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How a Small Business Negotiates Digital Inclusion of People with Disabilities: A Case Study

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HOW A SMALL BUSINESS NEGOTIATES DIGITAL INCLUSION OF PEOPLE WITH DISABILITIES: A CASE STUDY

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Abstract

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Technology has provided more people access products and services, yet some individuals who would benefit the most from digital access to resources are frequently excluded from participation. One group that is largely neglected is the disability community. Despite federal regulations intended to ensure that people with physical/mental disabilities are included in public digital platforms, organizations continuously design websites, applications, and interfaces without people with disabilities in mind. This is particularly the case with small businesses, which are most commonly reported as having inaccessible digital platforms.

Digital inclusion attempts to ensure equity in digital properties by providing a model to operationalize inclusion across technologies. This qualitative case study examines how a small business owner in an urban U.S. city prioritizes digital inclusion in his daily operations. Using a responsive interview model, the business owner's experiences, attitudes, and priorities were recorded. Six themes appeared from this study: perceptions of disability influence digital inclusion, powerful branding suggests digital access, unawareness of accessibility guidelines, UX testing overlooks input from people with disabilities, inclusion is tough to enforce on digital platforms, and workarounds hinder digital improvements.

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CHAPTER

Chapter 1: Introduction

I heard the automatic doors swoosh in front of me, and I knew I had arrived at the credit union's lobby. My guide dog, Oslo, proceeded to guide me around a buzzling crowd. It was spring of 2018, and I was finally getting serious about starting my content creation business. As a new venture, I wanted to support other small businesses, and I thought that a smaller bank would treat me better. A cheery woman greeted me, and I explained that I wanted to open a new business account. "Sure," she said, "I can help you with that." I took a seat on a plush chair, and she began to ask me questions about my business. "I'll focus on creating content like articles, books, and podcasts," I shared, "and the content will be for companies that want to reach people with disabilities." I pulled out a raised line check, which is much larger than the standard, and said I wanted to use the funds to open the account. "Wow, these are cool," she said, "I didn't know banks made these." "Oh yeah, they also have ATMs with Braille too," I said. I took out the ATM card, and showed her the raised bumps on the card. I then asked, "Don't you guys have any products for the blind?" The banker apologized for not knowing the answer to my question, and then called one of her colleagues over. The man with the brogue did not know the answer either, and he used the phone on the desk to call the bank manager.

I soon learned that unlike the large commercial bank that I used for my personal banking, the credit union did not have any accessible checks, cards, or phone service. I pulled out my laptop, and logged onto their website to see if it worked with my assistive software. If I could at least have access to online banking, I could overlook the other things. After all, I could add Braille stickers to the card, and do "bill pay" to replace

checks. To my disappointment, the website was completely inaccessible. No graphics were labeled, nor did the website allow me to find the edit field to enter my temporary password. I inquired about the bank's mobile app as a possible alternative, but that portal also proved to be inaccessible. An hour had passed, and we had run out of solutions. The man with the brogue said, "Sorry, we're a small business. We cannot afford to make things for your community. We won't be able to help you."

While many small organizations make a commitment to diversity and inclusion, they often fall short in providing digital products and services that are accessible to people with disabilities. This study will look at the digital inclusion of people with disabilities by a small business in an urban city in the United States. With a qualitative approach, the researcher will conduct a model case study that looks at how an entrepreneur prioritizes digital inclusion in his organization.

Background

The United States Department of Justice (1990) defines disability as the following: "(1) A physical or mental impairment that substantially limits one or more major life activities; (2) a record (or past history) of such an impairment; or (3) being regarded as having a disability." The researcher defines a disability as a condition that limits a daily activity, such as walking, reading, speaking, bathing, etc. In addition, he categorizes disability into two groups: physical and mental conditions. It is important to note that the researcher is blind, but did not become disabled until the age of twenty-seven. Thus, his definition of disability is more influenced by law and policy, than by frameworks from special education.

The Civil Rights Act did not include protection from discrimination against people with disabilities. Individuals with disabilities did not receive full protection under the law until “the Americans with Disabilities Act (ADA) was passed on July 26, 1990, by George H.W. Bush” (Americans with Disabilities Act, 1990). The ADA, which granted disabled individuals equal access to public places and services, was the first step towards providing access to consumer goods to people with disabilities. What is more, Title III of the ADA states that websites are covered by the law (Burks, 2013). Nevertheless, more than two decades later, businesses still struggle to create websites, mobile applications, and devices with a digital interface that are accessible to people with disabilities (Garcia & Diaz Castillo, 2010). It is especially tough for small companies to be digitally inclusive, as they have access to fewer resources when compared to government agencies and large corporations (Correia, 2008).

A big factor driving digital inequality for people with disabilities among small businesses is that business owners fail to see their e-commerce platforms as a public place (Correia, 2008). Furthermore, small business owners hire developers and engineering firms, and do not insist that their vendors create and test for accessibility in their digital properties (Areheart & Stein, 2015).

Digital inclusion is a concept that operationalizes digital access, but does not make specific recommendations on achieving ADA compliance for businesses (Burks, 2013). For precise access regulations, organizations need to look at the Communication and Video Access Act and the Web Content and Accessibility Guidelines in order to get detailed requirements to meeting Title III of the ADA (Burks, 2013; Cox, 2010; Ellcessor, 2014). Several free online resources are available to help

organizations become familiar with digital access and inclusion; however, they are often overlooked by smaller organizations (Heck Daigle, 2005). Ultimately, a digital inclusion strategy goes beyond complying with the ADA; it helps organizations have a bigger social impact (McDonald, Williamson, Weiss, & Meera, 2015).

Problem of Practice

People with disabilities are the largest minority group in the U.S. at 56 million, yet are overlooked by small businesses when it comes to the development of products and services (McMenamin, 2013; Walter, Clarcq, & Thompson, 2002; Weerakkody, Dwivedi, El-Haddadeh, & Ghoneim, 2012). Because small businesses are more at risk of violating federal access laws through their digital properties, they historically experience more lawsuits related to public accommodations (Beard, 2015; Correia, 2008). The inaccessibility of digital technologies makes it tough for individuals with disabilities to secure work, and consequently, live in poverty (Kelly, 2013; Weerakkody et al., 2012). Digital inclusion makes it possible for individuals with disabilities to participate fully in society, by providing the access to resources needed to survive. Additionally, understanding how to raise the number of small businesses with a digital inclusion strategy could have a positive impact on the American economy, as individuals with disabilities can increase their buying power, which ultimately surges their income tax contribution.

There is substantial need to further research how small business owners prioritize digital inclusion because of the difficulty of adequately researching this topic. First, current research from government agencies only focus on capturing information on large businesses that have been sued for not following access guidelines as outlined

by the ADA, which does not account for the small businesses who also violate access laws, but go unreported (Beard, 2015). Second, most of the data about small businesses comes from the Small Business Administration, and this agency does not offer any information on ADA compliance. This study will contribute to a body of research that is small and needs further development.

Purpose of Study

The purpose of this model case study is to examine the attitudes and experiences of a small business owner towards digital inclusion.

Inquiry Questions

The following questions guide this study's design, data collection, and analysis:

1. How do some small business owners learn about federal and state accessibility regulations?
2. What influences some business owners to give a higher priority to digital inclusion in their operations?

In order to gain a comprehensive perspective of how a small business owner prioritizes digital inclusion of people with disabilities, the following sub-questions were explored:

1. What barriers do some small businesses face in practicing digital inclusion?
2. What digital properties do some small businesses overlook when setting up their infrastructure?
3. What types of digital inclusion practices are difficult for some small business owners to execute?

Significance of Inquiry

Research on digital inclusion of people with disabilities by small businesses is scarce when compared to small business data for other minority groups (Kelly, 2013). Additionally, Garcia and Diaz Castillo (2010) point out that the majority of the data

available about digital inclusion focuses on usability, instead of on the accessibility of a product or service. Most data on digital inclusion of people with disabilities focuses on employment and health figures, and not on the perspective of a small business owner. This inquiry will add to existing knowledge by providing further understanding of the success strategies and challenges for small business owners. The inquiry will delve deep into the experiences of the study's participant, which will provide new insights that can be assessed through inductive analysis. This research can result in practical strategies for small business owners, as well as possible guidelines for public and private agencies working toward fuller compliance, such as the SCORE Association, the Minority Economic Development Agency, and the Small Business Administration. The study may also serve as a launchpad for future research in the space of technology for small organizations.

Theoretical Framework

Digital inclusion is a theoretical framework. It speculates that organizations can make their information and communication technologies accessible to any individual despite age, gender, educational level, ability, or economical background (Weerakkody et al., 2012). Duplaga (2017) describes digital inclusion as an opportunity for people with disabilities to gain further independence by being able to access resources that make their lives easier. This framework acknowledges that the increase of underrepresented communities on digital platforms does not just benefit the marginalized individual, but the society at large (Garcia & Diaz Castillo, 2010).

The purpose of using this framework in this study is to get an understanding of how a small business owner's priorities for information and communication technologies

impact their inclusion of people with disabilities on their digital properties. Digital inclusion has been recognized as a framework that benefits smaller organizations that are looking to scale (Beard, 2015; Correia, 2008). In this scenario, organizations can deploy a digital inclusion strategy to help them reach a wider audience, as well as ensure that different abilities are considered throughout their operations (Burks, 2013; Cox, 2010; Ellcessor, 2014).

Exploring a model case study through a framework of digital inclusion will help identify how a small business's negotiation of digital inclusion impacts their accessibility for people with disabilities. The theoretical framework is discussed in more detail in Chapter 2.

Chapter Summary

This dissertation will identify and outline issues affecting the deployment of digital inclusion of individuals with disabilities by small businesses. Articles including but not limited to Bell (2010), Kelly (2013), and McMenamin (2013), along with other reports and small business statistics are analyzed to provide a historical context about the digital inclusion of people with disabilities, concentrating on the factors that push some entrepreneurs to invest in creating an inclusive environment. In reviewing the research available on this topic, I will explore the historical background of having a disability in the United States focusing on the fact that the ADA was only enacted 29 years ago, and how disabilities studies among working-age individuals as a relatively new research field, still requires much development. Next, I will briefly discuss the impact of sensory disabilities such as blindness/visual impairment and deafness/hard of hearing, on accessing goods and services and the interaction with small organizations across

different industries. Third, I will focus on examining the data of leading researchers in the field of diversity related to individuals with disabilities, analyzing their work to understand how their research contributes to the field. Next, I will interview a small business owner located in an urban city in the United States. Finally, I will conclude by making my own recommendations to improve the digital inclusion of people with disabilities by small businesses by reflecting on the positive experiences a small business owner had in creating digital accommodations.

Definition of Key Terms

Assistive technology. Assistive Technology includes "products, equipment, and systems that enhance learning, working, and daily living for persons with disabilities" (Assistive Technology Industry Association, 2017).

Digital inclusion. The model used to increase digital access to marginalized groups is digital inclusion. Derived from social inclusion, digital inclusion was briefly known as digital divide, although now the term e-inclusion is considered a more acceptable phrase because it focuses on the opportunity, rather than on what is lacking in an e-service or platform (Duplaga, 2017; Weerakkody et al., 2012).

Disability. A disability is "(1) a physical or mental impairment that substantially limits one or more major life activities; (2) a record (or past history) of such an impairment; or (3) being regarded as having a disability. The ADA Amendments Act regulations specify how that definition should be interpreted and applied" (U.S. Department of Justice, 1990).

Disability studies. "Disability Studies refers generally to the examination of disability as a social, cultural, and political phenomenon. In contrast to clinical, medical,

or therapeutic perspectives on disability, Disability Studies focuses on how disability is defined and represented in society. It rejects the perception of disability as a functional impairment that limits a person's activities. From this perspective, disability is not a characteristic that exists in the person or a problem of the person that must be "fixed" or 'cured'" (Syracuse University, 2014).

Diversity. Diversity is a model that looks to increase awareness and participation of groups of people who historically have been denied access to social opportunities (Capella McDonnall, Crudden, & O'Mally, 2015; Kulkarni, 2012). It takes into account characteristics such as age, gender, religious beliefs, ethnicity, sexual orientation, and ability to define populations that have been historically marginalized (Von Schrader, Malzer, Erickson, & Bruyere, 2011). Diversity aims to improve social interactions by increasing participation of communities that have faced barriers in advancing in society (Von Schrader et al., 2011).

Employment development plan. "The Employment Development Plan (EDP) is a written plan for people in the Employment Services Program. The EDP contains your job goal, the education and training that you need to get to that goal, and the services like child care and transportation that you need" (Massachusetts Legal Help, 2017).

Small business. For decades, the term small business has come to define a plethora of organizations across several industries (Anastasia, 2015). Independent of business type or class, the Small Business Administration has been the authority in labeling what constitutes a small business in the United States (Anastasia, 2015). The term has a different meaning in diverse parts of the world, yet in some disciplines, there is consistency (Garcia & Diaz Castillo, 2010). For example, manufacturing plants with

less than 20 employees are considered small businesses, while insurance companies with an annual profit of less than 2 million are considered small—no matter the employee headcount (Anastasia, 2015). For the purpose of this research, the term small business will be limited to organizations with less than 25 part-time or full-time employees.

