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NEXT GENERATION SPACE SUIT DEVELOPMENT: A CASE STUDY OF THE SPACE SUIT  
SYSTEMS ENGINEERING & INTEGRATION BRANCH WITHIN NASA CONTRACTING AND  
IMPLEMENTATION OF AGILE DEVELOPMENT IN DESIGN & TESTING

**Abstract**

The objective deliverable for "Company X", a NASA contractor and performing organization in this case study, is to support the development of the next generation space suit for NASA, the customer in this case study, against a radically different level of customer expectation from previous years. As the project's contract is not anticipated to be renewed to the performing organization, a request for an alternative approach by contracting an outside, commercial industry partner to complete the next generation space suit. The remaining work and collective knowledge capture will be transferred to this yet unidentified commercial organization. With eminent project closure, this dissertation will serve as a case study as to specific areas with qualitative and quantitative analyses regarding a case of the systems engineering practices, requirements engineering and specific areas in which Agile practices may have been able to contribute to improvements across the project in terms of meeting cost, scope, budget and quality while appropriately accounting for risk management.