Security Nexus Perspectives

COMPETITIVE SECURITY GAMING: RETHINKING WARGAMING TO PROVIDE COMPETITIVE INTELLIGENCE THAT INFORMS STRATEGIC COMPETITION AND NATIONAL SECURITY

By Deon Canyon[*]

Summary

Generating competitive intelligence to make intelligent decisions in a world increasingly facing complex security challenges is more difficult than ever before. Competitive Security Gaming reframes wargaming in terms of strategic, operational and tactical competition rather than conflict. Like business wargames, it produces quality insight into the reactions and strategies of competing actors. But unlike business games, it focuses on higher-level strategy, such as national security objectives, and is not driven by market value and financial gain. When it comes to operationalizing strategic competition in the Indo-Pacific, traditional military wargames may fall short and other models, such as Competitive Security Gaming, that is less about conflict and more about relationships and soft power, must be considered.

Introduction

The year 2020 is proving to be exceptionally turbulent and full of threat from multiple directions. Ongoing issues with the COVID-19 pandemic have left many feeling that life will never return to normal again. While national security challenges have always pulsed across the Indo-Pacific with waves of disruption, security in the modern world is proving more elusive than ever before. In this

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big-data environment, the challenge for executive decision-makers is, 'How to sort the wheat from the chaff and generate high quality competitive intelligence?'

Strategic foresight, future discussions, expert opinions and wargaming are common methodologies, but unless in-house capacity exists, they require consultants who are detached from the issues at hand and often promote one-size-fits-all solutions. Competitive Security Games reframe wargaming in terms of strategic, operational and tactical competition rather than conflict, and their indicators of success relate closely to national security.

In recent testimony provided to the U.S. Department of State, it was said that, we are engaging with the Chinese Communist Party (CCP) 'as it is, not as we wish it to be, or as it seeks to present itself rhetorically.' The actions of the CCP were likened to an iceberg in that there were many undetected malign activities conducted by China for each part detected. The CCP was characterized as 'an aggressive, autocratic, ambitious, paranoid, hostile threat to free and open societies and the free and open international order.' That said, strategic competition with China is intended to restore balance and stability and 'need not lead to conflict.'

The U.S. Indo-Pacific Strategy is essentially about limiting China's malign influence and attempts to dominate the region. Underpinning this strategy is the resilience and strength of U.S. allies and partners, 'as well as the centrality of ASEAN, APEC, and other institutions in the regional architecture' throughout the Indo-Pacific region. These players are the 'frontline in our strategic competition with China,' and so the 'strategic competition' approach is less about conflict and more about relationships and soft power.

Generating competitive intelligence

The question is, when so much of the 'iceberg' remains undetected, how can we generate sufficient competitive intelligence to make intelligent decisions? And while many good things originate in the military, sometimes they need to move out into the corporate world and return refreshed with new hybridized ideas.

Business wargames, an offspring of military wargaming, are used to figure out competitor strategies before they happen so that effective responses can be planned and practiced.[2] They have become a popular approach in the corporate world because they manifest the dynamics of both cooperation and competition in a non-conflict environment. As such, they are valued for the insights they produce on the impact of disruptive events on corporate strategy.

The level can be tactical with a focus on specific competitive actions; operational with a focus on the mechanics of competition; or strategic with a focus on testing a particular marketing strategy or countering an opponent's strategy. While there are many different forms of military wargaming, in the corporate world, wargames tend to take fewer forms. The reason is simple. The aim is to expose

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[2] Gilad B. Business War Games. Career Press: Pompton Plains NJ, 2009.

specific corporate strategies to the reactions and strategies of competitors, unforeseen competitor-related events, challenges from regulatory agencies, and operational discontinuities and frictions. When it comes down to it, business is business and the single most important indicator of success in a business wargame is market value.

Strategic foresight, future discussions, expert opinions and wargaming are common methodologies for obtaining competitive intelligence in the corporate sector. According to one study, 40% of corporations integrate these methods into their strategic planning processes and 55% apply them on an ad hoc basis, but only 17% of them use wargames because they are more difficult to implement. While the typical planning process begins with situational assessments and ends with strategy development, wargaming adds another step to the process by validating and verifying a business strategy.

