**Creativity in Advertising: When It Works and When It Doesn’t**

by Werner Reinartz and Peter Saffert

Ask a professional in the business what the key to success is in advertising, and you’ll most likely get an answer that echoes the mantra of Stephan Vogel, Ogilvy & Mather Germany’s chief creative officer: “Nothing is more efficient than creative advertising. Creative advertising is more memorable, longer lasting, works with less media spending, and builds a fan community...faster.”

But are creative ads more effective in inspiring people to buy products than ads that simply catalogue product attributes or benefits? Numerous laboratory experiments have found that creative messages get more attention and lead to positive attitudes about the products being marketed, but there’s no firm evidence that shows how those messages influence purchase behavior. Similarly, there is remarkably little empirical research that ties creative messaging to actual sales revenues. Because product and brand managers—and the agencies pitching to them—have lacked a systematic way to assess the effectiveness of their ads, creative advertising has been a crapshoot.

Drawing on research in communications psychology, we have developed a consumer survey approach for measuring perceived creativity along five dimensions. We applied this approach in a study of 437 TV advertising campaigns for 90 fast-moving consumer goods brands in Germany from January 2005 to October 2010. We asked a panel of trained consumer raters to assess the creativity of the ads, and we examined the relationships between their perceptions and sales figures for the products. All the product categories we studied—body lotion, chewing gum, coffee, cola and lemonade, detergent, facial care, shampoo, shavers, and yogurt—are highly competitive and invest heavily in advertising.

Our findings confirm the conventional wisdom that creativity matters: Overall, more-creative campaigns were more effective—considerably so. We also found that certain dimensions of creativity are more effective than others in influencing purchasing behavior—and that many companies focus on the wrong dimensions in their campaigns. Moreover, we believe that by tailoring the survey model to reflect the cultural preferences and triggers of consumers in different geographic markets, companies the world over can dramatically improve their ability to predict the likely effectiveness of their creative ads and thus make smarter investments.

**What Is Creativity?**

In coming up with dimensions along which to measure creativity, we drew on social and educational psychology literature that defines creativity as divergent thinking—namely, the ability to find unusual and nonobvious solutions to a problem. One of the pioneers in the field was Ellis Paul Torrance, an American psychologist, who developed the Torrance Tests of Creative Thinking (TTCT), a battery of measures used to assess individuals’ capacity for divergent thinking in the business world and in education. Torrance scored responses to test questions along five dimensions: fluency, originality, and elaboration (borrowed from the work of Joy Paul Guilford, another American psychologist) as well as abstractness and what he called resistance to premature closure.

Fluency refers to the number of relevant ideas proposed in response to a given question (such as “list as many uses as you can for a paper clip”), and originality measures how uncommon or unique the responses are. Elaboration refers to the amount of detail given in a response, and abstractness measures the degree to which a slogan or a word moves beyond being a label for something concrete. Resistance to premature closure measures the ability to consider a variety of factors when processing information.

In the early 2000s Torrance’s measures were adapted for advertising by the Indiana University communications researcher Robert Smith and his colleagues. They adjusted the definition of creativity to refer to “the extent to which an ad contains brand or executional elements that are different, novel, unusual, original, unique, etc.” Their goal was to measure creativity using only those factors most relevant to an advertising context. They came up with five dimensions of advertising creativity, which form the basis for our survey.

Predicting an Ad’s Effectiveness

To assess the creativity of your ad campaign, ask consumer respondents to score the ads on each dimension, on a scale of 1 to 7, by considering the questions listed below. (These questions, based on communications researcher Robert Smith’s construct for measuring advertising creativity, are meant to be somewhat overlapping.)

Your campaign’s overall creativity rating is the average of the scores of each dimension. By comparing the scores of different campaigns, and analyzing the budget and sales effectiveness for each, you can improve your ability to predict the likely effectiveness of your creative ads and make smarter investments.

**Originality**

* Is the ad “out of the ordinary”?
* Does it depart from stereotypical thinking?
* Is it unique?

*Coca-Cola “Happiness Factory”*

**Flexibility**

* Does the ad contain ideas that move from one subject to another?
* Does it contain different ideas?
* Does it shift from one idea to another?

*Jacobs Krönung “Time for Chatting”*

**Elaboration**

* Does the ad contain numerous details?
* Does it extend basic ideas and make them more intricate?
* Does it contain more details than expected?

[***Ehrmann Yogurt “Strawberry Tongue”***](http://www.horizont.net/kreation/tv/pages/protected/show-25960.html)

**Artistic Value**

* Is the ad visually or verbally distinctive?
* Does it make ideas come to life graphically or verbally?
* Is it artistic in its production?

*Danone Fantasia “Flavor Trip”*

**Originality.** An original ad comprises elements that are rare or surprising, or that move away from the obvious and commonplace. The focus is on the uniqueness of the ideas or features contained in the ad. An ad can diverge from norms or experiences by applying unique visual or verbal solutions, for instance. Many advertising campaigns are anything but original. The prototypical detergent spot shows a homemaker satisfied with an even whiter wash; perfumes feature picture-perfect models; and cars cruise through beautiful landscapes free of traffic. One campaign we studied that excelled in the originality dimension was the surprising visualization of the inside of a vending machine in the Coca-Cola commercial “Happiness Factory.”

**Flexibility.** An ad scoring high on flexibility smoothly links the product to a range of different uses or ideas. For example, a commercial for the Kraft Foods coffee brand Jacobs Krönung, which aired in Germany in 2011 and 2012, showed a man facing various domestic challenges (washing dishes, sewing a button on a jacket, dicing an onion, and making a bed) while a group of women enjoyed a cup of coffee together.

**Elaboration.** Many ads contain unexpected details or extend simple ideas so that they become more intricate and complicated. One good example is an ad for Ehrmann fruit yogurt—one of the leading brands in Germany—in which a woman eating yogurt licks her lips to reveal that her tongue looks just like a strawberry (Ehrmann made different versions of the spot for different flavors), considerably deepening the idea of fruitiness in yogurt. In another example, an ad for Wrigley’s 5 gum, a man is submerged in tiny metal balls that bounce off his skin to represent the tingle one feels while chewing the gum.

**Synthesis.** This dimension of creativity is about blending or connecting normally unrelated objects or ideas. For example, Wrigley aired a commercial that featured rabbits corralled like cattle and fed bananas, berries, and melon, making their buckteeth grow in as Juicy Fruit Squish chewing gum. The commercial combines unrelated objects (rabbits and chewing gum) to create a divergent story line.

