Increasing Online Sales for VIAble Ventures

(Technical Topic)

Adjusting Workplace Environments to Accommodate for Adults with Autism

(STS Topic)

A Thesis Project Prospectus Submitted to the

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

Section I: Overall Introduction

People with disabilities make up 15% of the world's population (Friedel, 2015). However, when they are employed, they often work disproportionately lower paying jobs with worse working conditions and very little career mobility (Friedel, 2015). This has been an issue that organizations have tried to support for decades, with a federal program going as far back as 1967 employing people with autism for a variety of jobs. "Job performance exceeded expectations" (Civil Service Commission, 1967, p. 1), yet the employees were still at the time referred to as mentally retarded, as the title of the article suggests, and disregarded. More recently, there was a community organization in Montreal that trained people with autism in general job skills, and they saw an overall decrease in work anxiety for the participants (Martin et al., 2016). Societal awareness and effort has clearly improved since the 1960s, but the problem of adults with neurological disorders facing unemployment continues to be a burden on them and their families.

There is a vast spectrum of effects for people with neurological disorders, ranging from severely limiting disabilities to areas of higher-than-average functioning (Friedel, 2015, p. 1). Even within autism there is a wide gap of abilities. I will be focusing specifically on employment opportunities for adults with autism, both in how more can be created and how existing ones can be meaningfully improved so that there is increased equality of opportunity for people anywhere on the neurodiversity spectrum.

The goal of my technical project is to contribute to the employment opportunities for people with autism that have generally been hard to come by. The goal of my research paper is to explore alternative pathways of how this could be done in not only the creation of new jobs but in restructuring existing careers to accommodate for people across the neurological spectrum. I will do this by analyzing current employment "norms" and determining what aspects are designed around a generic neurotypical employee, excluding others.

Section II: Technical Topic

In the United States, nearly 99% of young adults have worked at some point between the ages of 21 to 25 years old; however, only 58% of young adults with autism have ever worked during their early 20s (Roux et al., 2015). Not only is this percentage significantly lower than the national average, it is also the lowest rate of employment across all disabilities (Roux et al., 2015). My project is centered around addressing this issue through a partnership with VIAble Ventures, a local microbusiness run by the VIA Centers for Neurodevelopment.

VIAble Ventures is a for-profit subsidiary that sells cosmetic products like candles, bath salts, and sachets, all of which are made by artisans with autism. Volunteers and employees at VIA have worked to develop a curriculum that can prepare anyone, no matter the level of their capabilities, to learn foundational job skills like repeating tasks and following directions clearly. It also shows the artisans what it can look like to contribute meaningfully to a company. The program acts not only as a way to provide a steady source of income for adults with neurological disorders, but also as a way to train them and give them the skills they need to enter the workforce (VIA Centers for Neurodevelopment).

My team has been tasked with helping the business meet its long-term goal of expanding employment opportunities to autistic adults in the local area by increasing online sales and revenue. Currently, VIAble Ventures is sustaining itself with profits from the local Charlottesville Farmers Markets that occur almost every Saturday during the fall. However, this sales method relies heavily on volunteer availability and seasonality. Therefore, this project is focusing on growing their online sales traffic via identifying sales trends and forecasting areas of improvement to the client. This will require a wide range of technical interventions, including looking at website analytics, analyzing historical sales data, developing a forecast based on past sales and seasonal demand, redesigning the website to improve usability, and devising creative ways to market VIAble Ventures' products.

This is a unique project in the sense that we will build on VIA's existing model to increase the number of autistic individuals they are able to employ, instead of designing and implementing a new employment program from scratch. By increasing online sales in the current low months and simplifying user experience on the website, VIAble Ventures will be able to employ more people with autism to help them gain employment skills and earn paychecks. This is based on existing research that shows increased sales have a proven relationship with improved operating processes (Gadad et al., 2004, p. 870). Therefore, I would consider our work successful if online sales, especially in late winter / early spring, which have experienced minimal sales historically, increase compared to last year.

Section III: STS Topic

While people with autism can occasionally find employment, there are more struggles that they face in maintaining a job than there are for others. The unemployment rate for people with autism is above the national average (Johnson et al., 2022). There are many reasons for this, one of which is the fact that following simple, unspoken rules of a workplace like "water cooler culture" is a much greater undertaking for someone who is neuroatypical (Rigler et al., 2016). Disclosing neurological disorders to employers or colleagues can be a huge source of stress, and often people either just quit or hide their disorders, leading to assumptions about their inadequacy that are likely misplaced (Hendrickx et al., 2010). Older guidebooks for this demographic group even suggest hiding any disabilities, calling it a "need-to-know issue" (Fast, 2004, p. 197). However, employees with autism are actually reported to perform better on the job in areas such as attention to detail and work ethic (Bennett et al., 2021, p. 23).

This research paper will explore the question of how our society can create new employment opportunities that fit the skillsets of people with autism, rather than fitting people with autism into existing career structures for the neurotypical. I will approach this question by looking at it through the STS framework of neurological diversity. Technological and societal artifacts have designs that qualify certain people for their use, and neuroatypical folks like those with autism often have the most barriers between them and their participation in these artifacts (Booth et al., 2016). Only by evaluating these artifacts can we ensure equality for the neurodiverse.

One of the ways this disparity of workplace experiences for the neurodiverse can be addressed is by realizing the conditions that are required for a person with a neurological disorder to thrive and maintain focus. People with autism are much more likely to experience sensory overload from excess stimulus (Scheiner, 2017). By being intentional about lighting, sounds, smells, clothing, etc., an office can be made significantly more inviting for neuroatypical people (Scheiner, 2017). Ultimately, this should be treated as an issue of diversity, equity, and inclusion in the workplace, as many studies surrounding employment of the neurodiverse fail to consider social factors (Mpofu, 2023). How can the American culture at large become more accepting of different levels of mental functioning in the workforce, so that all have opportunities to be fruitful in a career? This is the lens through which I will perform my research.

The research findings about employment for people with autism are significant because if specific changes are more broadly implemented in businesses that can make positions more accommodating, unemployment overall would decrease and companies would thrive with the introduction of neurodiversity on their teams. Creating new jobs for people with autism would also increase public perception of those with neurological disorders, where currently many are deemed unemployable before even reaching an interview phase (Hendricks et al., 2009). Since there is such a range in neurological disabilities, there is of course not one kind of job that will perfectly fit all adults with autism (Kaupins, 2022). However, it is this cultural shift towards jobs embracing neurodiversity and playing to the strengths of certain individuals at different levels of abilities that would support people with autism and enable them to support themselves. The current American career structure, which often can favor efficiency and charisma over some of the qualities that people with autism excel in, will be the primary force pushing back on this.

Section IV: Overall Conclusion

The overall goal of this project and research process is to make a quantifiably positive impact for adults with autism in realizing their employment potential, through a change in workplace culture and increased sales at VIAble Ventures leading to more available positions. The anticipated deliverable of my technical project is an array of forecasts, dashboards, and website redesigns that ultimately can be implemented by VIAble Ventures to increase their online sales and hire more artisans with autism. The anticipated result of my research project is to have a greater understanding of the action that would be required to restructure employment opportunities in the U.S. to better allow people with neurological disorders to have a seamless transition into the workforce and find employment that is both meaningful and providential.

If these deliverables are fully realized, then more artisans at VIA would have a better chance at being successful after leaving VIAble Ventures in working alongside neurotypical people and having the opportunity for career advancement.

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