For people who believe in excelling in everything they do

READY FOR THE NEXT MOVE

Understanding a brand's potential requires a new set of metrics

Andy Pierce and Suzanne Hogan

EDITORS NOTE

Dear Friend,

"Right for the next move" - Are you? The move could be a series of expensive repositioning exercises or over- emphasis on the bottom line at the expense of your brand. You got to be careful and resist the temptation of such exercises. Remain focussed inspite of your brand being threatened. Some times wait and watch is the best policy. This article is a journey through all that. The companion article **"Rigourous analysis provides a platform for action"** takes you to the diagnostics. All you need is to superimpose this on your business and see what happens. **"Brand is really about the customer relationship"** is an article that talks about the value of putting emotions in brands. Does your brand have it? How do you manage it? Read on. **"Winning in smart markets"** is a piece with a lot of tool book wisdom. So is **"Star Power"**. It is about how critical it is to have the right celebrity (star) endorse your brand. Then there is a timely piece about the e-mail deluge that we get and try to reply or delete - **"The ten commandments"**. It is very useful for an e-mail user. A gold nugget is **"The innovation premium"** that will make you think. It has very lucid examples and some practical *gyan.*

Hope you like this issue of **Quest.**

Sincerely,

A dispassionate analysis of a brand can uncover opportunities for a company to expand into new profit zones. It also can reveal signs that the brand is becoming irrelevant to changing customer priorities.

American Express contemplates a bold partnership with Visa that would eliminate a major source of customer dissatisfac-tion by dramatically increasing the number of establishments accepting the Amex card. Will it erode the profit-generating prestige of the American Express brand?

TotalFina hopes to achieve the necessary scale to compete in the consolidating petroleum industry through its acquisition of long-time rival Elf Aquitaine. What name should be chosen for the

merged enterprise, and how should it relate to the brands of the numerous operating companies?

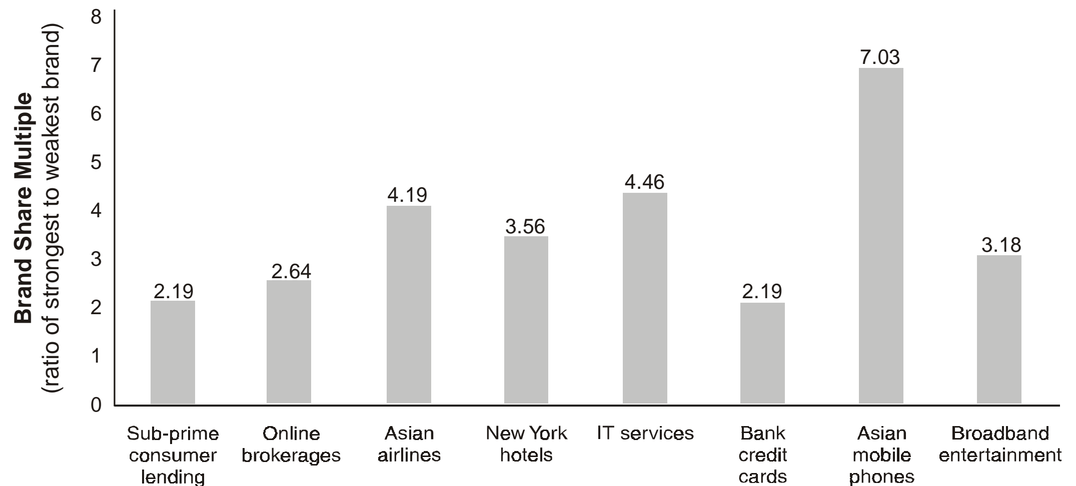
Kmart creates a stand-alone Internet site, BlueLight.com,

in response to the threat posed by new online retailing rivals. Is it correct in concluding—in contrast to discount retailing competitor, Wal-Mart—that its existing brand wouldn't translate well to the Internet or might limit its options in the online environment?

Each of these moves clearly raises high-level strategic issues for the companies involved. But in a world where brand strategy can no longer be separated from business strategy, key brand issues must also be addressed. To do this, a company needs a deep understanding of its current brand status. Without this knowl-edge, managers can neither anticipate the impact a business move will have on their brand nor gauge the brand's potential to drive a business move. A formal brand assessment thus becomes a crucial prerequisite to most major strategic initiatives.

