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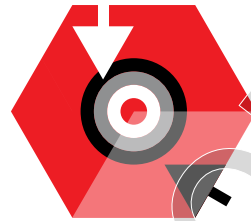
The Rules of Co-opetition

**Rivals are working together more than ever before.
Here's how to think through the risks and rewards.**
by Adam Brandenburger and Barry Nalebuff

The Rules of



Co-opetition



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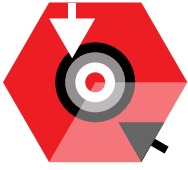
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PHOTOGRAPHER TIERNEY GEARON

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the

moon landing just over 50 years ago is remembered as the culmination of a fierce competition between the United States and the USSR. But in fact, space exploration almost started with cooperation. President Kennedy proposed a joint mission to the moon when he met with Khrushchev in 1961 and again when he addressed the United Nations in 1963. It never came to pass, but in 1975 the Cold War rivals began working together on Apollo-Soyuz, and by 1998 the jointly managed International Space Station had ushered in an era of collaboration. Today a number of countries are trying to achieve a presence on the moon, and again there are calls for them to team up. Even the hypercompetitive Jeff Bezos and Elon Musk once met to discuss combining their Blue Origin and SpaceX ventures.

There is a name for the mix of competition and cooperation: *co-opetition*. In 1996, when we wrote a book about this phenomenon in business, instances of it were relatively rare.

Now the practice is common in a wide range of industries, having been adopted by rivals such as Apple and Samsung, DHL and UPS, Ford and GM, and Google and Yahoo.

There are many reasons for competitors to cooperate. At the simplest level, it can be a way to save costs and avoid duplication of effort. If a project is too big or too risky for one company to manage, collaboration may be the only option. In other cases one party is better at doing A while the other is better at B, and they can trade skills. And even if one party is better at A and the other has no better B to offer, it may still make sense to share A at the right price.

Co-opetition raises strategic questions, however. How will the competitive dynamics in your industry change if you cooperate—or if you don't? Will you be able to safeguard your most valuable assets? Careful analysis is required. In this article we'll provide a practical framework for thinking through the decision to cooperate with rivals.

What Is Likely to Happen If You Don't Cooperate?

If a cooperative opportunity is on the table, start by imagining what each party will do if it's *not* taken. What alternative agreements might the other side make, and what alternatives might you pursue? If you don't agree to the deal, will someone else take your place in it? In particular, will the status quo still be an option?

Let's start with a simple example. Honest Tea (which one of us cofounded) was approached by Safeway supermarkets to make a private-label line of organic teas. The new line would undoubtedly eat into Honest Tea's existing Safeway sales. So even though the supermarket was offering a fair price, the deal would ultimately be unprofitable for Honest Tea.

IDEA IN BRIEF

THE CONTEXT

The idea that competitors should sometimes cooperate with one another has continued to gain traction since it was initially explored in the 1990s.

THE ISSUE

Even so, executives who aren't comfortable with "co-opetition" bypass promising opportunities.

A FRAMEWORK FOR ACTION

Start by analyzing what each party will do if it doesn't cooperate and how that decision will affect industry dynamics. Sometimes cooperation is a clear win. Even if it isn't, it may still be preferable to not cooperating. But it's critical to try to figure out how to cooperate without losing your current advantages.



There are many reasons for competitors to cooperate. At the simplest level, it can be a way to save costs and avoid duplication of effort.

However, if Honest Tea didn't cooperate, Safeway would surely find another supplier, such as rival tea maker Tazo. Honest figured that if it took the deal, it could design the new Safeway "O Organics" line to resemble the flavors and sweetness of Tazo's products and compete less against its own. If Honest had said no, Tazo would probably have said yes and targeted Honest's flavors, leading to the worst possible outcome. So Honest agreed to the deal.

Yet the company turned down a similar request from Whole Foods because the grocery chain insisted that the private line include a clone of Moroccan Mint, Honest's best-selling tea at the time. Honest didn't want to compete so directly against itself and believed that its rivals would have trouble copying the tea—which indeed turned out to be true.

UPS had to think through a similar opportunity when DHL, which had acquired Airborne Express some years earlier and was suffering large losses, asked UPS to fly DHL's packages within the United States. UPS had the scale to make the service efficient (potentially saving DHL \$1 billion a year) and was already providing a similar service to the U.S. Postal Service, so the opportunity appeared to be a profitable one that would allow UPS to rent out space on planes it was already flying.

