New tools for negotiators

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A few simple ideas make it possible to construct powerful strategies for even the most complex deals.

Negotiations are the stuff of business life, and volumes of advice tell managers how to prepare for and conduct them. But most of the advice applies to deals that are simpler than those pursued today. Negotiations now typically involve many parties that have an interest in the outcome—the "stakeholders"—and require decisions on many complex issues. Immense sums of money may ride on the outcome.

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Sophisticated support for negotiators is available—for example, computer simulation models based on dynamic game theory. These models can predict the behavior of stakeholders in multiparty deals and guide negotiators to winning strategies. As yet, however, few business leaders feel comfortable surrendering their personal judgment on such crucial issues to a "black box."

We have therefore been developing a middle way: a set of readily understood tools to help decision makers in complex multiparty negotiations.[1] With the help of these tools, negotiators can develop strategies that are not only

[1]The methodology builds on the theoretical and empirical work carried out by Decision Insights Incorporated (DII), a consulting company specializing in the computer-supported simulation of negotiations and political decisions. In particular, DII's dynamic-game-theory model for conducting multiparty negotiations gave us the concepts of "position," "salience," and "clout," which are fundamental to analyzing the behavior of stakeholders in negotiations.

favorable to them but also palatable to the other parties. This method rests on the same logic as sophisticated simulation tools but doesn't require an elaborate computer model. It has been used so far to develop strategies for several real-life negotiations and is appropriate whenever many stakeholders have different goals on a number of issues and the final decision emerges from bargaining among those stakeholders. The tools are therefore relevant to mergers and acquisitions, partnerships and alliances, regulatory rulings, litigation, and labor disputes—in short, to many of the items at the top of a chief executive officer's agenda.

Who are a deal maker's allies and enemies? What is the chance that **a particular outcome** will stick?

Applying the tools at the start of a deal should answer many crucial questions. Who are a deal maker's true allies and enemies? What is the chance that a particular outcome will stick? Who is worth lobbying for support on particular issues? What bargaining chips can be traded for that support? Used together, these fact-based tools suggest effective strategies for arriving at decisions that all parties can accept, and they help negotiators refine their plan of action as circumstances change. To see how the tools operate, consider how they helped negotiators in two real situations.

Power play

A European government decided to liberalize its electricity generation and supply industry. One major move in carrying out that plan was the privatization of a near-monopoly utility, which we will call Power. Negotiations had to be conducted on several issues, including the level of end-customer tariffs that Power could charge, the wholesale-market structure most appropriate for competition, and the possible forced sale of Power's generating plants.

Power's first task was to identify the key issues and the range of possible outcomes for each. On the tariff issue, for example, the regulator proposed a one-off cut of 15 percent in tariffs charged to end customers. Power, by contrast, aimed to keep the existing tariff levels. In addition to such obvious issues, Power considered several others, such as "green" subsidies: higher tariffs for electricity produced at environmentally friendly plants. Some of the additional issues at first seemed immaterial but later turned out to be important.

Next, Power had to identify all of the stakeholders that might influence the decision on any issue and to understand the objectives of each. It identified a total of 16 parties, including the regulator, the Ministry of Industry, the

Treasury, labor unions, competitors, the free-market system operator, and Power itself. Although the number of parties was large, a negotiator using our tools requires only three pieces of information about stakeholders to predict their behavior on any issue.

1. Position: What is the stakeholder's preferred outcome on the issue? Is the stakeholder arguing for one of the extremes on the range of possible outcomes, for example? For a stakeholder who hasn't stated a position on a particular issue, what would the rational position be?

2. Salience: How important is this issue to the stakeholder as compared with all other issues? For example, would the stakeholder drop everything else to attend a meeting on this issue? What do we know about this person's past interest in the issue—for instance, his or her willingness to spend resources on it?

3. Clout: As compared with other players, how much power does the stakeholder have to influence the decision on this issue? In the case of Power's future tariffs, for example, the regulator had the highest clout, followed by Power and the Treasury.

