Learning Faster Than The Competition: War Games Give The Advantage

Mark Chussil

Founder and CEO

Advanced Competitive Strategies, Inc.

The Journal of Business Strategy, January/February 2007

Advanced Competitive Strategies

Whatifyourstrategy.com

Learning Faster Than The Competition: War Games Give The Advantage

Mark Chussil

Anyone who has flown on commercial airlines knows about their maze of complicated prices and intricate rules. A well-known international airline, sympathetic to the plight of the flying public, developed a much simpler fare structure for their flights to and from North America. They calculated that the new system would be revenue-neutral because average fares under the new system would roughly match average fares under the old system. They calculated also that the new system would save money by simplifying their internal operations.

Managers know how to use market research to predict customers' reactions. How, though, could the airline anticipate its *competitors'* reactions? The airline wouldn't mind if competitors matched their move because industry prices wouldn't change and costs would be lower. They worried, though, that a price war could break out if even one competitor misinterpreted the new fares as a price cut. Unfortunately, a company cannot poll its competitors; it's frowned upon to ask them, "If we do this with our prices, what will you do with your prices?" Even history was no help: although the airline had ample historical data about fare changes, there was no precedent for their restructuring. How could the airline assess the risk of a price war before committing to the new fare structure?

The airline chose to look at the risk with a business war game. They had some of their managers role-play the home team (their airline), and they assigned other managers to role-play competitors' airlines. To ensure that the teams role-playing competitors would behave as realistically as possible, they chose managers who worked in sales (and therefore understood competitive dynamics in the industry) and who were unaware of the new fare structure. Each team would make pricing and other decisions, month by month, over a 12-month planning horizon. Teams worked in separate rooms, and could only access information they would see in real life (press releases, advertisements, etc.). The airline set up a computer-based simulation model to calculate the teams' sales, market shares, and profits, based on their decisions. Each team would see results from the previous month before it made its decisions for the next month.

The airline's managers role-playing the competition saw the new fare structure as a price-based attack. As simulated competitors they retaliated with price cuts, and a price war spread quickly. The airline decided not to introduce the new fare structure.

Would the real-life competitors react the same way? No one knows; there's no way to be certain what lies down the road not taken. Nonetheless, the airline gained insight into a difficult strategic question before risking real money and real careers, and they found the insight compelling enough to justify action.

Another situation involved a paper company that had endured years of heavy losses. A newly hired vice president, responsible for a turnaround, brought in two dozen of his regional sales managers to simulate competition over the next few years in a war game. The home team decided on a strategy based on productivity improvement. Their logic went like this: better productivity reduces our costs; with lower costs, we can cut our prices; with lower prices, customers will buy more; with customers buying more, our factories run at full capacity; with our factories running at full capacity, we can cover our fixed costs; with our fixed costs covered, we make money.

When asked about their competitors' reactions — after all, a market-share gain for them means a market-share loss for their competitors —they asserted that competitors couldn't afford to match the price cut because they couldn't match the productivity improvement.

Their colleagues, role-playing the competition, didn't see it that way. They matched the price cut anyway. They reasoned that they couldn't afford *not* to match the price cut, since they too were sensitive to capacity utilization.

The net effect, as calculated by the war game's simulation model: the home team would continue to lose hundreds of millions of dollars. At that point, the new VP rose and challenged his managers to think differently. Over the next two hours, they covered a wall with flipcharts detailing ideas to differentiate their product, enabling them to gain sales without cutting prices. They implemented the ideas in real life, and the company became profitable.

Would the managers come up with the differentiation strategy without the war game? Again, no one knows. However, there is good reason to believe that they wouldn't, because at the start of the war game the managers had adamantly insisted that they sold a commodity that could not be differentiated.

