

Thesis Project Portfolio

Developing a Project Management Tool for Network Migration to Improve Transparency between Enterprises and Network Experts

(Technical Report)

Developing a Project Management Tool for Network Migration to Improve Transparency between Enterprises and Network Experts

(STS Research Paper)

An Undergraduate Thesis

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My technical and STS research are connected through user experience (UX) design and portraying how feature design impacts user understanding and actions. UX dictates how users interact with digital platforms and, therefore, has immense influence on how users make decisions and interpret their digital environments. For my technical research, the team developed a network migration project management tool to improve enterprise clients' experiences implementing cloud computing network services. This work connects to my STS research where I explored the concept of deceptive digital designs, which occurs when UX features are intentionally designed to mislead users or persuade them to complete certain tasks. Both projects emphasize the importance of thoughtful and fair UX and highlight the power that UX designers hold when creating interfaces.

My technical research introduces the novelty of a project management platform specialized for cloud network migration. The goal of our solution is to streamline the transfer of information between enterprise clients and network engineers. The team designed an interface that has centralized resources, graphical components for network visualization, and integrated learning components. The combination of these features provide a unique user experience for enterprise clients and resolve existing challenges from convoluted communication throughout the migration process. The ultimate goal is for this interface to be utilized by enterprises of all sizes when implementing their cloud network services, which is possible due to the comprehensive and customizable features presented to them by their network engineers. This interface bridges communication between enterprise clients and their network engineers so that all stakeholders understand how the migration is progressing.

My STS research explores the ethical considerations of deceptive design practices according to care ethics, specifically the asymmetric power dynamics between digital platforms

and users. I use Google as a case study for instances of two types of deceptive design - privacy zuckering and confirmshaming - and investigate how Google maintains (or fails to maintain) attentiveness and responsibility in relation to its users. My claim is that Google fails to uphold care ethics by neglecting the values and expectations of users. My research demonstrates how Google uses UX designs to guide users towards actions that will achieve Google's directives at the expense of users' digital privacy. This research can be applied more broadly to other digital companies to analyze their relationship with designers and users and, furthermore, how they use UX design to influence users.

Working on each of these projects simultaneously has been beneficial because I have learned how complex designing UX interfaces can be. On my technical project, the team was balancing technical components with transparency and simple functionality to create a platform that educated enterprise clients on a field with which they were not familiar. With my STS research, I learned how to discern UX designs and investigate deeper motives of digital platforms, such as Google. While designing the interface for the technical project, I had an increased awareness for deceptive designs and knew the dangers of implementing persuasive features. Both projects convey how digital platforms merge incentives and values from platform operators, UX designers, and users; however, the final product rarely finds equilibrium among the competing values. Overall, each of these projects provided insight into the expanding digital world and increased my awareness for powerful UX design.