That said, *not* cooperating might have been even more profitable in the long run. If DHL's continuing losses led to its exit, UPS stood to gain much of DHL's U.S. market share.

But if UPS turned the deal down, DHL might have offered it to FedEx. And if FedEx accepted it, DHL would still be in the market and UPS would have lost out on potential profits. So UPS agreed to DHL's proposal, announcing a deal in May 2008. (It turned out to be not enough to save DHL, which decided during the recession later that year to leave the market.)

In the tech industry, thinking through alternatives to a deal is complicated because companies have multiple relationships with one another. Samsung's decision about whether to sell Apple its new Super Retina edge-to-edge OLED screen for the iPhone X is a good example.

Samsung could have temporarily hurt Apple in the high-end smartphone market—where the Samsung Galaxy and iPhone compete—by not supplying its industry-leading screen. But Apple isn't the only rival Samsung has to worry about. In addition to being one of the world's largest phone

manufacturers, Samsung is also one of the largest suppliers to phone manufacturers (including Apple, across several generations). If it hadn't provided its Super Retina display to Apple, Apple could have turned to LG (which supplies OLED screens for Google's Pixel 3 phones) or BOE (which supplies AMOLED screens for Huawei's Mate 20 Pro phones), strengthening one of Samsung's screen-technology competitors. Plus, Apple is well-known for helping its suppliers improve their quality. Cooperating with Apple meant that Samsung would get this benefit and that its screen-technology rivals would not. The fact that the deal would increase Samsung's scale and came with a big check attached—an estimated \$110 for each iPhone X sold—ultimately tilted the balance toward cooperating.

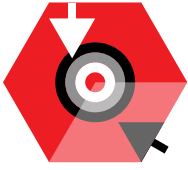
It takes two to cooperate. Now let's look at the deal from Apple's perspective. Would it make Samsung a more formidable rival? It probably would: In the year prior to the iPhone X launch, revenue from Apple accounted for almost 30% of the Samsung display business, a division that generated \$5 billion in profits. (Apple was also buying DRAM and NAND flash memory chips, batteries, ceramics, and radio-frequency-printed circuit boards from Samsung.) But for Apple, getting the best screen was worth bankrolling an already well-resourced rival—at least for a while.

The underlying economic reason that working together was advantageous to *both* sides was that Samsung had the best screen and Apple had a loyal customer base. Without cooperating, neither company could get the extra value from putting the superior screen on the new iPhone.

Will Cooperation Give Away Your Competitive Advantage?

Suppose you've analyzed the alternatives to cooperation and tentatively decided to move ahead. Doing so may mean sharing your special sauce. Then it might not be so special, and that could be a real problem. To get a read on the potential risk, figure out which of these four categories the deal falls into:

Neither party has a special sauce at risk, but the parties' combined ingredients create value. In this scenario neither side is giving anything away. A recent example is Apple and Google's decision to cooperate in creating



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contact-tracing technology for Covid-19. By sharing user location data across platforms, the two companies enabled governments and others to create effective notification apps. The circumstances here are exceptional, but it's not unusual for rivals to team up to set standards and create interoperability protocols and thereby create a bigger pie they can later fight over.

Both parties have a special sauce, and sharing puts them both ahead of their common rivals. In 2013, Ford and GM agreed to share transmission technologies. This made sense because they had complementary capabilities: Ford led in 10-speed transmissions, GM in nine-speed. The arrangement saved both money, had no significant strategic impact, and freed their engineers to work on next-generation electric vehicles, giving each company a leg up on other automakers.

There's a caveat here: Cooperation is more challenging if the playing field isn't level at the start. GM turned down an opportunity to collaborate with Ford on a next-generation diesel engine for super-duty pickup trucks. Though the potential cost savings were compelling, Ford already had a competitive advantage in the F-150's lightweight all-aluminum body, and GM feared that without differentiation between engines, Ford would have an unbeatable edge.

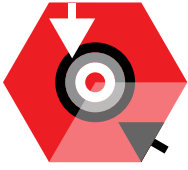
Sometimes, getting ahead of (or not falling behind) other rivals outweighs considerations of relative advantage. Autonomous driving technology, for instance, will be a key capability in the near future. Most automakers recognize that they won't be able to develop self-driving vehicles quickly or cost-effectively alone. That's why Ford invited Volkswagen to join its investment in Argo AI, an autonomous vehicle start-up. VW's \$2.6 billion investment (along with its \$500 million purchase of Ford's shares of the start-up) greatly reduced the drain on Ford's resources.

