

Thesis Portfolio

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

“There’s Me in There, You Just Have to Look Harder”: The Presentation of Self and Gender Norms on Instagram
(STS Research Paper)

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By Shannon McGrath

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Technical Team Members:

Amber Ecelbarger
Parker Hamlin
Kelechi Nwanevu
Nicholas Smith
Agni Stavrinaky
Daniel Xu

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SOCIOTECHNICAL SYNTHESIS

USER EXPERIENCE DESIGN TO SYNCHRONIZE GOVERNMENT ACQUISITION STRATEGY AND SCHEDULE

with Amber Ecelbarger, Parker Hamlin, Kelechi Nwanevu, Nicholas Smith, Agni Stavrinaky,
and Daniel Xu

Technical advisor: Gregory Gerling, Department of Systems and Information Engineering

“THERE’S ME IN THERE, YOU JUST HAVE TO LOOK HARDER”: THE PRESENTATION OF SELF AND GENDER NORMS ON INSTAGRAM

STS advisor: Kent Wayland, Department of Engineering and Society

PROSPECTUS

Technical Advisor: Gregory Gerling, Department of Systems and Information Engineering

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Most American adults today own a smartphone, with almost half agreeing that their smartphone is something they couldn't live without. Smartphones have become such an integral part of society due to the connectivity and efficiency they provide in the personal and professional lives of Americans. Many individuals use smartphones in their personal lives to connect with others via social media platforms such as Instagram, allowing them to share their lives with others and also explore new ideas. Instagram may help individuals develop a stronger sense of self and gender identity through presenting oneself to others. In a work environment, individuals use smartphones to contact one another through the workday, view one's calendar, and schedule meetings which increases productivity. Mobile applications tailored for task management are useful in helping workers stay organized, and could especially assist workers in the government acquisition process. This process is long and overwhelming, and new hires could benefit strongly from a schedule and task management application. As smartphones continue to have an increased presence in society, understanding how we can utilize these devices in an optimal way to connect with others and define ourselves in personal and professional settings can maximize the positive impacts these devices have on our lives.

The government acquisition process is complex and requires a significant amount of research and planning leading up a contract. In creating a request for proposals (RFP), contract specialists must manage a multitude of tasks and deadlines, and the current task management tools fail to appropriately support the process. To create a tool to better synchronize project planning, we followed an iterative process in designing a novel user experience for use on mobile devices. The design incorporates the three primary phases in generating an RFP: market research, requirements development, and acquisition strategy and planning. The final design highlights a

view of project status at high- and low-levels of detail, the rewarding of achievement through goal setting, a high level of customizability, and gamification. Data visualization indicators were devised to distinguish the completion status of tasks, goals set by the user, interdependencies between documents, and the task completion timeline. Prototype usability walkthroughs with contract specialists evaluated the effectiveness of these design elements.

Humans have always used self-presentation as a way to express their identity, but now with social networking sites, the ways of presenting the self have expanded to include online audiences. Social networking sites such as Instagram convey information about the self quickly and easily. Different genders may use Instagram to present themselves in different ways, and also gain new concepts of gender through seeing gendered presentations of others. Having a better understanding of how Instagram reinforces existing and creates new gender norms can help explain why females especially report feeling pressure on social media sites to look a certain way. By interviewing thirteen students at the University of Virginia, it was determined that college students present an idealized but realistic image of themselves on social media, not straying too far from their face-to-face self while portraying the most interesting aspects of their lives. Students use social media to form a digital image of themselves and receive gratification from others' comments and likes on their photos. Women tend to be more of perfectionists than men in forming their Instagram image by spending more time editing their photos, and reveal more information to their Instagram audience by posting more frequently and having multiple Instagram accounts. Instagram usage reinforces traditional gender norms as individuals represent themselves in a way they believe society accepts of them, which aligns with previous research

stating that cultural expectations surrounding gender roles are a primary factor influencing social media presentation.

By digging deeper into one an important way people use Instagram, the results from this study are useful in providing more information on how individuals present themselves on social media which is increasingly important in today's world as individuals continue to make judgements of others based on their social media profiles. In order to further this work, more participants could be gathered, ideally through a random sample, and Likert scales could be used in the interview questions so that mathematical correlations between variables could be found. In the technical project, great efforts were made in the design of a new task management application designed for government contracting. The constraints of using a mobile device limited the extent to which information could be displayed, however, the client requested this type of design due to the transportability of the application. In usability testing, participants enjoyed the display, saying it was intuitive and easy to use. This platform may ultimately transform how users manage the complexities and intricacies of the acquisition process.