

Figure 1 Recommended taxonomy of the Condition and Departure data fields (Ref 1).

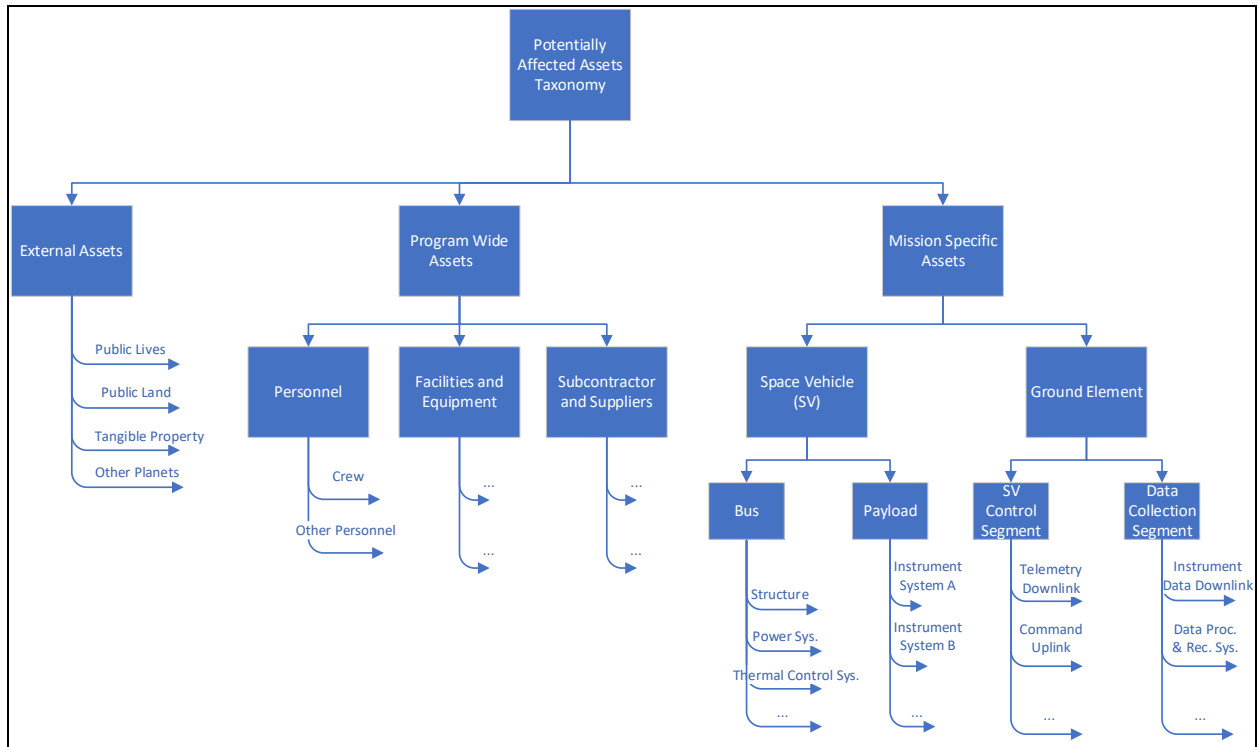


Figure 2 Recommended taxonomy of the Asset data field (Ref 1).

