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ISSUE 8RIEF
IB/47/26

DECISION DOMINANCE IN COGNITIVE WARFARE: A FRAMEWORK FOR THE INDIAN CONTEXT

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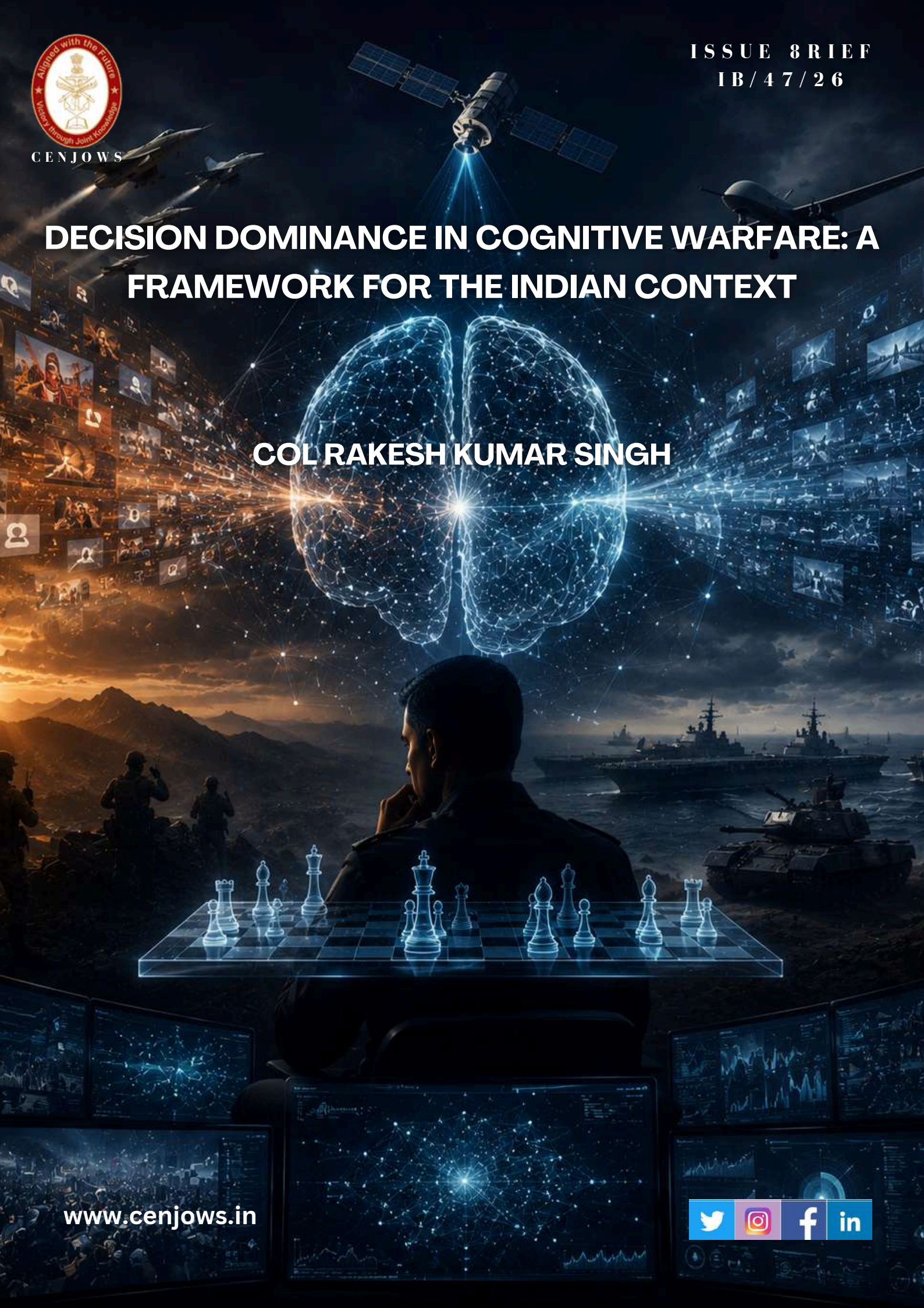

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Decision Dominance in Cognitive Warfare: A Framework for the Indian Context

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"Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur."

— Giulio Douhet

Abstract

The evolving character of conflict has elevated the cognitive domain as a decisive arena where outcomes are increasingly shaped through influence over decision-making processes. However, existing approaches to cognitive warfare remain largely narrative-centric, often lacking a clear linkage between influence activities and strategic outcomes. This paper argues for a shift from narrative dominance to decision dominance. Rather than treating cognitive warfare as an exercise in narrative competition alone, it examines how cognitive efforts influence perceptions, shape behaviour, and ultimately affect decision-making.

The paper proposes a framework to understand how cognition translates into behaviour and how this ultimately shapes decision-making. It highlights that the cognitive space is not uniform and that context matters, as different environments require different approaches. The paper also identifies the capabilities required for cognitive influence, along with mechanisms to assess its impact and support its implementation within a broader whole-of-nation approach. In addition, it outlines key policy implications for India,

emphasising the need for calibrated application across varied cognitive environments. Ultimately, it argues that cognitive warfare is less about shaping narratives alone and more about shaping the conditions under which decisions are made.

Introduction

Recent conflicts demonstrate that narrative success alone does not ensure strategic success. Russia's information operations during the Ukraine conflict, extensive US narrative management in Afghanistan, and large-scale digital influence campaigns during the Israel–Hamas conflict all generated substantial perception effects yet failed to produce decisive influence over adversarial decision-making.[1] These examples suggest that narrative dominance and decision dominance are related, but not synonymous. During the recent Israel–Iran confrontation, the conflict was fought not only through missiles and military strikes but also through narratives and digital influence. Social media campaigns, cyber activities, AI-generated content, and real-time messaging shaped global perception even as events unfolded on the battlefield.[2] The crisis showed that in modern conflicts, influencing how people understand events can be as important as military action itself.

Outcomes of future conflicts are likely to depend less on physical destruction and more on the ability to shape how people think and decide. Power today increasingly lies in influencing perception and, more importantly, decision-making. While information warfare focuses on the dissemination and control of information, cognitive warfare goes a step deeper. It engages directly with belief systems, biases, and decision processes. Its objective is not just to inform or persuade, but to gradually shape cognition in ways that influence behaviour and ultimately affect decisions.[3] In this sense, the centre of gravity shifts from controlling information to shaping decision outcomes. Cognitive warfare therefore operates at a deeper level than traditional information warfare—it targets beliefs, reinforces biases, and influences how decisions are made.

This shift is gradually finding place in military thinking across the world. However, current approaches still remain overly focused on narratives. Any practitioner of information warfare would recognise that narratives can influence, but they do not guarantee outcomes. For narratives to be effective, they must translate into changes in thinking, which then reflect in behaviour and finally shape decisions.[4] Influence over perception

does not automatically lead to behavioural change, nor does it ensure that adversary decision-making is meaningfully affected.

India's context makes this gap more significant. As the world's largest democracy, with its scale, diversity, and rapid digital expansion, India's information environment is inherently complex.[5] Multiple languages, regional identities, widespread mobile connectivity, and active political competition mean that information moves quickly across a fragmented media space. At the same time, India operates alongside neighbours with varying levels of information openness, adding an external dimension to this complexity.

In such an environment, cognitive engagements do not occur in isolation or move in a single direction. Without a clear structure and defined outcomes, efforts risk becoming fragmented, reactive, and less effective. This paper therefore argues for a shift from narrative-centric approaches to a more outcome-oriented construct—decision dominance. The emphasis should move beyond shaping what an adversary believes to influencing how decisions are made. Decision dominance, in this context, refers to the ability to shape the cognitive environment in ways that can constrain, delay, or redirect adversary decision-making in line with one's strategic objectives. Narratives, therefore, are not ends in themselves, but tools within a broader effort to shape decision conditions.

To support this shift, the paper develops a framework for understanding how cognitive efforts can be organised and applied to achieve measurable effects in the decision domain. The discussion that follows begins by examining prevailing approaches to cognitive warfare and their limitations, before introducing the conceptual shift from narrative dominance to decision dominance, which forms the basis for the framework developed in subsequent sections.