Business moves are not the only reason to stop and take stock. Early signs of change in customer priorities or the competitive environment also call for a self-evaluation. Indeed, smart brand builders are constantly reassessing their brand, identifying areas of strength and weakness, asking themselves whether their brand strategy needs to be adjusted or overhauled. Do the brand's strengths provide the company with the license to extend its business to new profit zones? Do the weaknesses indicate that the brand may soon become irrelevant?

Exhibit 1 A strong brand can make a dramatic difference in the likelihood of a customer choosing one product or service over another (all else being equal)



That self-assessment process has become increasingly complex. The shift toward a service- and Internet-based economy has upended the time-honored rules of brand building, making traditional yardsticks, if not obsolete, inadequate. The changing rules of branding call for new approaches to evaluating a brand's status.

In business-to-business set-tings,where brand has often played a subordinate role, a single competitive move can make a brand suddenly relevant.

Does brand matter?

Before a company undertakes a comprehensive self-assessment of its brand—not to mention major brand-related investments—it makes sense to determine the importance of brand in the industry. In a relatively few cases, brand plays virtually no role in shifting demand. For example, in a new industry or product cate-gory, the product rather than the brand will be the dominant connection to the customer. Or in certain business-to-business situations, the personal relationships that salespeople develop with their accounts may make the brand less relevant.

In most categories, however, the brand does make a significant difference, increasing to varying degrees the likelihood of a cus-tomer choosing one product or service over another. For exam-ple, strip away everything besides brand—for example, differ-ences in price, schedules, in-flight amenities, and on-time performance—and customers are four times more likely to choose the Asian airline with the strongest brand than the airline with the weakest (see Exhibit 1). The first question for many executives thus becomes *how much* does brand matter in their industry, and are they devoting an appropriate level of time and resources to brand building?

Even in situations where brands have less impact, things can quickly change. In a new product category, where brands initially may not be important, managers need to anticipate when and how they can seize the opportunity to create a powerful brand out of a strong product—as, for example, Palm Computing did with its PalmPilot personal digital assistant. In business-to-busi-ness settings, where brand has often played a subordinate role, a single competitive move can make brand suddenly and powerful-ly relevant. Intel's "Intel Inside" campaign leapfrogged the com-pany's immediate customer—personal computer manufacturers—and targeted the end consumer. By creating recognition and value around the microprocessor inside the PC—a prominent example of so-called ingredient branding—the chipmaker made itself an indispensable supplier to manufacturers.

Given this power of a brand to strengthen a company's "strategic control"—its ability to lock in customer relationships and protect profits from being diverted to competitors—smart business-to-business companies are always looking for signs of the latent or emerging importance of brand. For example, if brand isn't important to immediate customers, could it be important to end consumers? Do opportunities exist to create a branded "service wrap" around a commodity that would enhance consumers' use of the product? While the brand may not immediately support a price premium or directly influence a customer's choice, it can lead a customer to consider a product or service—a valuable first step even when buying decisions are ultimately based on personal relationships.

Of course, in gauging the importance of branding to their com-pany, managers must also keep in mind that customers are only one of a brand's potential audiences (see previous article). A powerful brand also influences investors and helps attract, retain, and motivate talented employees. These two constituencies, as much as customers, help drive a company's profit and sharehold-er value growth.

The brand report card

Assuming that a strong brand can make a difference for a company, managers need a strategy to capitalize on that poten-tial. That begins with an understanding of the current status of their brand.

Marketing science tools are indispensable in helping to under-stand which elements of a company's brand actually drive customer choice and shift demand for products and services. But companies can get started with a self-assessment. We have found that the dispassionate use of a simple diagnostic (see Exhibit 2) can provide a broad overview of a brand's

