

Thesis Project Portfolio

**Expanding VIAbLe Employment for Adults with Autism: A Systems Approach to Increase
Nonprofit Sales**
(Technical Report)

**Analysis of the Growth of Training and Improvement of Employment for People with
Disabilities in the United States**
(STS Research Paper)

An Undergraduate Thesis

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Olivia Conner

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Table of Contents

Sociotechnical Synthesis

Expanding VIAble Employment for Adults with Autism: A Systems Approach to Increase Nonprofit Sales

Analysis of the Growth of Training and Improvement of Employment for People with Disabilities in the United States

Prospectus

Sociotechnical Synthesis

My thesis will address the growth of training and employment for people with disabilities. This paper will highlight the main issues of barriers to employment and case studies and implementations related to the importance of employing people with disabilities. First, I will open up with an introduction of the main statistics related to disabilities and outline how the paper is going to be run. I will dive into the Methods for how I conducted my research and from what specific sources I utilized and why. Also, I describe my framework which is the Actor Network Theory. This framework is implemented throughout the paper in order to investigate the relationship between all the actors and elements in the field of expanding employment of people with disabilities. I discuss the results of my research like a literature review. I explored the history of disabilities and the specific attitudes of the different actors within society. I dive into the attitudes that employers and co-workers feel about those with disabilities in general society versus in the workplace. I move directly into the legislative history of employment and how legislation plays an integral role in promoting employment of people with disabilities. Then, I specifically detail the company culture and personal experiences of individuals that come into play with the successful implementation of an integrated workforce. After this general overview of barriers that individuals with disabilities face, I explore productive strategies for increasing employment. One case study by Walgreens was conducted to create an inclusive workplace with specific support provided to employees with disabilities. This study focused on forging partnerships with social agencies to assist with screening employees with disabilities and created a training room with life-skill information and actual work case simulations with limitless days of training. So, a personal connection was made through the employees and management in order to grow candidates progress and increase likelihood of successful employment. Many companies have visited this case to implement this program into their own operations. For other strategies, it

is important to implement programs for mentorship for those without disabilities and increased acceptance toward disabled workers. The START model will provide an opportunity for individuals without disabilities to have training regarding skills, awareness, resources, and theory to increase and establish a sustainable inclusive work culture. The CADE scale will work to measure the acceptance by co-workers toward disabled employees. Companies can implement this scale to observe changes in attitude towards individuals with disabilities in the workplace. The PBED scale will allow individuals with disabilities to explain their experiences and allow employers to assess the barriers they have in order to exhibit an actual change in employment. By adding together the researched tools and implementing the Actor-Network Theory, we can create a more inclusive and integrated workforce that benefits individuals with and without disabilities.

My technical project corresponds to the STS portion as I am working with the Virginia Institute of Autism (VIA). VIA is a non-profit organization which works with people to overcome the challenges of autism. They work to create programs surrounding education, innovation, and adult services. At this organization, they created VIAble Ventures which is a small business enterprise selling soy candles, sachets, and bath salts online and at local farmers markets. The main objective for this project was to help increase online sales for VIAble Ventures through data exploration and marketing. We were specifically looking at website analytic data, sales data, order/inventory data, developing a forecast based on past sales and seasonal demand, redesigning the website to improve online sales, and devising creative ways to get the word out about VIAble Ventures' products. By increasing sales and simplicity of the workings of the website, VIA will continue to employ more people with autism to help them

gain employment skills and earn paychecks. My STS thesis fits directly into the mission of VIA of continuing to implement programs and education to people with disabilities to employ them.

Specifically the tasks we were working on is how to improve the production and storefront management of VIABLE Ventures. Currently, VIABLE Ventures is thriving with profits from the local Charlottesville Farmers Markets that occur almost every Saturday during the fall. The profits from online orders are lagging in a realm these products should be thriving. Online sales have the hardest potential as you don't get to personally explain the message and the importance of these products to the consumers. My technical project group received data surrounding specific sales including revenue per product, which products were sold, and where and when they were sold. We were utilizing this data in order to synthesize the products that have the highest profits and when they should sell specific products. Another task that was prevalent is looking into redesigning the website. We were very interested in reducing the amount of clicks it entails to perform a specific objective, for example, selecting a specific candle and then checking out. This enabled a more user friendly and efficient website. We utilized Figma in order to create multiple wireframes for the potential of new website features. After ensuring the changes were important and approved by the client, we employed Square to create the new VIABLE Ventures website. Our redesign focused on promoting the best selling and most profitable products and improving the online customer experience. With these elements in mind, we established a consistent page layout, populated the product information and inventory, and incorporated client input and requests. We provided data statistics and a website redesign in the most conducive form, so we could boost online presence and revenue in order to employ more people with autism at VIA.