**Artistic value.** Ads with a high level of artistic creativity contain aesthetically appealing verbal, visual, or sound elements. Their production quality is high, their dialogue is clever, their color palette is original, or their music is memorable. As a result, consumers often view the ads as almost a piece of art rather than a blatant sales pitch. One ad we studied, which scored among the highest in artistic value, was an animated commercial for Danone’s Fantasia yogurt that aired at the end of 2009. It showed a woman floating on a flower petal through a sea of Fantasia yogurt, surrounded by flowers laden with fruits.

In our study, we asked a panel of trained consumer raters to score the German TV ad campaigns on each of these dimensions, on a scale of 1 to 7; the campaign’s overall creativity rating was the average of its scores. We then looked for relationships between each campaign’s score, its advertising budget, and the campaign’s relative sales effectiveness. (For a brief discussion of the statistical methods we used in our study, see the sidebar “Choosing the Right Model.”)

Choosing the Right Model

In analyzing the relationship between creativity and advertising effectiveness, companies typically use sales response models that are based on conventional regression analyses. We have found, however, that such regression is problematic because it assumes that the input variables (creativity and ad budget, say) are independent of one another in their effect. **In the real world, the longer a creative ad is aired, the more impact the creativity has on sales.**

**That’s why we use a hierarchical sales response model.** Hierarchical models get around the problem by nesting one regression model within another. This allows us to see both the direct impact of creativity on sales and the amplifying effect of the budget, and thus arrive at a more accurate overall estimate of the effect of creativity on sales.

**What We Found**

Our study revealed dramatic variation in overall creativity scores across the campaigns. The average score for overall creativity was 2.98 (again, on a scale of 1 to 7). The lowest score was 1.0, and the highest 6.2. Only 11 of the 437 campaigns received an overall score above 5 (five of them were cola campaigns). At the other end of the spectrum, 10 campaigns had an overall score below 1.5. The scores mattered a lot, we found. A euro invested in a highly creative ad campaign had, on average, nearly double the sales impact of a euro spent on a noncreative campaign. The impact of creativity was initially relatively small but typically gathered momentum as the campaign rolled out.

We uncovered two interesting insights about how creativity enhances sales numbers.

**The dimensions have varying levels of influence on sales.** Companies have plenty of room for improvement in the creativity of ad campaigns. For instance, the types of creativity that agencies currently emphasize are often not the most effective ones at driving sales. In our research, we quantified the impact that each dimension has on sales. Although all of them had a positive impact, elaboration had by far the most powerful one (1.32 when indexed relative to the overall average creativity of 1.0), followed by artistic value (1.19). Trailing behind were originality (1.06) and flexibility (1.03), with synthesis a distant fifth (0.45). Yet the study shows that ad agencies use originality and artistic value more than they use elaboration. Possibly, companies think primarily of originality when trying to be creative.

We also looked at campaigns that scored above the median on at least two dimensions and found that the variation in sales impact among the combinations was even greater than the variation between individual dimensions. Out of 10 possible pairs, we found that the most-used combination—flexibility and elaboration, accounting for nearly 12% of all combinations—is one of the lowest-performing: 0.41 indexed relative to the average of all pairs of 1.0. In sharp contrast, combining elaboration with originality (accounting for nearly 10% of all combos identified) had almost double the average impact on sales (1.96), closely followed by the combination of artistic value and originality (1.89, accounting for almost 11% of all combos).

What Creativity Combinations Work Best?

When used in combination, creativity dimensions had widely varying effects. Relative effectiveness here shows the sales uplift a particular pairing enjoyed relative to average effectiveness. Despite the disparities, however, companies in our study used the 10 combinations in roughly equal proportion (shown here as a percentage of total usage), suggesting that many firms are not getting the most out of their advertising investments.

**[http://hbr.org/hbrg-main/resources/images/article_assets/hbr/1306/R1306H_A.gif](http://hbr.org/hbrg-main/resources/images/article_assets/hbr/1306/R1306H_A_LG.gif)**

The most-used pairing, **flexibility plus elaboration,** is one of the least effective. The most effective pairing, **originality plus elaboration,** had almost double the impact. **Flexibility** is one of the least effective dimensions, whether used alone or in combination. Although **originality** has little impact on sales on its own, it appears to play an important enabling role, appearing in three of the four most effective pairings.

Interestingly, originality is often part of the most effective combinations, suggesting that this type of creativity plays an important enabling role. In essence, being original is not enough—originality boosts sales only in the presence of additional creative dimensions. Indeed, originality’s power to enable may be another reason that so many companies use it in ad campaigns, despite its mediocre individual effectiveness.

**Use of creativity differs by category.** Levels of creativity vary significantly across product categories, with the overall scores ranging from 2.62 for shampoo to 3.60 for cola. In categories such as cola and coffee, advertisers and customers tend to favor higher levels of creativity, whereas in categories such as shampoo, body care, and facial care, campaigns focus on showing the actual use of the product, albeit in an idealized environment. One reason could be that it is still important in certain categories to deliver factual proof points of performance features. When products are functional and oriented toward clear consumer goals (cleaning garments with detergents, protecting skin with body lotion), unorthodox approaches are less preferred. In contrast, when products are easily understood, similar, and tied to personal preferences (quenching thirst with a soda, for instance, or enjoying a cup of coffee), an out-of-the-ordinary approach can be more effective in stimulating sales.

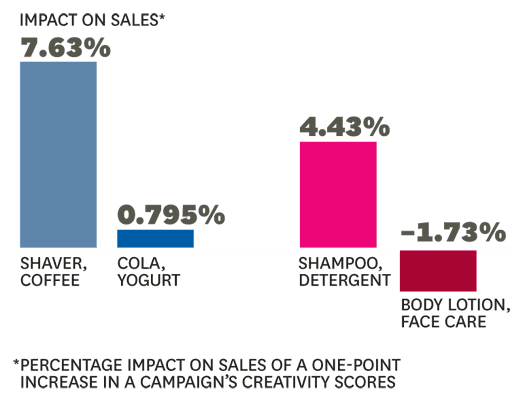
We also looked at whether investing in additional creativity pays off and found that it depends entirely on the category. As the exhibit “Is More Creativity Better?” shows, in traditionally low-creativity categories, adding creativity can pay off; according to our study, a one-point increase in creativity scores for shampoo and detergent ad campaigns boosted sales impact by 4%. However, the body lotion and face care categories, which also tend to feature low levels of creativity, were harmed by additional creativity: Sales impact fell by nearly 2%. We see variation across categories with high levels of creativity. Investing in additional creativity has a nearly 8% impact on sales in shavers and coffee but boosts impact by less than 1% for colas and yogurts. So make sure you understand your category’s sensitivity to creativity before you commission that high-priced category-redefining campaign.