User experience. User Experience (UX) is a model that focuses on understanding the needs of users related to a product or service. UX aims to comprehend user desires, frustrations, and limits, as well as to know range of ability (Holmes, 2018; Usability.gov, 2019).

User interface design. User Interface design (UI) is a model that focuses on anticipating the needs of users, such as how they will navigate through content, or interact with input buttons. It draws from visual design, interaction design, and information architecture (Holmes, 2018; Usability.gov, 2019).

Vocational rehabilitation. Vocational rehabilitation is “a process which enables persons with functional, psychological, developmental, cognitive and emotional impairments or health disabilities to overcome barriers to accessing, maintaining or returning to employment or other useful occupation” (Disabled Veterans, 2017).

Workaround. A disability-conscious alternative process to accessing a good or a service beyond what is readily available to society at large (Hollier, Ellis, & Kent, 2017).

Workplace accommodation. “In the employment context, a reasonable accommodation is defined as any change or adjustment to a job, the work environment, or the way things usually are done that would allow an individual with a disability to

apply for a job, perform job functions, or enjoy equal access to benefits available to other individuals” (U.S. Department Of Labor, 2017)

Chapter 2: Literature Review

As the number of organizations that offer electronic services via the internet, mobile applications, and through stationary devices grows daily, and as people shift to primarily sharing information digitally, technology has become a vital segment of society (Duplaga, 2017; Weerakkody at al., 2012). However, some of the people that would benefit the most from modern conveniences such as online banking, shared-ride services, and video conferencing are excluded from participation (Dobranskya & Hargittaib, 2016).

This literature review looks at how small businesses underserve people with disabilities through a theoretical framework of digital inclusion. It will examine research with a theory of access, as well as define the parameters in which people with disabilities are treated unequally by small organizations within business models of inclusion and diversity. The review will outline historical context and rates of people with disabilities, give examples of digital inclusion, and highlight recommendations by researchers in the field of digital inclusion of people with disabilities. This review of the literature will discuss education from the perspective of diversity and digital inclusion, but not from the lens of curriculum design or special education.

Exclusion from technology occurs when organizations fail to account for the various levels of physical and mental ability and design for the dominant population (Bunning, Trapp, Seymour, Fowler, & Rollett, 2010). Several minority groups, such as people who live in rural areas and racial and ethnic communities, are affected by the lack of digital inclusion in technology (Duplaga, 2017); nonetheless, one of the

communities that is most heavily impacted by digital inequalities are people with disabilities (Dobranskya & Hargittaib, 2016; Duplaga, 2017).

While there are several models and theories that can drive inclusion across various sectors of modern society, when it comes to technology, there is limited research on expanding digital access to marginalized communities (Areheart & Stein, 2015). Moreover, digital inclusion is almost exclusive to large corporations and governmental agencies – a result of them being more closely monitored by agencies that enforce access laws (Areheart & Stein, 2015).

Digital inclusion is a concept that confirms that basic baselines of accessibility are being met in order to ensure that all members of society have access to digital properties (Weerakkody et al., 2012). These baselines, as outlined by the Web Content Accessibility Guidelines 2.0, state that Web content must be: (1) “Perceivable – Information and user interface components must be presentable to users in ways they can perceive”; (2) “Operable – User interface components and navigation must be operable”; (3) “Understandable – Information and the operation of user interface must be understandable”; and (4) “Robust – Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies” (World Wide Web Consortium, 2018). Digital inclusion highlights the power decision-making has on access to resources that enhance the agency and independency of people who are underserved by their society (Cazini & Frasson, 2011). While its purpose is not to enforce federal or state access laws, if incorporated properly, digital inclusion results in international compliance (Garcia & Diaz Castillo, 2010).

Derived from social inclusion, digital inclusion was for a brief time known as digital divide, which is more common in Europe. Digital inclusion is also known as e-inclusion, and it is considered a more acceptable term than digital divide because it focuses on the opportunity, rather than on what is lacking in an e-service or platform (Duplaga, 2017; Weerakkody et al., 2012). In the United States, universal design is another term used to refer to both technology and physical structures that are inclusive to any population regardless of ability. However, universal design is more prevalent with large companies and in higher education, as these entities are concerned with improving access to both physical and digital spaces. For small organizations that only do business online, digital inclusion is more applicable (Basas, 2013; Hindle, Gibson, & David, 2010). Ultimately, a digital inclusion strategy can help small businesses adhere to access regulations without having to gain deep understanding of technical accessibility regulations set by governments or accessibility institutions (Burks, 2013).

According to Heck Daigle (2005), civic duty and engagement have become a priority for several organizations; still, the desire to be socially aware does not always align with being inclusive on digital properties. This absence of awareness for digital inclusion has caused several small businesses across industries to not be compliant with access laws and lose lawsuits (Beard, 2015).

Despite the fact that digital advancements to websites, mobile apps, and devices with a digital interface are less expensive to address than upgrades to a physical property, such as a building, smaller organizations are more likely to not address digital inequalities (Areheart & Stein, 2015). Consequently, smaller organizations are more likely not to abide by access regulations, while limiting the reach of their brands (Garcia

& Diaz Castillo, 2010). While research illustrates that smaller organizations struggle to be more digitally inclusive of people with disabilities, there are several large organizations that are effective in deploying a digital inclusion strategy (Burk & Welbes, 2018; Heck Daigle, 2005).

In a 2018 study by Burk and Welbes, the researchers looked at how the Minneapolis and St. Paul International Airport has built a culture around access for people with disabilities. The airport treats access and accommodations as a part of daily operations; they make updates to their programs on a quarterly basis – one of the most successful tactics being the committees of people with disabilities that constantly review services and products for satisfaction.

Burk and Welbes (2018) argue that building a business culture around digital inclusion will enhance access for all by helping to minimalize problems around usability for small organizations. This is a strategy that has made the Minneapolis and St. Paul International Airport a pioneer in digital inclusion.

Digital inclusion is impacted by small business owners' awareness of digital inclusion, perceptions of diversity, and prioritization of inclusion and diversity in their operations (O'Leary & Weathington, 2006; Zugelder & Maurer, 1998).

Rates of People with Disabilities

People with disabilities make up roughly about 20% of the global population, and in the United States, the disability community makes up the largest minority group at 19%, which consists of both physical and mental conditions (Hemphill & Kulik, 2016; McMenamin, 2012). Nonetheless, this demographic is continuously overlooked by businesses when products and services are designed or enhanced (Anand & Ben-

Shalom, 2014; Bruyere, Erickson, & VanLooy, 2006). The lack of digital inclusion can be measured by the large number of small business that receive demand letters or ADA lawsuits for not following access guidelines (Hayat, 2017).

Most of the statistical data about people with disabilities is collected by government agencies and not made readily available to small businesses (Burkhauser, Daly, Houtenville, & Nargis, 2002). As a result, small enterprises that do not do business with local, state, or federal governments are unaware of the size and power of this demographic and have a tough time figuring out how the law applies to their business (Burkhauser et al., 2002; Zugelder & Maurer, 1998). In addition to data about people with disabilities being limited to government agencies and the organizations that do business with them, a lot of the information collected about people with disabilities are new additions to federal reports (Kelly, 2013). For instance, in the United States, people with visual disabilities were not counted on any public survey until 2008 (Kelly, 2013).

It is important to note that county, state, and federal reports are unable to capture people with disabilities who do not wish to disclose their conditions, as doing so could impact their jobs, life insurance policies, and healthcare (Burkhauser et al., 2002). Yet, these individuals still require some level of benefits and support through inclusion (Burkhauser et al., 2002; Duplaga 2017).

How People with Disabilities Are Affected by Lack of Digital Inclusion

While lack of representation of people with disabilities across online communities is a problem, a bigger barrier to consuming services and products for people with disabilities is digital access (Sourbati, 2012). Policies around creating accessible

content exist in many first world countries, yet many small companies fail to produce accessible multimedia on their digital platforms, such as videos with close captioning and websites tagged for adaptive technology for the blind (Sourbati, 2012).

Additionally, a large number of people with disabilities face high figures of unemployment and live in poverty due to lack of access to employment sites (Nazarov, 2016). They also experience high levels of isolation produced by inaccessibility to online communities (O'Sullivan, Strauser & Wong, 2012). Additionally, access to education and training is limited as the number of fully inclusive online schools is restricted (Nazarov, 2016).

Many organizations exclude people with disabilities from access to their services, which keeps them from improving themselves through education and training (Huskin, Reiser-Robins, & Kwon, 2017). A lack of digital inclusion on behalf of small enterprises is often a catalyst to poverty, as the inability to access resources independently leads to scarceness of assets (Huskin et al., 2017).

Employment Gap

Individuals with disabilities did not receive full protection under the law until "the Americans with Disabilities Act (ADA) was passed on July 26, 1990 by George H.W. Bush" (ADA, 1990). The ADA, which granted disabled individuals equal access to public places and services, was the first step towards providing access to employment opportunities through workplace accommodations (Weber, 2012). Nevertheless, two decades later, the employment rate for individuals with disabilities was only 18.6 percent, while the figure for those who did not report a disability was 63.5 percent (McMenamin, 2012). Additionally, people who have one or more substantiated

disabilities have historically achieved less educational attainment when compared to those without disabilities (Huskin et al., 2017; McMenamin, 2012). Despite the fact that there is legislation, government sponsored vocational programs, and a higher social awareness for diversity and inclusion to support the employment of people with disabilities, there is still a significant discrepancy between the individuals in the U.S. workforce who have disabilities compared to those who do not (Huskin et al., 2017; McMenamin, 2012). Moreover, the large employment gap between individuals with disabilities and those without disabilities can be greatly attributed to the substantial number of the disabled population who are elderly, retired and not actively looking for work (Duplaga, 2017; McMenamin, 2012). "In 2012, 45.7 percent of people with a disability were ages 65 or older; in contrast, only 13.5 percent of people with no disability were in that age group" (McMenamin, 2012, p. 4). Still, it should be noted that when reviewing the employment numbers for people with disabilities, it is crucial to take a look at the data pertaining to working-age people with impairments.

The groups that experience low employment participation as a result of digital inequality in higher numbers are the blind, deaf, and people with developmental conditions. Nevertheless, all people with disabilities benefit from digital access to jobs because employment increases income, which automatically grants access to more goods and services (Burks, 2013; Duplaga, 2017). Factors that limit how these three groups interact with the world on digital platforms will be discussed in the following sections, as well as related to models of inclusion and diversity.

The Blind Community

A computer is an indispensable tool in today's fast-paced world as it serves as a method to acquire and produce information. For many individuals with visual disabilities, navigating a computer requires the use of assistive technology. Assistive technology makes otherwise inaccessible functions of the computer accessible to the blind, which then makes it possible for someone who is blind to complete a digital task without any assistance (Bell, 2010). Even with assistive technology for the visually impaired, many digital properties are still inaccessible (Bell, 2010). Thus, computer training for the blind does not guarantee access to digital communities, and access can become a major roadblock for blind people seeking education, employment and entertainment (O'Sullivan et al., 2012). Visually impaired people with adaptive technology training still do not secure paid jobs as a result of inaccessible online platforms (Zhou, Walters, & Parker, 2010). But even though the literature argues that there is a need for more computer training for the blind, there is a bigger need for digital communities, such as social media and mobile applications that work well with assistive software (O'Sullivan et al., 2012).

For people who are blind and visually impaired, education is one of the biggest hurdles to overcome as a result of digital inequality (Areheart & Stein 2015; Fichten et al., 2012). Colleges and universities, which serve their local communities in the same manner that small businesses do, regularly make poor decisions in designing their infrastructure (Fichten et al., 2012).

According to Parry and Brainard (2010), an estimated 75,000 students at colleges and trade schools are visually impaired in the United States. And while many of those blind students attend institutions that would never construct buildings without

wheelchair access, when it comes to technology, they continue to roll-out websites and applications that blind and visually impaired students cannot access via assistive software. Most of the improvements of accessible technology in higher education have occurred as a result of complaints and lawsuits (Areheart & Stein, 2015; Parry & Brainard, 2010). Such a phenomenon is a result of an increased number of blind advocacy organizations making web education access a priority (Fichten et al., 2012).

When it comes to inaccessible technology for the blind in higher education, it is easy to point the finger at technology companies; however, one cannot assess the problem of inaccessible digital educational services without taking a look at the impact campus culture has on technology access for all constituents (Betts et al., 2013). As Parry and Brainard (2010) mention in their study, campus culture can potentially have a greater impact on the accessibility of technology than advocacy agencies for the blind. Their research indicates:

> California State University has shown how powerful colleges can be when they make access a high priority. The nation's largest public-college system turns its size into influence by denying problem companies access to its market of 430,000 students. That helped push Apple, Google, and Blackboard to upgrade their products for the blind. (p. 5)

As a result of California State University's stance on equal access and digital inclusion for all, Blackboard, a common learning management system, made such great accessibility improvements, that the National Federation of the Blind awarded the software company with recognition for best access upgrades by a technology organization, making it one of the first educational digital businesses to make such changes (Parry & Brainard, 2010).

