognition competencies: business insights, strategic mindset, and metacognition; (b) people competencies: developing talent, building networks, and driving vision; and (c) competencies relating to self: courage, instilling trust, self-awareness, managing ambiguity, being resilient, and nimble learning (Cumberland et al., 2016; Korn Ferry, 2014) may provide a framework to help leaders thrive in an uncertain and ambiguous landscape. These competencies may also indicate what type of competency development is needed and necessary for organizations.

Implications for graduate education. There is an opportunity to gift the next generations with an academic foundation that enables a social mission and profit paradigm. This challenge was expressed succinctly in a statement from P5.

> Look around, when you think about your own kids or your nieces and nephews and the world they are about to inherit. We need to deploy our best and brightest leaders against solving some of the social problems that these kids are going to inherit. If it's just about maximizing profit on an ROI that is purely fiscal and you hold that against the world that we are on a course to hand over to the next generation, that is a gut check moment. (P5, personal communication, January 25, 2019)

The academic institutionalization of social entrepreneurship programs (Fraizer, 2009) gives way to a platform that can assist with the development of these upcoming systems-change leaders. A compelling case can be made for higher education

programs to incorporate leadership curriculum that supports these socially-driven leaders in preparation to enter a VUCA landscape. As stated by P1 “No one teaches you about social enterprise in college. You have to make these very black and white choices… No one says you can actually build an enterprise that can also help people” (P1, personal communication, January 18, 2019), indicating that academia has an opportunity to better prepare these next cadres of leaders. In light of the findings, focusing on developing strategic leadership competencies of self, cognition, and people (Cumberland et al., 2016; Korn Ferry, 2014) while integrating and intentionally fostering more systems leader preparation (Senge et al., 2015) through work and life experience would enable these budding leaders a more robust foundation in which to step into mission-focused work. The findings also suggest that crafting programming to incorporate a framework of creative destruction (Marcotte, 2014) within the context of a technologically-rich environment will ensure future leaders can scan for opportunities (Kutz & Bamford-Wade, 2013) and exploit them (Kirzner, 2009) enabling them to stay relevant in a complex and dynamic landscape as well as further their social impact. In addition to these implications, the findings were clear in the importance of crafting intentional supportive relationships to support, expand, and grow their social enterprises. Fostering a collectivistic academic experience would further expose students to the power of support through interdependent networks (Cullen-Lester & Yammarino, 2016) and its impact on mitigating and managing within a volatile, uncertain, complex, and ambiguous leadership ecosystem.

Recommendations for Future Research

Utilizing qualitative research, this study sought to discern the strategies and practices, challenges, day-to-day technology impact, and recommendations of social entrepreneur leaders creating systems-wide change within a technologically-rich ecosystem. These leaders gave thoughtful and candid responses that will help inform current and future leaders, talent development programs, and higher education programs for those seeking the skills to lead in today's VUCA environment. Incorporating relevant literature in relation to a technology-rich environment for current and future social entrepreneur leaders in addition to the combined experiences and insights from the ten participants has fostered in-depth research that can enhance and grow the current body of literature and research pertaining to leadership. The following recommendations for future research can continue to add to this evolving field of study.

- Conduct a similar study that explores the common leadership strategies of social entrepreneurs within a culture of innovation (Lakhani & Marquard, 2014). This study would aid in identifying a link between creating a culture of innovation and the leadership strategies which support success.
- Conduct a similar study looking at a younger demographic of social entrepreneur leaders to ascertain challenges this specific demographic faces in starting a social enterprise. This additional study would enable academic programs to iterate their curriculum to stay relevant to real-time challenges and issues these social leaders face.
- Conduct a study that narrows in on a specific social entrepreneur industry area to enable a deep dive on the explicit leadership needs for that industry. This study

examined a cross-section of industries and gave additional overall insights. A study focusing on the industry-specific strategies and practices relative to particular challenges those leaders face will benefit those sector leaders.