Competitive Security Gaming

Like all decision-making games, Competitive Security Gaming focuses on providing insight into the reactions and strategies of competing actors, but rather than market value, the indicators of success are more varied as they relate to national security objectives. Many nations develop strategies, not too dissimilar from the U.S. National Security Strategy, that aim to protect citizens, territory and way of life; that promote prosperity, winning economic relations and seek to dominate economically; that seek to preserve stability and peace by whatever means they have at their disposal, including internal influence over public opinion; and that seek to expand the sphere of their influence externally as they expand partnerships and become more outwardly focused.

Competitive Security Games are designed to highlight three distinct lines of force: They test a particular well-developed, *strategy* by exposing it to active *challenges* in an environment where various *uncontrollable* factors may arise to render the situation more complex, urgent and risky. Furthermore, they limit roles expressly to those entities that have a direct bearing on the strategy under review, and they have an additional element of consequence management.

The model for Competitive Security Gaming described in this paper is not that dissimilar from other types of business and military wargames, but there are clear variances that enable it to provide higher quality competitive intelligence, especially to the security sector. Figure 1 shows the structures of Competitive Security Gaming in contrast with four different types of games from the U.S. Marines, the Israeli Defense Force (IDF), Matrix games, and Crisis games from the National Security Decision Making Game group.

Competitive Security Gaming: Rethinking Wargaming to Provide Competitive Intelligence that Informs Strategic Competition and National Security

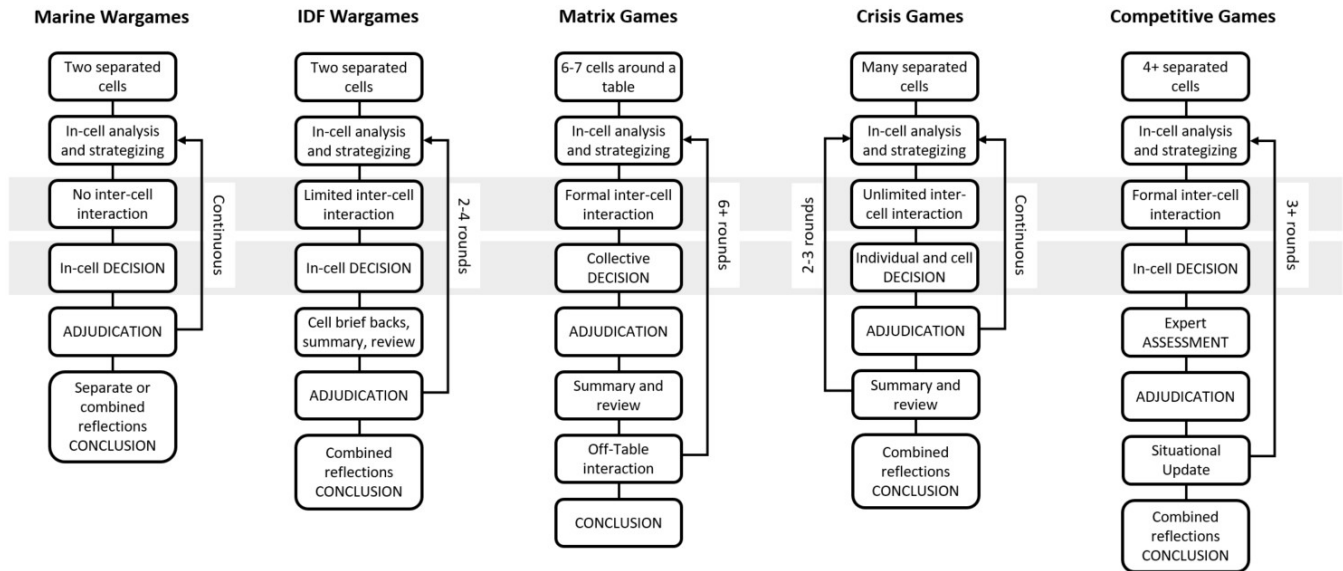| Marine Wargames	IDF Wargames	Matrix Games	Crisis Games	Competitive Games
Two separated cells	Two separated cells	6-7 cells around a table	Many separated cells	4+ separated cells
In-cell analysis and strategizing	In-cell analysis and strategizing	In-cell analysis and strategizing	In-cell analysis and strategizing	In-cell analysis and strategizing
No inter-cell interaction	Limited inter-cell interaction	Formal inter-cell interaction	Unlimited inter-cell interaction	Formal inter-cell interaction
In-cell DECISION	In-cell DECISION	Collective DECISION	Individual and cell DECISION	In-cell DECISION
ADJUDICATION	Cell brief backs, summary, review	ADJUDICATION	ADJUDICATION	Expert ASSESSMENT
Separate or combined reflections CONCLUSION	ADJUDICATION	Summary and review	Summary and review	ADJUDICATION
	Combined reflections CONCLUSION	Off-Table interaction	Combined reflections CONCLUSION	Situational Update
		CONCLUSION		Combined reflections CONCLUSION
Continuous	*2-4 rounds*	*6+ rounds*	*2-3 rounds / Continuous*	*3+ rounds*

