Business Wargaming

Idea In Short

Use wargaming when the future genuinely depends on how competitors react, not just on how markets evolve on their own. Reserve it for moderate uncertainty, where two or three plausible outcomes exist along each dimension, since games offer little guidance when uncertainty is unbounded. Treat the debrief as the real deliverable: a wargame without a rigorous, documented follow-through is close to worthless.

Why static planning isn't enough

Change is the one constant of any business environment, and no sound business decision can ignore both the world as it is and the world as it could become. Scenario planning is a reasonable starting point: it helps organizations weigh alternatives, assign probabilities to likely outcomes, and build a coherent strategy along with contingency plans. But scenario planning has a structural weakness. It is shaped entirely by the imagination of the people who build it, and therefore limited by whatever they happen to think of. Nobel laureate Thomas Schelling captured the problem precisely: there is nothing harder than compiling a complete list of everything you haven't thought of.

Business wargaming exists to push past that limit. It is built to answer questions that resist a purely analytical approach: what should a firm do as its industry consolidates and rivals move quickly with no obvious partners left, the way airlines did in the 1990s; whether an industry's business model is shifting in a way that threatens control of the market, as the automotive industry has faced with electric vehicles; whether a product is becoming so commoditized that profitability itself is in question, as happened with telecommunications services sliding into price wars; or simply how resilient a business really is, and where its next threat is likely to come from. By simulating competitive scenarios, testing strategies and analyzing likely outcomes, wargaming lets firms work through exactly these uncertain questions in an environment with no real-world risk attached.

From the battlefield to the boardroom

Business wargaming descends directly from military wargaming, a discipline used to prepare military leaders for the unexpected since ancient Greece. In 1811, the Prussians introduced a three-dimensional game board to make their exercises more realistic. The U.S. Naval War College adopted wargaming in 1887, and by the 1930s, Admiral Chester Nimitz had effectively played out nearly every major Pacific battle of the Second World War in advance, missing only the emergence of kamikaze tactics.

After the war, military research shifted toward operations research and systems analysis, and traditional wargaming lost ground with only a few exceptions. Even as its military use declined, academic strategists and political scientists picked up the technique and applied it to political behavior, producing the political-military games that emerged in the United States, following work Germany and Japan had already pioneered in the 1930s. From there, wargaming moved into the business world, largely because so many elements of a classical military wargame translated directly into a competitive business setting. A 1958 Harvard Business Review article documented the first known business application of the method.1

Business wargaming was originally used mostly for education and training. By the mid-1980s, its focus shifted toward competitive intelligence, analyzing rivals' likely actions, and it later expanded further into full strategy formulation. Booz Allen Hamilton was the first firm to build a dedicated, full-scale wargaming team, staffed with former Navy and military experts who systematically mapped out its possible business applications, and the firm has since run hundreds of simulations for corporations, governments and non-profits worldwide. Today, business wargaming is a standard tool for pressure-testing strategy, probing market opportunities, exposing internal weaknesses, training strategists, encouraging communication across departments, and challenging assumptions that have gone unquestioned for too long.

The four teams that make up a wargame

Every business wargame, at its core, is built from four teams: the company team, one or more competitor teams, the market team and the control team.

The company team represents the organization running the wargame and typically begins by executing its actual, current strategic plan, though it can also test a deliberately

hypothetical strategy if the firm wants to explore an alternative path. This team, made up of senior managers from within the company, has the same freedom it would have in the real world: it can form or dissolve alliances, pursue mergers and acquisitions, or take any other action within the bounds of reality and its own resources. Beyond executing its strategy, the company team also has to read and adjust to whatever the competitor and market teams do in response.

Competitor teams are staffed the same way, with senior managers from the client company, but those managers are forced to step into the shoes of a specific rival and view the business from that rival's perspective. To help with that shift, each team receives a gamebook containing the essential facts about the company it is playing, along with information about the other teams in the game. Combined with their own inside knowledge of the client company's weaknesses, these teams become genuinely tough opposition. Only the most significant rivals get their own dedicated competitor team; smaller competitors are folded into a combined group or absorbed into the control team. Competitor teams can act preemptively or reactively, launch new offerings, and form or break alliances just as the company team can.

The market team plays the role of the market itself, judging how attractive each team's offerings are relative to one another. It typically draws on market experts from inside the client organization, external experts, or some mix of the two, and often operates as a kind of focus group, blending research, experience and intuition to award market share. Its decisions rest on hard data submitted by the competitor teams at set points in the simulation, but the market team also weighs softer factors, such as how well a team communicates its message and how distinct its value proposition feels compared to the rest of the field. In short, the market team reacts to competitive moves, drives the resulting market dynamics, and renders judgment on which offerings actually win.

