FAILURE IS NOT AN OPTION: A ROOT CAUSE ANALYSIS OF FAILED ACQUSITION PROGRAMS

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Abstract

Failed acquisition programs are jeopardizing the strategic capabilities that enable the success of the United States military. In addition, declining budgets and the current sequestration environment limit the available resources necessary to accomplish programs that align with the National Security Strategy. Uncovering the root causes of failed Department of Defense (DoD) programs will better position the United States military to effectively execute programs and achieve national security objectives.

The broad range of negative impacts from the cancellation of major defense acquisition programs.

The objectives of this project are to explore failed DoD programs to discover common root causes of failure. Identifying the root causes will allow future program executive officers (PEOs) to mitigate or remove these root causes before program failure. Overall, our analysis will assist the United States military to effectively execute programs to achieve their mission in support of national security objectives.

Program costs · Agency budget · Capabilities delivery · Industrial base · Staff and personnel · Program partners — Program cancellation effects

Methods & Findings

The selection criteria to meet the scope objectives consisted of MDAP programs canceled between FY2001–FY2016, no fielded products, and greater than $2 billion in sunk costs.

Program	Service	Sunk Costs ($ in Billions)
Future Combat Systems	Army	18.1
Comanche Helicopter	Army	7.9
National Polar-Orbiting Operational Environment Satellite System	Air Force	5.8
Airborne Laser	Air Force	5.2
VH-71 Presidential Helicopter	Navy	3.7
Expeditionary Fighting Vehicle	Navy	3.3
Transformational SATCOM	Air Force	3.2
Crusader	Army	2.2

Program	Milestone A Waived	Requirements Obsolescence	Congressional Involvement	Technical Progression
FCS	X	X	X	X
Comanche		X		X
NPOESS				
Airborne Laser			X	X
VH-71	X		X	X
EFV		X		X
TSAT	X		X	X
Crusader		X		

Results

Our research shows that all studied MDAP programs lead back to at least one root cause for failure. Often, failed programs experience more than one root cause, strengthening the probability of failure. Many of the root causes discovered fit into the four broad categories of entering the acquisition program without a material solution analysis (MSA) or Milestone A approval, vast requirement changes driven by the national security strategy adjusting to the needs of the warfighter, negative congressional involvement, and lack of control in technology progression. These categories are broad enough to apply lessons learned to all current and future MDAPs, since all programs fall under similar statutory and regulatory requirements. Ultimately, the findings generated a series of recommendations to counteract future root causes of failure in MDAPs.

Recommendations

All Future MDAPS should conduct a material solution analysis and only proceed into TMRR with a Milestone A approval from the MDA.

Programs must constantly review changes in service-specific strategy & national security strategy to ensure alignment with capability gaps.

Design systems with an open architecture concept with adaptability to meet changes necessary throughout a long product development cycle.

Set realistic program expectations, including creating a development budget that considers the challenges of meeting TRL objectives.

Programs should no longer move forward with the defense acquisition system process until reaching the appropriate technical maturity.

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