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STRATEGY PRACTICE

Playing war games to win

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They can be a powerful business tool—but only if you get the design right.

As the global downturn kicked in, a high-tech company's senior executives decided to run a war game to prepare themselves for the uncertainties of the post-crisis landscape. After two days of simulations—when teams representing competitors and stakeholders role-played against a "company" team—the executives understood that a strong competitor on the sidelines was likely to enter the market aggressively. The executives also realized that the low end of the product range would face more price pressure than they had been anticipating. Moreover, while there would probably be industry mergers and acquisitions, as the company had expected, the deals were unlikely to kick off a wave of M&A or to have a material impact on the company's share of any market.

These insights made a difference. When actual deal making began and the player on the sidelines announced its intention to become a market leader, the high-tech company didn't leap into the M&A fray or otherwise lose focus. Instead, it concentrated on protecting its core business, minimizing low-end losses, and investing in a major growth opportunity that required new technology and a long incubation period—and has since proved valuable.

For a variety of reasons, many companies don’t learn as much from war games. Some misjudge when they are appropriate. Others foul up the game’s design by not including the right participants. Still others take a cookie-cutter approach and rely on standardized game design software or apply to operational problems the same approach they previously used for strategic or organizational ones.

To avoid these pitfalls—and the wasted time, money, and poor strategic decisions that go with them—CEOs and other senior executives should ask tough questions when contemplating war games or answering proposals to use them. Four questions, drawn from our experience with more than 100 war games at scores of companies around the world, can greatly increase the chances that your managers will use war gaming to make better decisions in the real world.

Can a war game help with our problem?

The sweet spot for games is some moderate level of uncertainty.[1] If the uncertainty is too great—say, the impact of robotic nanotechnology on manufacturing industries—game planners can’t offer enough guidance for the players to make reasoned decisions. More suitable is an industry environment where, say, two or three outcomes seem plausible along each of several dimensions. When no amount of analysis will provide the right answer, the results of gaming can shed valuable light on the range of possibilities that executives should be considering.

In addition, there must be some meaningful competitive dynamics between the company and various stakeholders—a game to be played, in other words—and a clear way of representing the most relevant players. Often this presents little challenge: the high-tech company, for example, ran its game against current and potential competitors and included consumer teams in some rounds. But it can be tricky to portray certain stakeholders, such as the US Congress, which one aerospace and defense contractor realized it had to include for its game to yield valuable insights.

Consider other approaches if the level of uncertainty, competitive dynamics, or stakeholder realities seem problematic. Scenario planning can help with decision making if there is too much uncertainty. Cost curves, profit pool analyses, or other standard frameworks are effective when complex competitive dynamics are absent.[2]

A final word of caution: be wary of the argument that war games are primarily about generating new ideas. Companies following this approach often find participants taking an “I’m going to prove how clever I am” posture, leading to unrealistic, impractical ideas. We suggest conducting idea generation workshops instead (for more, see

"Seven steps to better brainstorming," on mckinseyquarterly.com).

What kind of game should we play?

Let's say a consumer goods company is considering a narrow problem—raise prices 5 percent or keep them constant—and wants to know how its biggest competitor might respond. Given the tactical objective, the consumer goods maker might run two separate games: one in which it raised prices and one in which it didn't. Alternatively, the company could run a game in which it raised prices by 5 percent but made other adjustments, sometimes boosting marketing expenditures and sometimes offering retailers concessions. It could then compare the result with the outcome of the game in which it didn't change prices. The key is running the gamut of potential choices to make sure each is tested. Such games are most valuable when a company has very few but discrete choices to test, as well as a similarly small set of possible responses by competitors.

Tactical games aren't always practical, though. The aerospace and defense company mentioned above originally considered running a tactical game to better understand shifts in the US defense budget and their impact on the business. But the benefit of testing a very large number of scenarios for individual weapon systems—scenarios involving, for example, levels of funding, moves by competitors, and outcomes of technology investments—would not have justified the executive time spent on the exercise.

