
Relevance of ‘Red Teaming’ in Strategic Military Decision-Making

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In 1998, India and Pakistan carried out nuclear tests, which came as a total surprise to a majority of the world community. As it emerged later, the US Central Intelligence Agency (CIA) was equally baffled by the developments. It has been reported that the then Director of the CIA, George Tenet had asked Adm David Jeremiah (Retd) to review the case and see what had led to this failure to warn the Administration. While the main report remains classified, Adm Jeremiah noted at his June 1998 press conference that the bottom line was that both the intelligence and policy communities had an underlying mindset about these tests that the political leadership which was in power in India, would behave as the American’s behave. Adm Jeremiah (Retd) headed the panel investigating the intelligence failures on India and stated in June 1998:

First of all, we had a mindset that said everybody else is going to work like we work. Why would anyone throw away the economic advantages that they would lose with testing? Why would they hazard all that stuff, when there is no reason to do that? We don’t think like the other nation

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thinks. What drives them? What are their national security requirements?
What does their national pride drive them to do?

Foreign policy experts like Arnaud De Borchgrave of the Centre for Strategic and International Studies in Washington had termed the incident as more than just an intelligence failure and had categorised it as an embarrassment. A lot has changed since 1998; however, the ability to think beyond the conventional norms, practices and attitudes is still a major challenge in the strategic community. Increasing uncertainty in the future course of world events is a reality, which needs to be contended with at all levels. Strategic decision-making in this environment of uncertainty will be a tough challenge for leaders in fields such as governance, diplomacy, business and the military. Since military decisions have a direct bearing on vital aspects like life, death, national security, the growth and well being of a nation, military leaders would be perennially under pressure to come out with robust and well-analysed decisions. Decision-making mistakes are unforgiving in the military and there are no comebacks, unlike in other sectors like business, etc. A wrong decision could result in nothing less than body bags and coffins coming home. There are numerous decision-making tools, aids and techniques that are being used by leaders in different fields. In this context, *alternative analysis* methods, which have been borrowed from the intelligence community, are gaining popularity amongst strategic leaders as a collection of techniques which could arguably reduce the occurrences of hasty or ill-conceived decisions. According to Warren Fishbein and Gregory Treverton, alternative analysis seeks to help analysts and policy-makers stretch their thinking through structured techniques that challenge underlying assumptions and broaden the range of possible outcomes. Red teaming is one of the methods employed in alternative analysis, which has a high impact on military decision-making.

Red Teaming

Red teaming can be defined as the practice of viewing a problem from an alternate perspective, including that of an adversary or competitor. It is a technique to avoid surprise and bring in more objectivity in decision-making by accommodating feasible alternative viewpoints. It should, however, be seen as distinct from scepticism. Red teaming is aimed at a constructive contribution to positive decisions. It is the art of asking the right questions at the right time and in the right context. Militaries have traditionally played war-games with red cells or red forces, which undertake the role-play of the enemy in a specific scenario. Red teaming is, however, a broader term going much beyond red cells and forces. The goal of red teaming is to enhance decision-making by employing a wide range of techniques like specifying the adversary's likely preferences, acting as a devil's advocate or incorporating deception which could play out in real life. Playing the informed devil's advocate is, however, not an easy proposition in the strategic military decision-making context because of the obvious complexities. Such red teams need to be the best in the field, with a higher order perspective planning skills, critical thinking, access to pertinent data and data analysis skills. Hence, it is not surprising that in spite of its known advantages, red teaming as a recognised decision-making tool has not gained the requisite traction in militaries around the world, including the Indian armed forces. A few militaries like those the US and the UK have started to adopt the practice and have also published training manuals for the same. In the Indian armed forces, red cells are mostly constituted on an ad-hoc basis to play through war-games and training exercises, and are dissolved on conclusion of the event. The efficacy of such ad-hoc cells is limited and the process lacks a systems approach. There are only a few organisations like the Training Command of the Indian Army, which maintain a permanent red cell, with a focus on operational preparedness and responses.

Corporate boardrooms are, however, effectively using red teams to provide an alternate line of thought, which aids and assists in the evolution of more robust business decisions. Tools such as Accenture's new generation war-gaming are being used effectively to determine strategy and future course of action. Some start-up companies are also challenging the established players by bringing in the outsiders' perspective in decision-making. This enables decision-making without the baggage of conventional wisdom. The US company Booz Allen Hamilton, has created and run war-games and red team exercises for various organisations, including the US government and the Department of Defence to aid decision-makers at the national and strategic levels.