From Narrative Dominance to Decision Dominance

Existing literature on cognitive warfare has highlighted the growing importance of narratives in modern conflict. As a result, many countries now develop narrative plans alongside kinetic military plans.[6] This was visible during the Russia–Ukraine war, the Israel–Hamas conflict, and even in the ongoing tensions involving Iran, Israel, and the United States. In each case, controlling the narrative became an important part of the larger strategic effort.

However, dominating a narrative does not necessarily translate into behavioural change or influence decision-making. A viral narrative may trigger emotional reactions and even

gain wide public support yet still fail to produce strategic results. Take the example of Russia. It was initially successful in shaping its domestic discourse by calling the conflict a “Special Military Operation” rather than a war.[7] Yet this failed to reduce Ukrainian resistance or weaken NATO support. Instead, the conflict led to wider sanctions against Russia. Similarly, Gaddafi maintained tight ideological and narrative control in Libya for decades through state propaganda and the ideas promoted in the *Green Book*. Yet once public behaviour shifted during the 2011 uprising, despite the narrative dominance, his regime eventually fell. These examples highlight an important reality: controlling narratives is not the same as shaping decisions.

Democratic states also engage in narrative and cognitive competition. But unlike authoritarian systems, they operate under legal and institutional limits. This makes cognitive operations far more difficult in open societies.

Current studies on cognitive warfare focus heavily on narrative dominance, disinformation, influence campaigns, and propaganda.[8] But influence activities by themselves do not always lead to changed decisions. Most studies explain how narratives spread and shape public perception. Far less attention is given to what happens after that—whether those narratives change thinking, affect behaviour, or influence decision-making in a meaningful way. This gap remains one of the key limitations in the present understanding of cognitive warfare.

As a result, cognitive warfare is often treated as an extension of information warfare — as advanced propaganda or simply information warfare enabled by technology. Traditional information warfare largely focuses on controlling or managing information flows. Cognitive warfare goes much deeper.[9] It targets beliefs, thinking, judgement, and ultimately the decision environment itself. Therefore, viewing cognitive warfare merely as propaganda, media influence, or technology-driven information operations remains both incomplete and misleading.

Hence, narratives matter only when they successfully influence decisions. In that sense, narratives are merely tools in cognitive warfare, not the final objective. This paper therefore argues for a shift from narrative dominance to decision dominance. Decision dominance refers to a condition where the adversary is forced into delayed, confused, constrained, divided, or poor decision-making. The real objective of cognitive warfare, therefore, is not simply to control narratives but to shape the adversary’s decision environment under political, institutional, and operational pressures.

The current system measures success through reach, virality, engagement, and visibility of posts, though these may mean very little in strategic terms. A trending hashtag means nothing if the adversary still acts exactly as planned. What should really be assessed is whether there was any behavioural shift, delay in response, hesitation in decision-making, or institutional confusion within the adversary system. The real question is whether the narrative created pressure that altered choices, restricted options, fractured internal consensus, or pushed the adversary towards poor decisions. This paper therefore proposes an operational framework where success is measured through decision effects rather than the popularity of a narrative.

Cognitive Battlespace in the Indian Context

To understand how decision dominance works, the cognitive battlespace in India's strategic context must first be understood. Earlier, wars were fought largely within geographical spaces. The cognitive space no longer follows fixed borders. Narratives now move constantly through social media, diaspora networks, digital platforms, and global media. Cognitive conflict today moves across connected societies rather than fixed territories.[10]

Like electronic warfare, where the electromagnetic spectrum does not remain restricted by geography, cognitive warfare also spreads beyond physical borders. But unlike the electromagnetic spectrum, not all societies absorb external narratives in the same way. Culture, language, media openness, political systems, state control, and levels of digital freedom all shape how outside narratives are received. Some societies are therefore easier to influence, while others tightly regulate or resist external information flows. This makes every information environment behave differently. As a result, cognitive operations cannot follow a single template everywhere.

To understand these differences better, this paper broadly divides cognitive environments into three categories based on how easily outside narratives can enter and influence them.

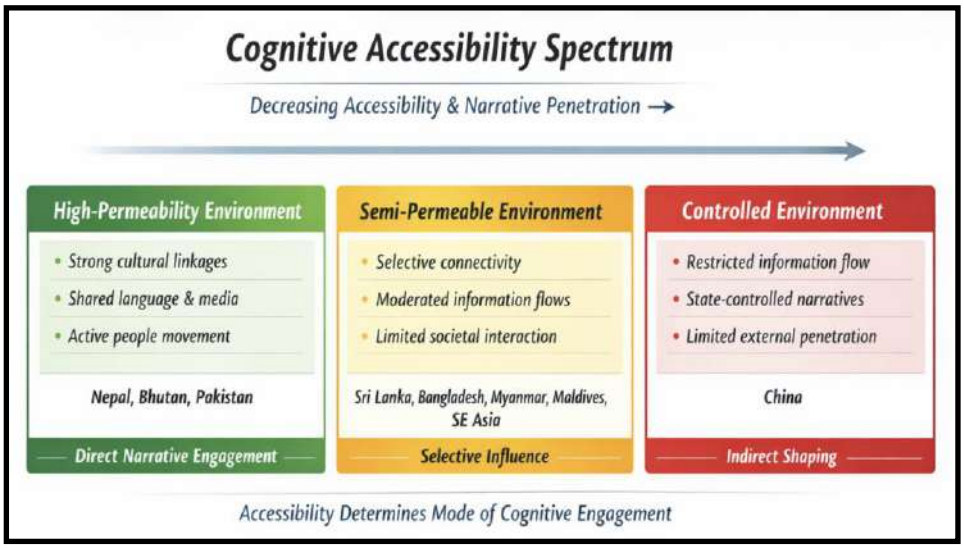
- **High-permeability Cognitive Environment.** The first category is highly permeable environments. These are spaces where information and ideas move easily because of cultural closeness, language overlap, open communication, and regular people-to-people interaction. India's borders with Nepal and Bhutan are good examples. Similar

conditions exist in parts of Jammu and Kashmir because of earlier cross-border linkages, language similarities, and local social connections. Such environments allow information to spread quickly and with relatively little resistance.

- **Semi-permeable Cognitive Environment.** The second category is semi-permeable environments. Here, interaction exists but is shaped by geography, politics, institutions, and identity differences. Countries such as Sri Lanka, Bangladesh, Maldives, Myanmar, and parts of Southeast Asia broadly fall into this category. These spaces are neither fully open nor fully closed. Information flows more selectively and often depends on political context, economic engagement, regional ties, or limited social interaction and media overlap**.**

- **Controlled Cognitive Environment.** The third category consists of tightly controlled environments. China is the clearest example.[11] External narratives find it difficult to penetrate because the state exercises strong control over media, digital platforms, and information flows. This creates a relatively closed information environment with limited outside influence.

Within this larger landscape, India occupies a uniquely open cognitive space. Its democratic system, internal diversity, and federal structure naturally create a high degree of interaction and information flow. This openness is further shaped by media freedom, rapid digital penetration, linguistic diversity, and active politics at both the national and regional levels. India's large diaspora and strong cross-border social linkages add another layer to this environment.



As a result, narratives move quickly across regions, platforms, and communities. Information circulates continuously and often produces varied interpretations at the same time. This makes India's cognitive space highly dynamic and constantly contested. At the same time, it also increases exposure to competing narratives and external influence.

The discussion above shows how cognitive environments increasingly blur the line between domestic and external spaces. A social media-driven upheaval in Nepal can quickly influence discussions within India. Similarly, a student-led political movement in Bangladesh, a political shift in the Maldives, or instability in Sri Lanka often creates ripple effects within the Indian cognitive space.

Domestic debates today are often shaped by outside narratives, just as external actors can influence internal discourse. Cognitive engagements, therefore, no longer remain isolated or linear. India's cognitive battlespace is now highly connected and constantly changing.

It must therefore be seen as an overlapping space where narratives spread and interact under different conditions. With the battlespace and its varying environments outlined, the next step is to examine what cognitive operations are meant to achieve.

Cognitive Objectives and Decision-Level Effects

Much of the current discussion on cognitive warfare remains focused on narratives — how they are framed, spread, amplified, and made more visible. Considerable attention is given to increasing reach and influence. But far less attention is paid to what these narratives are supposed to achieve. As a result, narratives are often treated as ends in themselves rather than tools meant to influence outcomes.

