

**User Experience Design to Synchronize Government Acquisition
Strategy and Schedule**

(Technical Report)

**Get People Outside or Protect the Wilderness: The Impact of Social
Media on Public Lands**

(STS Research Paper)

An Undergraduate Thesis Portfolio
Presented to the Faculty of the
School of Engineering and Applied Science
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Bachelor of Science in Systems Engineering

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Sociotechnical Synthesis

Current technology is slowing down the government contract acquisition process, and its users are learning the art of the deal at a much slower rate than they should. Government contract acquisition consists of the writing and development of a request for proposal (RFP) that outlines the nature of work needed by the government. This RFP then initiates a bidding process where contractors vie for the project. It's an extremely laborious tasks with multiple players and no set way of scheduling what needs to be accomplished. Because contracting encompasses a variety of needs from missile design to artificial intelligence security, it requires skilled personnel to handle the acquisition process.

Our technical project entails harnessing automation and intuitive design to help acquisition personnel succeed. The ACQ-SYNC app will be a decision-support application that employs graphical user interfaces to help acquisition personnel in creating a plan, managing the plan, and dealing with setbacks. ACQ-SYNC will accelerate decision-making by presenting options in an intuitive way and will redefine the acquisition experience by breaking the linear process of traditional scheduling and illuminating the connections between activities and people. Overall, ACQ-SYNC will help jumpstart the acquisition process, build confidence, and provide shared knowledge for the acquisition team. ACQ-SYNC

will bring a modern look to contracting tools and incorporate a novel approach to gamification that offers an engaging user interface for acquisition personnel. Our goal is to develop multiple wireframes that outline and portray the necessary features listed by MITRE.

In addition to the development of the ACQ-SYNC wireframes, I am also diving into the world of social media applications by assessing their impact on public lands. Since their inception, social media applications have been an outlet for expression and exploration. It allows users to access the world through what is often an edited photograph. In my research, I will be exploring the implications of viewing our public lands and the users of them in this distorted view. The goal is to discern just how distorted this view has become. More specifically, I will be addressing how this manipulation of reality has led to not only a number of issues within the domain of public lands, but also how it has created useful data and encouraged more people to become interested in the environment and the conservation of it.

By wireframing the ACQ-SYNC app and addressing the implications on public lands as a result of social media through the perspectives of its users I will be answering two questions. Firstly, how can mobile applications contribute to productivity and accountability, and secondly, how does social media impact public lands.

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