It is helpful to express this information by assigning a number from 0 to 100 to represent each stakeholder's position. On tariffs, Power chose 0 to represent its own position and 100 for the regulator's. The other stakeholders fell somewhere between these two extremes (Exhibit 1). As for salience, a rating of 100 means that this is the most important issue for the stakeholder, a rating of 50 that it is one of several important issues but not the most important, and a rating of 0 that it

EXHIBIT 1

The stage is set

Summary of each stakeholder's stance on the end-user tariffs issue based on a scale of 0 to 100[1]

Issue: 'Green' subsidies
Issue: Forced divestitures
Issue: Wholesale-market structure
Issue: End-user tariffs

Stakeholders	Key characteristics[2]		
	Position	Salience	Clout
Power	0	90	70
Regulator	100	85	100
Ministry of Industry	30	35	50
Treasury	0	40	60
Labor unions	0	20	20
Competitors	50	50	20
System operator	0	30	50

[1]For position, 0 = Power's position and 100 = regulator's position; for salience, 0 = unimportant and 100 = most important; for clout, 0 = no power to influence and 100 = most powerful influencer.
[2]Position is stakeholder's preferred outcome on particular issue; salience is issue's level of importance to stakeholder; clout is extent of stakeholder's power to influence decision on issue.

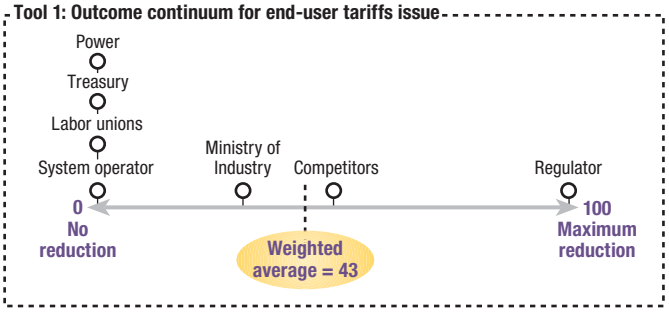
is unimportant. To express clout, the stakeholder with the greatest influence on an issue—in the case of tariffs, the regulator—would get a rating of 100; the others would get fewer points.

The task of gathering all of this information may seem daunting. In our experience, however, it is possible to find people who can provide answers based on their dealings with the stakeholders and their knowledge of the current negotiations. If so, a day or two will suffice to question these people carefully, preferably in a workshop setting; to calibrate their inputs; and to arrive at consensus estimates. Recording the results in an electronic format will be useful for later analysis.

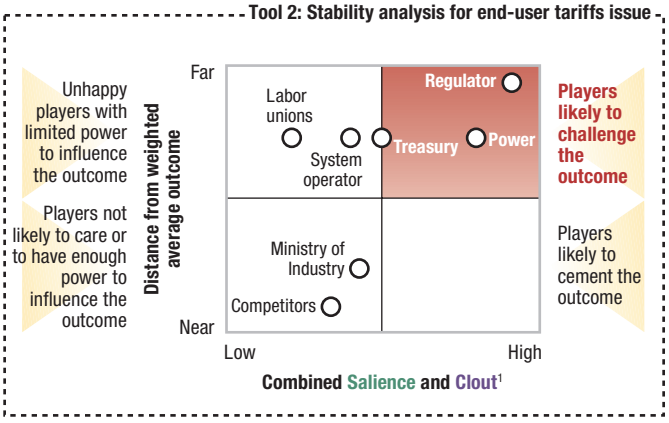
EXHIBIT 2

Tariff trouble

1 By graphing the expected weighted average outcome of a pure compromise vote with no bargaining among the stakeholders . . .



2 . . . Power realized that a straightforward compromise would prove impossible



[1]Product of salience and clout.

