Net Assessment: The Art of Long View[1]

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Abstract

Net Assessment (NA) provides decision makers with a deep insight into national security management and is a tool for relative analysis of military balances between competing nations or even potential competitors.[2] These assessments range from weapon comparisons to those at the regional or world level. The end state of any net assessment is to evolve long-term military strategic efforts to achieve the desired military edge. The key aspect of the procedure is the environmental scan which is carried out by a range of tools and techniques. Scenario building is an essential ingredient of any net assessment which is a methodology to test the current strategy and check if it would work in the diverse types of futures expected to arise. The benefits of net assessment are invaluable, and India needs to take it up for future strategic initiatives.

Introduction

Post-World War II, a significant weakness in strategic planning was acknowledged, and it emerged that adequate attention was not being given to long-term evaluation of the emerging competitions. The entire strategic picture was never put together and, hence, the need was for real diagnosis and not just threat assessments to justify military strategies.

Net Assessment (NA), as an instrument for military strategic analysis, has now become an important strategic tool in national security management systems and is being undertaken in a number of countries. In the USA, the Net Assessment group as part of the

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National Security Council was formed in 1972 under a Presidential Decree. It was converted to the Office of Net Assessment (ONA) and transferred to the DoD in 1973. The director ONA is responsible for providing the Secretary of Defence, and other senior leaders, with independent comparative assessments of the prospects of the military capabilities of the United States relative to other actors, as well as the political, economic and regional implications of those assessments.[3] The US Congress made NA of military competition a required function under the law when it directed the Joint Chiefs of Staff with responsibility for conducting such assessments.

The term 'Net Assessment' is a combination of two distinct words *Net* and *Assessment*, where *Net* implies the consideration of all aspects and perspectives significant to the problem at hand and *Assessment* means the systematic process of analysis, appraisal, and review to determine the salient information to develop knowledge. As per Paul Bracken, a professor of political science and business at Yale University, the best way to define NA is to understand *that it is a practice and not an art (like military judgment), or a science (like chemistry)*. A properly conducted NA will provide the policymaker with adequate information to allow the building of successful objectives, goals, and strategies for a nation. But unfortunately, it remains something of a mystery to many.[4]

In India, the Directorate of Net Assessment (DNA) was created as part of HQ Integrated Defence Staff in 2002, based on the recommendations of the Group of Ministers. It was envisaged that the creation of DNA will facilitate undertaking long and as well as medium terms assessments, outside the perspective planning directorates of the Service Headquarters, comprising the totality of national capabilities (*political, military, and economic*). However, in comparison with the American ONA, the directorate was not adequately staffed, and neither did it have the requisite mix of civilians and combatants. No permanency was accorded to the organisation, and neither was the intelligence setup integrated. Keeping in view the geo-strategic template of India, the need to have such an organisation is obvious and we need to further empower the organisation.

NA differs from threat assessment. Threat analysis focuses on the strength and weaknesses of the adversary based on a

broad judgment of combat capabilities. NA, on the other hand, centres on a greater analysis of strengths and weaknesses by considering factors like state of the economy and its impact on defence spending, national technical base, state of militarily critical technologies, the character of national leadership, national myths, and their impact on decision making, etc. The process deals with issues well beyond current military capabilities.[5] NA can be of various types as under:

- Overall Security Environment in the form of global, regional, or national NA.
- Military balances as strategic & operational NA.
- Weapons and force compassion as an operational NA.
- Lessons learned and historical evaluation.
- Special assessments on a case-to-case basis.

Process of NA

The broad methodology commences with identification and articulation of the national vision, followed by identification and articulation of the desired region of nation's security influence and formulation and implementation of strategies to achieve aspirations and defeat competition.