Generally, blind people are able to use smart phones, send text messages, access desktop applications that are Windows or Mac based, and navigate websites that follow web 2.0 guidelines (Fichten et al., 2012). Websites, however, are updated more frequently, and while some sites may start as accessible, an update can easily block a screen reader for the blind (Burks, 2013; Fichten et al., 2012).

Although some internet-based technology companies have been great at ensuring their technology follows ADA guidelines, others ignore web access laws altogether (Parry & Brainard, 2010). And even though some schools want to be ADA compliant, they do not always insist that their vendors comply with federal regulations (Burks, 2013; Parry & Brainard, 2010). In the end, many colleges inadvertently roll-out inaccessible educational technology because they do not have a protocol in place to ensure that the businesses they engage in their online education follow federal access laws (Burks, 2013; Parry & Brainard, 2010).

The Deaf Community

While the Web Content and Accessibility Guidelines 2.0 have influenced policy, it is litigation and aggressive advocacy that has made more online communities accessible to the deaf and hard of hearing (Hollier et al., 2017). But because disability complaints can be tougher to prove in court due to how evidence may be interpreted in many ways, aggressive advocacy has been a popular way for deaf people to gain access to digital communities (Weber, 2012).

In a report by Hollier et al. (2017), the researchers examine the Netflix take over by a deaf hacker, who added captions to his favorite show, which prompted the organization to add access features to some of their programs. The report also looks at

how deaf advocates have turned to piracy to gain access – making illegal versions of shows with captions and adding the clips to YouTube (Hollier et al., 2017).

Like the blind community, the deaf have also faced problems securing full-time work. In many cases, the deaf and hard of hearing participate in the workforce a lot more than the blind, but also are often underemployed (Walter et al., 2002).

Blind and Deaf Communities

Aside from sharing a sensory disability, blind/visually impaired and deaf individuals have a lot more in common when it comes to labor participation. A big part of this similarity is that they both possess an impairment that affects their access to data and how they communicate with the general public (Burks, 2013; Krieger, 2005). Thus, having a sensory disability impacts how such individuals read emails, communicate on the phone, create and gather materials and navigate office space – all critical tasks of employment. Furthermore, individuals with sensory disabilities are more likely to be discriminated against in employment opportunities (Ravenscroft, 2013; Walter et al., 2002).

With the decline of the manufacturing industry in the United States and the growth of the technology industry, lack of digital right of entry creates underemployment for both the blind and deaf communities; this means that individuals with hearing impairments and vision loss are performing jobs below their educational qualifications and are most prominently in low-level administration and physical labor jobs (Dobranskya & Hargittaib, 2016; Walter et al., 2002). Additionally, they are seldom promoted to management positions and do not receive salary increases very frequently (Heck Daigle, 2005; Walter et al., 2002). As Walter et al. point out in their 2002 study,

while deaf or hard of hearing people may have higher levels of employment, they still encounter problems with acquiring high paying jobs. Like the blind, they are still lacking vocational training to make them as competitive as the rest of the workforce. Although qualified educationally, blind and deaf individuals often lack vocational skills required in today's technology-centered workplace.

People with Developmental Disabilities

People with developmental disabilities are consistently overlooked when businesses design their websites with complicated words and sentence structures (Bunning et al., 2010). In addition, the guidelines set by the Web Content Accessibility Guidelines 2.0, which are the highest authority in accessibility, place more value on features for people who are deaf and blind by giving accessibility enhancements for these communities a higher priority than the linguistic approach needed for people with developmental disabilities (Bunning et al., 2010; Cox, 2010).

A study by Chadwick and Quinn (2016), examines the perceptions of able-bodied individuals on the internet usage of people with developmental disabilities. It outlines how some people with mental disabilities are not granted access to the web by a family member or caretaker because they feel as though there are too many risks. The UK study reports that the non-disabled people surveyed feel like people with intellectual disabilities may run into dangerous situations online, despite the fact that research suggests that people with intellectual disabilities also enjoy entertainment on the web as much as anyone else (Chadwick & Quinn, 2016; Dobranskya & Hargittaib, 2016).

Small organizations, including the nonprofits that assist people with developmental disabilities, exclude individuals with mental disabilities from their digital

platforms because of unawareness or because they deem this population more vulnerable (Bunning et al., 2010). Regardless of their intellectual ability, this group enjoys digital consumer products and services, yet are overlooked by small businesses (Chadwick & Quinn, 2016).

How Small Businesses Benefit from Digital Inclusion

As organizations have become more global, the appreciation for diversity and inclusion in the business sector has grown (Bendick & Nunes, 2012; Kulkarni, 2012). Most small and large organizations have some form of diversity statement on their websites, as diversity has been proven to drive innovation, productivity and enhance business (Von Schrader et al., 2011). Small businesses particularly benefit from digital inclusion because it allows them to reach a bigger pool of job applicants and customers, as well as stay compliant with access laws (Dobranskya & Hargittaib, 2016; Von Schrader et al., 2011). According to Bruyere et al. (2006), smaller organizations that embrace digital inclusion have an easier time growing and scaling their products and services, as they do not have to worry about making corrections to their operations as a result of an ADA demand letter or lawsuit. Also, research shows that people with disabilities are more loyal to brands based on usability and not prestige – making it easy for small organizations to win this demographic with an inclusive digital platform (Cazini & Frasson, 2011).

Untapped Talent Pool

Hiring a person with a disability can seem like a big risk – especially to a small business owner with limited resources (Bruyere et al., 2006; Von Schrader et al., 2011).

However, digital inclusion can make it possible to enhance a company's talent pool by adding staff that has a unique perspective on life (Beard, 2013).

The perceived risks of hiring employees with disabilities often overshadows business owners' good intentions to make fair hiring decisions (Kelly, 2013). Employees taking more time off for health problems, the prohibitive costs of adaptive equipment, potential legal issues, and accessibility could make any small business concerned about their company's bottom line (Weber, 2012).

According to Kelly (2013), the 56.7 million people with disabilities in the U.S. have a large part to play in the economic health of the country. Hiring people with disabilities should not stem from guilt or societal pressure; rather, hiring them can provide a measurable return on investment to the businesses that employ them because people with disabilities do not switch jobs as often as other communities (Bruyere et al., 2006; Kelly, 2013). In addition, small business owners are in more need of part-time workers, and people with disabilities generally look for part-time work because it allows them to better manage their physical or mental conditions (Bruyere et al., 2006).

In the United States, only 17.8 percent of people with a disability are employed. A poll by the National Industries for the Blind revealed that many hiring managers at a variety of different-sized companies had reservations about hiring a person who is blind (Kelley, 2013). According to the study, "23 percent of hiring managers said blind employees are not as productive as their colleagues, and 19 percent believe these employees have a higher absentee rate." Yet, a 2007 study by DePaul University found

that disabled and non-disabled employees actually had similar performance ratings, and disabled employees needed no more supervision than any other group (Kelly, 2013).

Besides being comparable in work performance, those with disabilities tend to stay with a company for a longer period of time, making the investment more valuable. And, because employees with disabilities have unique needs, companies that employ them often reassess how and why they perform certain tasks, leading to the incorporation of more efficient processes and productive changes in workflow (Cazani, 2013; Vu, Sarnoff, & Fritz, 2017).

Expanding Customer Base

According to Garcia and Diaz Castillo (2010), small enterprises employ usability and accessibility in transferring their brands to the web, yet they do not realize that these two aspects of design do not just provide great navigation, but also help to foster brand loyalty. While usability is perceived as more of a tech approach instead of an overall standard for all products and services, there is little recognition that good usability can be obtained by companies outside of tech (Garcia & Diaz Castillo, 2010; Vu et al., 2017). Likewise, accessibility is secondary and not a priority for small to medium sized organizations – despite the fact that accessible products and services help reach a wider audience (Duplaga, 2017; Garcia & Diaz Castillo, 2010).

Achieve Compliance

The internet architecture, which allows anyone the ability to create a website, makes it tough to enforce accessibility guidelines. Still, the internet is a public place and access to websites is as important as access to buildings (Areheart & Stein, 2015; Weber, 2012). Some of the small businesses most at risk of creating inclusive

electronic platforms are recreational franchisees who fail to accommodate people with disabilities (Beard, 2013; Vu et al., 2017). These small businesses include restaurants, bars, motels, and concert halls. Because they are unaware of how to comply with Title I and Title III of the ADA and they lack support from their franchising corporations, franchisees regularly do not meet access laws (Beard, 2013; Vu et al., 2017).

Burks (2013) suggests that the Communication and Video Access Act, which has been a standard in broadcast, has made it tough for commercial websites to become more accessible under Title III because small businesses fail to see their organizations as a content production house. Instead, they perceive themselves as small ventures that do not need to adopt the Act; though, many rely on marketing agencies to create content for them, which they do not always request in an accessible format (Beard, 2013; Cox, 2010). Research states that content tagged for access becomes easier to find on the internet; nonetheless, since small businesses rely on a lot of turn-key digital solutions, they can become compliant by ensuring that all of their vendors and business partners are only using inclusive designs in their technology (Beard, 2013; Garcia & Diaz Castillo, 2010). With a digital inclusion goal in mind, small businesses can meet ADA compliance without having to be familiar with every detail of access law (Areheart & Stein, 2015; Duplaga 2017; Vu et al., 2017).

Chapter Summary

The purpose of this literature review was to examine digital inclusion trends within the context of small businesses. From the research reviewed, it is clear that small business owners fail to make their digital properties inclusive and consequently, they are not compliant with federal access laws. Along with this, it is also clear that

people with disabilities are the most impacted by digital exclusion. Complete unawareness of access laws and a lack of a digital inclusion strategy continue to be the primary reasons why small businesses face lawsuits related to ADA violations. This field of inquiry is crucial because, at its center, it aids people with disabilities gain more access to products and services. Helping the disability community gain more digital inclusion will have a positive impact in society, as it will help this population be more independent, find better jobs, and allow them to financially contribute more to their communities.

Chapter 3: Methodology

Introduction

While there are several models and theories that can drive inclusion across various sectors of modern society, when it comes to technology, there is limited research on expanding digital access to marginalized communities (Areheart & Stein, 2015; Duplaga, 2017). Moreover, digital inclusion is almost exclusive to large corporations and governmental agencies – a result of them being more closely monitored by agencies that enforce access laws (Areheart & Stein, 2015; Garcia & Diaz Castillo, 2010).

Digital inclusion is a model that confirms that basic baselines of accessibility, as outlined by the Web Content Accessibility Guidelines 2.0, are being met in order to ensure that all members of society have access to digital properties (Weerakkody et al., 2012). It highlights the power decision-making has on access to resources that enhance the agency and independency of people who are underserved by their society (Cazini & Frasson, 2011). While its purpose is not to enforce federal or state access laws, if incorporated properly, digital inclusion results in international compliance (Garcia & Diaz Castillo, 2010). Ultimately, a digital inclusion strategy can help small businesses adhere to access regulations without having to gain deep understanding of technical accessibility regulations set by governments or accessibility institutions (Burks, 2013).

The following questions guided this study's design, data collection, and analysis:

1. How do some small business owners learn about federal and state accessibility regulations?

2. What influences some business owners to give a higher priority to digital inclusion in their operations?

In order to gain a comprehensive perspective of how a small business owner prioritizes digital inclusion of people with disabilities, the following sub-questions were explored:

1. What barriers do some small businesses face in practicing digital inclusion?

2. What digital properties do some small businesses overlook when setting up their infrastructure?

3. What types of digital inclusion practices are difficult for some small business owners to execute?

As described in Chapter 2, a great deal of research suggests that small businesses struggle with digital inclusion. Still, there is limited data on how small business owners rank the importance of digital inclusion in their daily operations. This chapter presents the design of the current study, including a description of the case and methodology used in case selection. This is followed by a description of data collection, data analysis, theoretical lens used in the study, researcher bias, credibility and consistency practices employed, study assumptions, and limitations. This study was exploratory since it sought to gain data on a behavior that has not been heavily documented (Ruben & Ruben, 2012).

Inquiry Approach

Qualitative research is more concerned with depth of experience rather than with medians and is best suited for understanding individuals, situations, and moments in time (Clough & Nutbrown, 2012; Creswell, 2002; Ransome, 2013). Qualitative studies fall under naturalistic research, which means that the data explores rich descriptions behind motives in order to gain perspective (Ruben & Ruben, 2012). Moreover, findings

from qualitative research provide context and meaning to numbers – aiding in the comprehension of complex problems (Clough & Nutbrown, 2012; Creswell, 2002).

A qualitative case study methodology was selected for two primary reasons. First, as Ruben and Ruben (2012) stated, “Qualitative interviews let us see that which is not ordinarily on view and examine that which is often looked at but seldom seen” (p. 26). Second, as Stake (2006) points out, “We can use the case as an arena or host or fulcrum to bring many functions and relationships together for study” (p. 27). Therefore, a qualitative case study methodology was the best approach to gain in-depth rich experiences on how a small business owner negotiates and prioritizes digital inclusion in his operations.

