

Thesis Project Portfolio

Office Space to Housing: Platform for Conversion Projects

(Technical Report)

Conditioned to Grind: How Busyness Culture Shapes Undergraduates' Mental Health and Career Expectations

(STS Research Paper)

An Undergraduate Thesis

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Sociotechnical Synthesis

After the COVID-19 pandemic, many workers transitioned to remote work and 20.1% of offices are now empty, which is a historic high (Zandt, 2024). These empty office spaces are sitting bare and unused in the middle of cities amidst a housing shortage. As a Digital Product Analyst Intern at Freddie Mac, we sought to address this disparity between vacant office spaces and the growing need for housing. Freddie Mac is a great place to look into this problem because they are one of the few companies that works in the secondary mortgage market. The company works to buy loans from banks, so that the banks can give out more loans to homebuyers and commercial real estate companies. When I worked there in the summer of 2024, I was in the Multifamily division, and this division worked with banks that deal with commercial real estate companies that build apartment buildings. Specifically, I was in the technology department, and they worked on developing platforms for their customers to use. For our intern project, our managers wanted us to address the problem of having a lot of vacant office space and not enough housing. They tasked us with proposing a platform that provided commercial real estate companies conversion projects from office space to multifamily housing. Over the course of the summer, we learned about the process of proposing a platform. This included learning about conducting user research, compiling requirements and features, designing mock-ups, developing business architecture, and creating roll-out plans. We learned from people in the company who were experts on these different topics like those in product, business enablement, user experience, and software development. This was extremely helpful to learn about the different steps in the platform proposal process and be able to design our platform well. We began with conducting user interviews with internal stakeholders at the company to learn about what they would want in the platform. We analyzed that data and came up with features and requirements for the platform. With this information, we designed a mock-up of the platform. To finish up our

proposal we developed a business architecture and roll-out plan for the platform. My technical project will describe the process of this project in depth.

After working my first 9-5 job, I noticed how nice it was to have work condensed into just 8 hours of the day rather than the constant pressure to do schoolwork while in college. Going into my fourth year at the University of Virginia, I knew very well the stress that being a university student brings. In fact, there is currently a mental health crisis occurring on college campuses, and 73% of college students have reported having a mental health crisis in their college years (Adebayo, 2022). After being aware of this and hearing similar things from peers, I decided that I wanted to look into how universities impact student mental health and how that influences life after graduation. For my STS research paper, I decided to ask the following questions: how are college students trained to value busyness? How is their mental health affected? How does the value of busyness in college students translate into jobs after graduation? I conducted research for these questions by sending out a survey to undergraduate students at the University of Virginia. This survey asked questions about things like how many credits students take on average, how busy they feel during the semester, and how much they feel their professors, peers, and specific degree programs influence their feelings of busyness. The survey found that college students value busyness highly and believe that busyness is equated with high success even at the expense of their mental health. It also found that students still feel the need to be busy in jobs after graduation, but there is less pressure to be busy. This will be discussed further in the STS project section.