The first cut

Having undertaken this preparatory work, Power was ready to see how the negotiations might pan out on each issue. The first tool, called an *outcome continuum*, graphs each stakeholder's position on a given issue relative to the two extremes. By weighting the players' positions according to salience and clout and then calculating the average, you can foretell the result of a pure compromise "vote," with no bargaining among the parties. This analysis quickly showed Power that it faced tough opposition on the tariff issue, with a potential outcome far from its ideal (Exhibit 2, part 1).

However, the outcome predicted by a pure vote usually doesn't materialize in reality. When negotiators don't like what they see coming, they bargain. To estimate the probability that all of the negotiating parties would accept the pure-voting outcome, Power applied the second tool, *stability analysis*, which examines how far the outcome is from each party's preference, how much each party cares about winning on the issue, and how important the parties are in reaching an agreement on it. If too many important players are dissatisfied with the outcome, it isn't likely to be stable.

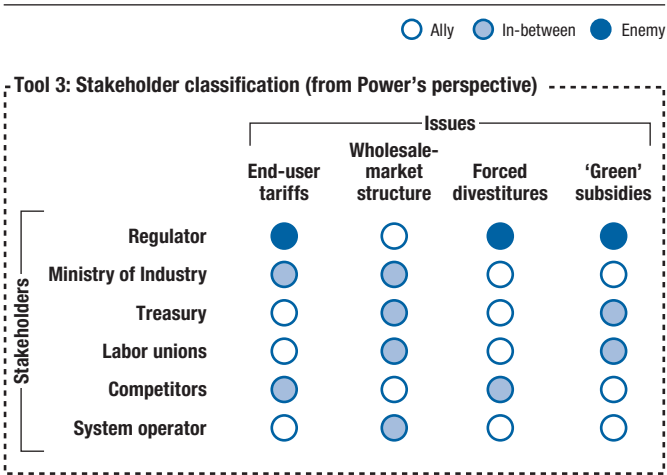
In Power's case, stability analysis showed that a straightforward compromise on the tariff issue would leave Power and the regulator very unhappy; both were likely to fight on (Exhibit 2, part 2). Power therefore had to apply the next three tools to find subtle ways of tipping the balance in its favor.

Allies and enemies, influencers and bargaining chips

First, Power used a *stakeholder classification*, which identifies each stakeholder as an ally, an enemy, or in-between on every issue (Exhibit 3). This exercise provides a useful overview of the main challenges and opportunities in the negotiations as a whole; it showed, for example, that Power and the regulator were enemies pretty much across the board. Power also found that on the issue of the wholesale-market structure, it could hope to get its way fairly easily, since none of the stakeholders were outright enemies.

EXHIBIT 3

Friend or foe?



To see which of the potential allies would make the most useful friends, Power placed the stakeholders on a *negotiation landscape* for each issue. Players with a lot at stake but little influence are "followers"—good to have on your side but not, given their lack of clout, worth much effort to win. The "shapers," by contrast, both care about the issue and can influence the outcome, so they are natural partners—or very strong enemies. Just as