Typical Scenarios where Red Teaming can be Utilised in the Military

The applicability of decision-making tools or aids on military decision-making has been a subject of intense debate over the years. In spite of advanced computational capability, software skills, artificial intelligence and machine learning, such aids have not been adopted in a big way in the militaries of the world. It can be argued that split second decisions, in response to live combat situations, are best left to intuition and experience. Similarly, tactical and operational decisions which are required to be taken frequently and have the personality of the commander written all over them, could be left out of the ambit of structured decision-making aids and tools like red teaming.

However, red teaming can be very effectively applied at the strategic level of military decisions, in certain specific areas. It may be argued that there is a natural propensity of military decisions taken at the strategic level to be personality oriented, status quoist and, at times, operational necessity gets overwhelmed by administrative constraints. The negatives of a sub-optimal decision take years to manifest, hence, such decisions

are seldom scrutinised in detail and the effects are taken as *fait accompli*. Decisions could also be pended in order to ‘avoid rocking the boat’. The armed forces comprise a tightly knit organisation. In such organisations, there is a tendency to fall prey to the Abilene paradox. This paradox has been defined as the inability to manage agreement. For instance, in case a superior in an organisation throws up an idea, the group members involved in the decision readily agree, lest he/she is construed as anti-organisation. The superior, on the other hand, might be perfectly open to a fresh or contrary viewpoint. Hence, a situation emerges where different stakeholders who are individually competent and have diverse views on a subject, may end up taking a completely incorrect decision under the false impression that the organisation would tend to lose if a contrary viewpoint is articulated. Hence, a viable contrary viewpoint never emerges since the group member is under the false impression that his/her viewpoint is faulty or anti-organisation.

Red teaming may be applied in multiple contexts in the strategic military domain. However, the following areas of decisions, which have long gestation periods and an impact well into the future, are ideally suited for the process.

- **Introduction of New Weapon Systems:** Decisions related to the introduction of new weapon systems into the military comprise complex choices, especially for fund strapped nations such as India, where defence requirements are often measured against the critical social needs of the nation such as education, poverty alleviation and nutrition. The decision has to pass the scrutiny of competing requirements from various branches and arms of the military. The effect of a decision taken today is likely to have ramifications well into the future. Finer details like the exact version of the equipment to be inducted, source, add-on optional capability, etc. are decisions, which, if taken in haste, may have adverse security and financial implications, well into the future.

- **Adoption of Major Organisational Changes:** It may be argued that there is a systemic resistance to organisational change in the militaries of the world. Such decisions can have a direct bearing on national security. A decision had been taken to disband selected animal transport units in the Indian Army, which had to be reversed due to the practical experiences of the Kargil War. Decisions taken in this domain need to systemically explore multiple outcomes, evaluate all competing hypotheses and diligently avoid the frailties of personal prejudices and opinion.
- **Creation of Operational Logistics Infrastructure:** Decisions pertaining to the location and capacity of critical infrastructure like ammunition dumps, missile bases, fuel bulk storage and logistic depots are required to be taken frequently at the strategic level of military leadership. The unending demand for such facilities from lower formations has to be balanced out against realistic threats and the availability of resources. Such decisions are non-reversible and the impact is visible after a considerable period. The team which takes the decision has invariably moved out by the time the infrastructure is completed. The pressure to take an early decision is always present in such cases; hence, the decisions could arguably be guided by factors of immediate concern rather than a long-term perspective. Related to the creation of infrastructure are the decisions about the actual stock levels to be maintained, more specifically of critical war-like stores like ammunition, missiles, fuel, engineer plant, medical stores and technical stores. A red teaming exercise prior to the final decision could avoid the underutilisation of costly infrastructure and avoid redeployment of stocks after the battle has been joined.
- **Long-Term Policy Formulation:** Development of doctrines and policies, which have a long-term impact, should ideally stand the scrutiny of time. There is a tendency of evolving personality driven

policies, especially in green field areas. Biases and flawed assumptions could result in policies which can be challenged or face practical difficulties during implementation. This area of military activity is ideally suited for red teaming, and as a policy, should ideally accommodate diverse views and perspectives, possibly of all the stakeholders.