- Conduct this study on a global scale integrating leaders from a multitude of countries. As the world becomes more globally connected, this research would enable leaders to better prepare for leading within this global context.
- Conduct a study that examines social entrepreneur leaders outside of Ashoka Fellows or in combination with this demographic. Expanding those social entrepreneurs associated with additional organizations allows a broader perspective on the leadership strategies which enable success.

Final Thoughts

We all have an opportunity to step in and step up to create positive change in the world around us. As these social entrepreneurs spoke of their clear and compelling vision and purpose to create lasting social impact, it affirmed my faith in everyone's ability to take small and large steps toward making a difference. These leaders saw a gap, a flaw in a system and deemed it was their honor, privilege, and responsibility to step in and make a difference. The skills that started their journey are those they still utilize to thrive in this tumultuous environment. When I first contacted one of the participants, he asked what VUCA meant. After I explained the complexity and ambiguity that technology had created, he responded with "haven't we always been in a VUCA environment?" To his point, social entrepreneurs are predisposed to lead this particular charge for all leaders. Social entrepreneurs, as evidenced by this unique research study, utilize competency strategies, contextual intelligence, systems thinking,

metacognition, as well as creative destruction and they have now begun to capitalize on the opportunities in this new volatile, uncertain, complex, and ambiguous landscape. They are furthering their social missions and creating more impact using the rapidly iterating ecosystem of technology as their lever. This group of resourceful, dedicated, committed, and passionate leaders has found success in chaos and is thriving where incumbents are struggling to keep pace. In looking at their journey through this research, this unique group of systems-change leaders has brought new insights into leading effectively within this VUCA environment. It is my vision and purpose to aid current and future leaders who wish to foster social impact and create positive change. To open the door of possibility through a clear foundation of leadership skills, competencies, and knowledge so that they may define their vision and purpose to take on our world's most intractable problems. This research is step one in a journey to do just that.

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APPENDIX A

IRB Approval

Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: December 17, 2018

Protocol Investigator Name: Victoria Brodie

Protocol #: 18-05-803

Project Title: Disrupted Leadership: Strategies and Practices of Leaders in a VUCA World

School: Graduate School of Education and Psychology

Dear Victoria Brodie:

Thank you for submitting your application for exempt review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations 45 CFR 46.101 that govern the protections of human subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Since your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research

APPENDIX B

Recruitment Script

Dear [Name],

My name is Victoria Brodie, and I am a doctoral candidate in Organizational Leadership at Pepperdine University's Graduate School of Education and Psychology. I am conducting a study on social entrepreneur leaders in a dynamic, technology-rich environment and you are invited to participate in the study. The title of my dissertation is: Leadership Disrupted: Strategies and Practices of Leaders in a VUCA World.

As leaders continue to be immersed in increasingly complex and volatile ecosystems, both scholars and practitioners need to determine the best strategies to be successful in this new VUCA landscape. The purpose of this study is to determine: (a) the common leadership strategies and practices that social entrepreneurs employ, (b) the challenges that social entrepreneurs face in their leadership journey, (c) the practices social entrepreneurs use to measure leadership success, (d) the role of technology in their day-to-day leadership, and (e) the recommendations social entrepreneurs would make for future leaders of systems-wide change.

If you agree, you are invited to participate in an interview that intends to explore the best strategies and practices of social entrepreneur leaders in a VUCA environment. The purpose will be achieved by identifying the challenges and successes that current social entrepreneur leaders have experienced leading in a technology-driven landscape while working to create systems-wide change.

The interviews anticipated to take no more than 60 minutes to complete and the interview will be recorded with your consent. Participation in this study is voluntary. Your identity as a participant will remain confidential during and after the study. Your name, affiliated organization or any personal identifiable information will only be reported if you consent. If you do not consent, a pseudonym from a "generic organization" will be used to protect your confidentiality. Additionally, confidentiality and privacy of all participants will be fully protected through the reporting of data in aggregate form.