EXHIBIT 4

Friends in unlikely places: Influencers can tip the balance

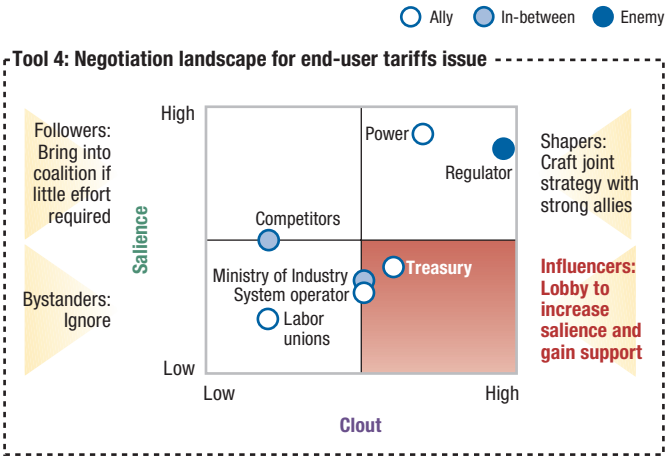
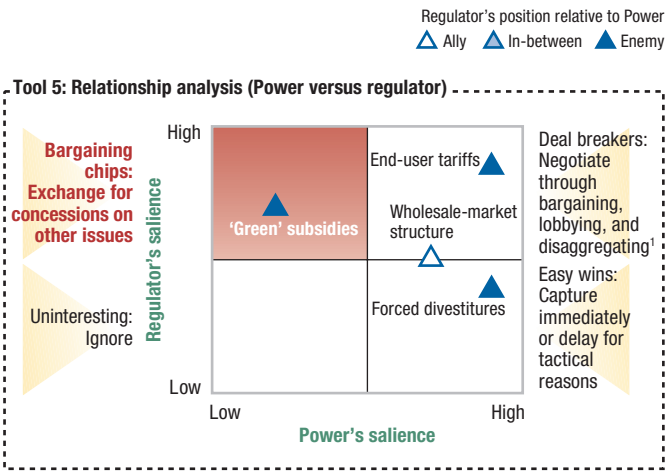


EXHIBIT 5

Green subsidies: Power's leverage



[1]Solutions for deal-breaking issues can often be found by dividing issues into subcomponents—for instance, end-user tariffs issue could be viewed as 3 subissues: initial tariff reduction, target levels in 5 years, and rate of ongoing reductions.

important are the "influencers," who are not greatly concerned with the issue but have a good deal of influence over it. If you can persuade them to support your position, you are much more likely to win.

In Power's case, the shapers on the tariff issue were Power itself and the regulator, an enemy. But there were several influencers—including the Treasury, the Ministry of Industry, and the system operator—that Power could court (Exhibit 4). It now realized that it had to convince them that the tariff issue was salient for them as well.

In some cases, lobbying alone can work, but certain stakeholders want something in return for their support. Moreover, Power still needed to get additional leverage with the most problematic stakeholder, the regulator. Power discovered its best bargaining chips by identifying the issues for which it was itself an influencer. To find them, Power plotted the salience of every issue for itself and for each other stakeholder on separate *relationship analysis* matrices. The upper-left-hand quadrant contains the negotiator's bargaining chips: issues that he or she is willing to compromise on but that are important to

the other party.[2] It turned out that on the issue of green subsidies, which Power had initially regarded as insignificant, it could give a good deal of ground to the regulator in return for a more favorable outcome on tariffs (Exhibit 5).

By working through these five analyses, Power discovered early on that it had little chance of winning on the tariff issue without hard bargaining. But it also found strong bargaining tactics. To build an alliance against the regulator's tough stand, Power could try to increase the salience of the tariff issue for the Treasury and other stakeholders, which already favored Power's position but would have to be persuaded to support it more actively. Power could also bargain away green subsidies in return for higher tariffs. Although these strategies were counterintuitive, they were practical and in marked contrast to Power's initial confusion in the face of so many issues and stakeholders.

To **build an alliance** against the regulator's tough stand, Power could try to increase the salience of the tariff issue for the Treasury

Adding dynamics

These analyses can give you an exact snapshot of your own and your opponents' negotiating strengths, along with insights into ways of changing the dynamics of the game. Negotiators will have more confidence in their chosen strategy if they can see what happens when they apply it to the next round of negotiations—something they can do by rerunning the first two analyses with updated information and then tracking the results on a spreadsheet.