Steps of Net Assessment

The five steps of the process are explained below:

- **Step-1.** This involves generation of the need as felt by the decision maker and is the commencement of the Net Assessment Project. The issue that is worrying the decision maker often becomes the subject matter of analysis. An example could be - *To evaluate the war-waging potential of Pakistan in the next 15 to 20 years*.
- **Step-2.** This involves theme mapping and is a detailed investigation of the subject. This allows a range of factors to be arranged in a logical sequence and the establishment of interdependency and causal relationships among them. It enables spelling out the contours of a research project and provides a framework for the study. To this end, conduct of seminars/

workshops/panel discussions and interaction with experts is necessary. The essential steps of theme mapping are to establish 'Conceptual Necessity' and frame the 'Research Design' comprising identification of the type of assessment and competing players, the hypothesis, research questions that need to be answered, and the research methodology.

- **Step-3.** It involves a diagnostic style of comparative analysis using various tools and techniques to scan the environment. The basic steps involved are to work out the present balance analysis, extrapolate the trend analysis, define the key drivers of change, carry out a competitive analysis by comparing concepts and strategies and, finally, identify asymmetries and competitive edges.
- **Step-4.** Scenarios, which are visualisation of future/ alternate futures, are then formulated based on iterative analysis of scenario defining drivers of change.
- **Step-5.** Because of the net assessment exercise and through simulation and gaming, strategic asymmetries are diagnosed between competitors to identify environmental opportunities to support senior policymakers in the formulation of effective strategies.

Tools and Techniques

Steps 1 and 2 are theoretic and need no elaboration. The most crucial step is *Step 3* and there are various tools and techniques available to carry out an environmental scan. Some relevant tools / techniques used in the Net Assessment process are discussed in the succeeding paragraphs.

BMC Analysis. The main drivers of a nation state's security can be grouped under *Base*-what is accorded to it by nature, and which may, if at all change very slowly and imperceptibly, e.g., geospatial base, geo-material base, geo-demographic base. Next is *Means*- man-made competencies which can be utilized to pursue national objectives and aspirations viz military, economic, and political; and finally, the *Capacity* for collective action which could be politico-social and psychological.

SWOT Analysis. This enables the researcher to identify the Strengths, Weaknesses, Opportunities and Threats of competitors. The steps for carrying out such an analysis are:

- Opportunities and Threats, which are always external, are brainstormed and then prioritised by giving out a probability of occurrence/success rating. Those with a high probability of occurrence and high attractiveness are the major opportunities and should be the focus of formulation of strategy while those having a low probability of occurrence and high attractiveness/ seriousness should be monitored for change. On the other hand, all those with a high probability of occurrence and high seriousness emerge as major threats. Subsequently, the Strengths and Weaknesses, which are always internal, are evaluated and prioritised. A summary of Strengths, Weaknesses, Opportunities, and threats is finally rank ordered.
- Once the SWOT review is complete, the future strategy may be readily apparent, or a series of strategy options or combinations will suggest themselves. The SWOT analysis identifies possible strategies, which emerge as *S-O, S-T, W-O, and W-T* combinations, with the aim being to build on strengths, resolve weaknesses, exploit opportunities, and avoid threats. One S-O strategy could be S1-O1 articulated as, *'Utilise Strength 1 to Exploit Opportunity 1'* and so on.
- All plausible *S-O, S-T, W-O, and W-T* options thus developed must be tested for their *Environment-Value-Resources* congruence. Those found to be congruent may only be considered for final articulation and the making of strategy choices. It must be kept in mind that *Environment* imposes constraints on the implementation of strategy, *Values* may not allow a particular strategy option, and *Resources* required to implement the strategy option may not be available.

Trend Exploitation. This tool uses historical data to gain insight into future developments, i.e., extrapolate to infer the future from the past. Net Assessment looks at long-term trends and ascertains asymmetries and competitive edges between nations, intending to

provide decision-makers a sense of future direction in terms of capability development and contours of future competition.