Why businesses run business war games

Managers who want to avoid unpleasant surprises may ask themselves, "where are the holes in our strategy?" Because they want the strategy to work, they narrow or limit their thinking in a phenomenon called *confirmation bias*, in which people unconsciously look for evidence that confirms their beliefs and desires; in this case, that their strategy doesn't have significant holes.[1] (Example: "our competitors can't afford to match our price cut.")

One way to reduce confirmation bias is to explicitly change perspective by asking, "how would you attack our strategy if you were a competitor?" The shift encourages managers to look at their world through competitors' eyes. But even though they're looking through different eyes, it's hard to evade the our-strategy-will-work mindset because they're still thinking of "our" strategy.

Business war games go one step further. They set up teams of managers, some to role-play their own company, some to role-play competitors, and the teams are told to do whatever it takes to win. The importance of competing teams goes far beyond entertainment or novelty. It taps their competitive spirit and makes them *want* to look for *disconfirming* evidence, because, rather than trying to attack "our" strategy, teams are trying to attack "their" strategy. They're doing more than looking through their competitors' eyes; they're also walking in their competitors' shoes. Teams vastly improve the quality of thinking in the same way that capitalism improves the quality of products: when people and ideas compete, they get better.

Business war games aren't precise and they don't replace market research, breakeven analysis, or other disciplines. Rather, business war games help managers anticipate, respond to, and even induce change. They're needed because the greater the change the

[1] See *The Psychology of Judgment and Decision Making,* Scott Plous, McGraw Hill, 1993.

more trends don't hold, experience doesn't fit, benchmarks don't apply, and previous strategies don't work. War games get managers' attention, tap creativity, make excellent use of competitive and market intelligence, and take advantage of humans' desire to win, all of which help uncover threats and opportunities as early as possible, when the company has the most and best options.

Business war games help managers generate good ideas and get good guidance for tough challenges. Managers use business war games to think through their new-product introductions (or to defend against competitors'), to test high-stakes changes in strategy (such as adopting a paradigm-changing technology), to create out-of-the-box moves (e.g., to differentiate a commodity), to get early warning of what competitors might do, to explore a new strategy without tipping off competitors, and more.

Defining "business war games"

There are many war-game needs, techniques, and suppliers, and there is no universally accepted meaning for the term "business war game." People saying "war game" can mean anything from an informal qualitative debate around a conference-room table to an elaborate multi-day program involving a hundred managers and quantitative simulation software.

What makes a business war game a "game," and what makes it different from other strategy-development techniques, is its use of teams to role-play competitor businesses that try to beat the home team. A business war game lets managers learn about competing in real life by testing their actions in a realistic environment where mistakes don't count. It's a flight simulator for managers.

Besides simulated competition using teams, all business war games have three things in common: a conflict or challenge, a way to make decisions, and a way to assess the value of those decisions. Business war games vary greatly in how they do those things. Managers who want to conduct a business war game have many options available to them about objectives, length, scope, assessment, and rules of engagement.

Objectives

Business war games can satisfy various objectives, such as raising energy, building skill, generating ideas, and making decisions. A company can aim its game where its need is greatest.

Raise energy. A war game that raises energy and excitement can rally people around a new product or strategy. After management has made key strategy decisions, such a game lets colleagues live the strategy and make it theirs. For example, management may develop a global strategy and use a series of raise-energy games to introduce the strategy to managers in key countries or regions. Managers charged with implementing the strategy get to test-drive the strategy against simulated competition in a safe environment. It's like rehearsing before the big show.

Build skill. A war game can be a hands-on, highly interactive form of executive education that builds skill, improves the strategy-development process, and spreads a common language of strategic thinking through the company. Skill-building business war games can use off-the-shelf case studies, which saves time and money. To avoid teaching or reinforcing bad habits, it's important that a build-skill war game rest on sound competitive-strategy principles. (See the section about assessment models, below.)