Should you have any questions, please contact me at [redacted]
or Dr. Lani Fraizer at [redacted]

Thank you for your participation,

Victoria K. Brodie, MA
Doctoral Candidate in Organizational Leadership
Pepperdine University, Graduate School of Education and Psychology

APPENDIX C

Recruitment/Informed Consent Letter

PEPPERDINE UNIVERSITY

(Graduate School of Education and Psychology)

INFORMED CONSENT FOR PARTICIPATION IN RESEARCH ACTIVITIES

LEADERSHIP DISRUPTED: STRATEGIES AND PRACTICES OF LEADERS IN A VUCA WORLD

You are invited to participate in a research study conducted by Victoria Brodie, MA, and Dr. Lani Fraizer at Pepperdine University, because you:

1. Are currently an Ashoka Fellow residing within the United States;
2. Have shown systems change leadership within your industry sector; and
3. Have demonstrated a commitment to social change.

Your participation is voluntary. You should read the information below, and ask questions about anything that you do not understand, before deciding whether to participate. Please take as much time as you need to read the consent form. You may also decide to discuss participation with your family or friends. You will also be given a copy of this form for you records.

PURPOSE OF THE STUDY

The purpose of the study is to determine:

1. What common leadership strategies and practices do social entrepreneurs employ?
2. What challenges do social entrepreneurs face in their leadership journey?
3. How do social entrepreneurs measure leadership success?
4. What is the role of technology in your day-to-day leadership?

5. What recommendations would social entrepreneurs make for future leaders of systems-wide change?

STUDY PROCEDURES

If you volunteer to participate in this study, you will be asked to:

1. Review the open-ended interview questions before the interview
2. Review the informed consent form
3. Respond to the 12 qualitative interview questions
4. Review transcribed responses taken from the recording of the interview

Note: Participant must agree to be recorded to participate in the study.

POTENTIAL RISKS AND DISCOMFORTS

There is no known risk to the participants in this study. If at any time the participant would like to choose to opt out of the study, they can for any reason. The participant may also choose to only answer those questions for which they feel comfortable during the time of the interview.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

The potential benefit to the participant is the knowledge that their contribution and expertise contributed to the greater body of literature on leadership to assist current and future leaders in a new dynamic global environment.

PAYMENT/COMPENSATION FOR PARTICIPATION

There will be no payment and/or compensation for being a participant in this study.

CONFIDENTIALITY

The records collected for this study will be confidential as far as permitted by law. However, if required to do so by law, it may be required to disclose information collected about you. Examples of the types of issues that would require me to break confidentiality are if you tell me about instances of child abuse and elder abuse. Pepperdine's University's Human Subjects Protection Program (HSPP) may also access the data collected. The HSPP occasionally reviews and monitors research studies to protect the rights and welfare of research subjects.

The data will be stored on a password-protected computer in the principal investigators place of residence. The data will be stored for a minimum of three years. Any identifiable information obtained in the collection of information during the scope of the

study will remain confidential. All interview recordings will be destroyed once transcribed.

PARTICIPATION AND WITHDRAWAL

Your participation is voluntary. Your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

ALTERNATIVES TO FULL PARTICIPATION

The alternative to participation in the study is not participating or completing only the items which you feel comfortable.

EMERGENCY CARE AND COMPENSATION FOR INJURY

If you are injured as a direct result of research procedures you will receive medical treatment; however, you or your insurance will be responsible for the cost. Pepperdine University does not provide any monetary compensation for injury.

INVESTIGATOR'S CONTACT INFORMATION

You understand that the investigator is willing to answer any inquiries you may have concerning the research herein described. You understand that I may contact the following individuals if I have any other questions or concerns about this research.