Delphi Technique. Based on the belief that group judgments are more valid than individual judgments, this is a process to survey and collect the opinions of experts on a particular subject. The technique takes place by the controlled elicitation of group opinion by iterative use of questionnaires with selective feedback of earlier responses as an informational input for later reference by group members. It involves a researcher pooling expert opinion about factual questions, particularly in the context of forecasting the future, and is a highly effective tool for decision making.[6]

De Bono's Six Hats. The Six Thinking Hats approach was created by Edward de Bono, a Maltese physician, psychologist, and philosopher. The Six Thinking Hats technique gets one to look at a problem in six separate ways. These six perspectives are[7,8]

- **Blue Hat:** ***'The Conductor's Hat'.*** When you or your team are in blue hat mode, you focus on controlling your thinking and managing the decision-making process. There is an agenda, summaries, and conclusions are reached.
- **Green Hat:** ***'The Creative Hat'.*** The green hat represents creative thinking. While donning this hat, one explores a range of ideas and possible ways forward.
- **Red Hat:** ***'The Hat for the Heart'.*** This hat represents feelings and instincts. With this hat, one can express feelings without having to justify them logically. It looks at problems using gut intuition, reaction, and emotion.
- **Yellow Hat:** ***'The Optimist's Hat'.*** With yellow hat thinking, you look at issues in the most optimistic light possible. You accentuate the benefits and the added value that could come from your ideas.
- **Black Hat:** ***'The Judge's Hat'.*** This hat plays the Devil's Advocate and is about being cautious and assessing risks. One employs critical judgment and brings exactly the reasons for the concerns.
- **White Hat:** ***'The Factual Hat'.*** The white hat represents data & information gathering and an analytical view. It

reflects being neutral and objective and is concerned with data and taking an analytical view. The aim is to look at data and extrapolate a past trend from historical data.

Cross-Impact Analysis. Cross-impact analysis is widely employed to inform management and policy decisions based on the formulation of scenarios, defined as combinations of outcomes of relevant uncertainty factors.[9] It is the general name given to a family of techniques designed to evaluate changes in the probability of the occurrence of a given set of events consequent on the actual occurrence of one of them.[10] It can help the analyst and forecaster explore how certain factors are likely to interact with each other.[11]

All the techniques discussed above need not be utilised together. Some or a combination could be attempted depending on the nature of problem at hand.

Scenario Building

Moving to *Step 5*, a scenario is defined as a context-dependent description of a probable future (fictitious) situation extrapolated from the present (start state), a hypothetical chain of events (the scenario dynamics) leading to a final situation (end state). A scenario must be plausible, internally consistent, based on rigorous analysis engaging, and compelling*. Scenarios are stories (or narratives) set in the future, which describe how the world might look in, say, 2025 or 2050.* They explore how the world would change if certain trends were to strengthen or diminish, or if various events were to occur. Normally a set of scenarios are developed (between two and five) representing different possible futures, associated with different trends and events. These scenarios are then used to review or test a range of plans and policy options or be used to stimulate the development of new policies, or as the basis for a strategic vision. They are also a useful means of identifying *'early warning'* indicators that signal a shift towards a certain kind of future.[12,13,14,15]

Stages. The eight stages to developing scenarios are:

- **Stage 1-*Initiating a Scenario*.** This is the first initiating step that defines the *purpose of the scenario-building exercise* or the focal question. This could be a result of

brainstorming. It also lays down the time dimension for the exercise including a period for the development of scenarios and time steps for the development of scenario dynamics (viz, annual time steps, five-yearly time steps, etc). Certain purposes could be[16]:

o *What will the future of Country X / Region Y look like in 10 years? (country / region analysis focus).*

o *What risks do we face in Country Y over the next 5 years? What contingency plans should we put in place? (Risk management focus).*

- **Stage 2-*Identification of Key Decision Factors*.** In the next stage, the *key decision factors (KDFs) are identified* which are critical to the decision. This could also be a result of brainstorming and will help the team to focus on what is important for planning If Stage 1 has identified Management of National Security up to the year 2030, as the purpose, the KDFs could then be seeking military competitive advantage, economic security and status, self-sufficiency in energy and adequacy of mineral and raw materials for growth, internal socio-economic stability, technology edge to drive key national endeavours, etc.

