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Co-opetition

by Adam M. Brandenburger and Barry J. Nalebuff
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Reviewed by Barbara Presley Noble

At one time or another, everyone wants life to be more rational and scientific. Then we wouldn't have to spend so much late-night time on the phone with friends, playing out scenarios of the possibilities life offers. Corporate executives aren't exempt from this desire. They too spin scenarios, of the bottom-line variety.

This must have been the audience Adam M. Brandenburger and Barry J. Nalebuff had in mind when they wrote "Co-opetition," a book about "the game theory strategy that's changing the game of business," as they put it. Mr. Brandenburger, a Harvard Business School professor, and

Mr. Nalebuff, who teaches at the Yale School of Management, believe businesses can become more competitive by cooperating, hence the neologism "co-opetition."

But it is not just any form of cooperation (like choosing not to keep score in volleyball so nobody loses) that will work. The authors visualize co-opetition as a kind of judo or chess match, in which duelists use not only their own strengths but their opponents' weaknesses as they battle. The fate of one person is interdependent with the other; the move one person makes influences moves the other person will make.

How to keep track of the infinite possibilities? Game theory, say the authors, the science of strategic thinking. The British Navy used it for submarine warfare in World War II. The Federal Communications Commission used it two years ago to devise an intricate auction of spots on the radio spectrum. The complex mathematics of game theory allows businesses that want to co-opete -- this, presumably, would be the verb form of co-opetition, since "co-opete" doesn't really work -- to move beyond the binary formulation of cooperation vs. competition and into the decision trees and path analysis that characterize more sophisticated decision-making.

The authors' description of game theory begins with an exercise Mr. Brandenburger does with his students at Harvard. He keeps the 26 black cards in a deck of cards and distributes the 26 red cards to the students. His dean offers \$100 to anyone, professor or student, who can hand in a red and black pair. The professor and the students, then, have to negotiate. The only limit is that students can't bargain collectively; they have to make their own deals. Who has the upper hand? If the professor offers you \$20 for a card at the beginning of the game, is it better to take it or wait and hope for more?

In this situation, with the variables -- the number and whereabouts of the cards -- all known, the decision is relatively easy. Because all the deals will eventually be made and no one has the upper hand, it's a 50/50 transaction. There's no penalty for waiting to see how the negotiations play out, because they should all play out the same way.

But the dynamics of the game will change if three black cards are missing and instead of 26 students and 26 deals, there will be 26 students and 23 deals. Then the balance of power tips to the person with the black cards; the red-card holder needs to make an earlier deal or run the risk of losing out.

The dynamics also change if one person has knowledge not available to others. A more prosaic instance of game theory is the old parental method of dividing up scarce resources, e.g., a cherry pie. If there are two siblings, the one who doesn't cut chooses. Presumably the cutter is motivated to slice the pie into two exactly equal parts. If, however, she knows her sibling likes crust better than cherries, she may split it up in a way that doesn't look equal but works to the advantage of both siblings -- i.e., creating a win-win situation for both.

From these examples, it's not hard to see how game theory can get very complicated very soon. The combinations and permutations of card opportunities would very quickly get to be astronomical. On the other hand, it's also not hard to see why much of what might be called game theory -- say, the avoidance of wars between siblings -- is intuitive and commonsensical.

And therein lies the problem with "Co-opetition." It is full of interesting case histories of companies and business strategies and entrepreneurial coups. It instructs readers to contemplate "added value" and "complementarity" as they assess opportunities. It notes that different "players" have different perceptions of the world and that a game may have a "scope" that can't quite be envisioned yet.

The professors approvingly cite, for example, a campaign by Robert Taylor, who gave the world liquid bath-and-shower soap, to establish brand loyalty for his upstart product. He took a wild gamble and spent several times his worth on 100 million dispenser pumps, creating a shortage that kept his bigger and better capitalized competitors, including Procter & Gamble, from copying -- "cannibalizing," the professors say -- his product. It's clever, it's inspiring, it makes good reading, but why is it game theory?

The authors never really make clear what distinguishes game theory from good business sense. Decision-making is looking upside, downside, matching advantage against disadvantage, marrying a weakness to a strength and occasionally doing something "counterintuitive" that actually makes complete sense in context. Since the book is full of good stories, it's hard not to recommend it, but readers looking for science are likely to be disappointed.