Methodology

Study design. Stake (2006) defines a case study as, “A noun, a thing, an entity; it is seldom a verb, a participle, a functioning” (p. 27). It is often the best approach to studying a single subject because it allows for observational focus on one entity (Flyvbjerg, 2006; Verschuren, 2003). Accordingly, a case study approach is the ideal technique to understand how a small business owner prioritizes digital inclusion in his organization.

The case. In this study, the case consists of data collected from the small business owner who operates his organization in an urban city in the United States. This case study follows the recommendations set by Stake (2006), which keeps with the idea that case design allows for the data to drive the study: “Case study work is often said to be ‘progressively focused’; that is, the organizing concepts may change a little or a lot as the study moves along” (p. 7).

Case criteria. The case criteria directly echo the purpose of the study, which also guided the researcher. The essential criteria were also shaped by the inquiry questions and by the definition of a small business as outlined in Chapter 1. The criteria were: (1) The small business owner had to operate an organization with fewer than 25 employees and be a member of the Chamber of Commerce in the city where their business was located; (2) The business had to have at least one digital property, such as a website, mobile application, or station offering a way for customers to interact with a screen in order to complete a transaction; and (3) The small business owner had to be available for four in-person interviews during a period of three months. Once these criteria were met, the study participant had to sign consent forms in order for the study to commence. The approved participant (who was given the pseudonym “Isaac” for the study) operated an organization in an urban city in the United States, and the researcher uses the pseudonym “Micah Systems” to refer to this organization.

Case selection. Purposeful sampling was used for this study. A purposeful sample seeks subjects that fit a specific profile, often from a particular demographic (Clough & Nutbrown, 2012; Creswell, 2002). Also, a sample of convenience was used, as participant availability to meet for several interviews with the researcher in the spring of 2019 was a consideration.

Role of Researcher

The researcher played three major roles. First, he was the first point of contact, managing all correspondence. Second, he was the person who conducted all interviews. Third, the researcher analyzed the data to identify: (1) themes that arise from the working experiences of the participant, (2) stories that provide insight into the

experiences that the business owner had with people with disabilities, and (3) experiences that led to digital inclusion.

Researcher Bias

Since the researcher serves as the primary research instrument, it is crucial to identify any attitudes and experiences that could lead to biased data results. Thus, I will share my work experience and philosophical background on disability. In 2007, I became blind at the age of 26 and shifted from a career in human resources to journalism. Now, I have worked in broadcast media for 10 years, covering disability policy and adaptive technology. Moreover, I have worked in higher education in academic support services for 5 years and have helped craft educational plans for adult students with disabilities. In addition, I have served on several national access committees as a subject matter expert on digital access for the blind. While I have worked on large accessibility projects for people with disabilities, my exposure has been limited to working with federal agencies and large corporations. This made it possible for me to come into this study with no preconceptions on accessibility perceptions of small business owners. My philosophy on disability draws from concepts of universal design and disability studies. I believe that a person's limitations are a result of their environment, and that physical or mental conditions do not dictate a person's ability or contributions. While I bring experience with accessibility related to people with disabilities, I have mostly worked with accommodations related to people with sensory impairments, such as blindness and deafness, and have a gap when it comes to digital needs for individuals with cognitive conditions.

Methods

Data collection. Gaining a deep understanding on how a small business owner prioritizes digital inclusion in his daily operations was the purpose of the data collection. To accomplish this goal, a series of four in-person interviews were scheduled for every three weeks, and each interview focused on a different digital property. The topics discussed in each interview were the following:

Interview 1: Business communications
Interview 2: Payment systems
Interview 3: Website presence
Interview 4: Mobile presence

Using a qualitative case study design, the intent was not just to collect information on how the business owner reacts to digital inclusion, but to also understand how he ranks inclusion in his digital properties. To achieve this goal, a responsive interview model was used to establish a conversational tone with the subject and allow for follow-up questions during interviews (Ruben & Ruben, 2012). As suggested by Ruben and Ruben (2012), the three types of questions used were main, follow-up, and probe. The main questions in this study are documented in each of the four interviews (Appendix D through G) and help to orient the subject to a specific topic. Follow-up questions obtain details about the immediate matter by asking for sequential order or a reaction; whereas probing questions encourage the subject to continue talking about a specific topic, such as, “go on” and “continue.” The responsive model does not limit a researcher to a script and makes it possible to dive deeper into a detail, while offering the participant a less stressful experience.

Description of Participant

The following steps were taken to select the case in this study. First, an email was sent to the Membership Manager at the Chamber of Commerce in an urban city in

the United States to introduce the study and researcher. This interaction was twofold because it gave the researcher the ability to establish a connection with the organization, as well as start developing leads for the study. The Membership Manager was asked one question to help recruit a subject for the case: Do you know of any small business owners with less than 25 employees that would be open to doing four in-person interviews over the period of three months?

Second, subjects were screened according to availability to meet four times over the spring of 2019. A sample of convenience was used to select the participant for the study, as availability to meet with the researcher was the factor used to finalize the short list of subjects for the case.

The last step in the selection process was to meet in person with subjects and review the consent letter with them (see Appendix C). The first business owner to submit their signed letter was the final selection for the case.

Instrumentation

In order to preserve accuracy of the data being collected from the interviews, a digital recorder was used to capture the subject's responses – a standard practice in qualitative research (Clough & Nutbrown, 2012; Creswell, 2002; Ransome, 2013). The digital recorder had power-on password settings, which meant that the researcher was required to enter a six-digit password when operating the recorder. This password protection made it highly unlikely for anyone other than the researcher to access audio recordings on the digital recorder. This password-protected device ensured the participant's confidentiality for the study.

Each interview was transcribed by the researcher shortly after it took place, before the following interview. The approach to transcription was to listen to the interview and type the subject's answers into a Microsoft Word document. This process was used to ensure that subsequent interviews could reflect the data emerging from the study (Clough & Nutbrown, 2012; Creswell, 2002). This study was exploratory and it was important to allow for flexibility of the questions being asked in order to allow for the emergence of data to drive the research.

Data Analysis

Qualitative research allows for in-depth understanding of the experiences around a single topic by a single subject (Creswell, 2002; Roberts, 2010). While raw data from interviews was transcribed, and the development of information guided later interviews, the data was not analyzed until the final interview was completed.

Coding. The inductive process of coding was used to identify themes in the data collected through interviews. Coding is the process used in qualitative research to move from data collected to the explanation of its meaning. It is the process of sorting and organizing raw data into symbols and reports (Clough & Nutbrown, 2012; Ransome, 2013; Saldaña, 2013).

In this study, the process of coding began with the researcher reading each transcript multiple times to ensure it was absorbed properly. At that juncture, first cycle coding began with the primary elemental method of descriptive coding. Descriptive coding is the process of summarizing the basic topic of a passage of qualitative data into a word or a noun; the researcher devised his own codes with the analysis of the initial interview, then applied the descriptive codes to the rest of the raw data (Creswell,

2002; Saldaña, 2013). The second method of cycle coding used to analyze the data was pattern coding. With pattern coding, the initial analysis was further organized and condensed by grouping word summaries into a smaller number of sets and themes. As a final point, the researcher consulted the literature to determine if any of the codes correspond to themes in other research (Roberts, 2010; Saldaña, 2013).

Theoretical lens. The study used an interpretive constructivist lens to examine the information collected (Ruben & Ruben, 2012). Ruben and Ruben (2012) claim that, "interpretive constructivism argues that the core of understanding is learning what people make of the world around them, how people interpret what they encounter, and how they assign meanings and values to events or objects" (p. 67). This theoretical lens suggests that through interpretive constructivism, people look at matters through distinct lenses and reach somewhat different conclusions – causing multiple true versions of the same event or object (Roberts, 2010).

Trustworthiness

In order to reduce researcher bias, triangulation was used to maximize credibility. Ruben and Ruben (2012) suggest that triangulation, which is the process of gathering data from sources multiple times, ensures data credibility. This applies to interviews with one or with several subjects, and is a common approach for qualitative research (Ruben & Ruben, 2012). Triangulation was used in this study in three ways. First, the three-step responsive interview process offered a means to evaluate the data by checking the internal consistency of the interviews. This makes it possible to determine if the answers in one interview are consistent or contradictory of another interview (Ransome, 2013). Second, analyzing data from multiple sources, such as transcripts

and audio files, ensures that the data is accurate (Clough & Nutbrown, 2012; Creswell, 2002). Finally, the interview data was compared to other findings in the literature to determine if it fits or relates to other research in any way (Roberts, 2010).

Consistency. Consistency was maximized by the triangulation mentioned above. Moreover, researcher reflexivity, the act of reflecting on how the researcher may have influenced the interview, was used to ensure that consistency was maintained throughout the study. Specifically, the researcher wrote his thoughts on the research process in the style of a personal journal on a Microsoft Word document where observations and considerations were noted to ensure researcher transparency (Clough & Nutbrown, 2012; Creswell, 2002; Ransome, 2013).

Assumptions. The following are the assumptions of the study. First, it is assumed that the study participant responded honestly and to the best of his ability. It is assumed that the Chamber of Commerce accurately vetted the business owner as a lawful business, thus meeting the criteria for the study.

Ethical Considerations

It was necessary to obtain Institutional Review Board (IRB) approval due to the fact that a human subject was used in this research. The IRB ensures that ethical practices were enacted in this study, thus protecting the participant in the process. The researcher made every effort to respect the subject's rights and privacy. Participation in the study was voluntary and the researcher gained permission from the participant to analyze and report individual contributions to the study through a consent letter sent by electronic mail. The participant also granted the researcher permission to audio record the interviews. Interviews were recorded with a password-protected digital recorder; to

be unlocked, this recorder required a six-digit password that only the researcher knew. Once interviews were completed, the researcher transferred the audio files from the digital recorder to a password-protected file folder on the researcher's personal computer. After transferring these audio files, the researcher deleted them from the digital recorder. The researcher will permanently delete the audio files from his personal computer in May of 2021.

Due to the small number of participants in this case study, individual responses and data were handled carefully with respect to privacy and confidentiality and no document associated with the study possessed any part of the subject's real identity. With the exception of the consent form, which is kept in a locked file, none of the participant's personal data touched any part of the research records or process. Also, the subject was informed that his interview answers would remain anonymous and would not be directly reported to anyone inside or outside his organization. The participant and his business were assigned a pseudonym in order to conceal his identity.

If the researcher had discovered that the business owner was not adhering to ADA laws or other access codes, the researcher would have informed the participant at the end of the study and provided a report with suggestions on how to improve access.

Limitations

There are two limitations that have been identified for this study. First, the subject for the case was selected from a group of small business owners who had the ability to buy a one year membership with the Chamber of Commerce in the city where their business is located, which has a cost of $350. Ultimately, businesses that join the

Chamber of Commerce are more established, and have more resources available to them. There may have been another subject available for the study, yet because they were not a member of the Chamber of Commerce, they were not considered. The second limitation is that case studies are limited to analytical limitations. According to Stake (2006), case studies are interpreted by the researcher – limiting the analysis to the single perspective of the researcher.

Chapter Summary

This chapter presented the methodological process for this case study. The case was defined as exploratory because of its instrumental design. The data for the case came from a series of interviews with Isaac, a small business owner in an urban city in the United States, and an in-depth and responsive interview style was used to gather rich detailed information. Coding was used to analyze the data and a constructivist theoretical framework was used to guide the study.

Chapter 4: Findings

Introduction

The purpose of this case study was to examine how a small business owner negotiates the digital inclusion of people with disabilities in his business operations. The following questions guided this study's design, data collection, and analysis:

3. How do some small business owners learn about federal and state accessibility regulations?
4. What influences some business owners to give a higher priority to digital inclusion in their operations?

In order to gain a comprehensive perspective of how a small business owner prioritizes digital inclusion of people with disabilities, the following sub-questions were explored:

4. What barriers do some small businesses face in practicing digital inclusion?
5. What digital properties do some small businesses overlook when setting up their infrastructure?
6. What types of digital inclusion practices are difficult for some small business owners to execute?

Significance of Inquiry

A qualitative case study encompasses findings that are rich in descriptive detail in order to allow the reader to experience the phenomena under study. Moreover, it provides the reader with the opportunity to gain exposure into an experience not readily available to them (Ruben & Ruben, 2012; Stake, 2006).

This chapter presents the findings that emerged from the analysis of the raw case data. The information that makes up this case, bounded system, are verbatim transcripts of four interviews with a small business owner in an urban U.S. city. The researcher assigned the pseudonym "Isaac" to the case participant and the pseudonym

"Micah Systems" to the case participant's business. Isaac is the Chief Executive Officer of Micah Systems, and these pseudonyms protect the identities of the case participant and his business.

The study used an interpretive constructivism lens to examine the information collected through the four interviews with Isaac. Ruben and Ruben (2012) claim that "interpretive constructivism argues that the core of understanding is learning what people make of the world around them, how people interpret what they encounter, and how they assign meanings and values to events or objects" (p. 67). This theoretical lens suggests that through interpretive constructivism, people look at matters through distinct lenses and reach somewhat different conclusions – causing multiple true versions of the same event or object (Roberts, 2010). Using the interpretive constructivism lens during the data analysis phase made it possible for the emergence of meaning to occur; ultimately, it allowed for a deep and rich understanding of how Isaac interprets and practices digital inclusion, and how his decision-making impacts the people with disabilities he serves.