It is important to understand that cognitive warfare is not only about influence. Its real aim is to shape how the adversary thinks and decides. A narrative may gain visibility, become popular, or create short-term changes in perception, but none of that matters if it does not affect decisions. Russia, for example, managed to shape its domestic discourse by describing the Ukraine conflict as a "Special Military Operation", yet this did little to weaken Ukrainian resistance or alter NATO's response. What finally matters is whether cognitive efforts change behaviour, reactions, or decision-making.

Such efforts become meaningful only when they affect how the adversary responds and decides. This may show up as delay, confusion, distortion, hesitation, or constraints in

response. Such effects reduce the adversary's ability to react effectively. A perception shift by itself has little strategic value unless it produces visible changes in behaviour and decisions.

Cognitive warfare operates through a gradual chain linking perception, behaviour, and decision-making.[12] Continuous exposure to narratives slowly shapes how individuals and groups interpret events. Over time, these perception shifts influence behaviour, reactions, and public responses. Over time, these behavioural shifts begin to affect the timing, coherence and quality of decisions. Cognitive effects therefore build progressively rather than appearing instantly.

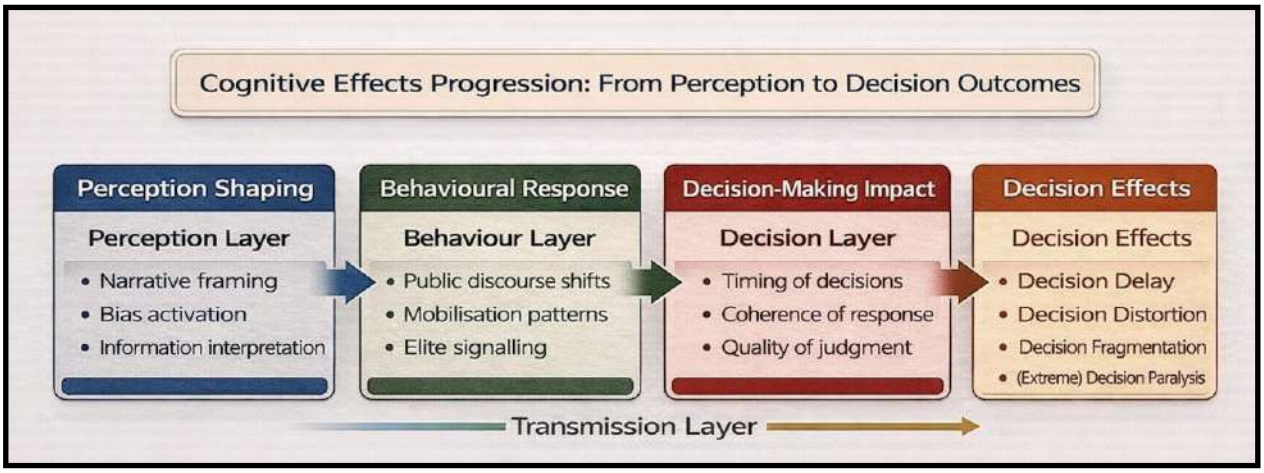
The perception–behaviour–decision continuum can be seen in several recent conflicts, including Russia's information campaign during the Ukraine war, where narrative shaping was closely linked with attempts to influence political and military decision-making.[13]

Cognitive effects become strategically meaningful only when they influence responses. These effects may appear in different forms. The first is decision delay, where responses slow down because of uncertainty or hesitation induced by competing narratives. The second is decision distortion, where actors misread situations or the intentions of adversaries. The third is decision fragmentation, where institutions struggle to maintain internal consensus. In extreme situations, prolonged confusion and competing pressures may even produce decision paralysis, where timely and coherent action becomes difficult.

Recent conflicts show how these effects play out in practice. During the Russia–Ukraine war, different narratives created divisions in parts of Europe over sanctions and military support. In the Hamas–Israel conflict of 2023, videos, social media posts, and fast-moving claims triggered immediate public reactions across many countries. Governments and international organisations struggled initially to respond coherently as information and counter-information spread simultaneously.

The impact of cognitive operations also depends on the type of cognitive environment in which they are applied. In open and highly connected environments, narratives spread quickly and public reactions become visible very quickly. In more tightly controlled environments, direct influence over public perception becomes harder. In such cases, cognitive effects are often generated indirectly through external pressure, signalling, diplomatic messaging, or the larger information environment. Semi-permeable

environments usually display elements of both and therefore require a more calibrated approach.



Another important factor is timing. Certain moments naturally create greater pressure on decision-making systems. These may emerge during crises, political instability, military escalation, elections, or periods of intense public scrutiny. Also, the periods of internal political or social turbulence create heightened cognitive vulnerability. Cognitive operations aligned with such moments are often more effective because decision-makers are already operating under stress, uncertainty, or public pressure.

This also changes how success should be measured. Reach, virality, visibility, or engagement alone reveal very little in strategic terms. What matters more is whether there are visible changes in behaviour and decision-making — such as delays in response, confusion, internal divisions, hesitation, or shifts from expected patterns of action.

Cognitive operations should therefore not be seen merely as tools for spreading information or shaping perception. Their real purpose lies in influencing behaviour and decision outcomes. The next section builds on this idea by introducing the Cognitive Decision Dominance Framework, which links perception, behaviour, and decision-making into a structured operational model.

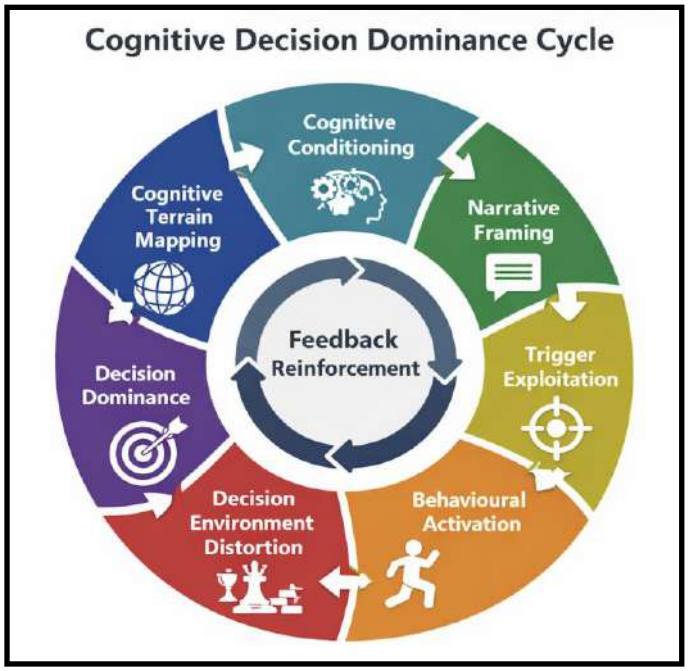
Cognitive Decision Dominance Framework

Having established that influencing decisions is the real objective of cognitive warfare, the next question is how this can be achieved. This requires a systematic approach or, in simpler terms, an operational framework. Cognitive warfare is not a straight-line process

where a narrative is created, an effect follows, and success automatically results. The process is far more dynamic. People react differently, situations evolve, and narratives themselves change over time. As a result, cognitive efforts must continuously adapt through feedback and reassessment. Their effects are often gradual and become visible only when they begin influencing behaviour and, ultimately, decision-making.

Any framework for cognitive warfare must also account for the nature of the environment in which it is applied. A highly permeable environment will respond differently from a semi-permeable or tightly controlled one. While the broad logic of cognitive warfare may remain the same, its application will vary across different cognitive environments. The framework proposed in this paper seeks to provide that common structure while allowing flexibility in its implementation.

The framework should not be seen as a rigid sequence of steps. Cognitive warfare unfolds through continuous interaction between perception, behaviour, and decision-making. Effects build gradually and often reinforce or modify one another over time. As situations evolve, narratives change, reactions emerge, and new opportunities present themselves. Feedback therefore becomes central to the process, allowing constant adjustment and refinement.