The control team runs the entire exercise, made up of wargaming experts, industry specialists, and often the client's own CEO or senior executives. It keeps the simulation on schedule, enforces the rules, and manages presentations and feedback at the right level of detail, while also calculating the quantitative outcomes based on what the market team decides. It reports results back to the company and competitor teams, typically in the form of key income-statement or cash-flow figures, and it can introduce deliberate shocks, such as announcing a product recall or a safety concern, to force teams to confront specific issues head-on. The control team also plays every stakeholder not otherwise represented in

the game, such as regulators, interest groups or a target company's board of directors when a proposed acquisition needs a decision.

How a wargame actually runs

A business wargame simulates a defined stretch of real time, typically unfolding over three moves, with the first move always grounded in the present and today's available data. Each move can represent anywhere from a few months to several decades, depending on the design.

Every move functions as a full decision cycle. Competing teams review their strategy and take their first actions, whether that means launching a new product, forming an alliance, investing in new capacity or markets, or running a communication campaign aimed at customers or other stakeholders. These decisions get documented on standardized templates and handed to the market and control teams as hard data to work from, and teams can also present their offerings directly to the market team and to everyone else participating, mirroring the way real markets give all players roughly equal information at key decision points.

The market team then plays the role of the customer, weighing the relative appeal of each offering, giving feedback and awarding market share. The control team folds that soft data together with hard data, such as pricing and investment figures, to calculate overall market size, segment sizes, segment shares and profit margins. Because time and resources are limited, this feedback usually covers only the key figures that matter most, such as profit and loss statements, capital expense calculations or a handful of core performance indicators. Whatever a team decides becomes the starting point for its next move; a competitor that wins market share by cutting prices aggressively, for instance, gains share but sacrifices profitability, leaving it with less capital to work with in the round that follows.

A single move can take a full day to play out. The morning typically has company and competitor teams analyzing available data, shaping their offerings, negotiating deals, filling out templates and preparing for a plenary presentation around midday. The afternoon and evening then belong to the market and control teams, who calculate market shares and quantitative outcomes while the company and competitor teams start preparing their next move, adjusting further once the results come in. Detailed profit-and-loss statements and other results get calculated overnight, forming the starting point for the next day's session.

Throughout execution, teams must stay separated and avoid exchanging information directly; any communication involving competitors, alliance partners or acquisition targets has to go through email or another agreed channel. The control team can also impose extra constraints on a deal, such as antitrust restrictions, or require a team to divest part of a business as a condition of an acquisition. Once all moves are complete, participants gather for an initial plenary assessment of what worked and what didn't, followed roughly a week later by a deeper analysis from the wargaming experts, who dig into the simulation's data and communications and deliver a consolidated report with recommended adjustments to the original strategy.

Designing and running a wargame

Business wargames generally follow a four-step process: design, preparation, execution, and debriefing and documentation, and the whole cycle typically takes eight to twelve weeks from first preparation to final report.

The design phase is where the game's objectives get set and the critical questions distilled. Ideally, a CEO, board member, division head or business unit leader commissions the game directly. Leadership needs to work through a specific set of questions at this stage: what the company wants to learn, what the wargame needs to answer, which unresolved issues in the organization are most relevant, who should participate in designing and playing the game, what the game's focus should be, which products, stakeholders, competitors, segments and markets matter most to the questions at hand, and what time horizon the game should cover. Reaching real consensus on these questions is essential to the game's eventual success.

Preparation involves gathering detailed information on major competitors, the relevant markets, customers, current and pending regulation, and technology trends, then distilling all of it into gamebooks and into the market and control models that will provide objective measures during play. Gamebooks carry the essential facts about the client company and its competitors, an overview of the market, and the most important industry trends and regulatory context. Market models incorporate key inputs such as customer segments and financial data, though they remain only a support tool: the experts on the market and control teams still need to scrutinize the results directly and adjust them where necessary to emphasize specific developments. Once the basic model exists, teams typically run a small pilot game to test its sensitivities and catch any bugs before the real exercise begins.

Regardless of team assignment, every participant needs a proper briefing, whether at the tail end of preparation or the start of execution, to establish shared context.

Execution is the phase most people think of as the wargame itself, generally spanning the three moves already described, and it depends entirely on participants committing to their assigned roles and sticking to the schedule and agreed deliverables.

Debriefing and documentation, occurring roughly a week after the game concludes, is arguably the most important phase of all. Wargaming experts compile the core findings from coaches' observations, participant input, the hard data generated by the models, and a review of the communication traffic recorded throughout the game. This produces a list of key observations, lessons learned and organizational consequences, followed by a set of concrete recommendations built through deductive analysis. How deep and how focused this debrief gets depends on the game's original objective: a strategy-testing game follows the path just described, a crisis-prevention game produces an action or contingency plan, and an educational game tends to focus more on group dynamics, such as where participants made a leap in reasoning or where mistakes crept in.