Figure 1: A comparison of five types of wargaming structures. The Marine, IDF and Matrix models all derive from information gathered at the 2019 Connections USA wargaming conference. The Crisis model is based on games from the National Security Decision

The key indicators of success relating to the strategic objectives of Competitive Security Gaming are:

- Protection: Level of threat to national security

- Economics: Level of national prosperity

- Stability: from peace to protests to dissent to unrest to law breaking to rebellion

- Internal influence: Public opinion polls

- External influence: Extent of alliances, partnerships, and international reputation

For instance, Competitive Security Gaming is ideal for determining how these questions might affect current government strategy.

- How prepared are the relevant forces/agencies to face blended crises?

- How can the U.S. keep its economy on track if conflict breaks out?

- How can the U.S. regain control over basic necessities, such as pharmaceuticals

- How can the U.S. maintain dominance in various military sectors?

- How can the U.S. use cyberpower to protect its technological superiority or its infrastructure?

- How can the U.S. military be ready to compete in a world in which all actions are limited by a pandemic and the Chinese and Russians are fully vaccinated?

- Can the U.S. afford to support nations that systematically violate human rights and target particular racial groups for the sake of maintaining partnerships in a well-informed world?

- What will the impact be of losing an ally or partner to neutrality, Russia or China?

- How would the emergence of a new breakaway state impact the geopolitical power balance?

- From where will black swans and emerging threats originate?

Actors and Flow in Competitive Security Gaming

In addition to control and assessment cells, there are typically four active player cells. One represents the nation or entity that is testing its strategy (Strategist Cell), and three represents competing nations or entities that challenge the strategy (Competitor Cells). Other sub-strategist or sub-competitor cells may be involved if they are essential to testing the strategy under investigation. Figure 2 shows the game flow of a typical Competitive Security Game.

The terms "Blue" and "Red" are not used because they have a military connotation, immediately create bias, and predispose players to engage in direct and often violent conflict.

Individual player roles derive from major government ministries or entities that may be involved in the scenario. They are essential to ensure that different perspectives views of the situation are represented to create more realistic and dynamic meetings. There are 5, 7 or 9 participants in each cell to make majority voting easier.

Performance is increased when teams are more diverse, so each cell should feature participants with various levels of skills, knowledge, experience and viewpoints. As in all role-playing games, players are expected to immerse themselves in their roles and act as they believe that entity would, based on its description. Participants will quickly find out that others will often not see things as they do, so they must do their best to avoid basing actions on assumptions of what other cells may do.
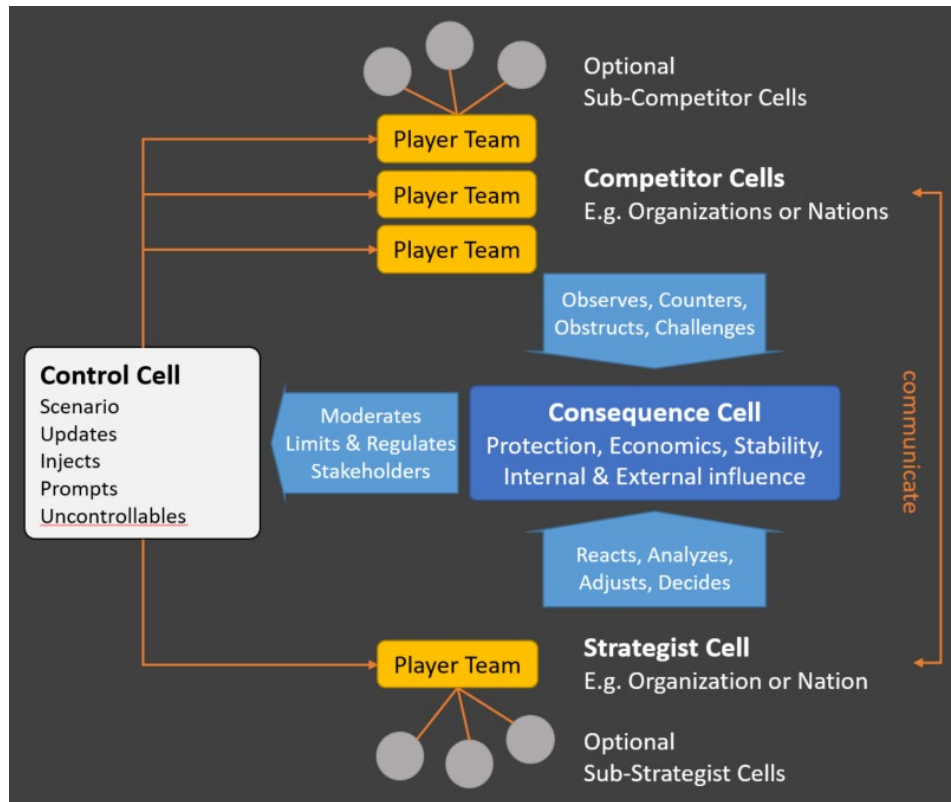
Figure 2: Cell roles and flow of a Competitive Security Game as it runs in practice.