For this reason, the framework functions as a continuous cycle rather than a one-time activity. It follows a broad progression from understanding the cognitive environment and shaping perceptions to influencing behaviour and, ultimately, decision outcomes. The process can be understood through eight interconnected stages: cognitive terrain mapping, cognitive conditioning, narrative framing, trigger exploitation, behavioural activation, decision environment distortion, decision dominance, and feedback reinforcement.

- **Cognitive Terrain Mapping**

  Just as military operations begin with an appreciation of terrain, cognitive operations begin with an understanding of the human terrain.[14] This requires studying the society, its fault lines, prevailing attitudes, belief systems, and the degree of trust people place in institutions and sources of information. It is equally important to understand how information spreads and which issues generate strong public reactions. Such mapping helps identify areas of vulnerability, existing grievances, and opportunities where influence may be more effective. If this understanding is incomplete or inaccurate, subsequent cognitive efforts are unlikely to achieve the desired effect.

- **Cognitive Conditioning**

  Once the environment has been understood, the next step is to prepare it for future influence. This is done by reinforcing beliefs, attitudes, and perceptions that already exist rather than attempting to create entirely new ones. Existing grievances and social divisions are gradually amplified so that certain interpretations become more acceptable than others. This is rarely a short-term effort. It requires persistence and repeated reinforcement over time. The objective is to shape how future events are likely to be understood and interpreted by the target audience.

- **Narrative Framing**

  The third stage involves narrative framing. Narratives provide meaning to events and help shape how messages are interpreted. Their effectiveness depends largely on how well they connect with beliefs, attitudes, and perceptions that have already been reinforced during the conditioning stage. People are more likely to accept information that aligns with what they already believe or are predisposed to believe.[15]

  For this reason, consistency and repetition become important. The same broad themes are reinforced across different events, platforms, and audiences. Dissemination through multiple media channels, social networks, and communication platforms increases exposure and strengthens recall. Over time, this repeated reinforcement helps establish a preferred interpretation of events and reinforces it over time.

- **Trigger Identification and Exploitation**

  The first three stages focus on preparing the ground. Once this groundwork has been laid, the next step is to identify and exploit trigger events as they emerge. Such triggers may take many forms—a military incident, political crisis, election, economic shock, protest movement, communal disturbance, diplomatic dispute, or even a viral social media event. Many such trigger events occur at moments when governments, institutions, or leaders are already under pressure to respond quickly. In such situations, the way an event is interpreted can have a significant influence on subsequent decisions.

  At such moments, people naturally try to make sense of what is happening. Often, they interpret new developments through narratives they are already familiar with. If a narrative gains traction early, it can shape perceptions and influence subsequent reactions. Timing therefore becomes critical, as the first widely accepted interpretation often has a lasting impact on subsequent discourse and behaviour.[16]

- **Behavioural Activation**

  Once narratives begin to resonate emotionally and are reinforced repeatedly, people start acting on them. They may share information, amplify viewpoints, join online campaigns, participate in protests, question institutions, or exert pressure on public authorities. What began as a perception gradually translates into observable behaviour. At this stage, cognitive activity moves beyond the information space and starts generating visible effects in the real world. These behavioural responses, if sustained, can create pressure on institutions and decision-makers. They may alter public expectations, intensify scrutiny, and reduce the room available for decision-makers to act freely. This, in turn, sets the stage for decision-level effects.

- **Decision Environment Distortion**

  As behavioural responses gather momentum, they begin to shape the environment within which decisions are made.[17] They often face uncertainty, competing narratives, media scrutiny, political pressures, public expectations, and internal

disagreements within institutions. Together, these factors can complicate judgement and make decision-making more difficult.

Under such conditions, cognitive effects may begin to influence the decision environment. This may be visible in the form of delayed responses, hesitation, distorted assessments, fragmented institutional positions, or even overreaction and under-reaction to unfolding events. The initial phase of the Russia–Ukraine conflict provides a useful example. European governments were simultaneously confronted with decisions on sanctions, military assistance, energy security, and diplomatic positioning, often under conditions of uncertainty and intense public scrutiny. The resulting debates and delays illustrate how competing narratives can shape the environment within which strategic decisions are taken.

- **Decision Dominance**

  The final objective is decision dominance. This is achieved when the adversary's freedom of action is reduced and decision-making becomes increasingly constrained. Choices narrow, responses slow down, internal divisions deepen, and the likelihood of poor decisions increases. In this sense, cognitive warfare does not end with influencing perceptions or behaviour. Its ultimate purpose is to shape the decisions that follow.

- **Feedback Reinforcement Loop**

  Influencing a decision does not mark the end of the process. Decision outcomes themselves create fresh perceptions and alter the cognitive environment. These changes generate new narratives and shape future behaviour. As a result, the cycle begins again.

  In this way, decisions give rise to new perceptions, perceptions shape narratives, and narratives continue to influence subsequent decisions. The cognitive environment is therefore constantly evolving rather than remaining static. Continuous observation and adaptation become essential, allowing the framework to adjust to changing conditions and remain effective over time.

- **Key Characteristics of the Framework**

  Several features distinguish this framework. First, it views cognitive warfare as a continuous process rather than a series of isolated activities. The objective is not

simply to shape a narrative for a particular event, but to influence behaviour and decision-making over time. Second, success is judged not by visibility, reach, or virality alone but by its impact on actions and decisions. The framework also recognises that cognitive effects may originate at the local level but gradually influence decisions at operational, political, and strategic levels.

Another important feature is adaptability. As the cognitive environment changes, new perceptions, behaviours, and opportunities emerge. The feedback loop allows the framework to adjust continuously to these changing conditions. Finally, the framework recognises that local cognitive effects can, if sustained and amplified, influence decisions at higher levels. Timing remains central throughout the framework, from long-term conditioning to rapid exploitation of trigger events and sustained reinforcement of effects.

Having outlined the logic and stages of this process, the next section presents the Cognitive Decision Dominance Framework as an integrated model linking perception, behaviour, and decision-making.

Capability Requirements

The framework outlined in the previous section can succeed only if it is supported by the right capabilities. Some are needed to understand the environment. Others help shape narratives, influence behaviour, and assess whether the intended effects are being achieved. Together, they provide the means through which cognitive efforts can be translated into behavioural and decision-level effects. While the broad logic remains common, the way these capabilities are employed may vary across different cognitive environments. The focus, however, remains unchanged: influencing behaviour and, ultimately, decisions. The following discussion outlines the key capabilities required for this purpose.

- **Cognitive Terrain Intelligence Capability**

  The success of any cognitive operation depends on a clear understanding of the environment in which it is to be conducted. Societies are not static. Public attitudes, social divisions, trust in institutions, and information flows evolve continuously. Any effort to influence behaviour or decision-making therefore requires a mechanism that can monitor these changes and maintain an updated understanding of the cognitive environment.

This capability would require the integration of open-source intelligence (OSINT), human intelligence (HUMINT), social media monitoring, data analytics, and regional expertise.[18] Together, these elements help identify emerging narratives, shifts in public sentiment, influential actors, information pathways, and potential vulnerabilities that may be relevant to cognitive operations.

The outcome is a continuously updated picture of the cognitive environment. It enables early identification of emerging trends, potential trigger events, areas of vulnerability, and opportunities for influence. This understanding forms the foundation upon which all subsequent cognitive activities are built.

- **Narrative Design and Dissemination Capability**

Once the environment has been understood, there is a need for a capability that can develop and disseminate narratives suited to different audiences. This includes crafting narratives, adapting them to different cognitive environments, countering adversary narratives, and maintaining consistency over time. The objective is not simply to communicate messages, but to shape how events are interpreted by different audiences.[19]

This capability would require dedicated content and narrative teams comprising narrative planners, strategic communication specialists, regional-language content developers, and visual media creators. It would also require counter-narrative mechanisms such as factchecking and verification cells, disinformation analysis teams, and rapid-response units capable of responding to emerging developments. Dissemination would depend on media engagement, digital communication teams, social media management, diaspora engagement networks, and partnerships with influencers. Technical support through content analytics, audience engagement tracking, and platform monitoring tools would remain an essential part of this ecosystem.

