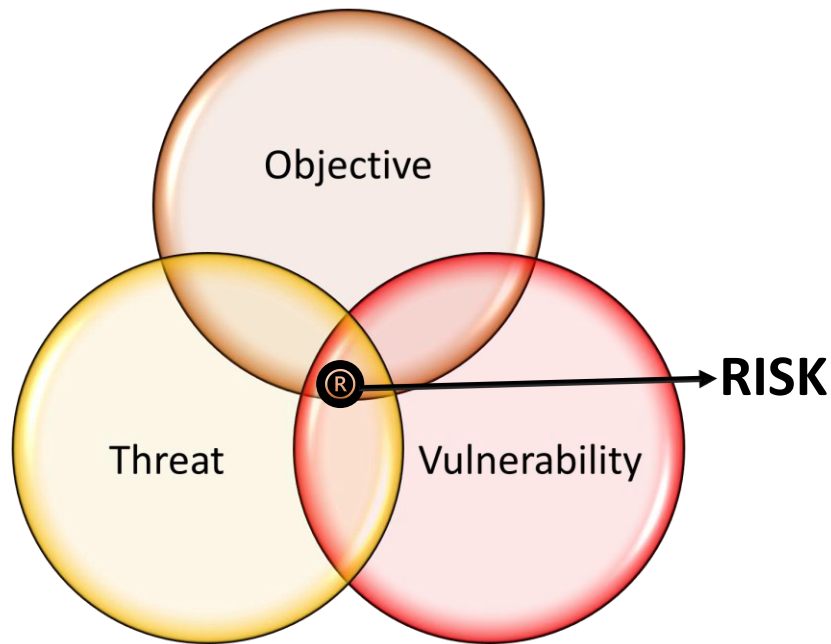


**BVG**  
**& Company**



## RISK (PART 1)

How do should government organizations quantify Risk when identifying and prioritizing capability gaps and investment strategy? Risk is nebulous and difficult to quantify- exacerbated by the current technological “explosion” (exponential breakthroughs daily) and how that affects “time horizons” (how do I quantify the adversary I’m not yet facing and accounting for their yet to be developed technology/capability). As an example, consider: how would you quantify the risk of Russian use of a tactical nuclear WMD against North Korea’s and/or Iran’s pursuit of a nuclear weapons program against a violent extremist organization’s use of a chemical/biological agent attack?

All three scenarios provide “different” types of risk (North Korea and Iran possessing a nuclear capability isn’t as catastrophic as use of a tactical nuke, but the long-term ramifications could prove just as concerning), carry potentially significant risk, and have various degrees of likelihood. For these reasons the “High Impact vs Most Likely” framework is not ideal- it is a two-dimensional framework attempting to quantify multi-dimensional “problems”. While the High Impact vs Most Likely framework is not ideal, the use of a framework is essential to calculating/quantifying risk, so results are repeatable and as objective as possible.

## OBJECTIVE/THREAT/VULNERABILITY

We at BVG & Company like to use the Objective/Threat/Vulnerability framework for quantifying risk, as we fell this provides a three-dimensional analysis. We have discussed this framework with Mike Scott of Tier Tech International at length and feel that this framework is the preferred method for “thinking about” and quantifying risk. Additionally, we have conducted numerous Tabletop Exercises and utilized this framework to help customers conduct gap analysis, quantify risk, and develop an intelligent investment strategy for allocating resourcing and increasing capability (filling gaps).

# EXPLANATION

## Objective



We at BVG and Company weight Objectives as the most important factor in assessing risk since they dictate how much an organization “cares” about a threat or vulnerability. The more an adversary’s objective clashes with ours, the more the threat/likelihood of action and associated vulnerabilities matter to us. As an example, if China’s top objective was to invade North Korea the associated threat and vulnerabilities would be MUCH less concerning that if China decided to annex/invade Taiwan (a free Taiwan is our objective, a free North Korea is not). Objectives can be used to prioritize “within” an adversary (a free Ukraine is a priority objective but less than Germany/Poland) across multiple adversaries (a free Taiwan is a higher objective than a free Ukraine which is a higher objective than a free North Korea).

## Threat



Threats are weighted next and focuses on two factors: 1. Likelihood of an action and 2. Imminence of the action by an adversary. Using Taiwan as an example- despite being a top priority for both the China and U.S., the threat of China’s use of nuclear weapons is so low to achieve this objective that we feel prioritization/resourcing should be allocated to other areas more likely to be encountered. Additionally, as the likelihood of a potential action increases (power projection to establish a blockade of Taiwan) the associated threat score increases accordingly (able to be used across multiple adversaries as well- Russia massing on the border of Ukraine is a higher Threat score than China poses to Taiwan).

## Vulnerability (Capability)



Once Objectives and Threats have been analyzed, vulnerabilities may be assessed to provide a final score. Those vulnerabilities that are of highest likelihood for adversarial use in capturing an objective are priorities for resourcing and the most immediate concerns. As an example, if China is the pacing threat

and is likely to use hypersonic glide crafts and sea mines capture Taiwan, then any associated vulnerabilities/gaps become the priority for resourcing and investment (over nuclear/chemical weapons...etc.).

### BVG & Company Implementation

BVG & Company works with customers to set up a Tabletop Exercise (or series of exercises) that utilizes the Objective/Threat/Vulnerability framework to quantify risk and develop an intelligent resourcing/investment strategy. We work with Sponsors to define “what right looks like” via a precise scope, we then partner to develop the event (or series of events), identify the optimal participants list, and the requisite weight for each of the categories (Objective, Threat, Vulnerability). Finally, BVG & Company facilitates the event (or series of events)- capturing salient points, quantifying risk, and assisting with the development of an investment strategy to increase capability and buy down risk where it is most needed.