Strategist Cell (Player team): This team has a well-developed strategy that it executes and tests in the game. While it will make adjustments to the strategy based on Competitor Cell actions, it may well end up developing an entirely new strategy to see if it would be more successful. It may take any action as long as it is realistic and within resource constraints.

Competitor Cells (Player teams): Up to 3 competing teams may be present and they must each represent a significant competitor (e.g. a nation or other significant entity) of the Strategist Cell. These teams need information to be able to role-play and behave appropriately. They seek to emulate the competitors, in terms of strategy, but will use all their knowledge to identify and target Strategist Cell weaknesses. Anticipating the Strategist approach is essential planning corresponding, countering, and competitive moves. Competitor cells must include plans to engage with each other as they explore individual and joint actions. The aim of this Competitive Cell is to *observe*, *counter*, *obstruct* and *challenge* the Strategist Cell at every turn

Consequence Cell (Assessment team): Each game round, this team of subject matter experts receives Course of Action documents from each of the player Cells. These documents explain the challenges faced, the actions taken in response and the *expected* outcomes of these actions. The Consequence Cell reviews all

these action sheets and determines what the *actual* outcomes will be in the game. Thus, they regulate the consequences of each action on the game situation.

Secondly, the Consequence Cell examines how well the Strategist Cell's strategy holds up in light of these actual outcomes and scores it according to the following five indicators of success that are updated each round and displayed prominently.

- Protection: Level of threat to national security

- Economics: Level of national prosperity

- Stability: from peace to protests to dissent to unrest to law breaking to rebellion

- Internal influence: Public opinion polls

- External influence: Extent of alliances, partnerships, and international reputation

Control Cell (Game management and Adjudication team): This team adjudicates in all matters and considers Consequence Cell output as it determines how player moves affect the situation between each round. The Control Cell's Situational Update, produced each round, moderates game flow and introduces injects if and when required to maintain an immersive sense of threat, urgency and uncertainty. Uncontrollable factors in the form of pre-prepared game injects, are used on an as-needed basis. If necessary, Control personnel may represent other governments, regulatory agencies, terrorist organizations, criminals or even rapid natural hazards, such as earthquakes or slow creeping crises, such as climate change and rising sea levels, to make the game more dynamic and realistic.

The Scenario Matters

Many security professionals have observed that we are living in an increasingly VUCA world; one that manifests volatility, uncertainty, complexity and ambiguity. In this environment, traditional analytical processes and planning often fail because they assume that the future can be predicted, and that trends are consistent, but this is not true in VUCA situations. Competitive intelligence requires more than data collection and analysis. It is entirely dependent on the products of analysis being synthesized and fused into new knowledge, understanding and insights. For a Competitive Security Game to produce this sort of fusion, ideally it must be run in circumstances that have five key attributes.

1. Urgent threat: The scenario, whether it is real-life or made up, needs to contain elements of threat. Players need to feel under pressure and this only occurs when higher-level risks are introduced in combination with the consequences of decision making. Some ways to create a high-stress environment include designing in confusion (fog of war) and injecting chaotic forces that produce morbidity or mortality and drive participants into action. While creating urgency in a fast-moving crisis is easy, doing the same for slow-moving events and creeping crises can be a challenge. One solution is to condense time frames to provide less time to make decisions.