Is More Creativity Better?

If creative ads can inspire consumers to buy, does amping up the creativity level drive even more purchases? Not necessarily. According to our study of German ads, the relative effectiveness of adding creativity to a campaign can vary significantly.

**Categories usually associated with highly creative ads**—such as coffee or cola—do not always get a big boost when more creativity is added to campaigns...

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and among **categories associated with low creativity**—such as detergents and body lotions—getting creative is not always a bad idea.

**Measuring Campaign Effectiveness**

Our research has big implications for advertising agencies and the companies that engage them. Advertising professionals can use methods like ours to identify where to direct their creative energies to best effect. Companies can use the models to estimate the financial impact their creative investments will produce.

In many—indeed, most—cases, companies will find that they are underinvesting in creativity. Our research clearly shows that the conservative approaches adopted in many product categories are leaving money on the table. Increased investment will usually pay for itself: More-effective creative ads will allow other parts of the ad budget to be significantly reduced.

For example, suppose a company plans to air two TV campaigns: Campaign A has a creativity index rating of 3, and it has allocated a TV budget of €500,000 per week. Campaign B has a rating of 3.5, but because it costs more to create the campaign, it plans to spend only €400,000 per week for airtime. (The company establishes creativity ratings by asking consumer panels to evaluate campaign drafts and storyboards along the five dimensions.)

After feeding the scores and budgets into a hierarchical sales response model (for this hypothetical example, we used data from our study), the company estimates that the sales impact for Campaign B will be 1.07% higher in the first week of airing than that of Campaign A. In the subsequent weeks, the gap increases to 1.93% (week 2), 2.63% (week 3), and 3.19% (week 4), thanks to carryover and buildup of consumer knowledge and goodwill. That means that diverting money from the airtime budget to creative will in this case result in a more effective ad. In fact, the model shows that the company could cut airtime spending to €330,000 before the negative impact of reduced airtime outweighed the positive effect of creativity.

Companies can also use a survey approach to estimate the impact of particular creative choices. Let’s say that your product category is coffee, and you have to choose between two creative pitches that both scored 4.0, each with a €400,000 weekly airtime budget. Campaign C emphasizes elaboration and originality, and Campaign D emphasizes artistic value and synthesis. Our findings suggest that Campaign C would be the better bet, since that combination of creativity dimensions produces a positive effect on sales nearly three times as great as that of the combo used in Campaign D.

Creativity isn’t easily engineered—and it is still largely measurable only after the fact. What’s more, a focus-group assessment of an unaired campaign’s creativity levels may well be off the mark. Nonetheless, companies can use a model like ours, coupled with sound baseline data, to better ground the process of creating advertising ideas and assessing their value. And in so doing, they can put to good use quite a bit more than the famous half of their ad budgets.

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## The New Dynamics of Competition

In his book *Innovation and Entrepreneurship,* Peter Drucker made this observation about industries that rely on knowledge-based innovation: “For a long time, there is awareness of an innovation about to happen....Then suddenly there is a near-explosion, followed by a few short years of tremendous excitement, tremendous start-up activity, tremendous publicity....Later comes a ‘shakeout,’ which few survive.”

The problem, Drucker argues, is that knowledge-driven innovations are “almost never based on one factor but on the convergence of several different kinds of knowledge.” The initial breakthrough generates a spate of activity, but meaningful progress occurs only after all the pieces are in place.

I cannot attest to the scientific merit of Drucker’s claim, but I consider it to be a remarkably accurate description of the field of strategy. In its early days strategy was a loose affair. Content originated either from commonsense approaches such as SWOT analysis or from frameworks like the Boston Consulting Group’s growth-share matrix. In 1979, however, Michael Porter’s five forces model changed the field forever. It masterfully synthesized the practical implications of economic research on industrial organizations from the 1960s and 1970s. Knowledge-based innovation put strategy on the map as a field of study, virtually overnight. *Competitive Strategy,* Porter’s practitioner-oriented book, became an enormous success.

Porter’s ideas generated immediate excitement. They prompted interest from researchers in other fields and the establishment of the Strategic Management Society and the peer-reviewed *Strategic Management Journal.* A flurry of papers made informally reasoned claims about the causes of persistent performance differences across firms. Theories such as the [resource-based view,](http://onlinelibrary.wiley.com/doi/10.1002/smj.4250050207/abstract)[dynamic capabilities,](http://www.worldscientific.com/doi/abs/10.1142/9789812834478_0002)and [transaction-cost economics](http://onlinelibrary.wiley.com/doi/10.1002/smj.4250121007/abstract)appeared, and an avalanche of empirical work quickly followed. Another seminal concept, though not as popular with practitioners as Porter’s proved to be, came in 1996, when Harvard Business School’s Adam Brandenburger and Harborne Stuart Jr. proposed “value-based business strategy.” That work has bred an extensive body of literature on strategy by mathematical economists.

From that backdrop, a general model of competitive strategy, which I call the *value capture model*(VCM), has emerged. It uniquely applies the mathematical concept of cooperative game theory to research on business strategy. (“Cooperative” is a misnomer, as the math focuses on competitive dynamics.) As such, the VCM has an explanatory, predictive potential that no other theory of competitive strategy, including Porter’s, can claim. The model is a work in progress, but scholars are starting to use it to explain the dynamics of competition and to identify practical implications for strategic decision making. At the VCM’s core is this axiom: “The value that any party can capture from engaging in transactions with a given set of parties is bounded by the value each of them can add to parties outside the set.”

In this article I will explain the axiom and its implications for how we need to think about strategy.

**Redefining Competition: From Five Forces to One**

In most industries, a firm, its suppliers, and its customers all have choices about how and with whom they create value. To produce more value, they may change how they engage in transactions with existing suppliers and customers or may switch to other suppliers and customers. Those agents, in turn, have similar alternatives in how they transact with the original firm and with their own suppliers and customers.