Generate ideas. A war game can help managers generate ideas when they face great uncertainty or simply want to think outside the box. A game focused on generating ideas can be an effective next step after a scenario-planning program, or the game itself can incorporate exercises to develop relevant scenarios. Qualitative business war games work well here because they naturally uncover threats and opportunities. In addition, since war-game teams win by being innovative and forceful, the game effectively shakes out complacency and denial.

Test ideas, make decisions. Because it makes competitive dynamics and other complexities explicit and realistic, a war game can provide good guidance for a management team that must validate a strategy or choose among strategy options. Quantitative business war games are the best solution when the objective is decision support because their models can handle the arithmetic required to see what would happen to the bottom line if we do *this* and competitors do *that*. By contrast, using a qualitative war game to gauge bottom-line performance can bog down in debates about outcomes and make it difficult for managers to agree on what action to take.

Length

Business war games can fit into almost any time slot from a few hours to a few days. The game's length will, to some extent, determine which objectives are feasible.

A war game in three hours or less can include exercises that will engage people and broaden perspectives. For instance, the game can conjure and prioritize future scenarios, or it can have teams use their creativity to say, "As competitor X, here's what I would do," "The reasons competitor Y will win are…," "We can beat X and Y by doing…," and so on.

A different approach for a short time slot is to build skill with an executive-education program that uses a miniature business war game. There are two advantages to this alternative. One is that it keeps costs down by using off-the-shelf material. The other is that many participants find it easier to stay focused on strategy concepts when they're in a case study about an industry other than their own.

It is possible to run a productive qualitative business war game in a brisk half-day. That's enough time to have two rounds (a "round" comprises team decisions and analysis of the outcomes). It helps to have at least two rounds in a business war game because the first round is often a shock, leading to creative thinking and major insights in the second round. Expanding a half-day game to a full day makes a qualitative game significantly richer, more detailed, and more insightful, because there's more time to stimulate and develop great ideas.

It's a challenge to apply serious quantitative models in half a day, especially if the war-game teams are to have access to the tools as they develop their strategies. That's because the teams need to become familiar and comfortable enough with the quantitative models to trust and work with them. Devoting a full day to the game makes it easier to use rigorous quantitative analysis for evaluating the costs, risks, and benefits of different strategy decisions.

A two-day (or longer) war game doesn't only increase detail and richness; it also allows for much more what-if strategy and scenario testing, probably with quantitative models. The opportunity to explore and test adds greatly to the quality of learning and decision-making.

Scope

Like a zoom lens, a business war game can focus narrowly or broadly. A narrow look probes a specific issue in depth, and a broad look uncovers new opportunities and threats as early as possible. A war game can focus broadly or narrowly on five dimensions: the market, competitors, functional areas, time horizon, and scenarios.

The market. A war game can work on a single market segment or a dozen. The downside of defining the market broadly is that some strategy decisions don't make sense when applied to an amalgam of dissimilar segments. (What does the "average" car buyer want?) The downside of defining the market narrowly and including many market segments in the game is that it raises the workload on the participants and the time it takes to develop and conduct the game.

Competitors. A narrow look means including the traditional big or influential competitors. A broader look could include scrappy underdogs and substitute products or services. Because business war games don't extrapolate the past into the future (see the section on assessment models, below), they can even include competitors that haven't entered the market yet.

Functional areas. A war game can cover a single discipline, such as marketing, or it can deal with whole-business issues including capacity decisions, R&D directions, mergers and acquisitions, etc.

Time horizon. Some business war games look twelve months into the future, some look forward 20 years. Using the company's normal time horizon fits the war game to the planning process. A time span longer than the company's usual planning horizon helps managers generate new perspectives and ideas, and a shorter horizon helps managers focus on tactics and implementation.

Scenarios. Simulating strategy decisions (for the company and its competitors) in a relatively stable environment focuses the game purely on the effect of the strategy decisions. Introducing shocks during the war game — a breakthrough, a disaster, a merger, a new government regulation or subsidy, a product failure — reveals how the strategy (and managers) handle the unexpected.