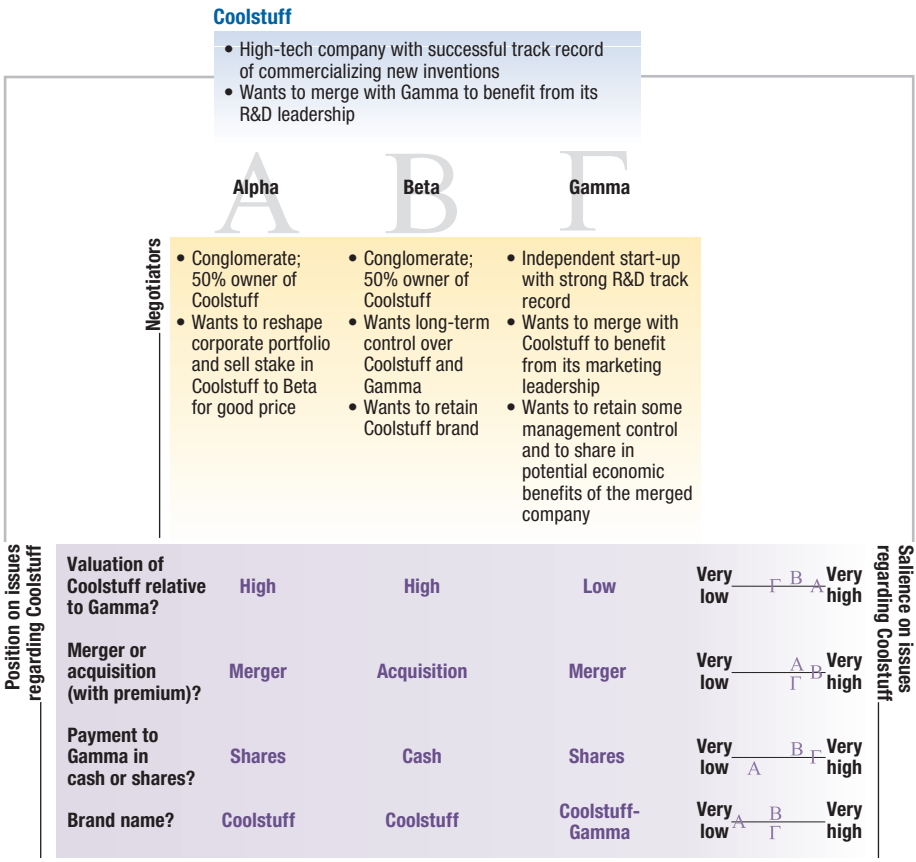
A conglomerate we will call Alpha used this technique in negotiations concerning Coolstuff, a high-technology company in which Alpha and another conglomerate, Beta, each had a 50 percent stake (Exhibit 6, on the next page). The two conglomerates had set up Coolstuff to share R&D costs and expertise, and the venture had successfully commercialized many of its inventions. In contrast, Gamma, an independent start-up in the same field, was brilliant at developing technology but less successful in the marketplace.

The management teams of Gamma and Coolstuff wanted the two companies to join forces so that they could apply Coolstuff's marketing know-how to

[2]To find bargaining chips even more precisely, a negotiator could also take into account its relative clout on each issue. The greater its clout, the more valuable the bargaining chip.

EXHIBIT 6

The players



Gamma's unique technologies. For Coolstuff, the price of the deal would depend on the relative valuation of the two companies and whether the deal was structured as an acquisition of Gamma—with a corresponding premium—or as a merger. An acquisition would also raise the issue of whether Coolstuff would pay in cash or in shares.

Irreconcilable differences?

Despite the commercial logic of a deal, differences in the expectations of the companies' owners seemed likely to make it impossible to consummate. Alpha hoped that Beta would in due course buy out its Coolstuff stake. Since Alpha's share of the combined Coolstuff-Gamma entity would be more valuable than the company's share of Coolstuff alone, Alpha naturally wanted a highly valued Coolstuff to merge with a relatively low-valued Gamma for the lowest possible outlay of cash.