The outcome of these efforts is the ability to generate audience-specific messaging, develop effective counter-narratives, and maintain narrative consistency across platforms. Messages that resonate in one cognitive environment may not necessarily succeed in another. Narratives therefore need to be adapted to local languages, cultural contexts, and audience sensitivities if they are to remain effective.

- **Behavioural Activation Capability**

  Developing and disseminating narratives alone is insufficient. A capability is also required to understand how different groups are likely to respond to those narratives and how desired behavioural responses can be encouraged. This capability would require expertise in audience analysis, influence mapping, behavioural research, and campaign planning. Together, these functions help identify key groups, understand their motivations, concerns, and grievances, and determine which individuals, communities, or networks are most capable of influencing wider opinion and behaviour.

  Behavioural research support drawn from psychologists, sociologists, and cultural experts can help explain how different audiences are likely to react to specific messages.[20] This understanding can then be used to support engagement campaigns, public participation initiatives, mobilisation efforts, and online outreach strategies. Equally important is the ability to monitor behavioural responses through participation trends, mobilisation patterns, and other behavioural indicators.

  The outcome of this capability is not merely greater visibility for a narrative but observable behavioural responses. These may include public engagement, mobilisation, amplification of narratives, and increased pressure on institutions and decision-makers. Diaspora communities hold particular significance in this regard. They often carry narratives across borders, reinforce messages through transnational networks, and influence discourse across multiple cognitive environments simultaneously. When effectively understood and engaged, they can significantly expand the reach and impact of cognitive operations.

- **Assessment and Feedback Capability**

  A narrative that attracts attention but produces no behavioural or decision-level effect cannot be considered successful in strategic terms. Cognitive operations cannot be sustained unless their effects are continuously assessed. Assessment must move beyond measuring reach, engagement, or visibility.[21] What matters is whether behaviour has changed, whether responses have slowed, whether institutions show signs of division, and whether decision patterns are being affected.

This requires continuous monitoring of social media, sentiment trends, media reporting, and emerging narratives. Behavioural indicators such as participation trends, protest activity, online mobilisation, community reactions, and engagement patterns can provide useful insights into how audiences are responding. Equally important are decision-level indicators, including delayed responses, policy shifts, altered public positions, institutional disagreements, or departures from expected patterns of behaviour and decision-making.

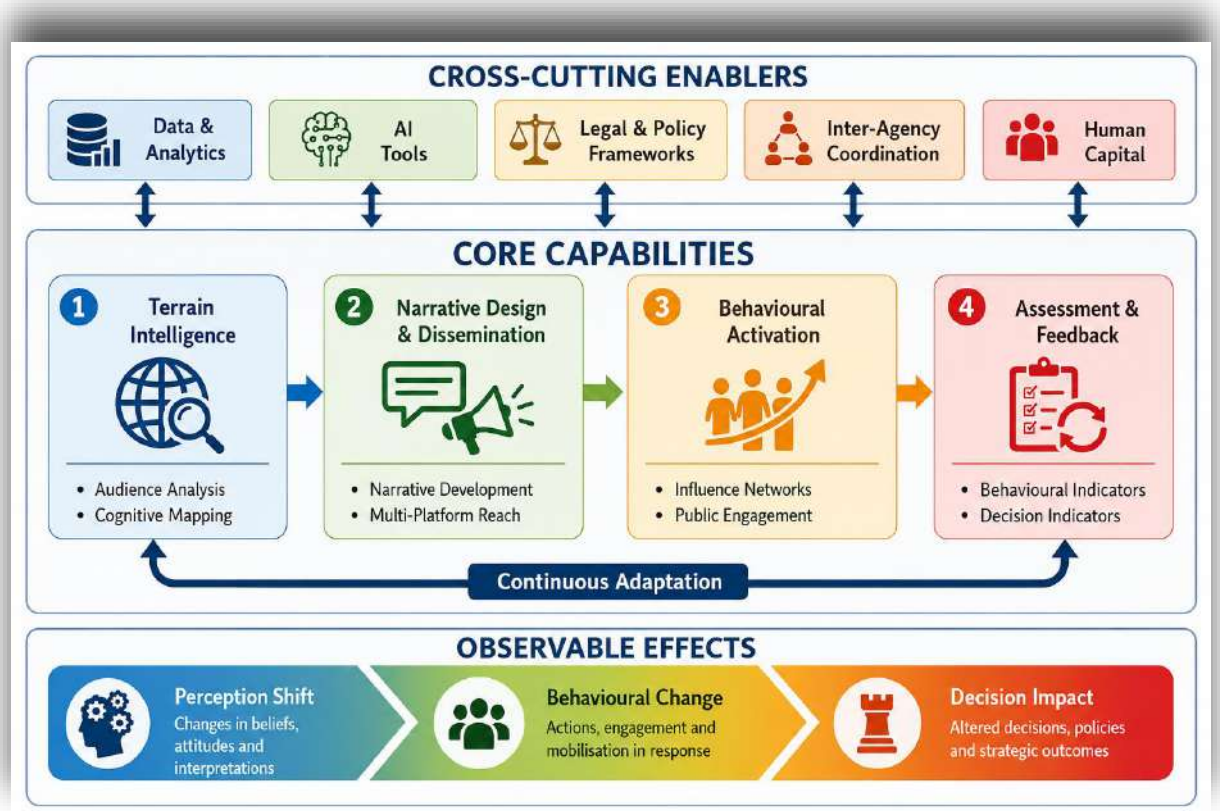
These assessments should feed directly into campaign reviews and decision-making processes. Lessons identified through monitoring and evaluation can help refine narratives, adjust priorities, and redirect effort where required. The outcome is a continuous feedback mechanism that helps assess effectiveness, identify gaps, and adapt cognitive operations to changing circumstances.

- **Cross-Cutting Enablers**

The capabilities discussed above cannot operate effectively in isolation. Their success depends on a number of enabling factors that support cognitive operations across all stages. These include data and AI infrastructure for processing large volumes of information, mechanisms for coordination across government, military, intelligence, and civil institutions, and legal and policy frameworks that ensure legitimacy and accountability.[22] Equally important is the availability of trained personnel with expertise in behavioural sciences, data analytics, regional studies, strategic communication, and related disciplines.

Audience motivations, grievances, and aspirations are shaped by a range of factors, including social, cultural, political, and economic considerations. Understanding how these factors influence perceptions and behaviour is essential

for designing narratives and engagement strategies that resonate with different audiences and ultimately influence behaviour and decision-making.



- **Role of the Indian Army**

Within the broader national effort, the Indian Army has an important role in supporting cognitive operations. Its greatest contribution lies in its ability to understand local conditions, communities, and sentiments in areas where it operates. Such insights often provide a level of understanding that cannot be obtained through technical means alone and can significantly strengthen cognitive terrain assessment.

The army can also play an important role during crises, conflict situations, and periods of heightened tension, where the interpretation of events often shapes public perception and subsequent responses. Its understanding of the local environment, combined with its operational presence, can support the development of timely assessments and context-specific narratives.

In addition, the army's organisational reach, intelligence inputs, and engagement with local populations can support broader national efforts in information

dissemination, psychological operations within its mandate, and operations in contested environments. However, cognitive warfare extends beyond the military domain. The army's role therefore remains part of a larger whole-of-nation approach involving government institutions, intelligence agencies, academia, industry, media, and civil society. Effective cognitive operations require coordination across all these stakeholders.

In sum, achieving decision dominance requires more than a conceptual framework. It demands a set of complementary capabilities that can understand the environment, shape narratives, influence behaviour, and assess outcomes. No single capability can achieve this in isolation. Their effectiveness depends on how well they work together and adapt to changing circumstances. When employed in a coordinated manner, these capabilities help ensure that cognitive efforts move beyond shaping perceptions and contribute to tangible changes in behaviour and decision-making.

The following section builds upon this foundation by examining how these capabilities can be assessed and refined over time to sustain effectiveness in a continuously evolving cognitive environment.

Assessment and Feedback Mechanism

Assessing cognitive operations is inherently difficult. Unlike conventional military operations, their effects are rarely visible in a direct or immediate manner. Changes in perception, behaviour, and decision-making often emerge gradually and are influenced by multiple factors. As a result, success cannot be measured through a single indicator or a simple measure of success and failure.