That reality suggests a formal definition of competitiveness that applies equally to all the firms, suppliers, and customers in an industry: a tension between the value generated from transactions that a firm undertakes with a given set of agents and the forgone value it *could have* generated from transactions with other agents. That definition enables you to assign formal identities to the agents involved; to place them in a mathematical game-theory model; and, with given measures of competitive tension, to examine the payoffs from their investments in resources and capabilities. You can also bring big data—from enormous databases that track consumer behavior and spending, stock prices, company accounts, and so on—to bear on this work. No other current theory of strategy offers the ability to model the effect of strategic decisions so precisely or to use data to test hypotheses about what kinds of management processes or investments improve a given firm’s ability to capture value in its industry.

The VCM model differs from Porter’s framework in two significant ways. First, Porter defines the opportunities of a firm largely by the power that other agents may or may not have over it (buyer power, supplier power, threat of entry by new agents, threat of substitute products brought by existing or other agents, and rivalry from other similar firms). The idea that other agents might compete for the firm remains buried as a moderating factor of each agent’s power over that firm. By bundling competition with different types of players, Porter creates unnecessary complexity. The VCM definition, by contrast, has only one force of competition that works transparently in multiple directions: Suppliers compete for firms, and vice versa; firms compete for customers, and vice versa. In sum, each player in an industry (whether a firm, a customer, or a supplier) experiences a single force of competition for itself. The intensity of that force is measured by the tension between the value the player creates with a given set of parties and the value it *could* create with others. The greater the alternative value relative to the value actually created, the greater the intensity. The relative intensities of the force determine how much value each player stands to win.

Second, the VCM makes a clear distinction between the value *created* by the transactions of market participants and the value *appropriated* by each participant. To be sure, a VCM analysis relies on the former to derive implications about the latter, but the distinction is crucial. Again, Porter buries the distinction so deeply that it is almost lost. Indeed, many people perceive his framework (probably unfairly) as a value-appropriation model, which may explain why many competing informal theories of strategy (such as Christensen’s disruptive innovation or Kim and Mauborgne’s blue ocean strategy) emphasize value creation rather than value appropriation.

**From Value Chain to Value Network**

The VCM offers a new way for practitioners to map a firm’s competitive landscape. Traditionally, and certainly in Porter’s framework, value is seen as the product of a chain of activities: A firm takes material from suppliers, adds some value, and sells a product to customers. It haggles with suppliers and customers over price, and its profitability depends on the appeal of its value-price proposition to customers relative to that of other companies.

The VCM framework replaces the firm’s value chain with what I call a *value network map*—essentially, a productive social network with linkages defined by actual and potential transactions. The map has two major components, as shown in the exhibit “A Different View of Value Appropriation.” The first is the firm’s value network, which comprises the agents (typically, suppliers and customers) who conduct actual, value-creating transactions with the firm. If no opportunities to create value exist beyond the network itself, there is no competition. Competition renders undeniable certain claims on the value produced. Without competition, the parties are left haggling among themselves, each attempting to persuade the others of the value they merit.

A Different View of Value Appropriation

Competition arises from the second component of the value network map: agents outside the network that wish to transact with agents inside the network but that, for some reason, are not currently allowed to engage in such activity. For example, suppose that manufacturer A wants to sell through retail outlet B, but scarce shelf space prevents the transaction from occurring. In the VCM, the collection of all such agents is the value network’s competitive periphery. When agents in the periphery wish to transact with a firm, that firm’s capture of the value created by the network is likely to increase. That’s because if the firm is offered too little in return for its activities within the network, it can choose to cut its transactional ties and form a new network with agents in the periphery.

Who occupies the competitive periphery? All the entities identified by Porter are certainly there: A firm’s rivals offer alternative opportunities to its suppliers and its customers, as do potential entrants and substitute firms in nearby industries. That reality erodes the firm’s ability to appropriate value, as Porter emphasized. But the periphery also includes the rivals of current suppliers and customers (those the firm does not deal with now but could) and potential entrants and firms from nearby industries. The credible threat to replace a supplier or customer with a well-poised substitute increases the firm’s appropriation from its suppliers and customers.

Consider Amazon in the early years of online book retailing (1994–2001), when it experienced persistent losses despite rapid sales growth and revolutionary technology. (See the exhibit “A Different View of Value Appropriation.”) Any buyer who cared to transact with Amazon could do that, so Amazon’s competitive periphery (the agents that might compete *for* it) was empty. Interestingly, this problem stemmed directly from Amazon’s innovation: The shift from brick-and-mortar to online retailing effectively eliminated capacity constraints. For example, I was an early Amazon customer, as it was a terrific source of mathematics monographs not typically stocked by its brick-and-mortar rivals. I never had to stand in line to buy a book, put in a bid for a limited customer slot, or worry that another Amazon enthusiast might jostle me out of my relationship with the company.

To make matters worse, the online arm of Barnes & Noble happily offered Amazon’s customers alternative transactions of comparable value. Back then, so little differentiation between the online book retailers existed that small price discrepancies could induce switching within seconds, a few mouse clicks away. Thus, the periphery of the buyers provided strong competition for *them.* Not surprisingly, markups for Amazon’s service were low, allowing customers to appropriate the lion’s share of the value in the market at that time.

**Factoring In the Strategic Decision**

So far, my description of the VCM has focused on variables beyond the control of individual firms—specifically, the agents in their existing value networks and the degree of competition for those agents as determined by the presence of alternative network partners. But those variables rarely dictate the exact value a firm ends up capturing. Rather, they set an upper and a lower limit for the share of value in a network that a firm can capture. Although the effects of competition can sometimes be subtle, the intensity of competition for the firm’s partners in the network determines the upper boundary, and the intensity of competition for the firm dictates the lower boundary.

The value actually captured is, of course, a consequence of the firm’s strategic decisions. We all intuitively know that firms can affect competitive opportunities and outcomes through their choices about which capabilities and resources to invest in. Formal applications of cooperative game theory mathematics to VCM-type strategy models not only confirm that intuition but also allow us to understand and predict *how* strategic decisions affect outcomes. That’s where the VCM’s distinction between value creation and value appropriation becomes important.