The responsive interview model used in this study not only provided the context sought to gain an in-depth understanding of how Isaac negotiates the digital inclusion of people with disabilities on his digital platforms, but also his overall perception of disability. This chapter presents the findings of this case analysis. First, it will introduce the subject through a case profile and then present the themes that arose from the study.

Case Profile

Isaac is the primary character in this story. The conversations and interactions with him took place at his downtown office in an urban U.S. city. A digital recorder was used to capture his responses and behaviors during a series of interviews that took place April through June of 2019. Short and block quotes were pulled from the transcripts created from audio files, and were interwoven with analysis to provide rich texture to the study's findings.

Background context. Isaac, at the time he was interviewed, was 31 years old and had been in business for two years. He employed one full-time staff member, aside from himself, and had four part-time employees. Prior to launching Micah Systems – a wealth management firm – Isaac worked in the financial investment industry for eight years.

Road to launching Micah Systems. Isaac was born and grew up in the United States, and attended college through a basketball scholarship. After graduating with a bachelor's degree in economics, he returned to his home city and instantly began working for a financial investment firm. Isaac is African American and with a hint of sadness in his voice, shared how many of the wealth management firms he worked for did not serve people of color:

> The firms I worked for only wanted rich people as clients. This often meant that our services and products were aimed at wealthy white men. I knew that there is a big need for financial literacy education for communities of color, and I wanted to help black and brown people become financially stable.

Isaac spent the first few years of his career as a financial advisor dreaming of someday launching his own wealth management firm; nevertheless, he wanted to open a company that would make financial planning accessible to underserved communities, as well as run a successful business to support him and his family:

> I needed to setup a suite of products that were accessible to people of color. But, I also needed to make sure that I would be able to make a living and support my family. And yeah, it took some time to figure out how to make those two things come together.

For eight years, Isaac worked on developing his business model. And for about a year, he worked at an investment firm part-time as he prepared himself to launch Micah Systems. One year after being in operations, Isaac became the first full-time employee. He also hired a part-time staff member at the same time to help with the business demand.

Views of inclusion and their effect. Isaac sought to create an organization that would make financial planning and wealth management more accessible to communities that are underserved by the financial industry. In order to make wealth management more inclusive, he focused on creating a product that would be affordable to his customers. Thus, he focused on making his service accessible from an economic perspective:

> So, most 25 to 40 year olds are typically overlooked because most advisors are seeking 50, 60 year old clients that have assets. Then the other big thing is they're people that are typically ethnic or racial minorities. Women and minorities don't get a ton of fair shakes in the financial services industry from a representation standpoint.

Micah Systems charges $75 a month and offers clients a financial plan and access to content on their website. They also provide a lot of free seminars to cultural centers and ethnic churches, which has proven to be a great approach to acquire clients. Isaac's experience as a minority has shaped how he perceives and practices inclusion in his business. He said:

> I still think I'm the only minority owned RA firm in the metro that I know of, because I asked and they didn't even have records of it. So there's not a lot of people that looked like me, so of course people that look like me don't get a ton

> of services. So that tends to be my natural draw. Women, minorities, 25 to 40. That's typically who's around and using my website.

While Isaac is very passionate about making his industry more inclusive, he admits that outside using ethnic models on his website, he has done little to ensure that his website – Micah System's biggest digital platform – works for all users. He said:

> I would say I haven't done enough. I know that from a first pass, we made sure that it worked on all mobile devices and web browsers. There's not a ton of graphical interface, so there's not like flashy videos and everything like that. We know that most audio readers should be able to sound out the content, and I think somebody that might be visually impaired would be able to understand the gist of our website.

Isaac is aware that while he makes certain that his business is constantly interacting with minority communities through online forums and at events, he does not actively do anything to ensure that his platforms are accessible to the disability community: "Like, if Chrome does an update, we're not making sure that our website works with Chrome to work with somebody that might have some sort of disability to be able to access that site. So we do need to make some steps in that space."

Micah Systems' customers with disabilities. Since its inception, Micah Systems has served customers with disabilities. And whereas Isaac is constantly fighting for more gender and racial inclusion within financial services, when it comes to inclusion of customers with disabilities, he takes a more passive approach:

> So I've had a couple of clients with disabilities, and for me, it's just trying to think of things from their experience, and understanding how do I communicate with them? So one client is blind, and so I always try to communicate in a way that his audio device would be able to speak things out loud. Another client is impaired with his hands, and so he can see and do everything but he just can't type very well, so he uses a lot of audio, like text-to-type type of tools. So in our communications I try to at least appreciate that, that's how our clients are communicating and where they're coming from.

Even though Isaac says that 100% of the communication between Micah Systems employees and clients happens digitally, he has not put much thought into improving his communication channels for his disabled clients. His firm has only about 20 clients with disabilities – which is 1% of his total client load – a number he deems small. Consequently, he has not made any effort to enhance his website with accessibility features:

> Not at the moment. Not that I'm aware of, outside of being able to be read by an audio service, there's not an accessible sub link or anything, because I've definitely seen that before where maybe it's a site that is adjusted so that different software could interact with it differently. We don't have that option right now.

Isaac states that his current customers with disabilities are happy with the service because they tell him so all the time. Still, with a hint of disappointment he said: “Our clients haven’t really complained. But yeah, maybe we could make things better for them by making a bigger effort to ensure things are accessible.”

Currently, Isaac puts a lot of effort in showing staff members how to simply help his customers with disabilities on the phone or in person, which is something that often takes more time and effort:

> We treat everyone with respect and so this is not different for our customers with disabilities. We ask them how they want to handle things if they can’t log onto the website or fill out an online form. It’s pretty straight forward, and they are pretty happy with the attention they are given. We have not lost a single customer with a disability in our two years of existence. And we don’t mind spending the extra time with them.

Themes

This section will present the themes that surfaced relating to Isaac’s experience with negotiating the digital inclusion of people with disabilities at his small business in an urban U.S. city. The data from all four interviews and field notes – which are the data

corpus of this study – were examined as a whole through the process of coding (see Chapter 3 for a detailed description of the coding method).

Six themes appeared from this process: perceptions of disability influence digital inclusion, powerful branding suggests digital access, unawareness of accessibility guidelines, UX testing overlooks input from people with disabilities, inclusion is tough to enforce on digital platforms, and workarounds hinder digital improvements.

Perceptions of disability influence digital inclusion. Isaac's first interaction with a person with a disability took place when he was a resident hall advisor his junior year of college:

> There were two blind guys on my floor. One could see a bit – he could see that I was black – and the other didn't see anything at all. They were both super independent and didn't like getting help. I usually just let them be, and they were fine with me being distant.

After college, he met a few disabled people through his church or at the gym; however, he never built any relationships with any of them, and refers to them as more like acquaintances. When he worked for investment firms, he said that in his eight years at three large firms, he never once had a client with a disability. This all changed when he launched Micah Systems, and began to get customers with various disabilities:

> I suppose that the big firms who only wanted people with assets, weren't doing a good job for people with disabilities either. I was really happy that I had a blind client a few weeks after launching because it meant that I was doing a good job in reaching out to underserved communities.

Isaac believes that all people need to be treated with respect. He also believes that people with disabilities do not need help unless they specifically ask for it. He combines these two ideas to build the perspective that customers with disabilities should only get help if they ask for it:

> We don’t coddle our clients. We only give them what they ask for. Sometimes that’s help with completing an online transaction and other times its meeting with them in person to get a signature because they cannot do a digital signature.

His philosophy impacts how he includes customers with disabilities in his digital platforms.

The disabled clients Isaac works with are all professionals, have families, and are highly educated. He has met some at his free financial planning seminars, but at least half were referred from other clients with disabilities: “I think that if someone recommends me to a friend, I must be doing a good job. Maybe this is why I haven’t thought much about digital access.”

Powerful branding suggests digital access. When Isaac began to build his website and establish his operations, he was leaving a big firm with its own proprietary software. Consequently, it took him about a year to figure out what digital tools would work best for his organization. Moreover, his search focused on tools that were readily available, as well as easy to use from the perspective of an able-bodied person:

> I actually brokered through MassMutual, and they had some stuff that wasn't as proprietary, like they used Salesforce, which is a general sales tool. They also used eMoney Pro, which a lot of financial advisors use. So I integrated it into their system because it was there, and it was easy. But then when I left to become 100% independent to do my own thing, then yeah, it probably took over a year of trial and error to start all over again, and see if it works, get a little bit frustrated. And then now, we're cruising, we're in a really sweet spot.

Eventually, it was the combination of brand recognition and ease of use that helped Isaac decide on a particular digital resource. For example, when choosing a tool to collect payments from customers, he chose PayPal because he figured that a large company would be the most digitally inclusive. Hence, he never checked for the availability of accessibility features on the platform:

> To my knowledge, I'm not quite sure about PayPal. I think there's some accessibility, but that's about it. I think that was kind of my hope was to use the most widely used payment system, kind of the most universally accepted, because I looked at things like Stripe or there's a couple of other ones and not everybody had them, or they had limited access, or there was kind of weird qualifications.

During the process of selecting a payment tool, Isaac was quick to point out that PayPal stood out to him because it is a brand that most people have heard of, and therefore, instills a level of trust. For Isaac, the dependability that PayPal portrays through their brand was so great, that he did not bother to verify whether the tool offered features for his customers with disabilities:

> But when you say PayPal, everybody either uses it personally or they know they can trust it. So besides that, I'm not quite sure what accessibility PayPal has. Hopefully it has something.

In Isaac's case, technology brands do not only implant a sense of digital inclusion and accessibility, but also a level of faith that pushes him not to question the brand's ability to fulfill access to all users – no matter their circumstance. This notion of a powerful brand with strong usability as an optimal tool for all users continues through the selection of other digital tools. He chose to go with DocuSign – a leader in the digital contract management space for the same reasons:

> My favorite and I think everybody's favorite is the ease of use. If I'm sitting with a client, we actually have integrated through DocuSign, the annual payment plan. So a client, when they sign our financial planning agreement, they click on sign, it signs their name, they click on pay, it links them to PayPal, so then either sign in with their PayPal if they have one, which most people do, and then they can pay however way they choose.

It is important to note that while Isaac points to ease of use as a criteria for selecting a specific tool for his business, usability and functionality of a product come from his experience as the main administrator. Micah Systems chose HubSpot, a big

player in the digital marketing industry, as the tool to use for their website hosting. This tool makes it possible for him to have constant full control over his digital platform, which drives up the usability of a product for him:

> Still to this day, we use HubSpot to link as our like domain. If I log in and go to my website sort of through HubSpot, I can make changes on the fly. So if I wanted to change a font or a color or background, I can do it right now and it would be live within a few moments. I like that a lot, that it's something that I can control a little bit.

In the end, Isaac's decision to select a digital tool for his organization was more influenced by brand reputation and his experience as the main operator of the resource. The brand gives him a sense of inclusion that is so great, he does not bother to verify if the product is accessible to customers with disabilities.

Unawareness of accessibility guidelines. The wealth management industry is heavily regulated, and Isaac had to go through a lot of training to become a financial advisor, and later to open up his own firm. Yet, none of the seminars and certificates he studied for included any regulations on access for people with disabilities. Thus, when he launched his website, he focused on meeting compliance from the financial industry:

> Yeah, that's not something we're drilled on or tested on. You know, I'm tested on all the laws and legislation around the finance industry. But never once in all of my compliance stuff, when I built my website, did they ever ask about ADA compliance or accessibility.

Isaac's compliance training instead dealt with laws that govern what he could say to clients, and how he had to archive the data he collected. He argues that unlike large banks that offer a lot of accessibility features, financial advisors are not taught that they need to consider federal laws, such as the Americans with Disabilities Act (ADA), when they design their websites:

> Yeah, it's interesting, right? So a bank I think, that feels like yeah, they're really good at accessibility, but independent financial advisors, we've never been taught that we ought to be. So yeah, that is something where it's like, if I build a website, I want to be accessible, how do I do that? I don't know where to start.

This comment was followed by a long pause. Then, Isaac sighed with frustration a few times before resuming his commentary. He shared that he is completely unaware of how to make things accessible, and that he wishes that was not the case:

> From a trade standpoint, honestly I'm not. From a compliance standpoint for financial industry, yes. So I know there's only certain things I can say. I'm not promising people a million dollars or the next hot stock pick or that nothing will go wrong. So there's only certain things I can say because of my standing with FINRA and the FCC. But outside of that I don't know any other regulations that makes me think I should.

Isaac asserted that he would be better at making his website accessible if he knew how to do so. He understands that there are federal access codes, but does not know how to interpret them, nor does he know what type of person he would need to hire to help him with improving accessibility on his digital website and content. In fact, he shared that he would not even know how to properly search for resources online.