Assessment therefore requires a broader approach that looks at patterns, trends, and observable changes over time. Decision dominance cannot be observed directly.[23] It must be inferred from evidence of how individuals, groups, institutions, and decision-makers respond to cognitive efforts. The visibility of such indicators may also vary across different cognitive environments, requiring assessment methods to remain flexible and context-specific.

For this reason, assessing cognitive operations requires attention to three related areas: how people perceive information, how they respond to it, and whether it influences

decisions. Together, these provide a structured way to evaluate whether cognitive efforts are producing the intended effects.

- **Assessing Perceptions**

  The first area of assessment focuses on perception. The purpose is not to determine whether a narrative has achieved complete acceptance but whether it has begun influencing how events are interpreted by the target audience. Assessment at this stage requires establishing a baseline of prevailing perceptions and then monitoring for measurable changes over time. Indicators may include changes in media framing, shifts in public sentiment reflected in surveys or polling data, variations in online discourse, increased circulation of alternative narratives, or declining trust in established sources of information.

  No single indicator is sufficient on its own. Assessment should therefore rely on multiple sources and compare trends across them to determine whether observed changes are consistent and sustained. The emphasis is less on proving that a particular narrative caused a specific perception and more on identifying whether the information environment is evolving in a direction that suggests growing influence. The key question is whether perceptions are beginning to shift in a manner that creates conditions for subsequent behavioural and decision-level effects.

- **Assessing Behaviour**

  The second area of assessment examines whether changes in perception are translating into observable behaviour. This may be reflected through increased engagement with issues, amplification of narratives, participation in campaigns, mobilisation around specific causes, or shifts in the conduct of influential groups and actors.

  Behavioural indicators provide an important measure of whether cognitive effects are moving beyond the information space and beginning to influence actions in the real world. However, behavioural change should not be viewed as an end. Its significance lies in its ability to generate pressure, uncertainty, support, resistance, or other conditions that may ultimately shape the decision environment.

- **Assessing Decision-Making**

  The final and most important area of assessment focuses on decision-making. It is at this stage that cognitive operations acquire strategic relevance. The objective is to identify whether perceptions and behavioural responses are influencing how individuals, institutions, or leadership groups make decisions.

  Indicators may include delayed responses, policy reversals, contradictory actions, institutional disagreements, hesitation during crises, or decisions that deviate from established patterns observed under similar circumstances. Assessment should focus not on stated intentions but on observable actions. The central question is whether cognitive efforts are affecting the timing, coherence, or quality of decisions and thereby altering outcomes in a manner favourable to one's objectives.

- **Threshold of Decision Disruption**

  While individual indicators may suggest cognitive influence, strategic significance emerges only when changes begin affecting decision-making in a consistent manner. This paper refers to that point as the ‘Threshold of Decision Disruption’. The underlying premise is that success in cognitive operations ultimately lies in influencing decisions. If such influence is effective, it is likely to manifest through departures from established patterns of decision-making. These departures may appear in the form of delayed responses, inconsistent actions, unusual caution, policy reversals, or decisions that differ from what might reasonably have been expected under similar circumstances.

  The threshold is reached when such deviations are no longer isolated occurrences and begin appearing with sufficient consistency to suggest a change in the decision environment. Identifying this threshold requires comparison with historical behaviour and established decision patterns. While such assessments cannot provide absolute certainty, they offer a structured basis for evaluating whether cognitive efforts are contributing to observable changes in decision-making.

- **Data Sources and Measurement**

  Effective assessment depends on drawing information from multiple sources rather than relying on any single indicator. Open-source intelligence (OSINT), media reporting, digital platforms, and public discourse can help identify shifts in

perceptions and narratives, while human intelligence (HUMINT) and field reports provide context and validation. Technical intelligence and analytical tools can help detect emerging patterns. No single source provides a complete picture; meaningful assessment depends on combining these inputs to develop a more reliable understanding of cognitive effects across perception, behaviour, and decision-making.

- **Adaptation, Reinforcement and Limitations**

Assessment is valuable only when it informs action. Insights derived from monitoring and evaluation should be fed back into the operational cycle to determine whether narratives require adjustment, behavioural responses need reinforcement, or greater attention must be directed towards influencing decision-making. In this sense, assessment is not a retrospective activity but a continuous process that helps align cognitive efforts with evolving circumstances.

Where indicators suggest that perceptions are shifting, behaviours are emerging, and decision-making is being affected, cognitive efforts can be reinforced and sustained. Conversely, where expected effects fail to materialise, assumptions may need to be revisited and approaches adjusted. The objective is not to follow a rigid plan, but to remain responsive to changing conditions within the cognitive environment.

At the same time, assessment in the cognitive domain is subject to important limitations. Human behaviour is influenced by multiple factors, making it difficult to attribute outcomes to any single cause with certainty. There is also a risk of overestimating the significance of isolated events, misinterpreting correlations as causation, or drawing conclusions from incomplete information. Assessment should therefore be viewed as a process of informed judgement rather than precise measurement.

Taken together, assessment and feedback provide the critical link between cognitive activity and decision outcomes. They enable continuous learning, adaptation, and refinement, ensuring that cognitive operations remain responsive, evidence-based, and aligned with their intended objectives.

The following section builds on this foundation by examining how cognitive efforts can be coordinated across strategic, operational, and tactical levels to generate coherent and sustained effects.

Multi-Level Execution Framework

Having identified the capabilities required for cognitive operations, the next challenge is ensuring that they work together effectively. In the Indian context, a wide range of organisations already communicate with domestic and international audiences. These include government ministries, the Press Information Bureau, public broadcasters such as Doordarshan, the media and public relations wings of the Armed Forces, and various agencies operating within their respective domains. Each of these organisations performs important functions and communicates from its own institutional perspective.

The challenge, however, is not the absence of communication capability but the absence of a mechanism that consistently aligns these efforts towards common cognitive objectives. Without coordination, different organisations may pursue parallel lines of communication, resulting in fragmentation or inconsistent messaging. This becomes particularly important in the cognitive domain, where effects are generated through the cumulative interaction of narratives, behaviour, and decision-making rather than through any single activity or organisation.

Drawing upon the established concepts of strategic, operational, and tactical levels, this section proposes a multi-level execution framework for cognitive operations. The discussion examines how cognitive initiatives are directed at the strategic level, translated into coordinated campaigns at the operational level, and executed through local actions and engagements at the tactical level. Together, these levels ensure that national objectives, campaign design, and local activities reinforce one another and contribute towards coherent decision-level effects.

- **Strategic Level: Direction and Narrative Guidance**

  The strategic level is responsible for defining the outcomes that cognitive operations are intended to achieve. This includes identifying the decisions, behaviours, or responses that need to be influenced and ensuring that cognitive campaigns remain aligned with broader national objectives. In essence, the strategic level determines what is to be achieved and establishes the broad direction for all subsequent activities.

A key function at this level is the development of overarching narrative guidance. This does not imply prescribing specific messages or campaigns. Rather, it involves establishing the broad themes and positions that support national objectives and provide a common frame of reference for organisations operating at lower levels. Strategic guidance also helps identify priority audiences and the desired effects that cognitive activities seek to generate.

In a large and diverse democracy such as India, strategic direction requires coordination across multiple stakeholders that engage both domestic and international audiences. These may include ministries dealing with external affairs, defence, home affairs, information and broadcasting, state governments, diplomatic missions, public communication organisations, and other institutions involved in shaping public discourse. Given the diversity of actors involved, maintaining coherence becomes particularly important. Contradictory messaging or competing priorities can dilute intended effects and create ambiguity in the information environment.

The strategic level therefore provides the common direction within which operational planning and tactical activities are conducted. Its principal responsibility is to ensure that cognitive efforts undertaken by different organisations remain aligned with national objectives and contribute towards the desired behavioural and decision-level outcomes.

- **Operational Level: Campaign Design and Coordination**

The operational level serves as the bridge between strategic intent and tactical execution. Its primary role is to translate broad cognitive objectives into coordinated campaigns and actionable plans. While the strategic level defines the desired outcomes, the operational level determines how those outcomes are to be achieved.