A firm’s strategic investments in capabilities and resources can be measured on two dimensions: the effect of the capabilities and resources on the actual and potential value that partners in a network create, and the extent to which they enhance the ability of a firm to pry value from its transaction partners. Resources and capabilities that influence value, whether actual or potential, are deployed with *competitive intent.* By contrast, resources and capabilities developed to persuade a firm’s transaction partners to give up value, beyond what competition dictates, are deployed with*persuasive intent.*

Typically, a firm uses competitive capabilities and resources to increase the range of value (the minimum, the maximum, or both) that is available for capture, consistent with the competitive intensities of its situation. So a deployment of resources that drives a minimum value up to the level of a maximum value benefits the firm, especially if its persuasive resources are weak. Competitive resources are usually easy to identify. A firm’s products and services, productive assets, innovation skills, and customer service quality all affect the value that the firm creates within its network and that it could create with agents in its competitive periphery.

Advertising is also competitive: It may be designed to increase customers’ willingness to pay for the firm’s own product (by enhancing brand image, for instance) or to reduce customers’ willingness to pay for a competitor’s product, thereby weakening competition for the customers from entities in their peripheries. Such activity usually increases a firm’s maximum *capturable value.* Alternatively, comparative advertising may increase the willingness to pay of potential buyers who are not current customers of the firm, thereby intensifying competition for the firm from the periphery and increasing the firm’s minimum capturable value.

In practice, ads are often designed to achieve both effects. For instance, when General Motors touts its OnStar service in an advertisement and points out that other automakers don’t offer it, the company is aiming to increase the attractiveness of its cars and decrease that of its rivals’ vehicles. Similarly, ads for a sleep aid that mention the product is “not habit-forming” provide a not-so-subtle dig at rival products.

Persuasive resources and capabilities become relevant when competitive intensity is sufficiently loose to create a gap between a firm’s minimum and maximum levels of capturable value. In such situations, a firm may make investments in resources and capabilities to get network partners to relinquish value; such activity may even be the prime driver of profits. For example, car dealers often use elaborate sales techniques to get buyers to part with value.

To see how these types of resources come together, consider Apple, whose own foray into online sales yielded a very different outcome from Amazon’s. Apple launched iTunes in 2001, and by 2010 it was the largest global music vendor. According to some estimates, the company earned a 30% gross margin on $1.4 billion in [iTunes revenue for 2011.](http://www.forbes.com/sites/timworstall/2012/12/04/apples-itunes-is-standing-alone-one-of-the-largest-media-companies/)

When it comes to physical goods, like those sold by Apple, firms can use capacity as a competitive resource to keep their peripheries populated by limiting the number of agents with which the firm can transact. For example, Apple limited the supply of iPods when it introduced them in 2001 and thereby ensured competition for itself. The proprietary iTunes song format also linked the scarcity of Apple’s physical devices to its digital content, and the appeal of the design of Apple’s products kept buyers unusually loyal. The buyers’ own peripheries were populated with other digital music and device providers, but loyalty to Apple lowered the relative value of transacting with them, thereby weakening competition for Apple’s customers. The complementary nature of Apple’s product ecosystem has been much discussed; in VCM terms, the increased value from the iTunes store, particularly for buyers with multiple Apple devices, and the weakening of Apple’s competitive periphery increased the company’s maximum value available for capture.

The stories of Amazon and Apple illustrate an important contrast. In Amazon’s case, book suppliers shipped physical products that were limited in number through a distributor with more or less unlimited transaction capacity. In Apple’s case, the content suppliers provided licenses for music, an activity with no inherent capacity, so the suppliers’ commitments to keep their peripheries populated were not credible. Meanwhile, Apple capped distribution by tying its digital content to its own products using proprietary file formats.

Apple established some distance between its minimum and maximum quantities of capturable value, and its persuasive resources also came into play. Persuasive resources get a firm’s transaction partners to relinquish value beyond the amount proscribed by competition. One way to achieve this aim in a mass retail market is to control pricing at the point of sale, which permits the firm to make credible take-it-or-leave-it offers to its buyers. That technique unravels when it becomes economically attractive for buyers to haggle, as with big-ticket purchases like cars, or if the gap between the minimum and the maximum appropriable value decreases. Indeed, Amazon’s control of the point of sale had little advantage because the similarity of Barnes & Noble’s online offering kept the gap very narrow.

**Quantifying the Outcome**

The exact effects of strategic choices on a firm’s value network and competitive periphery are hard to predict. But armed with a VCM-based mathematical model, managers can estimate those effects more precisely. Indeed, in the VCM model, a firm’s minimum and maximum value-appropriation levels (defining the range of value the firm can capture) are the solutions to problems in linear programming, a very well understood analytical technique that can be conducted in Excel.

A useful real-world example comes from a case study, which I am coauthoring, on Evan Kristen Specialty Foods (EKSF). In it, a venture capitalist must evaluate a business plan from EKSF, a start-up that plans to sell washed, de-stemmed, fresh herbs in the produce section of retail grocery stores year-round. EKSF aims to create a value network with nontraditional participants. Those include FedEx as the distributor (bypassing standard produce warehousing and shipping requirements), original equipment manufacturers as suppliers of custom processing equipment and in-store refrigerated displays, the maker of an IP-protected shipping refrigerant, an in-house staff of retail merchandisers (unheard of in produce), and a collection of growers in a location amenable to year-round production, near Watsonville, California.

Standard industry rules of thumb do not apply in this unusual scenario. The VCM, however, allows the venture capitalist to assess competitive intensity for all players in EKSF’s innovative value network. Comparing the resulting analysis with the financial projections in the business plan enables the potential investor to distinguish the amount of projected profit, given the predictable competition, from the amount that would come from persuasive resources. (Investors usually perceive profits locked in by competitive forces as less risky.)

The analysis provides insight into the balance and evolution of competitive intensities affecting all the agents in the value network. Tight capacity constraints for the start-up imply strong competition for it from customers in its competitive periphery. Upstream, the periphery is essentially empty for several of the nontraditional suppliers mentioned above, as it is (on the supply side) for EKSF. In other words, EKSF and the suppliers have no alternative but to form a network with each other.

However, a medium-term threat emerges, just as the venture capitalist is thinking about an exit strategy. Specifically, the VCM reveals that if EKSF succeeds, the efficacy of its innovative value network will be proven, and the competitive peripheries of its unusual suppliers will fill up more quickly than its own, thereby squeezing profits. Planning for that possibility is therefore important, and that means acquiring a patent license from the refrigerant supplier.