What makes a wargame succeed

A handful of factors consistently separate wargames that deliver real value from those that don't. Every game needs to be tailor-made for the client, reflecting that organization's specific objectives, issues and questions rather than a generic template. Preparation needs to be genuinely thorough, starting with in-depth interviews with the key players before the game even begins, followed by careful work on the gamebook and underlying models once buy-in is secured. The game needs solid quantitative data behind it, or, failing that, a clear enough framework to reverse-engineer why particular outcomes occurred. Models need to stay pragmatic: comprehensive enough to matter, but focused tightly on the key questions rather than attempting to model everything happening in the market at once. The exercise itself should be intensive and well-structured, tightly scheduled with clear deliverables and run by a professional team, so participants can fully immerse themselves and effectively live through a plausible future. It needs to feel close to reality, since the more participants genuinely identify with their assigned roles, the more they learn, which puts real responsibility on facilitators to keep everyone motivated, well-prepared and within the bounds of realism. And finally, every wargame needs real follow-through: a proper debrief covering action plans and lessons learned, without which the entire exercise has little

practical value.

Where wargaming works best

Wargaming tends to deliver the most value in a specific set of conditions. It works well when an industry has genuine competitive dynamics, where each player's actions provoke reactions from the others; if Company A launches a product that challenges Company B, B might cut prices, a third competitor might exit the field entirely, and A might respond to the price cut by improving service instead. It also works well when market reactions are partly or wholly unpredictable, driven by rapid change, new technology or shifting demand that no deterministic model could forecast, since customers in a scenario like the one above have to react not just to the initial product launch but to the price cut, the service improvement and the departure of a competitor, all layered on top of each other. It is most useful when a problem needs to be examined dynamically over a real stretch of time, since today's assumptions about customer behavior become largely irrelevant once a new product enters the market, prices shift and a competitor exits, and companies care about sustaining profit over the long run, not just winning the immediate round. Finally, it suits problems with too many unknowns for a straightforward quantitative solution, where trying to model the interacting reactions of multiple competitors, the market and regulators all at once becomes practically impossible.

In situations like these, conventional analysis-heavy strategic planning tends to fail, since it can only interpret the past and extrapolate a future that assumes relatively little change, an assumption that is self-defeating precisely because the past rarely repeats itself. Scenario planning, which also leans on historical analysis to sketch future outcomes, can be similarly deceptive here: a scenario is ultimately a best guess about the future, shaped by informed judgment, and it is easy to mistake that guess for reality, especially since nothing in the method predicts when a genuine discontinuity might occur or how disruptive it could be.

Four questions to ask before running a wargame

Many organizations get less out of wargaming than they should, often because they misjudge when it's appropriate, leave out the right participants, lean on generic off-the-shelf game software, or apply methods built for strategic questions to purely operational ones. McKinsey and Company have proposed four questions that meaningfully raise the odds a wargaming exercise will actually improve real-world decisions.

The first is whether a wargame can help with the problem at hand at all. Wargames work best under moderate uncertainty, roughly the middle two levels of a four-level uncertainty framework, where two or three plausible outcomes exist along each relevant dimension. When uncertainty is essentially unbounded, such as trying to anticipate the long-run impact of an emerging technology like robotic nanotechnology, game designers simply don't have enough structure to offer useful guidance, though wargaming can still help map the range of possibilities worth considering when no amount of conventional analysis will produce a clean answer.

The second is what kind of game to play. Wargames deliver the most value when a company and its rivals face a limited number of discrete choices worth testing directly, such as whether to raise prices by 5 percent and how a leading competitor might respond either way; a firm in that position might run two separate games, one with the price increase and one without, or test a hybrid where the increase is paired with higher marketing spend. Purely tactical games like this don't suit every situation, though: a defense contractor trying to grow share against a shrinking government budget needs a different, more strategic approach built around levers like pricing, contracting, operational improvements and partnerships, aimed not at a tactical playbook but at broader guidance on industry direction, the most promising types of moves, and where the company's real strengths and weaknesses lie.

The third is who should design and play the game. That depends on whether the underlying goal is tactical, strategic, or focused on building organizational alignment. Tactical games, with clearly defined moves and evaluation criteria, are relatively simple to run and rely on a small group of experienced decision-makers as the key input. Strategic games need much broader participation, precisely to avoid being skewed by the assumptions of just a few people. Games aimed at organizational alignment benefit from including leaders across every function, along with frontline employees, since a genuinely diverse group of participants broadens everyone's understanding of the industry and creates shared experiences that a smaller, more homogeneous group simply couldn't produce, sparking discussion across the company as conditions evolve.