User experience testing overlooks input from people with disabilities. In order to build the Micah Systems website, Isaac hired a web design company. Isaac's intention was to build an inclusive website, and it was important for him to hire a design firm that shared his values of gender and racial equity. The design firm was based out of the same urban U.S. city, and was led by an African American man who also promoted his services to minority communities. Isaac said that with the help of the design firm, he created client profiles and came to the conclusion that the design would be mobile native, which means that the design would be initially created for a mobile audience:

> When we built our website, I knew that almost everybody that would be using it or interacting with it would probably do so on some sort of mobile device, so we built it to see how it would look and feel on a phone and then made sure that it could scale to a desktop.

User experience (UX) best practices were used to test the site and help determine layout and content. Isaac believes that this process was crucial to piecing together all the bits of information needed to make the site as user-friendly as possible. In addition, he felt that getting some of his clients involved aided the process significantly:

> We would launch a little bit and make it live and see how it looked and felt on our phone, on our desktop, on our iPads. We'd use it on Android, multiple devices just to see and look how it felt. Then we would sort of get feedback, so we worked with a couple of distinct clients to see what they thought. Then we would make a couple tweaks. We would answer questions, and if people had the same question over and over again like, "Hey, how much are your services?" I was like, okay, we should just put that on the website.

Isaac sheepishly admitted that while he had several of his customers participate in the UX testing for his site, none of them had disabilities. The group of eight clients he used to test the site, and the additional testers the firm provided, surveyed the site and were also used to help create content for the website – a project that was recently completed:

> So we've actually planned out the rest of the year. All the way through December of 2019, we have blog posts planned. We've got videos filmed that we'll sort of launch on our YouTube site and then link them back to our blog page, and then share all of that through social media. The one thing that is very dynamic and gets updated every Friday, we call it Financial Fridays, is our blog page.

Isaac has put a lot of focus on creating content that would help his clients make better financial decisions. He even hired a curriculum designer who earned a doctorate in educational technology. Yet, he mentioned that none of the content he has designed

was tested by his clients with disabilities, nor did the curriculum designer mention it should have accessibility features built into it. The focus of the content was to make it so that it would read well on a mobile device:

> If you want to see our services or get any links to our social media pages, whether you're on your phone, that's an iPhone, an Android, an iPad or Samsung Tab, it all works the same as if you were on the desktop.

Isaac mentioned that if he had been told by the web design company or the curriculum designer that he needed to test for accessibility, he would have done so. With a hint of remorse, Isaac said that the clients he had test were folks he knew would be responsive, and would not be bothered by the request. Isaac certainly knew people with disabilities who would have tested for accessibility if he knew that was appropriate.

Inclusion is tough to enforce on digital platforms. Since its inception, Micah Systems has aimed to create policies that foster inclusion and give underserved communities access to financial products. These policies are eminent in their company tagline that says helping minorities reach financial freedom and their moto is to create financial literacy for the underserved. These policies are actively enforced on Micah Systems' non-digital platforms, but less so on their digital platforms. Isaac must balance client needs with financial compliance and policies:

> So, we like to follow a process with each of our clients. Once they reach certain stages, we'll flag or activate tasks for the next team member. So if it's a part of our process, we use our CRM. If it's every day communication or one-offs then it's text and email.

Isaac shared that all client communication happens digitally. This is caused by the fact that most people have access to email and text messages via their mobile device, and that Isaac wanted to build a system that people could access with ease, as well as not have to learn a new app or device:

> One thing that I do think is interesting and very intentional, is it's all digital, 100%. There's actually a vendor that I was using for an insurance, called Errors and Omissions Insurance. And they wanted me to fax something. And I was like, I don't use a fax. We don't have access to a fax. So I went to a different provider because it's just not a part of the world that I'm trying to create. Everything that we use now is digital. We haven't thought a ton in terms of inclusiveness, which means we probably need to think a little bit more about it.

Isaac gave out a hearty laugh as he realized that he wanted to build a digital platform to make it easier for people to participate in financial investment; however, he never tested for accessibility for customers with disabilities. He did, though, say he does a lot of phone sessions with his clients that cannot access the website for any reason: “For my business, when it comes to private information, then we have to do something with a phone call or in person if the site doesn’t work for them.”

Isaac noted that while some of his disabled clients have had problems with PayPal and DocuSign, they are all comfortable with email and texting. He said that that part of the operation runs smoothly: “So our to-do list is built around our emails. But our communication and quick correspondence is text messages. Our clients with disabilities all use iPhones and they like texting, too.” Isaac said that he built a digital platform to make things more convenient for his customers. His number one policy is that everything must be in digital form so that it could be emailed or accessed at a later time. He is not sure how he would build a digital inclusion policy:

> We have an inclusion policy that says that everything we do must be accessible digitally and through a mobile device. I am not sure how to change my process so that our tools would be more accessible. I think I would have to hire someone to help me because I don’t know how to create and enforce an inclusion policy for the web.

Workarounds hinder digital improvements. Isaac is very happy to work with clients with disabilities. In fact, he sounded excited when he described some of the

different ways he has altered his process when something was not working for one of his customers. And like an anthropologist, he evaluates the needs of his disabled clients as though he was interacting with someone from another culture:

> Just as you would with a different culture, right? You know, one culture would say, "We don't get it because this is how we practice." So if you adjust it in a way that they could understand, do the same thing for accessibility.

Looking at accessibility as a cultural need from a community has consequently pushed Isaac to customize his process for each of his clients. He shared that the results of his workarounds have made all of his customers extremely happy, and thus, they have referred a lot of business to him. Some of the alterations he has done include the reconfiguration of data into alternate formats, such as creating Microsoft Word documents with bulleted lists, or presenting information orally: “But then it's like okay, we can do the same thing, we just have to craft it or adjust it in a way that they could hopefully get the same experience.”

Isaac identified the onboarding process of new clients as the most problematic for his customers with disabilities. It is a procedure that the Micah Systems team has had to create the most workarounds for since the company launched. He also admitted that he felt that the workarounds he created saved the customer a lot of time, as they did not have to learn new software, or buy anything extra, such as a new device:

> Typically in our process, we have a part where the client logs in, and they use our planning software to link all of their accounts. For our clients with disabilities, it wasn't an option, it wasn't going to work. And so, we either did things to where I entered the information personally, or we went around it and looked up the information in a way that they were able to look up the information. Then we just recorded it into "the old-fashioned way." Then we just put the information in later. So, instead of a client actually clicking through and signing up for the things, or linking their accounts, we just figured out an alternative solution.

Isaac's perception of inconvenience comes from him not wanting disabled customers to waste their time. Therefore, Isaac believes it's better to offer alternate solutions because it prevents disabled customers, who already experience several setbacks, from experiencing additional inconveniences. For Isaac, creating workarounds has also caused him to spend more time with his customers with disabilities – a process he describes as love – and felt it was time well spent:

> It did. Yeah, yeah, it took a little bit of extra time, and a little bit of extra love to say like okay, not everybody can do it this way. Take a little bit of extra time. Again, it didn't change our process because we're still providing the same great financial planning advice, and still doing it the same way. It's just the tendency was, shoot an email, the client fills it out, but in both of those cases, we just sit with the client on the phone, and sit with the client in person to get the information.

While Isaac is happy to address accommodations for his disabled clients, he never considered reaching out to the tech companies for help. As a matter of fact, he was unsure if he should, as he felt it would prolong the onboarding, and he did not want to have his clients waiting. Though, with a hint of disappointment, he said that contacting the tech companies may be something he does in the future:

> No. Nope. And I didn't even know if we should, or if we just adjust our stuff? But that's a good point, yeah, maybe to mention that. Maybe I'll reach out to them next time an access issue pops up.

Whereas Isaac has created several workarounds for his disabled clients, he has not created a policy that shows new staff members how to work with a disabled client, nor has he reported any tech glitches to his vendors. His process now is to simply offer disabled customers the option to come in to the office to get assistance, or to have a Micah Systems team member help them with the setup over the phone. He does not

know how to test for accessibility, and he feels that his customers do not need to be inconvenienced. Thus, offering workarounds is what is working for him now.

Summary

This chapter presented the findings of this qualitative case study. Through the process of coding, a case profile was developed and six themes arose. The case profile was created from data taken from a series of four interviews with Isaac, the study's subject, and provides rich descriptions of Isaac's background prior to launching Micah Systems. It also gives context to Isaac's perception of inclusion and how that translates to his organization's digital platforms. The themes that emerged were: perceptions of disability influence digital inclusion, powerful branding suggests digital access, unawareness of accessibility guidelines, UX testing overlooks input from people with disabilities, inclusion is tough to enforce on digital platforms, and workarounds hinder digital improvements.

Chapter 5: Discussion

Introduction

According to Title III of the Americans with Disabilities Act (ADA), websites are covered by the law (Burks, 2013). Nevertheless, businesses continue to struggle to create websites, mobile applications, and devices with a user interface that is accessible to people with disabilities. Being digitally inclusive is especially difficult for small businesses, as they have access to fewer resources when compared to government agencies and large corporations (Correia, 2008; Garcia & Diaz Castillo, 2010).

This study examined how a small business owner in an urban U.S. city navigates the digital inclusion of customers with disabilities in his daily operations. Through the theoretical framework of digital inclusion, the study sought to understand the problems a small business owner encountered in achieving the digital inclusion of customers with disabilities in his digital platforms.

This chapter includes a discussion of the study's findings. The chapter begins with a short summary of the study followed by an analysis of the findings from Chapter 4. The data are organized by the inquiry questions that guided the research. The analysis is followed by key findings, recommendations for practice, and areas for further study.

Summary of the Study

As the number of organizations that offer electronic services via the internet, mobile applications, and through stationary devices grows daily, and as people shift to primarily sharing information digitally, technology has become a vital segment of society

(Duplaga 2017; Weerakkody at al., 2012). However, some of the people that would benefit the most from modern conveniences such as online banking, shared-ride services, and video conferencing are excluded from participation in many aspects of society. Exclusion from technology occurs when organizations fail to account for the various levels of physical and mental ability and instead design for the dominant population (Bunning, Trapp, Seymour, Fowler, & Rollett, 2010). Several minority groups, such as people who live in rural areas and racial and ethnic communities, are affected by the lack of digital inclusion in technology. Nonetheless, one of the communities that is most heavily impacted by digital inequalities is people with disabilities (Dobranskya & Hargittaib, 2016; Duplaga, 2017).

The purpose of this model case study was to examine the attitudes and experiences of a small business owner towards the digital inclusion of people with disabilities on his company's technology platforms. The questions that guided this study's design, data collection, and analysis are the following:

5. How do some small business owners learn about federal and state accessibility regulations?

6. What influences some business owners to give a higher priority to digital inclusion in their operations?

In order to gain a comprehensive perspective of how a small business owner prioritizes digital inclusion of people with disabilities, the following sub-questions were explored:

7. What barriers do some small businesses face in practicing digital inclusion?

8. What digital properties do some small businesses overlook when setting up their infrastructure?

9. What types of digital inclusion practices are difficult for some small business owners to execute?

The theoretical framework applied to this study is digital inclusion, which speculates that organizations can make their information and communication technologies accessible to any individual regardless of age, gender, educational level, ability, or economical background (Weerakkody et al., 2012). Duplaga (2017) describes digital inclusion as an opportunity for people with disabilities to gain further independence by being able to access resources that make their lives easier. This framework acknowledges that the increase of underrepresented communities on digital platforms does not just benefit the marginalized individual, but the society at large (Garcia & Diaz Castillo, 2010).

This research was a model case study that examined the attitudes and experiences of a single subject – a small business owner in a city in the United States. The essential criteria were shaped by the inquiry questions and by the definition of a small business as outlined in Chapter 1. The criteria the researcher used to select the subject were: (1) The small business owner operated an organization with fewer than 25 employees and was a member of the Chamber of Commerce in the city where the business was located; (2) The business had at least one digital property, such as a website, mobile application, or station that offered a way for customers to interact with a screen in order to complete a transaction; and (3) The small business owner was available for four in-person interviews from April to June 2019.

A responsive interview model was used to establish a conversational tone with the subject and allow for follow up questions during interviews. The three types of questions used were main, follow up, and probe (Ruben & Ruben, 2012). The probing

questions allowed the researcher to collect additional data and not be limited to the preset protocol. A digital recorder was used to capture the subject's responses – a standard practice in qualitative research. The approach to transcription was to listen to the interview, and type subject answers into a Microsoft Word document. This process was used to ensure that subsequent interviews could reflect the data emerging from the study (Clough & Nutbrown, 2012; Creswell, 2002). This interview model made it possible for the subject to share rich detailed information and allowed surprising key findings to emerge.

The data collected were analyzed using the inductive process of coding to identify themes in the data. In the first step, descriptive coding was used to analyze the data, while pattern coding was used in the second cycle to further organize the findings. The study used an interpretive constructivism lens to examine the information collected, and six themes appeared from this process: perceptions of disability influence digital inclusion, powerful branding suggests digital access, unawareness of accessibility guidelines, UX testing overlooks input from people with disabilities, inclusion is tough to enforce on digital platforms, and workarounds hinder digital improvements.