Strategy is a complex domain, and social science progresses in fits and starts. Therefore, it might be a decade before the VCM can provide practitioners with a turnkey managerial tool. Nevertheless, work on the VCM is already revealing important insights for leaders who aim to chart a strategic direction for their firms. If scholars in the field of strategy do succeed in creating a streamlined version of the model with a reasonably full complement of input variables, it will become an important theoretical paradigm. Empirical research findings will then refine the model, which will illuminate the way to better business practices in a virtuous, recursive cycle of discovery and innovation.

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## Tours of Duty: The New Employer-Employee Compact

by Reid Hoffman, Ben Casnocha, and Chris Yeh

For most of the 20th century, the compact between employers and employees in the developed world was all about stability. Jobs at big corporations were secure: As long as the company did OK financially and the employee did his or her job, that job wouldn’t go away. And in the white-collar world, careers progressed along an escalator of sorts, offering predictable advancement to employees who followed the rules. Corporations, for their part, enjoyed employee loyalty and low turnover.

Then came globalization and the Information Age. Stability gave way to rapid, unpredictable change. Adaptability and entrepreneurship became key to achieving and sustaining success. These changes demolished the traditional employer-employee compact and its accompanying career escalator in the U.S. private sector; they are in varying degrees of disarray elsewhere.

We are not the first to point this out or to propose solutions. But none of the new approaches offered so far have really taken hold. Instead of developing a better compact, many—probably most—companies have tried to become more adaptable by minimizing the existing one. Need to cut costs? Lay off employees. Need new skills? Hire different employees. Under this laissez-faire arrangement, employees are encouraged to think of themselves as “free agents,” looking to other companies for opportunities for growth and changing jobs whenever better ones beckon. The result is a winner-take-all economy that may strike top management as fair but generates widespread disillusionment among the rest of the workforce.

Even companies that have succeeded using minimalist compacts experience negative fallout, because the compacts encourage turnover and hamper employee productivity. More important, although the lack of job security indirectly creates incentives for employees to become more adaptable and entrepreneurial, the lack of mutual benefit encourages the most adaptable and entrepreneurial to take their talents elsewhere. The company reaps some cost savings but gains little in the way of innovation and adaptability.

The time has come, we believe, for a new employer-employee compact. You can’t have an agile company if you give employees lifetime contracts—and the best people don’t want one employer for life anyway. But you can build a better compact than “every man for himself.” In fact, some companies are doing so.

We three come from an environment where the employer-employee relationship has already taken new forms—the high-tech start-up community of Silicon Valley. In this world, adaptability and risk taking are acknowledged as crucial to success, and individual entrepreneurs can have a big impact if the networks they’ve built are strong enough.

Two of us (Reid and Ben) recently wrote a book, [*The Start-up of You,*](http://www.thestartupofyou.com/)that applied the habits of successful tech entrepreneurs to the work of building a fulfilling career in any field. Obviously, not every industry works like a start-up business. But most firms today operate in a similar environment of rapid change and disruptive innovation.

Tiny start-ups out-execute corporate giants all the time, despite seemingly huge disadvantages in resources and competitive position. Start-ups succeed in large part because their founders, executives, and early employees are highly adaptable, entrepreneurial types who are motivated to out-hustle, out-network, and out-risk their competitors—and who thus generate outsize rewards.

Recruiting, training, and relying on such a workforce can be scary. After all, if you encourage your employees to be entrepreneurial, they might leave you for the competition—or worse, they might*become* the competition. This is an everyday reality in Silicon Valley. But smart managers here have realized that they can encourage entrepreneurial mind-sets and increase retention by rethinking how they relate to talent within their organizations. What’s more, many have come to understand that they can benefit from employees who do leave for other opportunities.

Don’t Be Afraid of Entrepreneurial Employees

This is the beginning, we think, of the new kind of compact that’s needed today. Although it is most evident in the tech world, we’ve seen elements of it elsewhere—at consulting firms, for example. The chief principle underlying it is reciprocity: Both parties understand and acknowledge that they’ve entered into a voluntary relationship that benefits both sides.

Mutual investment was implicit in the old lifetime employment compact, to be sure. Because both sides expected the relationship to be permanent, both sides were willing to invest in it. Companies provided training, advancement, and an unspoken guarantee of employment, while employees provided loyalty and a moderation of wage demands. The new compact acknowledges the probable impermanence of the relationship yet seeks to build trust and investment anyway. Instead of entering into strict bonds of loyalty, both sides seek the mutual benefits of *alliance.*

As allies, employer and employee try to add value to each other. The employer says, “If you make us more valuable, we’ll make *you* more valuable.” The employee says, “If you help me grow and flourish, I’ll help the company grow and flourish.” Employees invest in the company’s *adaptability;*the company invests in employees’ *employability.* As former Bain CEO Tom Tierney used to tell recruits and consultants, “We are going to make you more marketable.”

The reciprocal compact may be unsentimental, but it depends on trust nonetheless. Because the parties are seeking an alliance rather than just exchanging money for time, it can build a stronger relationship between them even as it acknowledges that relationship’s finite life in the organization. This allows both sides to take more risks, investing time and resources to find global maxima rather than simply seeking local peaks.

Netflix’s compact with its employees is an example of what these new arrangements can look like. In a famous presentation on his company’s culture, CEO Reed Hastings declared, “We’re a team, not a family.” He gave managers this advice: “Which of my people, if they told me they were leaving in two months for a similar job at a peer company, would I fight hard to keep at Netflix? The other people should get a generous severance now, so we can open a slot to try to find a star for that role.” The new compact isn’t about being nice. It’s based on an understanding that a company is its talent, that low performers will be cut, and that the way to attract talent is to offer appealing opportunities.

We’ve found three simple, straightforward ways in which organizations have made the new compact tangible and workable. They are (1) hiring employees for defined “tours of duty,” (2) encouraging, even subsidizing, the building of employee networks outside the organization, and (3) creating active alumni networks that facilitate career-long relationships between employers and former employees. Let’s look at each in turn.

**Establishing a “Tour of Duty”**

If you think all your people will give you lifetime loyalty, think again: Sooner or later, most employees will pivot into a new opportunity. Recognizing this fact, companies can strike incremental alliances. When Reid founded LinkedIn, he set the initial employee compact as a four-year tour of duty, with a discussion at two years. If an employee moved the needle on the business during the four years, the company would help advance his career. Ideally this would entail another tour of duty at the company, but it could also mean a position elsewhere.

