AIR FORCE 341 CONS
AI CONTRACTING AND ACQUISITION ASSISTANT

PROBLEM STATEMENT

The acquisition of mission essential supplies and services that have a direct impact on national security are often delayed due to contract protests. In fiscal year 2020, the Government Accountability Office (GAO) received 2,149 cases: 2,052 protests, 56 cost claims, and 41 requests for reconsideration. The second most cited reason for these protests was a flawed or poorly written solicitation. This human error has caused delays that cannot be afforded in an era of peer-to-peer competition. With over 90 contracting squadrons, 58,000 contracts and 4.7 million documents, spread out across 8 MAJCOMs, 215 offices, and a $50B+ global contract portfolio, solving this problem is not trivial.

PROPOSED SOLUTION

We propose using an AI-assisted solution to help contracting officers in drafting solicitations. The AI-tool will be trained on all previously awarded and disputed contracts to identify the clauses triggering litigation action against the contracting office. Having trained on the previous data, the AI tool can then proceed to flag the clauses entered by the contracting officer as either: high-risk, medium-risk, or low-risk. The contracting officer can then address any high- and medium-risk clauses and mitigate the issue before the solicitation goes out.

The proposed solution's success is dependent on two main factors:

(1) the ability of an AI tool to understand and detect certain critical topics in the contractual language used by the DAF, and
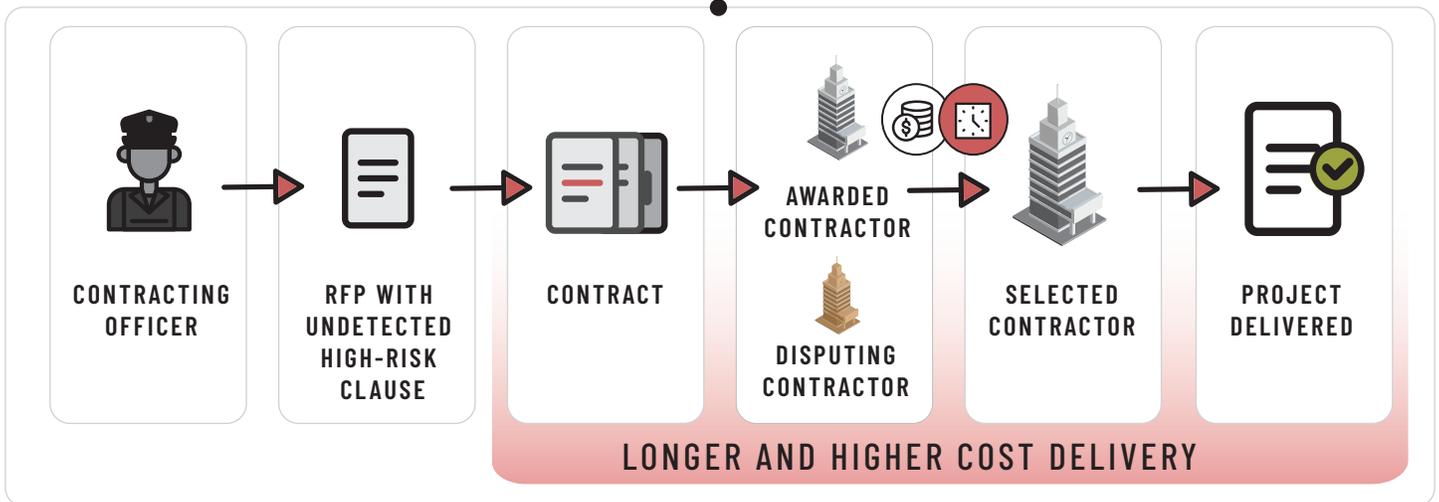
(2) the availability of a training data set that is properly labeled with the risk rating range proposed.

To reduce the risk of failure of this project, we have completed a SBIR Phase I project that involved assessing the feasibility of (1) on a data set that was provided by the Air Force Inspector General Agency (DAFIA) and showing that a combination of Neural Network (NN) and Natural Language Processing (NLP) processes well-tuned for the provided data set can produce informative and actionable insights to the human user. With regards to mitigating the risk of (2), we are working closely with the 341st Contracting Squadron to procure and label the data needed to train our AI tools.

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BEFORE

| CONTRACTING OFFICER | RFP WITH UNDETECTED HIGH-RISK CLAUSE | CONTRACT | AWARDED CONTRACTOR / DISPUTING CONTRACTOR | SELECTED CONTRACTOR | PROJECT DELIVERED |

LONGER AND HIGHER COST DELIVERY

AFTER

| CONTRACTING OFFICER | RFP WITH UNDETECTED HIGH-RISK CLAUSE | HIGH-RISK CLAUSE IS FLAGGED AND CORRECTED | CONTRACT | SELECTED CONTRACTOR | PROJECT DELIVERED |

AI ASSISTANT

FASTER AND LOWER COST DELIVERY