Thesis Portfolio

User Experience Design to Synchronize Government Acquisition Strategy and Schedule (Technical Report)

Increasing Accountability Measures in Government Acquisition (STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree Bachelor of Science, School of Engineering

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Department of Engineering Systems and Environment

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Sociotechnical Synthesis

The technical and STS research provided in this document can be used by the government to reduce the government contracting timeline. The technical report is focused on developing an application to synchronize the government acquisition timeline between multiple parties. The STS report is focused on accountability's definition within the government. Both reports aim to help actors within a larger network.

The technical topic focuses on creating an approach to project planning with a digital application to serve as a guide in the government acquisition process. The client expressed the government was looking for a solution to increase accountability within their offices. Through bi-weekly meetings with the client, the application was able to be tinkered and fit their requirements. The design is centered around three critical stages in the government acquisition process: market research, requirements development, and acquisition strategy and planning. Throughout the application, there are different indicators to inform the user of the tasks they are responsible for. Success for the application was measured by the user understanding the interface, non-linearity, and the gamification of the application. The technical report gives a digital solution to an antiquated acquisition process, that the government is currently struggling with.

The STS topic highlights accountability and its role within the government.

Accountability aids the communication of technical information and provides for a better workplace. Within the acquisition process, there are many characters involved which creates communication problems when individuals operate on different schedules. Additionally, there are many documents and paperwork that must be filled out by each respective party.

Furthermore, the government has a history of cultural shortcomings. An example is the "Don't

ask, don't tell", government mentality that has permeated team dynamics and enabled the isolation of peers. This lack of checking in makes it harder to approach your coworkers with conflict. Ultimately, these cultural problems hurt accountability measures which is the primary focus of my STS research.

My thesis is dedicated to helping acquisition personnel manage and deliver projects throughout their entire lifetime. The research provides aid to each actor to better the network or organization they belong too. A central claim is that accountability should be taught as a virtue rather than implemented as a punitive system. The mobile interface aims to assist task management while providing a simplistic user interface. These works combined provide the government and large organizations the opportunity to increase their synergy within the workplace.

Acknowledgments: My technical work was done in partnership with The MITRE Corporation, a not-for-profit organization that manages federally funded research and development centers supporting several U.S. government agencies.