The deal also plays to each party's respective strength in getting regulatory approvals—Ford is strong in the United States, VW in Europe—significantly increasing the chance that Argo AI will be one of the platforms that gets worldwide approval. Ford also believed that if it didn't work with VW, VW would find another partner, which would decrease the chance that Argo AI would become one of the approved standards.

Because Ford's market share is greater than VW's in the United States and VW is ahead of Ford in Europe, it was a







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good bet that this partnership wouldn't change the balance of power between them. The focus was on elevating the pair relative to their many rivals.

One party has a strong competitive advantage, and sharing only heightens it; even so, less-powerful parties are willing to cooperate. Amazon gives rival sellers on Amazon Marketplace access to its customers and warehouses. Why? For starters, while it loses some direct business and the associated markup, it makes a commission on Marketplace sales. The net effect on profit depends on how the commission compares with the markup, and whether Amazon Marketplace (which accounts for \$50 billion of the company's revenue) leads to an increase in the company's total volume.

Even if the net effect were negative, blocking rival sellers from its platform would push them to other sites that could compete with Amazon. More important, though, when Amazon shares its platform, it becomes a hub—the starting place for any search. It makes money when a person looking for a book or a computer cable comes to its site and purchases additional, higher-margin products like electronics or clothing. Amazon also learns about the customer's preferences and can use this data to offer better recommendations and more accurately identify which Amazon-branded products to offer. And finally, opening up Amazon Marketplace allows Amazon to operate more warehouses and increase shipping volume, thereby reducing shipping times and lowering overall costs.

But why do other merchants cooperate with Amazon? Each partner, acting individually, finds it more profitable, even necessary, to be part of the Amazon ecosystem. But it's a collective action problem: When the merchants all join its platform, they make Amazon a more formidable rival. Indeed, both the European Commission and the U.S. House Subcommittee on Antitrust, Commercial, and Administrative Law are investigating whether Amazon Marketplace is using its dominant position to undermine and compete unfairly with its merchant “partners.”

One party shares its secret sauce to reach another's customer base, even though doing so carries risks for both parties. We saw this dynamic when Samsung shared its high-end screen with Apple. Google and Yahoo provide another example.

Google is better than any of its rivals at turning ads that appear alongside searches into clicks—that's its secret

What About Antitrust Issues?

Regulators are naturally suspicious when rivals get together. Executives need to know which types of cooperation are permissible and which are not. Some antitrust violations are black-and-white: Businesses that coordinate to raise prices or divide up the market are engaged in collusion, pure and simple.

Regulators tend to take a more favorable view when businesses work together to reduce costs or expand demand. One good litmus

test is to ask if customers will be better off as a result of the cooperation. For example, customers benefit if rivals partner to provide charging stations for electric cars. Similarly, supplying a rival tends to pass muster when it improves quality (as is the case when Samsung sells its Super Retina screens to Apple) and doesn't foreclose market entry to other players.

There is always the possibility that regulators will step in to nix a deal, as they did with Yahoo's 2008 agreement to have Google provide it with search ads. This is one of the challenges of co-opetition.

sauce. In 2008 it agreed to do ad placement for Yahoo. Google's technology would generate substantially more revenue per search for Yahoo, and sharing it was the quickest, surest way to extend its value to the market Google didn't already have. (In the short run, Google was unlikely to capture all of Yahoo's customers. By 2020, Yahoo's share of search was down to 1.6%, but that decline took a dozen years.)

The potential gains were enormous. Given Yahoo's then 17% share of the \$9 billion market, a 50% to 60% revenue increase would create almost \$1 billion in annual profits to be split between the two companies.

The deal did carry some risks for Google. It might have made Yahoo into a stronger competitor, but that possibility was less worrisome because Yahoo was already cash-rich owing to its stake in Alibaba. (More cash probably wasn't material to its competitive position.) Improved ad technology on Yahoo might have led some Google users to switch, but it seemed unlikely that better ads would cause a large number to do so. Perhaps the greatest risk was that Yahoo would learn the recipe for Google's special sauce—but Google never planned to hand over its algorithms.

The risks for Yahoo were bigger. Its capabilities might wither if it became dependent on Google's black box. Were the partnership to end, Yahoo would be further behind, perhaps dangerously so. Those risks were mitigated by Yahoo's plan to continue doing ad placement for its sites in Europe and thus maintain its own capabilities.



