



Battle-test your innovation strategy

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Leading companies use war games to focus better on their competitors, while improving the way they identify, shape, and seize opportunities to innovate.

You thought you did everything right—gathered market research and consumer insights; brainstormed, prototyped, and tested a promising new idea; developed detailed financial models and a solid marketing plan. Yet your company’s new product or service didn’t perform as expected. What did you overlook?

If you answered “the competition,” you’re far from alone. In our experience, companies making decisions about

developing and launching new products commonly fail to anticipate their rivals’ motivations and actions.¹ Moreover, the failure often contributes to innovation-related disappointments, many of which are below the radar and quite insidious: your rival, for example, discounts prices to encourage customers to stock up on its product rather than try yours, ties up distributors so you can’t get shelf space, or duplicates your service to dissuade consumers from switching.

Unfortunately, in the heat of competition it's extraordinarily difficult for players to identify such threats, because the tendency to overlook rivals is deeply ingrained in human behavior. Indeed, neglecting to think about competitors is one of dozens of natural human biases—along with excessive optimism and overconfidence—that subconsciously affect strategic decision making. Addressing the challenge requires tools and processes that help companies “debias” their decisions.²

Recognizing this problem, some companies are tackling it head on by integrating war games into their innovation activities. By simulating the thoughts, plans, and actions of competitors, these companies are improving their products and services, while gaining a deeper understanding of how their innovation assets compare with those of rivals—insights that help them better identify, shape, and seize opportunities.

In this article, we'll look at how companies use war games to sharpen their products and services as they wrestle with three interrelated types of innovation decisions: those involving individual products, portfolios of offerings, and market-entry strategies. We'll focus on situations involving medium-term innovations—new products or services expected within one to three years. While it's obviously important to keep an eye on rivals at *all* times, competitive insights gleaned at this stage are particularly actionable, and a company's ability to adjust its approach relative to competitors, and thereby to change the outcome, is high.

Product-level decisions

The development team of a consumer-electronics company was debating the mix of components and features to include in the next version of an important product. Advances in the underlying technology meant that the launch, planned for the following year's holiday season, could well represent a significant upgrade that would influence several generations of the product.

To see how the competitive landscape might evolve—and be shaped—the company ran an in-depth war game. Over three days, cross-functional teams of product designers, marketing and sales experts, and supply-chain managers, assuming the roles of executives in the company and a leading rival, participated in a series of games representing three consecutive holiday seasons.

The choices the opposing team made were revealing, for it identified several new components and technologies the competitor might include in its own update of this kind of product. While there were obviously no guarantees the competitor would act as predicted, the rigorous preparation the company had undertaken to ensure that players on both sides would behave realistically suggested that the competitor's rationale for making the moves would be strong.³ Moreover, if the competitor was thinking along the lines the simulation predicted, the resulting changes to its product and market positioning would be significant, requiring a speedy and decisive response from the company.

Fueled by these insights, the company went on to identify a host of moves it could make to seize the initiative—including partnerships, bets on particular technologies, and an attractive, untapped consumer segment it could target to spur growth.

Ultimately, many of the game's predictions did materialize, and when the competitor moved as expected with its new product, the company was ready. Its own updated product was a hit with consumers, and it went on to sell more units than the competitor did over the following three holiday seasons.

An additional insight the war-gaming process sparked was that meeting the needs of the consumers the company was targeting wouldn't always require using the very latest technology. In some cases, an older—and cheaper—one was more than adequate. The company used this knowledge to its advantage in subsequent sourcing and pricing decisions.

To increase the likelihood of gaining such insights, the consumer-electronics company included a range of framing questions when it designed and ran the game. We include a sampling of them here as thought starters for any company looking to plan and run a product-focused war game of its own.

- How much of a lead or leap—technological or otherwise—must we make in the next generation of our product or service?
- How might our new product or service stand up to the pressures of the

existing—and, potentially, the new—competitive landscape?

- What price point will our product or service support and sustain?

Portfolio-level decisions

War gaming can also help companies develop and deploy their product portfolios more strategically across geographies and customer groups. Consider the experience of the global high-tech company whose leaders wanted to better understand how changing competitive dynamics would affect the company's B2B business.