Inquiry Question 1: How do some small business owners learn about federal and state accessibility regulations? Isaac did not have any training opportunity to learn about federal or state accessibility regulations prior to, or after, launching Micah Systems. This is despite the fact that he had to receive training on laws pertaining to wealth management and personal finance in order to become a financial advisor, and later open up his own firm. This finding mirrors the literature relating to the digital inclusion of customers with disabilities by small businesses – which

reiterates that small businesses lack resources to acquire information about laws related to accessibility (Areheart & Stein, 2015; Burks, 2013; Cox, 2010; Dobranskya & Hargittaib, 2016; Duplaga, 2017; Ellcessor, 2014; Garcia & Diaz Castillo, 2010; Weerakkody et al., 2012).

The lack of resources that would grant Isaac the ability to learn about accessibility protocols emerged as the theme: unawareness of accessibility guidelines. As the study progressed, Isaac became more conscious to the notion that while he had to be familiar with laws related to financial services, no one ensured he was learning about accessibility. He explains:

> Yeah, that's not something we're drilled on or tested on. You know, I'm tested on all the laws and legislation around the finance industry. But, never once in all of my compliance stuff, when I built my website, did they ever ask about ADA compliance or accessibility.

As Areheart and Stein (2015) mention in their report, small businesses are more likely to have to retrofit their digital platforms in order to meet accessibility laws at both the federal and state level – a cost that often places financial hardship on the business owner. Larger companies in Isaac's industry would be more efficient and comprehensive with accessibility compliance because they have the ability to hire the proper resources. The big institutions in Isaac's industry are banks, and he is quick to note how they are better with accessibility for people with disabilities:

> Yeah, it's interesting, right? Therefore, a bank I think, that feels like yeah, they're really good at accessibility, but independent financial advisors, we've never been taught that we ought to be. So yeah, that is something where it's like, if I build a website, I want to be accessible, how do I do that?

While the answer to this inquiry question coincides with the literature, the data revealed a surprising finding that is not prominent in previous research. Whereas the literature

clearly notes that small businesses struggle with learning about access laws, previous research does not explore how there are some business owners that have a strong desire to be compliant, but do not know where to begin the process. Moreover, this study highlights how the very institutions that monitor small businesses, are underserving their constituents. Isaac said:

> From a trade standpoint, honestly I'm not. From a compliance standpoint for financial industry, yes. So, I know there's only certain things I can say. I'm not promising people a million dollars or the next hot stock pick or that nothing will go wrong. So, there's only certain things I can say because of my standing with FINRA and the FCC. But, outside of that I don't know any other regulations that makes me think I should.

Inquiry Question 2: What influences some business owners to give a higher priority to digital inclusion in their operations? This study showed that some of the reasons why a small business owner would prioritize digital inclusion is largely connected to the leader's personal experience with diversity issues. As a minority business owner, Isaac was inspired to create an online community where people of color could get financial literacy education; however, his idea of digital inclusion was limited to diversity in gender and race and not ability. This was apparent when he described his need for ethnic models for his website, but did not ensure the platform was accessible to customers with disabilities: "I wanted the website to be inclusive and I made sure that we featured black and brown faces. It was also super important to portray women in a positive way." This idea of ability not being considered by small business as a component of digital inclusion is supported by the limited literature in this space (Burks, 2013; Dobranskya & Hargittaib, 2016; Garcia & Castillo Diaz, 2010; Holmes, 2018; Parry & Brainard, 2010; Sourbati, 2012; Walter et al., 2002).

Isaac's failure to consider ability as a part of digital inclusion made it possible for the rise of the theme: perceptions of disability influence digital inclusion. More specifically, this study shows how Isaac's experiences with blind people in college shaped his ideas around inclusion of ability. For example, he oversaw two disabled students during his stint as a resident hall advisor in college. These students were very independent, and preferred Isaac to remain a passive resource instead of an active helper. As a result of this experience, Isaac built a philosophy around people with disabilities that consisted of a hands-off approach to his interactions unless called upon.

This philosophy—that disability can be managed by the person and thus does not need to rank high in Isaac's inclusion strategy—has transferred over to his business interactions, as seen when he declared, "We don't coddle our clients. We only give them what they ask for."

While it is clear that Isaac delivers quality services to his clients with disabilities, as he has retained all customers with some sort of physical or mental condition, his perceptions of disability has impacted how he prioritizes digital inclusion in his operations. Essentially, he is more heavily influenced by retention of his clients, and not necessarily by the idea of equal access to digital platforms (Dobranskya & Hargittaib, 2016; Duplaga, 2017). Although Isaac means well, he is more motivated by his business model than his awareness of accessibility. Isaac's case fits in with the growing body of literature that says ability is not always included in personal and systemic conceptions of diversity and inclusion (Dobranskya & Hargittaib, 2016; Duplaga, 2017; Weerakkody et al., 2012). Ultimately, digital inclusion derives from social inclusion, and disability is often invisible.

Sub Question 1: What barriers do some small businesses face in practicing digital inclusion? This sub question pointed to a phenomena not reported in the literature. While Garcia and Castillo Diaz (2010) report that expanding on digital usability can improve a small or medium sized company's brand, there is no mention that a brand with positive associations and universality can give the illusion of digital inclusion to business owners. This finding led to the emergence of the theme, powerful branding suggests digital access. That is, one of the barriers to practicing digital inclusion is when small business owners' utilize well-known brands under the assumption that they offer optimal accessibility features. For instance, Isaac selected PayPal has his company's payment tool based on its ubiquity in financial transaction. He revealed his assumptions about PayPal's digital inclusion status due to said ubiquity, but admitted he could not validate the company's level of accessibility, nor did he try to. For Isaac, the illusion of access granted by brand recognition provided enough evidence on which to stake his own company's digital inclusivity.

While there is a limited amount of literature that suggests business owners do not see themselves as content creators and even feel as though federal access laws do not apply to them, there is no mention that some business owners feel that large brands are accessible by default (Areheart & Stein, 2015; Beard, 2013; Cox, 2010; Weber, 2012). However, this study seems to support the existence of such an assumption among small business owners.

In Isaac's case, he produces a great deal of multi-media content and relies on established brands to deliver on their pledge of inclusion and usability. A powerful brand can invoke an illusion of accessibility, but ultimately end up being a barrier to

digital inclusion. This is due to small business owners failing to investigate true accessibility options for their users.

Sub Question 2: What digital properties do some small businesses overlook when setting up their infrastructure? The digital property that Isaac overlooked was the Micah Systems website, which according to the literature, company websites are commonly disregarded by most small businesses when considering digital inclusion (Areheart & Stein, 2015; Beard 2013; Burks, 2013; Cox, 2010; Dobranskya & Hargittaib, 2016; Duplaga, 2017; Ellcessor, 2014; Garcia & Diaz Castillo, 2010; Weerakkody et al., 2012). This disregard for digital inclusion is concerning because marginalized communities are impeded from fully accessing goods and services, as well as participating in the company's most prominent digital platform.

While Isaac put a lot of effort into building his website, he completely neglected to test it for accessibility. His team tested the website on multiple devices and browsers, and solicited feedback from users; however, none of those test users had a disability. From this sub-question emerged the theme: 'UX testing overlooks input from people with disabilities.' This finding mirrors what Holmes (2018) reports: digital inclusion starts with a representative range of users who reflect various age groups, education levels, level of ability, socio-economic status, and so on. UX testing often relies on groups of individuals who do not represent the wider population.

Sub Question 3: What types of digital inclusion practices are difficult for some small business owners to execute? This study shows that small business owners struggle most to create and execute a digital inclusion policy. This is also

reflected in the literature around the enforcement of digital inclusion. This finding led to the emergence of the theme: 'inclusion is tough to enforce on digital platforms.'

Isaac was able to work with the technology his customers with disabilities use; however, he lacks the skillset to interpret accessibility best practices and turn those into a policy he can enforce across the board.

The limited literature agrees that creating a digital inclusion policy is difficult for small businesses to execute (Areheart & Stein, 2015; Beard 2013; Burks, 2013; Cox, 2010; Dobranskya & Hargittaib, 2016; Duplaga, 2017; Ellcessor, 2014; Garcia & Diaz Castillo, 2010; Weerakkody et al., 2012). Research also shows that even companies that have some type of inclusion policy lack the resources to translate their policy to a digital context. Isaac expressed the same concern: "I don't know how to create and enforce an inclusion policy for the web." Digital inclusions policies are difficult to develop and execute because such policies require specialized knowledge of inclusion models, accessibility best practices, and federal law.

Key Findings

In conducting this research, attention was given to addressing the two inquiry and three sub questions. In examining the data related to these questions, key findings emerged that were contrary to some of the expected outcomes. This section outlines these key findings, as well as gives reasons why these key findings exist and what they mean in the context of the study.

Financial opportunity. Isaac stated that he only had twenty clients with disabilities – which was roughly about 1% of his total clientele. In addition, he reported that he had not done a whole lot of research into accessibility because his company

was able to manage the workarounds for their clients with disabilities, as there were so few of them. This discovery points to two key findings. First, because Micah Systems was able to manage the workload that the workarounds required, they were not motivated to report the inaccessible features to the tech companies. Also, because the clients with disabilities were pleased with the accommodations they received, and Micah Systems was retaining all clients with disabilities, they were not losing out on any financial opportunity. Additionally, the small business was not seeing a demand for workarounds that they could not manage. Since there were not that many customers with disabilities who were inquiring about their services and later not signing up with Micah Systems as a result of inaccessibility, Isaac's strategy was to retain through accommodations, instead of investing on a tactic that would help his clients with the technology barriers.

It is important to note that Isaac did not report any profit loss as a result of inaccessible technology at the time of the study, nor did creating workarounds cause any financial hardship on the organization. Ultimately, financial opportunity played a major role in how Isaac negotiated the digital inclusion of people with disabilities on the Micah Systems digital platforms because it guided the small business owner's behavior.

As Parry and Brainard (2010) point out in their study, large tech companies that serve the education field are motivated to be accessible to people with disabilities because not doing so could present financial hardship. Hence, school districts and university systems have a lot of influence on tech companies, as buying inaccessible technology could bring about a lawsuit. In relationship to small business owners, this

study showed that financial opportunity also has an effect on small business owners. And, in the end, the organization's ability to make a profit overrode good intentions.

Compliance enforces inclusion. Isaac was grilled on laws and codes pertaining to running a wealth management company. In fact, he mentioned that he was grilled on the law related to money coaching several times before he was able to launch his business. However, none of his training touched on the ADA.

As Burks (2013) shared in his report, Title III of the ADA covers websites. The only way for small businesses to know what is required of their digital properties is to have someone evaluate them, a process that sometimes involves the business owner learning about the inaccessibility through the experience of a lawsuit.

This study showed that professionals in the wealth management and personal finance space are not being informed about the accessibility compliance aspect of their industry. This is key because throughout the course of this study, Isaac mentioned a few times that he wished he had learned more about digital access from his compliance training. This finding points to a gap in the financial advising compliance field. It also underscores that if digital accessibility was included with training on other federal compliance laws, smaller organizations, who lack resources, would be able to achieve digital inclusion. This key finding highlights how negligence on behalf of the organizations that oversee wealth management compliance is producing financial advisors that are not meeting federal accessibility guidelines.

User experience professionals overlook accessibility. User experience (UX) is focused with designing products and services based on the needs of users. But if the test user population does not include people with disabilities—the largest minority group

in the U.S—then UX designers are leaving a huge demographic out of the conversation. Moreover, professionals that adopt UX methodologies in their design and do not take input from disabled users are creating products and services with limited usability (Areheart & Stein, 2015; Holmes, 2018).

This study showed that while Isaac hired two seasoned professionals – a website developer and curriculum designer—to help him create his website, they did not bring up the need to have disabled users test the digital prototypes. This finding is significant because UX design has become the most prominent model to use for product design by tech companies, and if users with disabilities are missing from the UX tests, companies will have to then go back and retrofit their products. This process is costly, and some tech companies will refuse to do it and then point to financial hardship if sued under the ADA. If more design professionals that use UX models to produce work include people with disabilities in their testing, they would be helping organizations become more proactive in their digital inclusion.

Recommendations for Practice

The restrictions of a single case study were presented in Chapter 3. With that in mind, this researcher sees value in using findings from this study to inform practice.

Recommendations for small business owners. This study showed that digital inaccessibility often goes unreported – even if it presents a barrier for someone. In the case of Isaac and his customers with disabilities, glitches in the technology Micah Systems had adopted kept clients with sensory and mobility problems from registering on the website independently. And while Isaac stated that spending the extra time it took to complete the onboarding process manually was not a big deal for his company,

there is no way to know if clients felt the same way. Moreover, if the problematic features had been reported to the tech companies, perhaps, the bugs could have been fixed over a period of time. Conceivably, accessibility on the digital tools that Micah Systems used at the time of this study could have been improved if Micah Systems had reported each instance of when the technology did not work for one of its customers. Thus, while offering workarounds to customers may be a great way to troubleshoot short-term, reporting the access issues promptly and following up on the status of the bug, should be standard procedure for small business owners to bring about a more sustainable digitally inclusive experience for clients with disabilities.