Cooperation is an overall win-win, but splitting the gains is a zero-sum game. The solution is relatively straightforward when there's an even trade but harder if the trade is uneven.

In the end the deal didn't materialize; the U.S. Department of Justice ruled against it on the grounds that it might leave Yahoo a weaker competitor in the future. (One of us helped defend the agreement.) But the economics were compelling. One year later, Yahoo made a deal with Microsoft to have Bing provide its search ads.

It isn't always possible to rent the sauce without giving away the recipe, however. Could the United States and China, for instance, cooperate on a mission to Mars? A seemingly insurmountable challenge is that it would involve sharing intellectual property that can't be recaptured. This is a particularly sensitive issue since space technology spills over to military applications.

How to Structure an Agreement

The parties have almost gotten to yes. They've identified a desirable opportunity and found a way to share their special sauce without giving away the recipe. The remaining task is to craft the agreement. Two issues are particularly challenging when a prospective partner is also a competitor: the scope of the deal and how the costs and benefits will be divided. (There may also be antitrust concerns; for more on those see the sidebar "What About Antitrust Issues?")

Establishing scope and control. First the parties have to figure out how far to extend their cooperation, who is in charge, and how they might unwind their arrangement should it no longer make sense.

The simplest types of cooperation are limited and don't raise control issues. In some cases one party becomes a nonessential supplier to the other—as Honest Tea did with Safeway or as CBS did when it supplied the show *Dead to Me* to Netflix. In other cases the parties share costs but not proprietary knowledge. Rival television stations sometimes share camera crews, for instance, and rival breweries coordinate on recycling. Several museums in a city may run an ad campaign or develop an all-access museum pass together. Generally these arrangements are easy to negotiate and can be unwound easily.

Agreements become challenging when one party has to cede control, however. Ford and GM's plan to share transmission technologies worked well at the R&D stage, but neither company was willing to give control of manufacturing to the

other or even to a joint entity. Ford and GM could have written a contingent contract about who got what transmission production capacity when, but this would have been tricky since demand is variable and transmissions are mission-critical. Fortunately, the majority of the cost savings came from using common designs and common parts, so Ford and GM limited the agreement to those areas.

In other circumstances one party is in charge and the other party is protected by a contingent contract with performance guarantees and penalties for not hitting specific targets. This works well in situations where there are established performance benchmarks. The party in charge, the one providing the guarantees, doesn't have to be told what to prioritize; instead the right-sized penalties allow it to internalize decisions and make calls that optimize the combined outcome.

It's important to structure any agreement in such a way that one side doesn't become dependent on the other. Otherwise, the dependent party may be backed into a corner when it comes time to renegotiate the deal—or distressed when the deal ends. As noted earlier, this was one of the Justice Department's issues with the 2008 Google-Yahoo deal.

Dividing the pie. Cooperation is an overall win-win, but splitting the gains is a zero-sum game. The solution is relatively straightforward when there's an even trade, as when Ford and GM shared transmissions. It's harder if cooperation involves an uneven trade and payments are required.

Consider interairline agreements to help stranded passengers. For a long time it was customary for airlines to take care of one another's passengers in the event of a flight cancellation, or what the industry calls an IROP (irregular operation). Airlines paid a low IROP rate to secure a seat on another carrier.

Cooperation broke down in 2015 when Delta thought other airlines were getting the better end of the deal and proposed a steep increase in the IROP rate. Delta was taking five American Airlines passengers for each Delta passenger that American took. American declined to pay more, and the agreement ended.

The underlying problem was an uneven trade. With an even balance of trade, the IROP fare doesn't matter. When the trade is out of balance, the right price is what ensures a fair deal. An IROP fare that was Delta's cost of a seat (including forgone sales to displaced customers) plus half the value



of American's gains (the savings on a hotel and meals and avoidance of the customer's ire) should have done the trick.

There might have been a way to save at least part of the deal without agreeing on price. Delta and American could have set up an agreement that guaranteed parity, trading seats on a one-for-one basis. If one airline had more cancellations and took more seats, the number of seats it got could be rationed going forward until things evened out.

The problem was ultimately resolved when the balance of trade was restored. After a series of computer outages and systemwide shutdowns, Delta found that it, too, needed some help. It renewed an agreement with American in 2018.