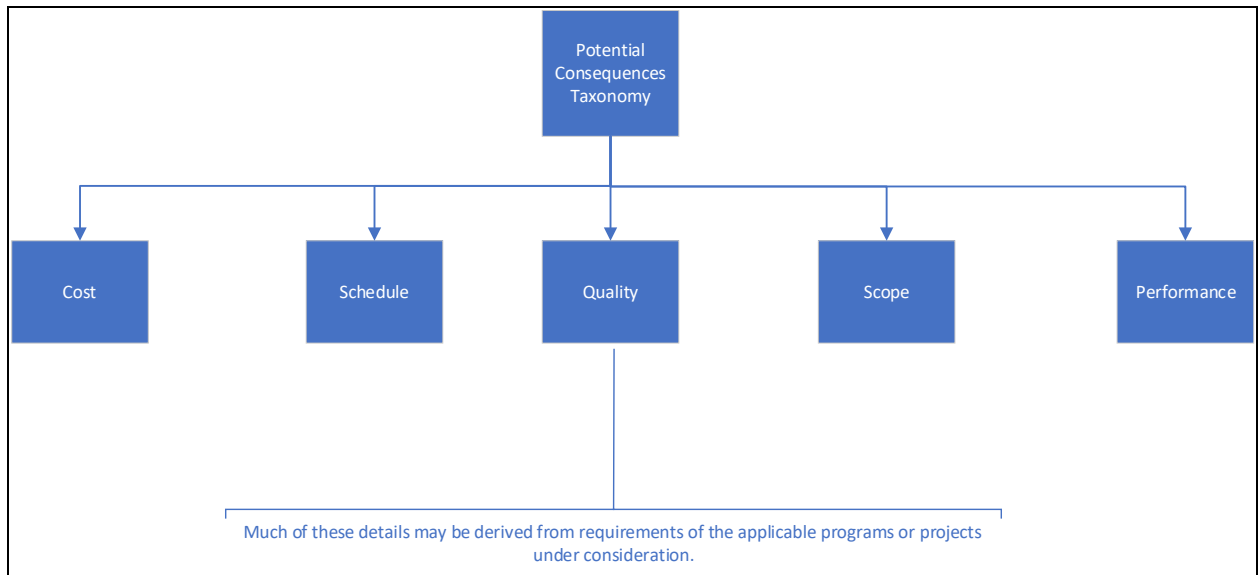


Figure 3 Recommended taxonomy of the Consequence data field

Risk ID	Risk Title	Condition (C)	Departure (D)	Asset (A)	Consequence (C)	Risk Score
						$= C * D * A * C$

Figure 4 Data fields recommended based on past data review. This is known as the CDAC structure and is meant to be linked to the subcategories described in the CDAC taxonomies shown in Figures 1-3. The actual terms that will be entered in the CDAC categories should be the lowest subcategory possible as shown in Figures 1-3.

Innovation (I)	TRL (T)	Function (F)	Interface (I)	Stress (S)	Relative Risk Score
					$= I * T * F * I * S$

Innovation	Rank
New	5
Modified	2
Re-use	1

TRL	Rank
≤ 4	5
> 4 and < 8	2
≥ 8	1

Function	Rank
New	5
Similar	2
Same	1

Interface	Rank
New	5
Similar	2
Same	1

Stress	Rank
More/unknown	5
Similar	2
Less	1

Figure 5 New data fields recommended to improve risk assessment. This approach is primarily meant to categorize technical risks during the pre-concept stage of a new project. While not a part of the main AI/ML described in this submission, this is a relatively easy means for which possible risks may be identified for mitigation activities at the earliest stages of a project.