This involves identifying target audiences, selecting areas of focus, determining the sequencing of activities, and aligning available capabilities towards common objectives. It is also at this level that narrative development, dissemination, behavioural activation measures, and assessment are brought together into a coherent campaign. The emphasis is not on individual activities, but on ensuring that different efforts complement and reinforce one another.

A key responsibility of the operational level is coordination across organisations that possess relevant capabilities and information. In practice, cognitive operations may involve inputs from intelligence, military, and communication organisations. The operational level provides the mechanism through which these diverse inputs are translated into coordinated action while avoiding duplication of effort and contradictory outcomes.

The operational level also plays an important role in adaptation. Feedback from assessments, changes in the information environment, and emerging opportunities or risks may require campaigns to be modified over time. The ability to continuously review progress and adjust activities accordingly is therefore essential for maintaining relevance and effectiveness.

In essence, the operational level converts strategic direction into a coordinated campaign, ensuring that available capabilities are employed in a manner that generates cumulative effects and supports the achievement of desired behavioural and decision-level outcomes.

- **Tactical Level: Local Execution and Effect Generation**

The tactical level represents the point at which cognitive actions interact directly with the target environment. It is here that broader objectives and campaign plans are translated into actions, engagements, and responses that are relevant to specific audiences and local conditions. While strategic and operational levels provide direction and coordination, the tactical level is where cognitive effects are generated and observed.

Activities at this level may include engagement with local populations, interpretation and framing of events, dissemination of context-specific messaging, and interaction with community networks, influencers, and other actors capable of shaping perceptions. The effectiveness of such efforts depends largely on an understanding of local realities, cultural sensitivities, prevailing grievances, and audience expectations. Narratives that resonate in one environment may have little relevance in another, making local adaptation essential.

The tactical level is also often the first to detect changes in perceptions, behaviour, and sentiment. As a result, it serves not only as an execution mechanism but also as an important source of feedback for higher levels. Information gathered through

local engagement, field observations, and interaction with affected populations can provide valuable insights into the effectiveness of ongoing efforts and the emergence of new opportunities or risks.

A distinctive feature of the tactical level is its ability to generate effects that extend well beyond the immediate locality. For example, in regions such as Jammu and Kashmir or parts of the Northeast, a local incident involving security forces or civilian populations can rapidly gain national and international attention through digital media. How such events are communicated and responded to can significantly influence public perceptions and affect levels of trust among different audiences. A local event, if framed and amplified effectively, can therefore contribute to broader behavioural and decision-level effects. Conversely, poorly handled incidents can undermine credibility and reinforce adverse narratives. The tactical level therefore remains central to both the generation and assessment of cognitive effects.

- **Indian Army's Contribution Across Levels**

While the strategic, operational, and tactical levels provide a useful analytical framework, the contribution of the Indian Army often spans across all three levels. In addition to executing activities on the ground, the Army contributes to planning, coordination, and the communication of information relevant to the broader cognitive environment.

At the strategic level, military assessments and ground-based insights contribute to national decision-making and help inform broader security narratives. At the operational level, Army headquarters and its associated communication structures play an important role in translating strategic guidance into coordinated plans, narrative priorities, and activities aligned with national objectives. They also facilitate coordination with other stakeholders and ensure coherence between military actions and the broader information environment.

At the tactical level, field formations and units interact directly with local populations and institutions, adapting broader guidance to local conditions while providing continuous feedback on emerging perceptions and evolving ground realities. This enables alignment of local actions with wider objectives while ensuring that higher levels remain informed by developments on the ground.

The army's role assumes particular significance in remote and border regions, particularly Jammu and Kashmir and parts of the Northeast, where its operational presence, engagement with local communities, and assistance during crises often shape perceptions and affect public trust. The army's contribution should therefore be viewed not solely through the lens of military activity but as part of a broader whole-of-nation effort aimed at shaping a favourable cognitive environment.

- **Integration and Tim**

Cognitive operations are enhanced when activities conducted across different levels and by multiple agencies are mutually reinforcing and coordinated towards common objectives. Strategic guidance, operational planning, and tactical execution must remain aligned if cognitive efforts are to generate coherent and sustained effects. This requires both vertical integration across levels and horizontal coordination among the various organisations involved in execution.

An equally important consideration is timing. Cognitive operations rarely produce immediate results and often unfold across distinct phases. Prior to a major event, efforts may focus on shaping the cognitive environment and reinforcing narratives. During the event itself, rapid interpretation, framing, and dissemination become critical. In the post-event phase, sustained engagement may be necessary to reinforce desired perceptions and counter competing narratives.

The interaction between integration and timing is particularly important. Well-coordinated efforts executed at the wrong time may fail to achieve the desired effect, while timely actions that lack coherence may generate only limited or short-lived outcomes. Contemporary conflicts provide numerous examples where the rapid dissemination of images, videos, or eyewitness accounts in the immediate aftermath of an event has shaped global perceptions before official narratives could be established. For instance, the early release and widespread circulation of body-camera footage and visual content during the Hamas-Israel conflict significantly influenced international discourse and public opinion, demonstrating how speed of dissemination can amplify cognitive effects and shape competing narratives. Effective execution therefore requires both alignment across levels and an appreciation of the temporal dynamics of the cognitive environment.

- **Risks of Fragmentation and the Need for Coordination**

  The absence of a coherent execution framework can significantly reduce the effectiveness of cognitive operations. When different organisations pursue separate objectives or communicate inconsistent messages, cognitive effects become fragmented and may even prove counterproductive. Narrative inconsistencies and delays in response can weaken credibility and reduce the overall impact of cognitive campaigns.

  These risks are particularly relevant in complex information environments where multiple actors engage the same audiences simultaneously. In such circumstances, coherence becomes as important as capability. Individual organisations may perform effectively within their respective domains yet still fail to generate meaningful outcomes if their efforts are not aligned towards common objectives.

  The purpose of the multi-level execution framework is, therefore, not to centralise all cognitive activity but to provide a mechanism through which diverse capabilities and organisations can operate in a coordinated manner. By linking strategic direction, operational planning, and tactical execution, the framework helps translate cognitive efforts into sustained behavioural and decision-level effects.

  Taken together, the execution framework provides the organisational foundation through which the Cognitive Decision Dominance Framework can be applied in practice. It ensures that cognitive efforts remain coordinated across levels and aligned with broader national objectives.

Risks, Constraints and Ethical Considerations

The growing importance of cognitive warfare reflects its potential to shape perceptions, behaviour, and decisions without relying on kinetic force. Yet the very characteristics that make cognitive operations attractive also make them difficult to control. Unlike conventional military actions, whose effects are often more visible and measurable, cognitive interventions operate within complex human and informational environments where outcomes can be unpredictable and difficult to contain. The pursuit of decision dominance must therefore be balanced with a clear understanding of its limitations and potential unintended consequences.

- **Strategic Risks**

  At the strategic level, one of the principal risks is escalation.[24] Efforts intended to influence perceptions or decisions may provoke responses that extend beyond the cognitive domain, resulting in wider political or security consequences. Closely related is the risk of blowback.[25] In an interconnected information environment, narratives directed at external audiences may re-enter the originator's own information space and generate unintended domestic effects.

  Another concern is the erosion of credibility. Cognitive efforts that are perceived as manipulative or externally orchestrated can weaken trust in both the message and the institution communicating it. Since credibility is difficult to rebuild once lost, it must be treated as a strategic asset rather than a disposable resource.

- **Operational Constraints**

  Cognitive operations also face significant operational challenges. Establishing a clear relationship between actions and outcomes is rarely straightforward. Changes in perception, behaviour, or decision-making are influenced by multiple factors, making it difficult to determine the precise impact of any single activity. This increases the risk of overestimating success or drawing incorrect conclusions from available evidence.

  The nature of the target cognitive environment further complicates assessment. In open and highly connected environments, information may spread rapidly in unintended ways, increasing the likelihood of amplification and blowback. In more controlled environments, limited visibility can make it difficult to assess actual influence or accurately interpret the behaviour of decision-makers. These differences reinforce the need for context-sensitive application rather than a uniform approach.

  Effective coordination presents another challenge. Cognitive operations often involve multiple organisations working simultaneously across different domains. Poor coordination can result in inconsistent messaging and reduce the overall impact of cognitive efforts.