Victoria K. Brodie – Investigator [redacted]
Dr. Lani Fraizer – Dissertation Chairperson [redacted]

RIGHTS OF RESEARCH PARTICIPANT – IRB CONTACT INFORMATION

If you have questions, concerns or complaints about your rights as a research participant or research in general please contact Dr. Judy Ho, Chairperson of the Graduate & Professional Schools Institutional Review Board at Pepperdine University 6100 Center Drive Suite 500 Los Angeles, CA 90045, [redacted] or [redacted]

APPENDIX D

Research Questions and Corresponding Interview Questions

Research Questions	Corresponding Interview Questions
RQ1: What common leadership strategies and practices do social entrepreneurs employ?	IQ 1: What leadership practices and/or techniques have helped you be successful as a social entrepreneur? IQ 2: What education/training, work experiences, or personal characteristics prepared you to lead systems-wide change?
RQ 2: What challenges do social entrepreneurs face in their leadership journey?	IQ 3: What challenges have you faced in leading systems-wide change within and outside your company? IQ 4: How did you overcome these challenges?
RQ3: How do social entrepreneurs measure leadership success?	IQ 5: How do you define your leadership success? IQ 6: How do you measure and track your success as a social entrepreneur?
RQ4: What is the role of technology in your day-to-day leadership?	IQ7: What is the role of technology in your day-to-day leadership? IQ8: What challenges do you face pertaining to technology in your day-to-day leadership?
RQ5: What recommendations would social entrepreneurs make for future leaders of systems-wide change?	IQ 9: What advice or recommendations would you give to future leaders? IQ 10: Is there anything else you would like to add?

Note. The table identifies four research questions and corresponding interview questions.

APPENDIX E

Peer Reviewer Form

Dear Reviewer:

Thank you for agreeing to participate in my research study. The table below is designed to ensure that may research questions for the study are properly addressed with corresponding interview questions. In the table below, please review each research question and the corresponding interview questions. For each interview question, consider how well the interview question addresses the research question. If the interview question is directly relevant to the research question, please mark "Keep as stated." If the interview question is irrelevant to the research question, please mark "Delete it." Finally, if the interview question can be modified to best fit with the research question, please suggest your modifications in the space provided. You may also recommend additional interview questions you deem necessary.

Once you have completed your analysis, please return the completed form to me via e-mail to [redacted]. Thank you again for your participation.

Research Questions	**Corresponding Interview Questions**
RQ1: What common leadership strategies and practices do social entrepreneurs employ?	IQ 1: What leadership practices and/or techniques have helped you be successful as a social entrepreneur? *Keep as Stated* *Delete It* *Suggested Modifications* IQ 2: What education/training, work experiences, or personal characteristics prepared you to lead systems-wide change? *Keep as Stated* *Delete It* *Suggested Modifications*
RQ 2: What challenges do social entrepreneurs face in their leadership journey?	IQ 3: What challenges have you faced in leading systems-wide change within and outside your company? *Keep as Stated* *Delete It* *Suggested Modifications*

	IQ 4: How did you overcome these challenges? *Keep as Stated* *Delete It* *Suggested Modifications*
RQ3: How do social entrepreneurs measure leadership success?	IQ 5: How do you define your leadership success? *Keep as Stated* *Delete It* *Suggested Modifications* IQ 6: How do you measure and track your success as a social entrepreneur? *Keep as Stated* *Delete It* *Suggested Modifications*
RQ4: What is the role of technology in your day-to-day leadership?	IQ7: What is the role of technology in your day-to-day leadership? *Keep as Stated* *Delete It* *Suggested Modifications* IQ8: What challenges do you face pertaining to technology in your day-to-day leadership? *Keep as Stated* *Delete It* *Suggested Modifications*
RQ5: What recommendations would social entrepreneurs make for future leaders of systems-wide change?	IQ 9: What advice or recommendations would you give to future leaders? *Keep as Stated* *Delete It* *Suggested Modifications* IQ 10: Is there anything else you would like to add? *Keep as Stated* *Delete It* *Suggested Modifications*