The fourth is how often a wargame should be run. Most wargames are one-off exercises, since replaying the same uncertainties with the same participants rarely adds much. Repetition earns its keep in a few specific situations: when the goal is organizational alignment and a broader group of employees, who never took part in the original game,

needs the same kind of shared, learn-by-doing experience; when conditions have genuinely changed, such as a significant shift in competitors or technology that makes rerunning a strategic game worthwhile; or with tactical games, such as pricing negotiations, which can be rerun every few months with the same players and small adjustments to reflect evolving market conditions, helping a sales team continually sharpen its pitch. Certain high-stakes negotiations, where a firm has very little room to maneuver, may also call for repeated play simply to find the best possible strategy.

Wargaming and strategy formulation

An organization's strategy ultimately has to answer three questions: what objective or vision it wants to reach, what it needs to do to get there, and what obstacles might stand in the way and how to deal with them. Business wargaming is primarily built to address that third question, surfacing obstacles that come not only from within the company but from competitors and the wider environment, including legislation, stakeholder groups and emerging technology.

Most organizations move through these three questions in a straight line, working from data and analysis toward what they treat as the single best answer and, by extension, the plan to pursue. That approach works well for understanding past trends and extrapolating them forward, but it is far from foolproof. Some organizations try to compensate by layering in scenario planning, using it to surface key trends and uncertainties and combine them into pictures of possible futures that map the boundaries of what might happen. That does improve decision-making, generating alternatives, assigning rough probabilities and supporting more cohesive contingency plans, but it inherits the same core limitation: it is still shaped by the imagination and biases of whoever built it, often reducing likely outcomes to simple, linear extensions of the past, when the real world is genuinely complex and multidimensional.

This is exactly where business wargaming earns its keep, testing a strategic plan's robustness under conditions that come far closer to real life, improving both the quality and the reliability of the final plan. It also actively involves participants, builds organizational learning, and challenges the mental models people bring into the exercise. Taken together, using wargaming in strategy formulation actively engages every participant, helps anticipate future developments through simulation, incorporates multiple perspectives at once, offers several distinct ways of learning, produces real team-building effects, and delivers a

genuinely dynamic simulation rather than a static forecast.

Beyond strategy: other uses of business wargaming

Crisis management is one of the clearest additional applications. Crises are now a routine, structural feature of business life rather than a rare aberration, and organizations face a real catch: they can't fully know what they'll need to do during a crisis until they understand what they need to have in place beforehand, and they can't know what to prepare beforehand until they understand what a crisis will actually demand of them. Wargaming breaks this cycle by letting participants directly experience how prepared their organization really is. Since a crisis typically emerges when the connections between organizations, people and technology break down, wargaming's real value here lies in understanding those complex systems, spotting critical failure points, and identifying what else might trigger or worsen a crisis once it starts. It also allows organizations to test not just the scenarios they expect but ones nobody has thought of yet, which is really the whole point of preparing for a crisis: getting ready for the unexpected, not just the predictable.

Developing foresight is another major use. An organization's success often comes down to reaching a desired future before competitors get there first, and foresight means catching developments before they harden into trends, recognizing patterns before they fully surface, and grasping the significance of broader social currents early. In short, foresight means picking up on weak signals of change, imagining plausible alternative futures, and predicting how one's own organization is likely to evolve within them. As a tool, wargaming helps build exactly this kind of foresight, especially when a game is deliberately designed to project several years out, since it forces participants to think ahead, critically reexamine their assumptions and question their own mental models both analytically and collaboratively. Cognitive blind spots and defensive reasoning tend to surface far more readily in a participative exercise like this than they would in a purely analytical planning session.

Change management is a further application. Wargaming works well here precisely because it brings a group of people together to work jointly on a shared challenge, and the insights and mutual understanding that emerge from that process are themselves what kick off real organizational change. Resistance to any change effort is essentially inevitable, rooted in fear and a survival instinct that operates at several levels to protect a social system from the distress and disruption that change tends to bring. Running a wargame ahead of a formal

change program lets participants test how that change is likely to unfold and which obstacles are most likely to surface, giving them a chance to anticipate those obstacles and confront their own fears before the real process begins.

Education and recruiting round out the major applications. Wargames help orient and train new employees by giving them real decision-making experience inside the company before the stakes are real. They offer a genuine opportunity to screen current or prospective managers, testing analytical and decision-making skill directly during a hiring process. And they support ongoing management development, letting executives sharpen their decision-making, experiment with different strategies, practice analytical tools, and gain real insight into their organization, competitors and other stakeholders along the way. Done well, business wargames give both participants and their organizations something genuinely rare: a shared, lived experience of a plausible future, well before that future actually arrives.

- 1Business Wargaming, Daniel F. Oriesek And Jan Oliver Schwarz

Summary

Business wargaming tests a strategy against opponents who adapt, not against a static forecast. That difference is exactly what scenario planning alone cannot offer, and it is why wargaming keeps earning a place in serious strategy work.