Beta was in the business for the long haul, so it sought full management control of Gamma, with or without Alpha. Beta therefore wanted Coolstuff to hold all of the equity in the new company, leaving Gamma's original owners with none. Rather than merge, Beta wanted Coolstuff to acquire Gamma—a course that would make it easier to replace Gamma's management. Although the price might include an acquisition premium, Beta cared more about control and the long-term potential of the business. Beta was also determined to preserve the Coolstuff brand as the public face of the new company.

The owner-managers of Gamma wanted it to be valued as highly as possible. They also wanted shares in the new venture as payment so they could benefit from the future commercial success of the technologies they had so passionately developed. They envisioned the new company as a merger of equals, branded Coolstuff-Gamma.

The search for common ground

Alpha ran the outcome continuum analysis, with dispiriting results. Beta, as the negotiator with the most clout and salience, would probably wish to acquire Gamma for cash and to keep the Coolstuff brand name. Stability analysis suggested that although Alpha might accept this arrangement, Gamma would be so dissatisfied that the deal would never be consummated, and Alpha would have no chance to get out of its unwanted investment in Coolstuff. Still, the game wasn't lost: every stakeholder attached a different degree of importance to each issue, so there might be room for bargaining.

The stakeholder classification reminded Alpha that Beta and Gamma might collaborate with Alpha on some issues even if those companies were enemies on others. Gamma was Alpha's natural ally on the merger-versus-acquisition issue, for example, while Beta would support Alpha's preference for a high relative valuation of Coolstuff. The negotiation landscape analysis on each of the issues showed Alpha which party it should lobby for support on the questions it cared about most. Alpha had a better chance of getting its way on the valuation, for instance, if it could increase the issue's salience to Beta. It could also try to get Gamma to push harder for a merger rather than an acquisition. Both companies were predisposed to support Alpha on these issues, but it had to persuade them to use their clout.

A relationship analysis showed Alpha what it might offer in exchange. The terms of payment and the name of the future brand emerged as powerful

bargaining chips for dealings with Gamma. Alpha could promise to wield more of its own clout to support the desire of Gamma's owners to retain stock in the new company if Gamma in return accepted a relatively high valuation for Coolstuff. Alpha could also agree to rebrand the new company—an issue much more important to Gamma's management than to Alpha's.

Alpha needed only two days to gather and structure the data needed for these analyses and only **half a day** to apply them

But the same analysis vis-à-vis Beta produced rather problematic results. Apparently, one of the most effective ways of persuading it to accept a merger would be for Alpha to grant the company a cash-based deal. Alpha could also help Beta get its way on the brand issue. Which party should Alpha support on which of these issues? What would be the most effective use of Alpha's bargaining chips?

And the winner is . . . everyone

To find out, Alpha ran the stability analysis again, testing which of two strategies was more likely to yield a deal among the parties. Should Alpha back Gamma's desire for a combined brand name but persuade Gamma to accept a cash deal? Or should it support Beta on maintaining the current brand but push for a share-based deal more acceptable to Gamma? Rerunning the analysis showed that the latter strategy was the only way to make everyone happy enough to agree to a deal; the other route would still leave Gamma highly dissatisfied. In contrast, securing payment in shares would be just enough to persuade Gamma to go ahead with the deal and pave the way for Alpha's exit from the Coolstuff venture.

Alpha needed only two days to gather and structure the information for these analyses and about half a day to apply them, with iterations. The effort yielded a practical strategy for resolving what had seemed to be a total impasse. The deal went ahead.

More advanced game theory modeling can include—at a fairly low cost—an almost infinite number of dynamic simulations, which allow a negotiator to identify and test strategies with greater precision. So far, few businesses use this approach. Managers seem reluctant to apply mathematics to a process inherently concerned with human judgment.

But past negotiations reveal that stakeholders behave predictably given their position, salience, and clout on each issue. Negotiations are therefore susceptible to more rigorous analysis than traditional approaches allow. Five simple tools—the outcome continuum, the stability analysis, the stakeholder classification, the negotiation landscape, and the relationship analysis—can give negotiators the best of both worlds. *MQ*

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