- **Stage 3-*Driving Forces*.** Once the key factors have been listed, the third step involves *listing driving forces* in the macro-environment that will shape the future of these factors. They could be social, technological, economic, environmental, and political.

- **Stage 4-*Rank Ordering*.** Next comes the *ranking of key factors and driving forces based on two criteria*: first, *the degree of importance* for the success of the focal issue or decision identified in Stage 1, and second, the *degree of uncertainty* surrounding those factors and trends. The point is to identify the two or three factors or trends that are most important and most uncertain.

- **Stage 5-*Scenario Logic*.** The *logic or structure of a given scenario* will be characterised by its location in the matrix of forces or divers and involves defining the following:

o **Scenario *'Parameters or Constants'.*** These are *'High Impact-Low Uncertainty'* factors identified earlier.

o **Scenario *'Variables or Drivers'.*** The task team focuses on grouping the *'High Impact-High uncertainty'* factors – identified as drivers, which revolve around two or more critical axes of uncertainty. Each of these axes presents mutually exclusive different trends referred to as scenario logics. Based on each different logic, separate scenarios need to be developed leading to separate future end states.

o **'How Many Scenario Logics?'.** Each Scenario Logic will dictate as many *plausible scenarios* as possible. The effort should be to identify those combinations of the behaviour of the drivers which are logical and plausible.

- **Stage 6-Scenaro Writing.** Having decided on the number of scenarios to be written, a team of experts is constituted *to write each scenario*. Before commencing on writing the scenario, each team must describe the time dimension (period & time steps), the scenario logic, and the target end state.

- **Stage 7-Scenario Analysis.** This is where the scenario-building team *interprets the scenarios* linking them back to the strategic decision(s) identified in Stage 1. Each scenario team must present respective scenarios to the nominated teams and in presence of other teams. A detailed critique must be held, and the presenting team should be able to convince 'plausibility' of each development which is part of its 'scenario dynamics.' If needed, the scenario team is allowed to go back, rework scenario dynamics, and refine and present the same again.

- **Stage 8-Selection of Leading Indicators and Signposts.** It is important to know as soon as possible which of several scenarios is closest to the course of history as it unfolds. Once the different scenarios have been fleshed out and their implications for the focal issue determined, then it is worth spending time and

imagination on *identifying a few indicators to monitor in an ongoing way*. Each scenario will be analysed for its impact on the organisation and derive '*Decision Needs*' to exploit opportunities and avert threats.

Formulation of Strategy

The decisive step in the process of Net Assessment is to formulate effective strategies to face the probable future and not get surprised by it. It also entails taking mid-course strategy corrections as projected scenarios pan out on the time horizon.

Conclusion

Depth and width of inquiry and analysis is the basic requirement of the Net Assessment process. The concept of jointness is thus epitomised by this process and a Net Assessment practitioner is by necessity a practitioner of jointness as well. It is impossible to carry out a worthwhile Net Assessment by confining the inquiry and analysis to just one or a few aspects. Even if the Net Assessment project is confined to a specific functional aspect like a maritime balance between two competitors it will still require examination of many other factors that will impact the specific balance.

Net Assessment is like the stock market. Everyone on Dalal Street has the same information available to them about stock prices and company performance. Balance sheets and operating statements of companies are public information and are readily obtainable. But some players do better than others. Having data is important. But it is not enough. Time after time some players use information that is available to all to make a lot more money than other players. The Net Assessment uses data that is widely available and creates Strategic Insights that lead to Decisive Advantage.

As per Peter Schwarz, using Scenarios is like rehearsing the future.[17] You run through the simulated events as if you were already living them. You train yourself to recognise which drama is unfolding. It helps you avoid unpleasant surprises and know how to act in your interest.

Endnotes

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