Recommendations for technology companies. Findings from this study showed that Isaac was not able to identify any accessibility features on the platforms he was using for his business. Consequently, this pushed him not to report the bugs to his vendor and create workarounds on his own. Tech companies need to add accessibility problems as an option to their tech support reporting process. Many small businesses are not able to deliver workarounds to their clients with disabilities and need help when it comes to assisting clients with certain conditions. Furthermore, tech companies need to let their customers know if additional services are available to customers who have clients with disabilities. Often this could be a link to a website that is text-based and has no images to a tutorial on how to use the technology with adaptive software. Holmes (2018) suggests that the more inclusive a digital design, the more user-friendly it will be for everyone else.

This study showed that when tech companies do not mention accessibility features, small business owners are less prone to inquire about accessibility support.

Thus, another item that tech companies can do to improve access is to draft an accessibility policy for their website. These statements help users with disabilities learn how to navigate a site with their adaptive software. It also helps small business owners by having a place they can refer their clients to – just in case the business is unfamiliar with adaptive technology.

Recommendations for designers. This study demonstrated that design professionals are not considering users' range in ability when creating graphics, videos, and blog posts. Whereas the designers that put together the Micah Systems website wanted to ensure that diversity was visible throughout the site, they did so by using models that showed diversity in gender and race – not ability. Just as architects and chefs need to design creations that will be used and consumed by a wide range of people, designers who create digital content that will be accessed by users on the web need to keep in mind that not all people surfing the internet can see color, use their hands, or be able to read long blocks of text. For this reason, professionals tasked with design projects need to consider ability in every aspect of the creation process. For example, they need to imagine customers with all levels of sensory, mobility, and cognitive ability when they begin to brainstorm design ideas, then test for access by using free online accessibility tools. Furthermore, they can work with an accessibility consultant to ensure the highest level of compliance.

Recommendations for policy makers. The data that emerged from this research highlights that while there are federal and state laws that enforce access for the disability community, and that these access regulations also cover digital properties, there is no clear or set standard for measurement of that access. There is a need for a

law that unmistakably outlines a minimum digital standard for organizations to follow based on Web Content Accessibility Guidelines (WCAG) 2.1, level AA. In addition, the rule must specify the size and types of organizations that are impacted by it. For instance, as soon as a small business files for Articles of Organization, that business should fall under the minimum digital standard law. This proposed law also needs to act on a national level in order to help coalesce digital inclusion across the United States.

Recommendations for research institutions. This study contributes to a small body of research. As the literature points out, digital inclusion is in its infancy and requires more contributors and findings. Like other disciplines that greatly impact a significant section of our population, digital inclusion needs to have a dedicated institute of study at a research organization. Perhaps, a university can establish such an institute to offer a place that conducts research, as well as creates opportunities for scholars in the field to engage in dialogue through different mediums, such as scholarly journals, multimedia releases, and reoccurring conferences.

Future Research

It has been almost a decade since Garcia and Castillo Diaz's (2010) study on the website usability and accessibility of small and medium enterprises was published. The study, which reported that website accessibility was of secondary concern to small and medium enterprises, was one of the few to examine digital access for people with disabilities as it related to smaller organizations. In 2019, web access to people with disabilities is now a byproduct of models such as universal design for learning and digital inclusion; yet, small businesses continue to undermine accessibility when they design their digital platforms. In the United States, small businesses make up roughly

about 75% of the private sector. However, studies that look at how smaller organizations negotiate accessibility are scarce when compared to other research about small businesses (Anastecia 2015; Weerakkody et al., 2012).

There is a plethora of research opportunities for any investigator or organization looking to inform small businesses of best practices around digital inclusion. Within the realm of the digital inclusion of people with disabilities by small businesses, there is a need for more quantitative and qualitative studies that look at how individual businesses navigate their interactions with the disability community. These individual studies could then help to create evidence on a broader scale by providing findings on how small businesses commonly manage accessibility on their digital platforms. These findings could then be compared to inform the organizations and agencies that support the small business community.

Whereas the results of this study showed that Micah Systems' customers with disabilities were happy with services, the literature indicated that this is an exception rather than a rule. For instance, in the study by Parry and Brainard (2010), a group of blind people resorted to litigation to improve services by technology companies. Additionally, in a report by Hollier et al. (2017), the researchers examined the Netflix take over by a deaf hacker, who added captions to his favorite show, which led to the organization to add access features to some of their programs. In follow-up to this research, a qualitative longitudinal study of a cohort of individuals with disabilities should be conducted to examine their digital interactions with small businesses over a year. In addition to business demographics, such as location and industry, the interviews need to track how subjects react to different workarounds that the small

organizations provided to them. Moreover, interviews need to define the accommodations that are acceptable to offer to customers with disabilities, as well as outline problematic workarounds.

A quantitative study that examines the financial impact on businesses of ignoring digital accessibility would offer a lot of value to the emerging field of digital inclusion. Understanding more about the correlations and relationships between variables such as level of accessibility and financial status would also provide politicians, business leaders, and technologists with the information they need to draft budgets and plan their financial investments. Likewise, nonprofits that advocate for people with disabilities would also benefit from one such quantitative report, as it would aid with presenting evidence to their cause.

Summary

This study was an examination of interactions between a small business and customers with disabilities on digital platforms. The analysis of the business owner's experiences with navigating the digital inclusion of customers with disabilities on his digital properties led to six themes: perceptions of disability influence digital inclusion, powerful branding suggests digital access, unawareness of accessibility guidelines, UX testing overlooks input from people with disabilities, inclusion is tough to enforce on digital platforms, and workarounds hinder digital improvements.

The analysis also lead to surprising key findings, including that financial opportunity drives accessibility for the disability community, and UX and UI professionals are overlooking people with disabilities in their practice. The findings from this study have implications for small business owners wanting to expand their brand to

the disability community. These include that small business owners should have a vetting process for ensuring that vendors and consultants can provide accessible products and services, and that all vendors go through the same review process – even if they are a major brand.

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APPENDIX A: IRB APPROVAL LETTER

UNIVERSITY OF THE
PACIFIC

OFFICE OF RESEARCH AND SPONSORED PROGRAMS | INSTITUTIONAL REVIEW BOARD

TO: Belo Cipriani
Organizational Leadership
Benerd School of Education

CC: Dr. Brett Taylor, Faculty Advisor

FROM: Valerie Andeola

DATE: May 16, 2019

RE: IRB Approval Protocol Cipriani, #19-54

Your proposal entitled ***"How a Small Business Negotiates Digital Inclusion of People of Disabilities: A Model Case Study,"*** submitted to the University of the Pacific IRB has been approved. Your project received an Expedited review.

You are authorized to work with ***1 Small Business Owner*** as human subjects, based on your approved protocol. This approval is effective through **May 31, 2020**.

NOTE: Enclosed is your IRB approved consent document with the official stamp of IRB approval. **You are required to only use the stamped version of this consent form by duplicating and distributing to subjects. (Online consent should replicate approved consent document).** Consent forms that differ from approved consent are not permitted and use of any other consent document may result in noncompliance of research.

It is your responsibility according to the U.S. Department of Health and Human Services regulations to submit an annual **Active Protocol Status/Continuation Form**. This form is required to request a continuation or when submitting your required closure report. Please be aware that procedural changes or amendments must be submitted to the IRB for review and approval prior to implementing changes. Changes may NOT be made without Pacific IRB approval except to eliminate apparent immediate hazards. Revisions made without prior IRB approval may result in noncompliance of research. To initiate the review process for procedural changes, complete **Protocol Revision Form** and submit to IRB@pacific.edu.

Best wishes for continued success in your research. Feel free to contact our office if you have any questions.

Valerie Andeola
University of the Pacific
Office of Research & Sponsored Programs
3601 Pacific Avenue, Stockton, CA 95211

APPENDIX B: PARTICIPANT RECRUITING LETTER

Dear Membership Manager,

My name is Belo Cipriani and I am a doctoral student at University of the Pacific. I am looking for a participant for a case study on how small business owners practice digital inclusion.

The study is unpaid and seeks a business owner from [urban U.S. city].

Do you know of any small business owners with less than 25 employees that would be open to doing four in-person interviews over the period of three months?

Thank you for your time.

Regards,

Belo Cipriani
[PHONE NUMBER REDACTED]

APPENDIX C: PARTICIPANT SELECTION LETTER

Dear Participant,

My name is Belo Cipriani and I am a doctoral student at University of the Pacific. I am writing to let you know that you have been selected to participate in a case study on how small business owners practice digital inclusion.

The study is unpaid and involves doing four in-person interviews over the period of three months.

I have attached the consent letter for your review. Please read it thoroughly, and if you consent to participating in this study, then sign the letter and bring it with you to our first interview. Please also respond to this email to let me know your availability for our first interview.

Thank you for your time.

Regards,

Belo Cipriani
[PHONE NUMBER REDACTED]

APPENDIX D: CONSENT FORM WITH IRB STAMP OF APPROVAL

Consent for Participation in Interview Research

I volunteer to participate in a research project conducted by Belo Cipriani, a graduate student at University of the Pacific, and supervised by Dr. Brett Taylor, Assistant Professor at University of the Pacific. I understand that this doctoral project, as part of the doctoral dissertation, is designed to gather information about a small business owner on digital inclusion of their technology. I will be the only participant being interviewed for this study.

1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty. If I decline to participate or withdraw from the study, no one in my organization will be told.

2. I understand that the discussion will be around the technology I use for business. If, however, I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.

3. Participation involves being interviewed by Belo Cipriani four times over the period of three months. Each interview will last approximately 30-45 minutes. Notes will be written during the interview. An audio tape of the interview and subsequent dialogue will be made. If I don't want to be taped, I will not be able to participate in the study.

4. I understand that the researchers will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies which protect the anonymity of individuals and institutions. Belo Cipriani will be the only person present at the interview. No one, other than Belo Cipriani and the faculty members on Belo's doctoral dissertation committee, will have access to interview notes and transcripts. This precaution will prevent my individual comments from having any negative repercussions.

5. I understand that there are potential benefits to my participation in this study. I may benefit personally from discussions about digital access with Belo Cipriani. I may also become more aware or conscious about the benefits of accessible technology and digital inclusion and make changes to current business processes and operations that could ultimately lead to better experiences for people with disabilities.

6. I understand that there are risks to my participation in this study. I may experience psychological factors such as anxiety when being interviewed; however, this risk is not greater than those ordinarily encountered in daily life or during the performance of routine psychological examinations or

tests. I may also experience sociological factors such as embarrassment when being interviewed; however, this risk is not greater than those ordinarily encountered in daily life or during the performance of routine psychological examinations or tests. I am also aware that there is the risk of loss of confidentiality, and that the research team will take safeguards to minimize this risk, including protecting my anonymity and the anonymity of my organization.

7. I understand that this research study has been reviewed and approved by the Institutional Review Board (IRB) at University of the Pacific. If I have any questions about my rights as a participant in a research project, I will contact the Office of Research and Sponsored Programs, University of the Pacific: (209) 946-3903. In the event of a research-related injury, I will contact my regular medical provider and bill through my normal insurance carrier, then contact the Office of Research and Sponsored Programs.

8. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

9. I have been given a copy of this consent form.

My Signature	Date
My Printed Name	Signature of the Investigator

APPENDIX E: INTERVIEW 1 - BUSINESS COMMUNICATIONS

1. How can potential customers communicate with you about your services?
2. How do current customers communicate with you?
3. Please describe how your employees and contractors communicate and exchange messages among themselves.
4. How are internal company messages created and distributed?
5. How are external company messages created and distributed?
6. How would you describe the process you used to select your business communication tools?
7. How would you describe the process you currently use to assess the effectiveness of your business communication tools?
8. What accessibility features do your communications vendors offer?
9. How do you currently manage communications with customers with disabilities?

APPENDIX F: INTERVIEW 2 - PAYMENT SYSTEMS

1. How does your business collect payments from customers?
2. What are some ways that your payment systems accommodate people with disabilities?
3. Why did you choose your current payment system?
4. Tell me some of the strengths of your current payments system and why they're important to you.
5. Tell me some of the challenges of your current payment system and why they're problematic.
6. If you could change anything about how you collect funds from your customers, what would it be and why?

APPENDIX G: INTERVIEW 3 - WEBSITE PRESENCE

1. How would you describe your company website?
2. What steps did you take to prepare your website before launch?
3. What process do you use to select content for your company website?
4. What communities does your current website serve?
5. What steps do you take to ensure that your website is inclusive?
6. What accessibility features does your website have, and how do these features meet your customer's needs?

APPENDIX H: INTERVIEW 4 - MOBILE PRESENCE

1. How would you describe the mobile version of your company website?
2. How do people access your company website on a mobile device?
3. What federal or state regulations impact your company's mobile presence?
4. Which of your services can customers access via a mobile device?
5. How do you manage your company's mobile design?
6. What role does mobile presence play in your business?
7. How does inclusion influence your mobile platforms?

APPENDIX I: TOOLS AND RESOURCES

1. World Wide Web Consortium: https://www.w3.org/