The challenges are greater when there are three or more parties to the deal and offsetting trades aren't possible. Take Ionity, a joint venture involving BMW, Daimler, Ford, Hyundai, Kia, and VW, which is building ultrafast electric-charging stations across Europe. The speed and cost savings advantages from teaming up are enormous. Still, each partner

has different geographical priorities, creating tensions over where to place the stations.

Splitting the massive price tag is even harder. It wouldn't work to divide the costs equally; the partners have significantly different shares of the market, and Kia, with its much smaller slice, would walk away. Costs could be split according to market share—but should market share be based on unit sales, dollar sales, profits, or even miles driven? Each party had its favorite answer.

In the end the six companies agreed that costs would be divided in proportion to current unit sales. A simple, albeit somewhat arbitrary, heuristic like that may be a practical way to get a cooperative venture off the ground.

Changing Minds

Cooperation with rivals also has an important emotional aspect. Some people are comfortable with the idea that

**ABOUT THE ART**

Tierney Gearon collaborated with her children and their friends to create her Alphabet Book series, setting up scenes of calculated kid-chaos playtime for each letter of the alphabet.

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there can be multiple winners, and some are not. As a result, co-opetition may end up being a strategy of last resort even in cases where it should be a first resort.

Apple was on the verge of failure in August 1997 when Steve Jobs was finally forced to confront the fact that Microsoft was not the enemy. Jobs later admitted that “if the game was a zero-sum game where for Apple to win, Microsoft had to lose, then Apple was going to lose.” That change in perspective was hard for Apple loyalists to accept. When Jobs announced at the Macworld conference that Microsoft had invested \$150 million in Apple, Bill Gates was booed.

Obvious opportunities for cooperation fall by the wayside when businesspeople don’t focus on ensuring that all parties come out ahead. The world of check payments illustrates the problem.

Ever since printed checks were invented, more than 300 years ago, banks have needed a way to exchange those deposited by their account holders but written on other banks’ accounts. The obvious solution was to establish a central clearinghouse. When the London banks failed to do this, the bank runners did it themselves. Instead of crisscrossing the city to exchange checks, they did an end run and all met at the Five Bells tavern. Some 50 years later the banks established the Bankers’ Clearing House to do the same job.

In the modern era the U.S. Federal Reserve operated a system in which each bank would forward the paper checks it received to the Fed, which would then distribute them to the banks on which they were written. In 2001 some 40 billion checks were being flown around the country.

A logical alternative was to scan the checks and send digital images, thereby saving time and money. The challenge was that some of the small banks weren’t set up to process digital images. Thus cooperation would further tilt the playing field. When the large banks didn’t ensure that the small banks would also come out ahead, the small banks used their political power to block digital check clearing.

Then 9/11 forced the issue. With all planes grounded for over a week, checks were stranded and could not be cleared. At that point, the large banks finally agreed to ease the transition for small banks by having the Fed print the digital images and send the substitute checks to the small banks. In 2003 digital check clearing became established in law when Congress enacted the Check Clearing for the 21st Century Act.

It’s also possible to work *around* mindsets. One solution is compartmentalization—both mental and actual. The Apple-Samsung deal, which happened during a billion-dollar legal battle between the two tech giants over patent infringements, was doubtless easier to arrange given that Samsung operates as three separate companies with three separate CEOs. Apple could cooperate with one autonomous part of Samsung while competing with and suing another.

For a similar reason, we think it was wise for Ford to keep Argo AI, the autonomous vehicle start-up, a separate company. It was psychologically and contractually easier to get VW to invest in an entity that was outside Ford. The external structure helps ensure that the two will be equals and also makes it easier to bring in future partners.

ULTIMATELY, GETTING THE right mindset requires choosing the right people. The executives we interviewed emphasized the need to staff the cooperating teams with people who are open to the dual mindset of co-opetition.

That isn’t always easy, because people tend to think in either/or terms, as in either compete or cooperate, rather than compete *and* cooperate. Doing both at once requires mental flexibility; it doesn’t come naturally. But if you develop that flexibility and give the risks and rewards careful consideration, you may well gain an edge over those stuck thinking only about competition.

We began this article with the missed opportunity for cooperation between the United States and the Soviet Union on a mission to the moon. Today the opportunities for countries to cooperate are even larger—from tackling Covid-19 and climate change to resolving trade wars. We hope that a better understanding of co-opetition will help businesses, managers, and countries find a better way to work and succeed together. ©

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