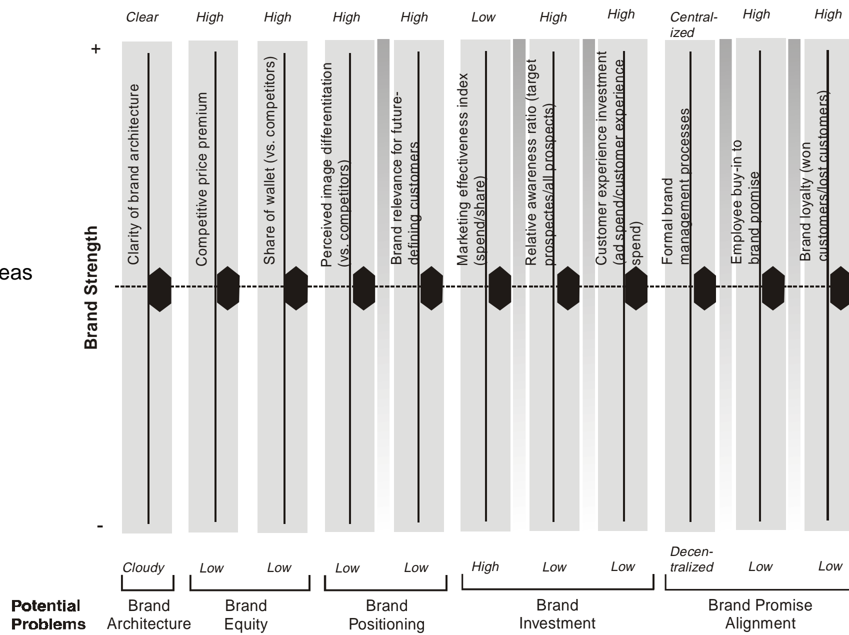


Exhibit 2 A brand self-assessment can identify areas where a company's brand needs to be strengthened

health, identify poten-tial problem areas that would benefit from deeper analysis, and suggest ways to make the brand more robust today and in the future. As you read, use the diagnostic to assess your firm's brands.

How well thought out is my brand architecture? Many companies with a portfolio of brands have given little thought to how they relate to one another or to the corporate brand. When they diagram that portfolio, they find that it not only has little ration-ale, creating confusion among customers, distributors, and investors, but also that it may be undermining their strategic goals. Thus, a company's first task is to determine the appropriate brand architecture.

There are three basic types of brand architecture—master brand, holding company, and asymmetrical (see Exhibit 3). In the mas-ter- brand model, a single brand is dominant throughout an entire corporation. The economic benefits are clear: Every mar-keting dollar benefits each one of the divisions or operating com-panies, which themselves provide multiple exposures of the brand in the marketplace. IBM had aggressively pursued a master-brand strategy until it acquired Lotus in 1995. Because the software maker had a strong product brand that was flourish-ing under a different business model, culture, and operating style from IBM, Lotus was allowed to retain its name. Over time, however, IBM recognized that the stability and financial clout of its own brand enhances the Lotus brand and reverted to a modified master-brand architecture, connecting Lotus to the parent through a simple endorsement—thus, "Lotus, an IBM company."

At the other end of the spectrum is the holding-company model, in which none of a company's businesses share the corporate name. This model provides a company with brand flexibility, enabling it to target diverse audiences. For example, the variety of brands offered by automaker General Motors or the luxury goods firm LVMH allows those companies to build loyal cus-tomer relationships with different customer segments. The hold-ing- company model also gives a company greater flexibility in buying and selling other companies: Acquisitions can be made with the promise that the acquired company will be able to operate independently, while divestitures generally won't result in negative repercussions for the corporate brand. But with this flexibility comes the cost of supporting more than one brand. A company must be able to analyze the economics of its brand portfolio to ensure that the incremental brand management costs are outweighed by the benefits of having an array of brands.

The asymmetrical model generally emerges from a historic base. A company starts with a strong master brand but, as it outgrows its core business, it finds that this restricts its efforts to expand into new customer segments or market areas. For example, as Disney began to grow beyond its core business of wholesome, family-oriented movies and theme parks into potentially more profitable areas, it found itself limited by its definition of the Disney brand. Consequently, it created and invested in sub-brands,
such as Touchstone, Miramax, and Buena Vista, that produced under separate identities a wide variety of films and videos for a broad audience. The asymmetrical model also may serve as a way to deal with the rapid changes wrought by evolv-ing customer priorities and the Internet. As companies increas-ingly are forced to redesign their businesses every few years, they may find that their master brand isn't malleable enough to with-stand quick and easy repositioning. Keeping pace with the changes may require the creation of sub-brands.