- **Democratic and Ethical Considerations**

  For democratic states such as India, cognitive operations must function within established legal and constitutional frameworks. Principles such as freedom of expression, institutional accountability, and the rule of law place legitimate limits on the methods that may be employed. While these constraints may restrict certain approaches, they also contribute to the legitimacy and long-term sustainability of cognitive engagement.

  Ethical considerations are equally important. The boundary between influence and manipulation is often difficult to define.[26] While influencing perceptions has always been a part of statecraft, deliberate attempts to exploit societal divisions or distort public understanding can undermine the very institutions and values that cognitive efforts are intended to protect. The long-term effects on social cohesion and public trust therefore warrant careful consideration.

- **Responsible Application**

  These risks do not diminish the relevance of cognitive warfare, but they highlight the need for a measured and responsible approach. Clear policy direction, continuous assessment, and appropriate oversight are necessary to ensure that cognitive efforts remain aligned with broader national interests.
  Cognitive warfare should therefore be viewed not as an unconstrained instrument of influence, but as a carefully governed domain of statecraft. Its effectiveness ultimately depends not only on the ability to shape perceptions and decisions, but also on the discipline with which such capabilities are applied.

Policy Implications for India

The framework developed in this paper highlights several areas that deserve attention in the Indian context. The preceding sections have outlined a framework for achieving decision dominance through cognitive operations, the capabilities required to support it, and the risks associated with its application. If cognitive warfare is to be pursued as a national endeavour, the challenge lies not in developing isolated capabilities but in ensuring that they function in a coordinated and adaptive manner. The following considerations identify areas that merit particular attention in the Indian context.

- **Institutional Coherence**

  The effectiveness of cognitive operations depends largely on coherence of effort. India already possesses a range of organisations that engage domestic and international audiences. The challenge is not the absence of capability, but the need to ensure that these efforts support common objectives and reinforce one another. This requires clear coordination mechanisms, shared situational awareness, and a common understanding of desired outcomes. Without such coherence, individual initiatives may remain effective in isolation but fail to generate meaningful cumulative effects.

- **Capability Development**

  Achieving decision dominance requires continued investment in key capability areas. Attention should be given to cognitive terrain intelligence, data analytics, behavioural research, and narrative development. These capabilities form the foundation for understanding audiences, identifying opportunities, and shaping responses. Technology alone, however, will not be sufficient. Success will depend equally on the availability of skilled personnel with expertise in behavioural sciences, strategic communication, regional studies, and data analysis. Developing such human capital should remain a long-term priority.

- **Whole-of-Nation Participation**

  Cognitive operations extend beyond government institutions. Academia, media, the private sector and civil society all influence perceptions and public discourse in different ways. Their participation can significantly enhance reach, credibility, and contextual understanding. Diaspora communities represent an additional source of influence. Operating across multiple information environments, they often shape narratives, provide local context, and reinforce perceptions among diverse audiences. Their contribution can be valuable, provided engagement remains measured and preserves credibility.

- **Environment-Specific Application**

  No single approach is suitable for all cognitive environments. The methods that prove effective in open and highly connected societies may produce limited results in more controlled settings. Policy approaches must therefore remain sensitive to

local conditions, audience characteristics, and the degree of accessibility within the target environment.

In highly permeable environments, emphasis may be placed on sustained engagement and narrative reinforcement. In more restricted environments, indirect approaches that shape perceptions around decision-makers may prove more relevant. Recognising these differences will improve both efficiency and effectiveness.

- **Continuous Learning and Adaptation**

  The cognitive domain is dynamic. Narratives evolve, audiences adapt, and information environments change rapidly. Policies and campaigns must therefore remain responsive rather than static. Assessment mechanisms should be integrated into planning and execution from the outset. Lessons derived from successes and failures must feed back into future activities. Over time, this will help build institutional learning and improve the effectiveness of cognitive engagement. Taken together, these considerations highlight the importance of coherence, capability development, adaptability, and broad-based participation. If pursued consistently, they can strengthen India's ability to operate effectively in the cognitive domain while remaining aligned with its democratic values and long-term national interests.

Illustrative Application

The preceding sections have outlined the conceptual foundations, capabilities, and execution mechanisms associated with cognitive decision dominance. The purpose of this section is to illustrate how the framework may operate across different cognitive environments. The examples that follow are therefore analytical in nature and are intended to demonstrate the logic of application rather than operational practice.

- **Application in Highly Permeable Environments**

  In highly permeable environments, information circulates freely, public discourse is visible, and behavioural responses can often be observed in near real time. Under such conditions, cognitive effects are more likely to emerge through broad societal interaction. Existing perceptions, public grievances and competing

narratives shape how events are interpreted and discussed. When significant events occur, they are rapidly absorbed into ongoing public discourse. The speed with which narratives spread can influence perceptions, shape behavioural responses, and generate pressure on institutions. Over time, sustained behavioural effects may influence the wider decision environment by creating uncertainty, increasing public scrutiny, or altering the context within which decisions are made.

- **Application in Semi-Permeable Environments**

  Semi-permeable environments combine characteristics of both open and controlled systems. Information flows are possible, but access may be uneven and certain narratives may face restrictions. In such environments, cognitive effects are often generated through selective engagement with specific audiences, networks, or institutions rather than through society-wide mobilisation. The effectiveness of cognitive activity in these environments depends largely on identifying accessible pathways through which perceptions and behaviour can be influenced. Effects may emerge gradually and may not always be immediately visible. As a result, continuous assessment assumes particular importance.

- **Application in Controlled Environments**

  In controlled environments, direct influence over public perceptions is often limited. Information flows may be restricted, public discourse may not be easily observable, and behavioural responses may be difficult to assess. Under such conditions, cognitive effects are less likely to emerge through mass mobilisation and more likely to develop indirectly.

  Influence may occur through the broader decision environment, including external perceptions, strategic signalling, and other informational pressures that affect how decision-makers interpret their circumstances. Although the pathways differ, the objective remains the same: shaping the conditions within which decisions are made.

  Across all three environments, assessment and adaptation remain essential. Cognitive effects rarely emerge in a linear manner. They accumulate over time, interact with existing conditions, and evolve as circumstances change. Continuous

monitoring and adjustment therefore remain central to the effective application of the framework. This illustrative application highlights a central argument of the paper: cognitive effects are shaped not only by the content of narratives but also by the nature of the environment in which they operate. Understanding that relationship is critical to influencing decision outcomes in a consistent and sustainable manner.

Conclusion

The character of contemporary conflict is increasingly being shaped within the cognitive domain. While narratives remain important, their significance lies not in visibility or reach alone, but in their ability to influence behaviour and ultimately affect decision-making. Cognitive warfare must therefore be understood not as a contest for attention, but as a contest for decision advantage.

This paper has argued for a shift from narrative dominance to decision dominance. By linking perception, behaviour, and decision-making within a common framework, it has sought to provide a more structured understanding of how cognitive effects translate into strategic outcomes. It has further highlighted that cognitive environments differ significantly in their accessibility and characteristics, requiring approaches that are calibrated to context rather than applied uniformly.

The paper has also emphasised that achieving decision dominance requires more than persuasive narratives. It depends upon coherent capabilities, effective coordination and the ability to adapt to changing conditions. Equally important is the recognition that cognitive warfare operates within legal, ethical, and political constraints that cannot be ignored, particularly in democratic societies such as India.

For India, the challenge is not simply to compete within the information space, but to develop the institutional capacity, strategic clarity, and whole-of-nation coordination necessary to operate effectively in the cognitive domain. The ability to shape decision conditions—whether by creating uncertainty, inducing delay, or constraining options—may increasingly influence strategic outcomes in future conflicts.

Ultimately, cognitive warfare should be viewed not as a substitute for traditional instruments of power but as an increasingly important component of modern statecraft. In an era where perceptions shape behaviour and behaviour shapes decisions, the ability

to influence decision-making may prove as consequential as the ability to influence events themselves.

DISCLAIMER

The paper is the author's individual scholastic articulation and does not necessarily reflect the views of CENJOWS, the Defence forces, or the Government of India. The author certifies that the article is original in content, unpublished, and it has not been submitted for publication/ web upload elsewhere and that the facts and figures quoted are duly referenced, as needed and are believed to be correct.

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