

## **Thesis Project Portfolio**

### **Expanding VIABLE Employment for Adults with Autism: A Systems Approach to Increase Nonprofit Sales**

(Technical Report)

### **Examining the U.S Hiring Process and its Impact on the Ability of People with Intellectual Disabilities to Join the Workforce and Gain Financial Independence**

(STS Research Paper)

An Undergraduate Thesis

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## **Sociotechnical Synthesis**

### **Technical Project**

My technical project is centered around addressing the issue of people with intellectual disabilities having a difficult time acquiring and maintaining employment due to a variety of internal and systematic barriers. Specifically, my team has partnered with VIABLE Ventures, a local business run by VIA Centers for Neurodevelopment. VIABLE Ventures is a for-profit subsidiary that sells cosmetic products like candles and day spa items, all of which are made by artisans with autism. The program embedded within VIABLE Ventures business model provides on-site job training, opportunities to build soft-skills, and a steady source of income for adults with intellectual and developmental disorders. The ultimate hope is for these adults to take the learnings and interpersonal skills they gain through their work at VIABLE Ventures and be competitive candidates for employment in the traditional workforce.

To help VIABLE Ventures make meaningful progress towards these missions, the goal of our work was centered on increasing VIABLE Venture sales to expand employment opportunities to more autistic adults in the local Charlottesville area. This is a unique project in the sense that we built on VIABLE Venture's existing model instead of designing and implementing a new employment program from scratch. Currently, production and sales heavily rely on volunteer availability and seasonality, as almost all profits come from in-person transactions at the local farmer's market and have not been focused on online sales. This project used a systems thinking approach to boost online sales on VIABLE Venture's website with two main areas of focus: (1) analysis of past purchasing transactions and (2) website design. Using data analytics, we projected top selling seasonal as well as year-round scents, and identified higher margin products that VIABLE Ventures could prioritize to increase profits. Additionally, our team facilitated focus

testing on the navigational user experience of their previous website to identify pain points based on client feedback, notably the salience of navigational tools and clarity of the company mission. These findings were used to guide the final redesign of the Square website along with client input and business model updates. By eliminating the impact of lower sales months through the advancement of VIABLE Venture's website and streamlining the overall user experience, they have the potential to boost sales and thus increase the number of artisans with autism employed.

### **STS Project**

My STS project was inspired by the work my team completed in partnership with VIABLE Ventures and the VIA Institute of Neurodevelopment. Through numerous interactions with adults who are employed by VIABLE Ventures and the coordinators of the program, I became increasingly interested in understanding how the hiring process within the United States is designed, specifically how it impacts those with intellectual disabilities. Therefore, the question that guided my STS project was, "How does the general hiring process in the United States impact the ability of people with intellectual disabilities to join the workforce and gain financial independence?"

The goal of the project was to tackle this question from all angles, starting with a deep-dive into the historical landscape of employment opportunities available to IDD individuals and an overview of anti-discriminatory legislation passed in the United States. Understanding major historical events concerning people with intellectual and developmental disabilities, most notably the eugenics movement, and how the introduction of legislation protecting this group impacted society's stigmas around mental health proved to be key steps in grasping the challenges of integrating IDD individuals to the workforce and gaining equal representation. Up

to this point, I successfully analyzed how historical factors have influenced social stigmas that exist today and how that has translated into current statistics around employment of people with IDD. However, we live in a digital age where the use of algorithms and artificial intelligence is constantly evolving. Therefore, I decided to investigate how AI is being used in the recruitment process and the impact that this technology has on people with IDD. Due to the multitude of groups involved in the design, regulation, and use of this technology, the project was broken down by social groups to gain a better understanding of their individual role in the matter.

Following the research that had been conducted through literature reviews, I applied the Disability Studies Framework with the goal to factor in the consideration that disabilities are also created by environmental factors, including community attitudes and policies, to create the motivation to expand inclusive practices that accommodate diverse people. Finally, all of the research was synthesized in order to identify three key solutions areas. My hope is that the solution areas will provide a framework for how society and all groups can shape decisions around recruitment practices for people with intellectual disabilities moving forward.