Instead, the company designed a game to answer the more strategic question: how can we win market share given the budget pressures on the Department of Defense and the moves of competitors? The game tested levers such as pricing, contracting, operational improvements, and partnerships. The outcome wasn't a tactical playbook—a list of things to execute and monitor—but rather strategic guidance on the industry's direction, the most promising types of moves, the company's competitive strengths and weaknesses, and where to focus further analysis.

Who will design and play the game?

You have big personnel choices to make or approve—who designs the game and who plays. In both cases, deciding exactly how wide to cast the net depends on whether the game's objective is primarily tactical or strategic or the creation of organizational alignment.

Tactical games, with their detailed moves and evaluation criteria, are relatively straightforward: leaders with deep expertise about and responsibility for implementing the decisions are critical sources of input. The design of a strategic war game requires much broader interaction. To ensure that the defense contractor's game wasn't unduly influenced by the hypotheses of its designers, for example, they asked all 40 executives who would play it which trends, scenarios, and decisions should be tested.

The selection of players is also critical. A tactical exercise, such as a pricing game, can have a relatively small set of participants. You should cast a wider net in a strategic game and a much wider one in an organizational game in which the objective is to get people on board for a strategic move.

In a game in which the goal is organizational alignment around a strategic decision, for example, you should include leaders of all functions that will be involved in its execution. Often, it's also worth including frontline managers, product designers, and account reps, since they can raise different viewpoints during the game and disseminate the lessons to colleagues afterward.

A more diverse set of participants also creates valuable opportunities to broaden their understanding of the industry—for instance, by assigning them to stakeholder teams with roles that are less familiar to them. In the debriefing session after the high-tech company's game, the leader of a business unit, who had paired up with a salesperson on a customer team, remarked, "Having played the customer, I now understand what the sales force means when they say we get push-back on price. I am going to make sure we give you the support you need to make the value-based argument to the customers." This shared experience, which would have been impossible with a smaller or more homogenous group of participants, has continued to stimulate discussions across the company as market conditions evolve.

How often should we play?

The one-off games described so far are the most common type; it's usually pointless to run a game repeatedly to test the same uncertainties with the same participants. It's often beneficial, however, to repeat a game for the sake of organizational alignment when you want to bring along people who didn't experience the first game—usually, the wider group of employees who will implement the decision. Most people learn better by doing, and when they have shared experiences, they are more likely to embrace change.

Repeating games also can be useful when conditions are changing. If competitors or technologies have evolved, for example, it may be time to rerun a strategic game. Tactical games like those for pricing negotiations may bear repeating as frequently as every three or four months, with the same set of players and slight modifications to reflect changes in the market. That helps salespeople refine their pitches as customer needs, competitive offerings, regulations, and other factors shift.

You may, however, want to run the same set of players through a game repeatedly and rapidly to practice for a critical upcoming test. The negotiation team of a health insurer, for example, was entering into a renegotiation with its key provider partner and felt it had little room to maneuver. To explore its options, the team played a war game in which it chose a negotiating approach, negotiated with the provider team, huddled up to reformulate its strategy and tactics, and then reentered negotiations—all in several quick rounds.

The participants replayed the game several times in one day (starting again with new tactics when they got bogged down), reflected on the results, and repeated the exercise the following week. The improvement between the first and the last sessions was enormous: the players uncovered areas where they could stand firm and learned how to craft their message more adroitly to regain control of the situation. They also became more confident and ready to flex their muscles in real negotiations with the provider.

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Well-designed war games, though not a panacea, can be powerful learning experiences that allow managers to make better decisions. By asking a few tough questions, executives can help their organizations be smarter about when and how to play. o

[1] See the descriptions of Level 2 and Level 3 uncertainty in Hugh G. Courtney, Jane Kirkland, and S. Patrick Viguerie, "Strategy under uncertainty," mckinseyquarterly.com, June 2000.

[2] Kevin P. Coyne and John Horn, "Predicting your competitor's reaction," *Harvard Business Review*, April 2009, Volume 87, Number 4, pp. 90–97.

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