The tour-of-duty approach works: The company gets an engaged employee who’s striving to produce tangible achievements for the firm and who can be an important advocate and resource at the end of his tour or tours. The employee may not get lifetime *employment,* but he takes a significant step toward lifetime *employability.* A tour of duty also establishes a realistic zone of trust. Lifelong employment and loyalty are simply not part of today’s world; pretending that they are decreases trust by forcing both sides to lie.

Why two to four years? That time period seems to have nearly universal appeal. In the software business, it syncs with a typical product development cycle, allowing an employee to see a major project through. Consumer goods companies such as P&G rotate their brand managers so that each spends two to four years in a particular role. Investment banks and management consultancies have two- to four-year analyst programs. The cycle applies even outside the business world—think of U.S. presidential elections and the Olympics.

Properly implemented, the tour-of-duty approach can boost both recruiting and retention. The key is that it gives employer and employee a clear basis for working together. Both sides agree in advance on the purpose of the relationship, the expected benefits for each, and a planned end.

The problem with most employee retention programs is that they have a fuzzy goal (retain “good” employees) and a fuzzy time frame (indefinitely). Both types of fuzziness destroy trust: The company is asking an employee to commit to it but makes no commitment in return. In contrast, a tour of duty serves as a personalized retention plan that gives a valued employee concrete, compelling reasons to finish her tour and that establishes a clear time frame for discussing the future of the relationship.

The Wharton School polls its students about their satisfaction with their pre–business school jobs. It has found that students who came to it from “terminal jobs”—two-year analyst programs, for example—are more positive about their work experience than their peers are. Terminal jobs are generic versions of tours of duty; personalized tours would probably produce even more positive feelings.

In 2003 Matt Cohler was a management consultant who wanted to become a venture capitalist, although he lacked start-up experience. He began working for Reid at LinkedIn, where the two mapped out a two-year tour of duty. After that time was up, he and Reid agreed to extend the tour while they figured out what Matt could do next. Six months later Matt had the opportunity to join Facebook as one of its first five employees. Although Reid didn’t want to lose Matt, he advised him to take the position, which would bring diversity to his start-up experience and move him closer to his goal. After three years at Facebook Matt became the youngest general partner at Benchmark, a prominent venture capital firm.

**Action item: Construct personalized, mutually beneficial tours.** Work with key employees to establish explicit terms of their tours of duty, developing firm but time-limited mutual commitments with focused goals and clear expectations. Ask, “In this alliance, how will both parties benefit and progress?”

When possible, a tour of duty should offer an employee the possibility of a breakout entrepreneurial opportunity. This might involve building and launching a new product, reengineering an existing business process, or introducing an organizational innovation.

This approach can’t be executed by a central HR function; you’re making a compact, not drawing up a contract. We’re not suggesting that you negotiate a guaranteed arrangement that spells out all the specifics—a rigid approach is the opposite of an entrepreneurial mind-set. You’re building a trust relationship that’s based on the employee’s actual job, so the conversations must be handled by direct managers.

**Engaging Beyond the Company’s Boundaries**

Henry Ford once complained, “Why is it that every time I ask for a pair of hands, they come with a mind attached?” But these days, of course, minds dramatically amplify the value of hands—and they become even more powerful when they’re able to engage with minds outside the company.

No matter how many smart employees you have, there are always more smart people outside your company than within it. This is true of all organizations, from one-person start-ups to the Googles of the world.

You can engage with smart minds outside your company through the network intelligence of your employees. The wider an employee’s network, the more he or she will be able to contribute to innovation. Martin Ruef, of Duke University, has found that entrepreneurs with diverse friends scored three times as high as others on measures of innovation. To maximize diversity and thus innovation, you need networks both inside and outside your company.

Therefore, employers should encourage employees to build and maintain professional networks that involve the outside world. Essentially, you want to tell your workers, “We will provide you with time to build your network and will pay for you to attend events where you can extend it. In exchange, we ask that you leverage that network to help the company.” This is a great example of mutual trust and investment: You’re trusting your employees by giving them the resources to build their networks, and they’re investing in your business by deploying some of their relationship capital in your company’s behalf.

Those networks should encompass the entire environment in which your business operates, including customers and competitors alike and serving as platforms for information on new technology and other trends. For example, at the venture capital firm Greylock, where Reid is a partner, tapping the investment professionals’ external networks is an important part of product review meetings. Someone might ask, “What new technologies are you hearing about? Which ones should we investigate?” The insights gained translate into better decision making and more value for Greylock’s portfolio companies. The partners at another top venture capital firm, Andreessen Horowitz, have their own creative spin: At the beginning of every meeting, they award a cash prize for the best industry rumor someone has heard. You don’t have to be in venture capital to adapt such techniques for your company.

The power of external engagement helped define the history of Silicon Valley high tech, as chronicled in AnnaLee Saxenian’s 1994 book on technology clusters, *Regional Advantage.* In 1970 some of the world’s largest technology firms were located in Boston’s Route 128 corridor. Today none of the 10 largest tech firms are; Boston’s primacy has been snatched away by Silicon Valley. What made that possible? External networks.

Massachusetts companies typically preferred secrecy to openness and rigorously enforced noncompete clauses to prevent employees from jumping to rival firms or starting their own. Silicon Valley has long had a more open culture (and lacks enforceable noncompete clauses), and this has permitted the development of much denser and more highly interconnected networks—which make it easier for people to innovate. The area even gave rise to a term, “coopetition,” that reflects the fact that working with competitors can be mutually beneficial. Consider Netflix again: It runs its streaming video service on Amazon’s cloud platform, even though Amazon’s Instant Video is a direct competitor.

**Action item: Encourage network development.** In*The Start-up of You* we wrote, “Your career success depends on both your individual capabilities and your network’s ability to magnify them. Think of it as IWe. An individual’s power is raised exponentially with the help of a team (a network).”

Just as an individual’s power rises with the strength of her network (IWe), a company’s power rises with the strength of its employees’ networks. Value each person’s network and her ability to tap it for intelligence; make it an explicit, acknowledged asset. An employee who keeps her LinkedIn profile current or builds a big personal following on Twitter is doing right by your company, not being disloyal to it. And make a candidate’s network strength and diversity a priority when hiring. Bringing in employees with strong networks is good; hiring people whose networks complement rather than overlap those of existing employees is even better.

