



**STEVENS**  
Institute of Technology

### **Federal Aviation Administration Technology Transition Process**

The Federal Aviation Administration (FAA) is a part of the Department of Transportation (DOT) that oversees all air traffic within the United States. In an effort to decrease air traffic jams and increase safety, security, and the capacity of air transport, the current Air Traffic Management System (ATM) will be replaced by the Next Generation Air Transportation System (NextGen). Estimated to be completed by 2025, NextGen will transform the air traffic control from a ground based system of radars to a satellite based system. The objective of this project is to develop a defined stage-gate process that helps transition mature NextGen related projects from Research and Development (R&D) into the FAA's Acquisition Management System (AMS). Currently, the transition process of mature R&D project into AMS is ambiguous and undefined. Over the course of 3 semesters, the group analyzed the current R&D and AMS practices within the FAA, conducted best practices research, and aligned our solution with the rules and protocols of the FAA. After studying the best practices for technology transition within manufacturing, government, and service industries the group came across LeanTec. The LeanTEC consortium made up of experts from industry, government, and academia provided a methodology for producing breakthrough improvement in technology transition. This methodology, specifically tailored to the aerospace industry, provides processes, procedures and tools for greatly improving technology transition. The group developed a stage-gate process based on the LeanTec methodology which will help the FAA optimize R&D investments in pre-AMS activities and overall help create a standardized view of project scope, maturity, decision, and projected outcomes.