Composition of a Red Team

Red teams could be organic or external to the organisation. In the military, departments dealing with operations, perspective planning, operational logistics, acquisitions, long-term policy formulation, etc., should ideally have integrated red teams as part of the staff. These teams should be flexible and may function jointly or across departments, as required. The selection of the right personnel to man these teams is important. A red team could consist of a leader, subject matter experts, including independent observers, analysts, critical thinkers, role players, cross cultural experts, etc. It is important to designate someone who has the confidence of the commander, who is making the final decision, as the red team leader. The key to success is independent functioning and close integration in the decision process. It would also be prudent to put through a proposed decision of a particular department through the scrutiny of a red team of a different department, for example, the red team from the operations department could act as a red team for the operational logistics or perspective planning departments. Ideally, a red team of any department should not be bulky and could be supplemented with specific external stakeholders or experts, depending on the context of the problem. The success of such red teams would, however, hinge on the leader, the permanency and the competence of the team, the confidence the team inspires and the acceptability of the process with the decision-maker(s).

Functioning of a Red Team

The commander or the primary decision-maker should decide the method of functioning of a red team. A particular commander may be able to derive the best inputs from the red team through informal interactions, while a different commander may like the process to be structured and formalised. A suggested process flow is given as under:

- Identification of the problem by the commander and staff.
- Initial discussion of the problem between the staff and the red team leader/core team. The underlying assumptions and data being used to arrive at the decision need to be laid out transparently.
- Identification of additional red team members required, and final composition of the red team.
- In-house analysis of the problem by the red team.
- Initial interaction with the commander where the possible pitfalls, risks, surprises and deception associated with the problem are spelt out.
- The commander and staff identify all possible courses of action.
- Each course of action is analysed in detail by the red team independently. The red team could also identify a completely different solution.
- Final interaction of the red team with the commander and staff.
- The commander makes the decision.

The process is iterative and could go into more than one cycle as per the complexity of the problem. The commander and the staff should use a process of logical analysis and discard to arrive at the final decision.

Caution

The process of red teaming is not a panacea for all strategic military decision-making lacunae. Its success is largely a function of the competence of the red team and its ability to identify the risks and vulnerabilities, which could be missed out by the decision-maker, who is also associated with numerous

other strategic challenges on a day-to-day basis. The success is also dependent on the decision-maker's ability to get rid of biases, underlying assumptions and experiences. It may be argued that the decision-maker could well arrive at the same decision as he/she would, even without the red teaming process. However, a structured and institutionalised process would be advantageous, since numerous decisions are taken against the pressure of time, the scrutiny of subordinates, the glare of the media and other watchdogs, including audit authorities. A structured process also provides the red team an institutionalised authority to disagree and argue, without fear of retribution, thereby mitigating the effect of the Abilene paradox.

Conclusion

The terms 'red team' and 'penetration testing' are commonly used in the context of computer networks. The external red teams deliberately carry out cyber attacks on networks and attempt to breach the firewalls and other protective mechanisms with an aim to discover vulnerabilities. Such kind of testing has been found to be extremely effective, much more effective than proactive measures taken by the in-house network security teams. The red teams invariably discover vulnerabilities which have been overlooked by the in-house team of security experts, although these security teams are working continuously on the same networks on a day-to-day basis. The analogy can be carried to the relevance of red teams in decision-making. The ability of an external team, which is not involved in the day-to-day hullabaloo, has a far greater chance of identifying the risks and vulnerabilities in a decision. In the armed forces, young officers are often driven to the point of frustration, with their seniors picking holes in their decision-making process, especially in training institutes and exercises. This natural method of red teaming, however, pays handsome dividends in the process of honing of the decision-making skills of officers. The ability of the system to provide free and well analysed red

team inputs, however, reduces gradually as decision-makers rise up the chain of command, to the extent of being virtually non-existent at the strategic level. In a way, the red teaming process elucidated in this article is a means by which a commander can outsource his/her internal ability to introspect and find faults in a decision, to an external and independent team. It is essential to reiterate that the staff, which traditionally advises the commander, cannot perform this role. Due to the repetitive nature of staff functions, there may be an involuntary propensity, at all levels of staff, to provide bracketed advice based on previously encountered similar instances. It may also be argued that more time spent on a staff appointment may result in narrower and similar advice. Hence, a red team is essential to provide the internal check and leave the mind of the commander clutter free. The commander, on the other hand, needs to give complete professional freedom to the red team, possibly, just like his/her own alter ego and not merely treat the red team as an extension of the staff.