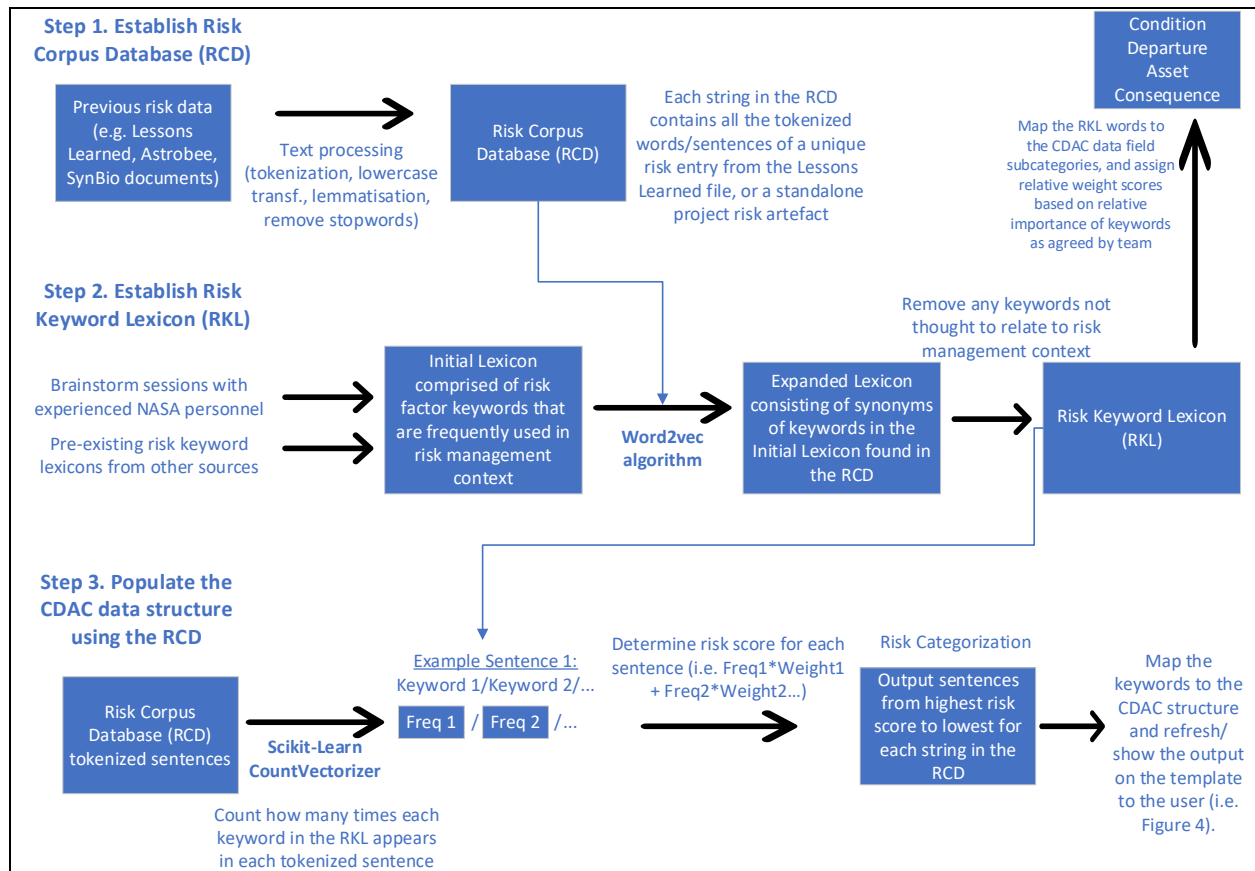


Figure 6 Visual describing the steps needed to establish the Risk Corpus Database, the Risk Keyword Lexicon, and ultimately populating and categorizing past project data into the suggested CDAC data field structure/template.

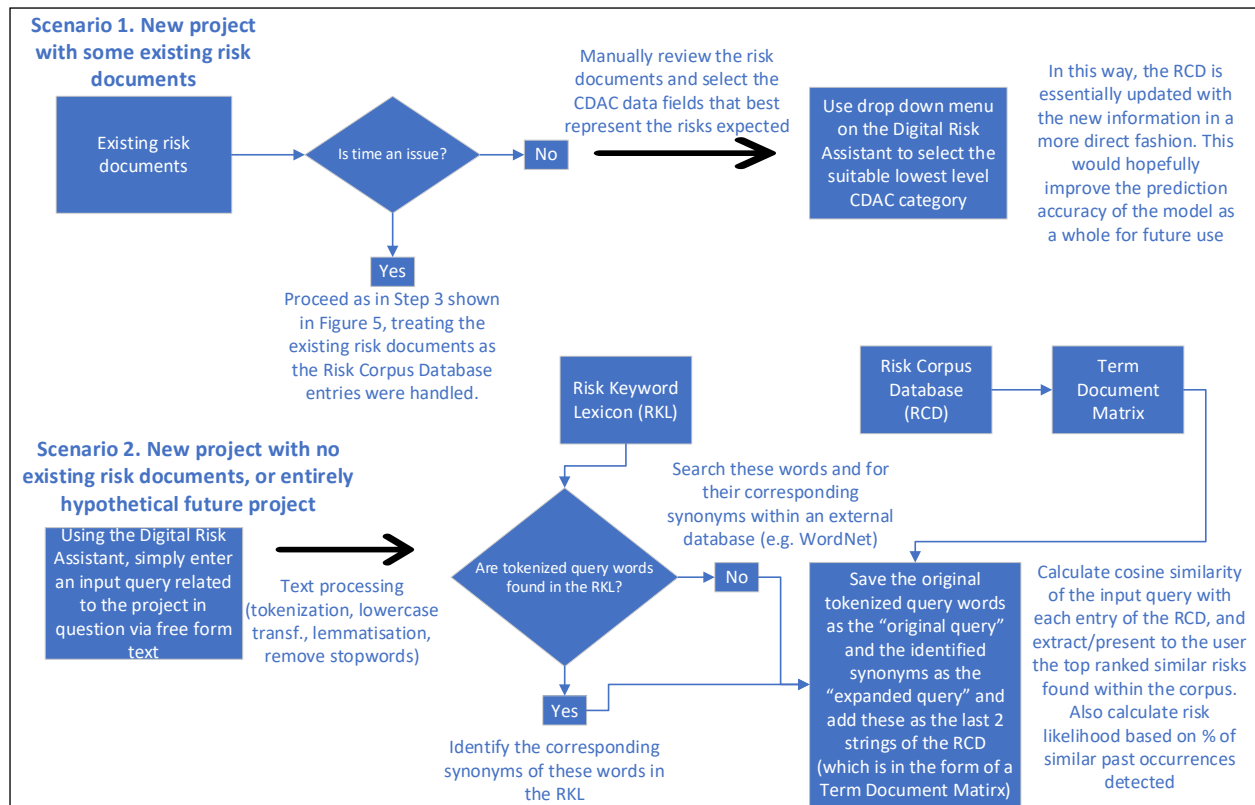


Figure 7 Visual depicting the scenarios available to the user for the Digital Risk Assistant to predict risks for new/future projects.