There's some connection between a war game's objective and scope. If the objective is to raise energy and excitement, it probably won't work well to include a wide variety of potential competitors over a 20-year horizon. If the objective is to generate questions and ideas, looking only at traditional competitors over the next year will define away the interesting issues.

The assessment model

Every business war game contains some mechanism to assess outcomes; that is, some way to determine whether one team's strategy is better or worse than another's. The assessment model may be in a computer (a spreadsheet or simulation model), or it may be in someone's head (based on experience and/or expert knowledge, and known as "mental models").

Different kinds of assessment work with different kinds of war games (see Table 1). For instance, using a sophisticated quantitative model is counterproductive in games that focus on generating ideas. That's because no quantitative model can deal with all possible ideas in real time, and it defeats the purpose of a generate-ideas war game if the participants aren't allowed to explore a promising idea.

Similarly and perhaps less-obviously, using mental models can interfere with games that focus on making decisions. It is no overstatement to say that it defeats the purpose of a make-decisions war game if the game's performance assessments amount to someone's opinion. That's especially true if the war game is concerned with a situation that has not occurred in the past, because, by definition, no one has experience with that situation.[2]

[2] There is extensive literature about why people have difficulty making quantitative forecasts in their heads, and why people nevertheless are overconfident in their ability to make those forecasts. See, for

	Qualitative games		*Quantitative games*	
Assessment model	Raise energy	Generate ideas	Build skill	Test ideas, make decisions
Judges' scores	Yes	Yes	Maybe	No
Frameworks: SWOT, Five Forces, etc.	Maybe	Yes	Maybe	Maybe
Strategy simulator	Maybe	No	Maybe	Yes

Table 1

Matching the model to the war game means assessing outcomes in a way that supports the objectives of the business war game. In a raise-energy or generate-ideas war game, human judges can score the teams on measures such as the clarity of their proposed strategy, the ingenuity of their ideas, and so on. (Such measures don't give any team an inherent advantage or disadvantage.) In a build-skill or make-decisions game, strategy-simulation models work well because they provide the performance estimates managers need to make better strategy decisions.

Perhaps the most subtle and yet most important issue regarding strategy assessment in a make-decisions war game is the quality of the assessment model. To many people, "the computer" calculates a number, and that's that. They may agree with the number or they may disagree with the number, but they don't know that the number itself depends on the kind of model used in the war game. Models can be based on accounting principles, trend analysis, rules of thumb, customer purchase decisions, and so on, and they can easily produce different numbers.

Just as different tools are not equally valid for every construction task, different models are not equally valid in business war games. The model in a make-decisions war game

---

instance, *Decision Traps* by J. Edward Russo and Paul J.H. Schoemaker, and *Innumeracy* by John Allen Paulos.

will serve as a strategy calculator, so it ought to work with strategy concepts. For instance, if customer preferences may change, if advances in technology may enhance products, or if new competitors may enter, then it's vital to use a model that explicitly takes customers, quality, and competitors into account. (Accounting-based models don't.) Because extrapolations implicitly assume that the past will persist, it's vital also to make sure that the model doesn't extrapolate historical trends. In effect, extrapolations lock in the past and make it hard for managers to discover threats, opportunities, and discontinuities.

Because we humans always use models (in our heads or in our computers) to predict outcomes, there's no alterative to working with models in war games. It's good to be skeptical of models (in our heads or in our computers), because skepticism begets rigor and insight. It's good also to remember that mental models are not inherently superior to computer-based quantitative models. Yes, computers have limitations: for example, they calculate whether they're given good or bad data. But so do people. The relevant question is not whether a quantitative model is perfect. The relevant question is whether managers can make better decisions — and one way or another, they *will* make decisions — by combining a quantitative model with their insight, or by using their insight alone. It's tough to beat Garry Kasparov at chess, and it's tough to beat the Deep Blue computer at chess, and it would probably be impossible to beat a Blue-Kasparov team.