2. <u>Coupling</u>: Game designers know that incidents are more likely to spiral out of control in more complex and tightly linked systems, whereas in loosely coupled systems, incidents are easily isolated. Participants need to pay close attention to the state of critical systems and the connections between them, and they need to <u>select a decision-making approach that fits the state of coupling</u>. In practical terms, a game must ensure that players are affected by the actions of other players to provoke reaction and response, and hopefully improve preparedness.

3. <u>Sense-making</u>: The introduction of uncertainty and unpredictability is essential to engage participants in sense-making thought processes. When a threat is evolving and not all its features or implications are known, it is <u>difficult to move forward</u> and make decisions. Not only do participants need to process information, they need to frame it in a way that influences other players, and be ready for the consequences of their actions.

4. <u>Consequence management</u>: It is easy for a participant to make a decision if they are not exposed to its consequences. Thus, game rounds must represent a sufficient duration of time to enable situational change and assumption invalidation. Building a narrative over the duration of the game is crucial to creating immersion which is required to generate insights of value.

5. <u>Complexity</u>: When situations are complex, there is limited and conflicting information, rapidly changing circumstances, and unpredictable player actions that cannot possibly be modeled. Scenario complexity quickly compounds problems, which tends to unravel player plans because they cannot predict the actions of others. Typical outcomes can be changes in the availability of resources, damage control requiring immediate political action, and impulsive actions, such as alliance-building, blaming, avoiding and stigmatizing.

Benefits of Competitive gaming

Competitive Security Gaming reframes wargaming in terms of strategic, operational and tactical competition rather than conflict, which is the purview of traditional wargames. Like business wargames, they have <u>high-end, qualitative analytics</u> that ensure quality outcomes and insights. But unlike business games, they focus on higher-level strategy and are not solely focused on financial gain. Other benefits are presented in Figure 3.

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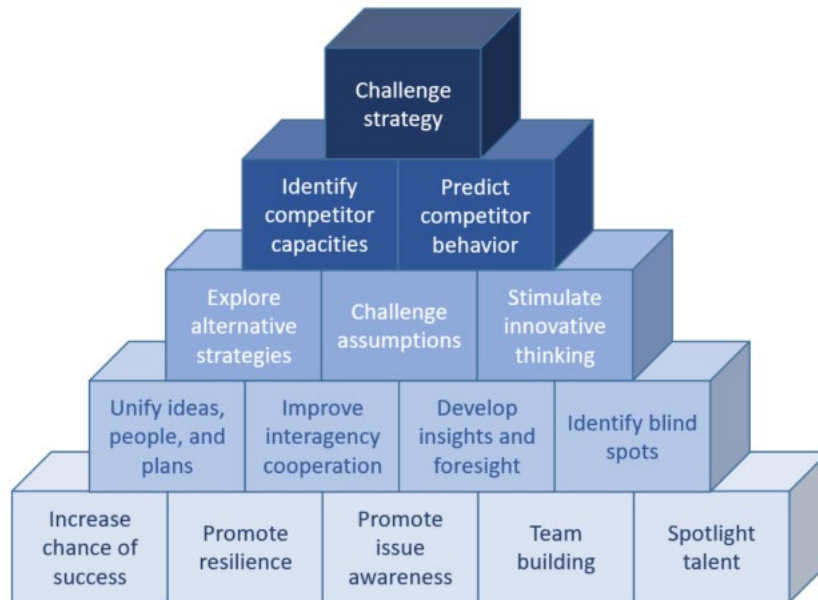

Figure 3: The benefits of Competitive Security Gaming range from strategic to operational and tactical and affect all layers of agencies and stakeholders involved.

One of the greatest assets of competitive security games is their ability to reveal the strengths and weaknesses of competitors. Understanding competitor capacities, motivations and methods and 'identifying a competitor's blind spots is the highest form of intelligence analysis.'[3] Information on faulty assumptions by one's own organization or competitors enables modifications in strategy that can correct internal deficiencies and neutralize external threats.

In a comparison between business and military wargames, it was observed that the former are more competitive, flexible and often combine different methodologies, whereas the latter tend to compartmentalize and be less inclusive of external stakeholders. Military wargames can be more rigidly committed to, and limited by, particular doctrines, practices, operational protocols, and even political constraints.

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When it comes to creating the elusive fusion of information that is necessary to create competitive intelligence; when it comes to identifying an approach that is less about conflict and more about relationships and soft power; when it comes to figuring out how best to operationalize strategic

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1. Gilad B. Business War Games. The Career Press: Pompton Plains NJ, 2008.

competition in the Indo-Pacific, military wargames may fall short and other models, such as Competitive Security Gaming need to be employed.