One of the techniques we recommend for individuals is to maintain an “interesting-person fund” to take people in their networks out to coffee. The corporate equivalent is a “networking fund” for employees. To make sure your company reaps the full benefits, establish two requirements for tapping the fund. First, employees have to leave your corporate campus; you want them to get “outside the building” to build a more diverse external network. Second, they must report back about what they learn so that the gains are shared. Most companies allow employees to expense business lunches, but few allow them to expense networking lunches. Yet if you’re a top executive, you probably have such lunches all the time, and your company benefits as a result. Make it not just acceptable but *expected* for your people to do the same.

HubSpot, a Massachusetts-based marketing software company that, in its words, believes in “invest[ing] in [the] individual mastery and market value” of every HubSpotter, keeps it even simpler than that. Interested in a book? Mention it on the internal company wiki, and the book will show up on your Kindle. Want to take somebody smart to lunch? Company policy is: “Expense it. No approval needed.”

The network intelligence flowing into your company needs to be a top management concern, with specific programs to strengthen and extend it. For highly networked and entrepreneurial employees, this is one of the primary criteria for judging your attractiveness as an employer.

**Building Alumni Networks**

The first thing you should do when a valuable employee tells you he is leaving is try to change his mind. The second is congratulate him on the new job and welcome him to your company’s alumni network.

Just because a job ends, your relationship with your employee doesn’t have to. Corporate alumni networks are a prime way to maintain long-term relationships with your best people. As Cindy Lewiton Jackson noted while she was the global director of career development and alumni relations at Bain, “The goal is not to retain employees. The goal is to build lifelong affiliation.”

Some industries and firms have long understood this. McKinsey & Company has operated an alumni network since the 1960s; the group now has upwards of 24,000 members (including more than 230 CEOs of companies with at least $1 billion in annual revenue). Booz Allen Hamilton’s network has 38,000 people.

One obvious benefit of alumni networks is the opportunity to rehire former employees. The Corporate Executive Board reports that rolling out the CEB Alumni Network doubled its rehire rate in just two years. But the value goes far beyond that. Your alumni are among your most effective means of external engagement. They can share competitive information, effective business practices, emerging industry trends, and more. They understand how your organization works and are generally inclined to help you if they can. Bain’s Tom Tierney has observed, “Our number one source of high-quality new business is our alumni.”

It may be that management consultancies have pioneered corporate alumni networks because the organizational practices of those firms (two-year analyst programs, “up or out” advancement, encouragement of consultants to take positions with clients) align so well with the concept—but the practice is spreading. LinkedIn now hosts thousands of corporate alumni groups, including those of 98% of the *Fortune* 500 companies. Such groups are often informal, not official; they spring up because alumni want to stay in touch with and help one another. In a [study](http://www.slideshare.net/joeinholland/what-universities-can-learn-from-corporate-alumni-programs)from the University of Twente, in the Netherlands, only 15% of the companies surveyed had official alumni networks, but 67% had independently organized, informal groups.

You might fear that running an alumni network is an admission of failure—a sign that your company can’t retain its best people. But your alumni are likely to form a network anyway; the only real question is whether your company will have a voice in it. Alumni are fallow resources waiting for you to tap them. So why don’t you?

**Action item: Utilize your exit interviews.** The traditional exit interview represents a lost opportunity. Instead of collecting perfunctory feedback that they’ll probably just ignore, your managers should gather information that can help you maintain long-term relationships with departing employees (and induct them into your alumni network!). Keep a database of information on all former employees: personal e-mail and phone, LinkedIn profile, Twitter handle, blog URL, areas of expertise, and so on.

The exit interview is also a trust-building opportunity. Many employees have sat through grimly polite or even resentful parting talks. You can make your company stand out by emphasizing the ongoing nature of the relationship. This is also, of course, an opportunity to learn about ways the company and you can do better. Departing employees are more likely than current ones to be honest, and the flaws in your business and organizational practices may be on their minds. Listen closely to what they say.

If the employee who’s leaving is one of your stars, you should provide an even higher level of service (assuming he handles his departure professionally and doesn’t take the rest of the organization with him). Such folks are likely to go on to great things and to be the hubs of their networks, which could prove very valuable to you. As with the tour of duty, aim for a two-way flow of value; you need to provide benefits if you expect to receive them. The benefits you offer may depend on the business you’re in. For example, management consultancies often give free insights to alumni who have joined industry clients. If you’re a consumer company, offer alumni discounts in addition to the customary employee discounts. The cost is minimal, and the trust and goodwill gained can be substantial. Some might consider it extravagant to “reward” employees who have left, but that view misses the point. Most employees don’t leave because they’re disloyal; they leave because you can’t match the opportunity offered by another company.

If you don’t have the resources to set up a formal alumni network, you can support the informal networks that arise on LinkedIn or Facebook. Your assistance can cover the gamut, from giving financial rewards to alumni who help your firm to handing out company swag or paying for pizza during a meetup. Even distributing an alumni newsletter can contribute to an ongoing cordial relationship at practically no cost.

**The Virtuous Circle**

An employee who is networking energetically, keeping her LinkedIn profile up to date, and thinking about other opportunities is *not* a liability. In fact, such entrepreneurial, outward-oriented, forward-looking people are probably just what your company needs more of.

How do you square the need for such people with the reality that many of them won’t stick around forever? First, by accepting that reality. A CEB study of 20,000 workers identified by their employers as “high potentials” found that one in four of them planned to be working elsewhere within the year (see [“How to Keep Your Top Talent,”](http://hbr.org/2010/05/how-to-keep-your-top-talent/ar/1)HBR May 2010). Once you get past this scary truth, you’ll find it easier to achieve honest, productive relationships that support your employees’ ambitions. This will make your employees more effective on the job and may actually keep them around longer.

The key to the new employer-employee compact we envision is that although it’s not based on loyalty, it’s not purely transactional, either. It’s an alliance between an organization and an individual that’s aimed at helping both succeed.

In the war for talent, such a pact can be the secret weapon that helps you fill your ranks with the creative, adaptive superstars everyone wants. These are the entrepreneurial employees who drive business success—and business success makes you even more attractive to entrepreneurial employees. This virtuous circle has created a competitive advantage in talent for Silicon Valley companies. It can work for your company, too.