Rules of engagement

Managers planning to conduct a business war game will make decisions about what the military calls rules of engagement. These rules govern teams' conduct during the war game. An obvious example is whether competing teams are allowed to interact while the war game is in progress, including during breaks for meals or refreshments. Prohibiting interaction heightens the sense of competition and it prevents actions, such as collusion, that are illegal in real life. Giving the teams visible identifiers, such as hats or T shirts, helps them identify with the company they work for during the game, and it alerts them when a potential spy is near.

A business war game that rubber-stamps a favored strategy doesn't add any value, which is why it's important to encourage competitor teams to try to beat the home team. (If only one “right” answer is acceptable, it’s a waste of time and money to run a business war game.) By urging competitor teams to beat the home team, the company can encounter obstacles and resistance in the safe environment of a business war game before encountering them in real life. It’s like the relationship between a sparring partner and a champion boxer. The sparring partner doesn’t help the boxer by going easy; he or she helps the boxer by hitting hard.

Ruling topics or actions out of bounds can affect the ideas and insights that result from the game. Those rules are double-edged swords. For instance, telling teams that they are not allowed to propose mergers, introduce new products or abandon existing products, or change prices, will prevent teams from reopening decisions that won’t be changed. Yes, there might be gold in the out-of-bounds areas; then again, there’s only so much time in a war game, and it’s necessary to direct the game activity where it’s needed most. There’s a potential trap, though, in constraining competitor teams. It might make sense to tell the home team not to cut its price, but real-life competitors might not feel similarly limited.

Instructions given to the teams about what it means to “win” can affect competitive behavior in the game. Defining winning as beating the competition will produce a hyper-competitive game in which the teams knock each other simulated silly. Defining winning as being profitable will produce a game with a different attitude, perhaps emphasizing cost cutting. In most cases, it works best to tell the teams that “winning” means whatever their team’s company wants in real life. Those instructions produce the most-realistic behavior, and they give an opportunity to discuss why a seemingly irrational competitor may actually be quite sensible, given their definition of success.

Because the lifeblood of a business war game is creativity, it’s critical to create an environment where people can speak freely. If war-game participants don’t feel safe, they will censor themselves. It’s important for them to know it’s okay to explore unusual ideas, question conventional wisdom, do what hasn’t been done before, and stop doing what’s always been done before.

Now what?

To prevent a business war game from becoming merely a fond memory, it helps to end it by asking *now what?* It's a worthwhile discussion, even if the game is short, for two reasons. First, each participant will have different lessons-learned from the game, and participants add to the company's wisdom by sharing what they learned. Second, the discussion builds commitment to action, and clarifying and assigning actions right away helps prevent the natural tendency of people to slide back into old routines.

Business war games usually include at least one big surprise. For the airline, it was discovering that competitors could misinterpret their move; for the paper company, it was seeing what was on the other side of the assumption that their commodity could not be differentiated. In my experience, surprises are the rule, not the exception. The surprises are fresh at the end of the war game, which makes the now-what discussion the ideal time to talk through what to do differently.

According to Arie de Geus, a former senior strategist at Royal Dutch Shell and author of *The Living Company*, "The ability to learn faster than your competitors may be the only sustainable competitive advantage." Business war games help management teams learn.

About the author

Mark Chussil is Founder and CEO of Advanced Competitive Strategies, Inc., a pioneer in the field of business war gaming, and a veteran of 100 business war games around the world (www.whatifyourstrategy.com). He is also a Founder and Senior Director of Crisis Simulations International, LLC (www.crisissimulations.com). Mark designed ACS's award-winning ValueWar® business simulator and CSI's patent-pending DXMA™ crisis simulator. He has published extensively, and he has lectured and consulted on six continents. He earned his B.A. from Yale and his M.B.A. from Harvard.

info@whatifyourstrategy.com 503.243.2586 (USA)

Advanced Competitive Strategies

Whatifyourstrategy.com