For years the company had sold a comprehensive range of specialized TV models to hotel chains across the price spectrum. (Compared with the company's consumer models, the hotel TVs were more robust, had additional software features, and in some cases were more energy efficient.) Recently, though, new competitors had begun arriving on the scene in force, and competition had increased broadly. To learn what effect the new conditions might have on the company's portfolio of products and how they were positioned, it created four rival teams, each representing a new or established competitor, and ran a series of war games against them.

The results suggested the threat was bigger than the company had suspected. Notably, several of the games quickly degenerated into value-destroying price wars. That outcome helped company leaders understand how quickly its high-

end TVs would migrate down to the buyers from lower-cost hotels as rivals discounted prices on their own higher-end units to gain market share. If the company were to maintain its pricing policy, the executives recognized, the resulting profit squeeze would be enormous.

In response, company leaders essentially decided to ignore certain market segments, where price competition would be fiercest—areas it had strongly contested before. Instead, the company would place its biggest innovation and marketing bets on serving midscale hotels. In this growing segment, it had a better chance of differentiating some of its existing products and services, and of creating more value for customers (by helping hotels capture additional revenue streams, for example). The company went on to identify several possible partnerships with players in the industry value chain. It has successfully leveraged these partnerships to begin implementing the new strategy.

Useful questions the high-tech company considered when planning and running the game included the following:

- Which product classes will face the most competition, and will supply-side dynamics or customer demand drive it?
- Can we adapt any of our existing products to differentiate them further for the geographies or segments that will face the most pressure?
- Which customer segments will our competitors focus on, and how do these segments overlap with the ones our new offering targets?

Go-to-market decisions

Finally, war games are a useful way of testing and refining launch strategies to help ensure that new product and service offerings get the most traction in the market.

That's what happened when a financial-services firm wanted to determine which of a handful of promising new services had the greatest potential to reach global scale quickly and thus should be fast tracked. Company executives were particularly keen to test one technology-driven service that they felt had the potential to catch rivals off guard and to capture additional revenues from much-coveted business customers.

The company ran a series of simulated launches pitting itself against three rival teams whose members began the games unaware of the new service. Executives were surprised to learn how quickly and convincingly the opposing teams reacted to the offering and developed a version of their own. Worse, in some cases an opponent team's offering appeared superior to the company's, or at least close enough that company executives felt it would be tough for business consumers to differentiate between the two. "If we go to market with this offer," said one team member, "we'll get creamed."

This exercise had a sobering effect on the executives, who began to recognize that overconfidence and excessive optimism had clouded their thinking. The company has since gone back to the drawing board and is using many of the observations gathered from the war

game to help improve the new service and its market positioning.

Notably, the company's team of developers has also begun identifying ways to use the service's underlying technology to create entry barriers that could help delay a competitive response by up to a year. Given the tendency of players in the industry to copy good ideas quickly, the ability to create such barriers—and to include this skill in regular development activities—should serve the company well in years to come. Questions that it considered in the design and execution of its game included the following:

- What ideas could put our product or service out of business in the next one to three years?
- Can we create value and continued appeal with our service given the possible responses of attackers and other competitors, our responses to them, and their responses to our responses, over a defined period of time?
- What next versions and extensions are required to keep our idea in play, sustainable and scalable, and how do we start building them now?



War games are a tried-and-true strategic tool, yet relatively few companies use them to innovate. Those that do so effectively can not only avoid the problem of overlooking what the competition might do but also determine how likely their new products and

services are to survive in the crucible of the marketplace. ○

¹ Academic research supports this view. For example, a 2005 survey of business executives found that the expected actions and reactions of potential rivals almost never play a role in decisions to introduce and price new products. For more, see David Montgomery, Marian Chapman Moore, and Joel Urbany, "Reasoning about competitive reactions: Evidence from executives," *Marketing Science*, 2005, Volume 24, Number 1, pp. 138–49.

² To learn more about countering the effects of cognitive biases in strategic decision making, see Dan Lovallo and Olivier Sibony, "The case for behavioral strategy," *mckinseyquarterly.com*, March 2010; and John Horn, Dan Lovallo, and S. Patrick Viguerie, "Beating the odds in market entry," *mckinseyquarterly.com*, November 2005.

³ A full examination of the fundamentals of war-game design is beyond the scope of this article. For ideas on that topic, see John Horn, "Playing war games to win," *mckinseyquarterly.com*, March 2011.

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