Different business situations call for different brand architecture models. But managers can't determine whether theirs is appro-priate until they have mapped it out. An architecture that includes a profusion of unrelated brands will need to be justified economically, given the efficiencies of the master-brand model.

How strong is my brand equity? There are numerous tools used by companies and advertising agencies to estimate the

economic value of corporate brands. They range from calculations of a brand's balance sheet value to assessments based on image-related research. While well designed, few of these quantify what we call brand equity: the value to customers (or employees or investors) of the attributes embedded in a brand name, reflected in the choices they make in a competitive marketplace.

The distinction is important. By failing to take into considera-tion the value of the brand from the constituency's point of view, most brand valuation methods give executives little guidance on how to more effectively manage their brands. By contrast, under-standing which attributes of a brand cause people to choose it over competing brands—or, conversely, to choose a competitor's brand instead—allows a company to make informed brand strat-egy moves. For example, what should be emphasized or down-played in the brand promise to customers? Where should invest-ments be made in the delivery of that brand promise? What opportunities exist to extend the brand into new customer seg-ments or product categories? Where are the opportunities to attack competitor's brands?

Particularly powerful equity assets—for example, "trust" for GE, "innovation" for 3M, "family entertainment" for Disney—can carry a company into new opportunities with little risk of brand equity dilution. Relatively weak brand assets may foreclose such opportunities for brand extension. Knowledge of a brand's equity has become particularly important as the rise of the Internet has created tremendous opportunities and pitfalls for companies try-ing to extend their brand into this new space.

Strategic Choice Analysis® (see article on the next page) enables managers of major brands to assess in detail the critical compo-nents of their brand's equity. But they can get a start through a "back-of-the-envelope" perspective derived from more easily accessible data—for example, the brand's relative price premium or "share of wallet" compared with competitors.

How effectively is my brand positioned? An organization that can-not
articulate its corporate brand positioning, or brand promise, hasn't found its soul. And if it hasn't found its soul, its audiences certainly won't make the emotional connection necessary for a brand to have an impact. Thus, the first step for some companies is to create a detailed positioning statement for their brand or brands. Then, with a clear understanding of the positioning, they can assess whether it is effective, using updated definitions of some traditional benchmarks.

For years, basic marketing principles have asserted that a brand must be differentiated in the eyes of customers. But that is only part of the story: A differentiated brand that doesn't also affect a customer's choice of a product or a service may help a company to become well-known or well-liked, but it won't drive profit or shareholder value growth. A brand also must be relevant to what the customer wants. That, however, begs an important question: "Which customers?"

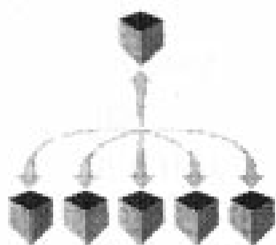
Clearly, one group must be a firm's most profitable customers. Becoming the brand of choice with customers who cost more to serve than they contribute in revenue is a hollow victory for the brand strategist.

But perhaps the major flaw in traditional brand positioning yard-sticks

Exhibit 3 Different situations call for different brand architectural models.

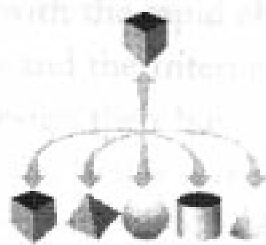
Master Brand

The corporation and most operating units and brands share the same name.



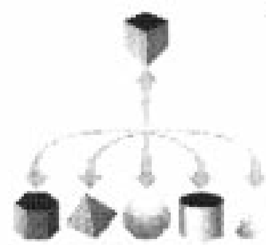
Asymmetrical

The corporation and one operating unit or brand share the same name.



Holding Company

The corporation, operating units, and brands do not share the same name.



Efficiency ⟷ *Flexibility*

Examples	Examples	Examples
American Express	Coca-cola	General Mills
AT&T	Disney	General Motors
IBM (Lotus)	Ford	Philip Morris
Samsung Group	Gillette	Procter & Gamble
Sony	Time Warner	Unilever

is their shortsighted focus on the present. While it is reassuring for managers to ascertain that their brand is relevant today, much more important is how relevant it will be to what customers want in the future. One resource that can help in positioning a brand for the future is an understanding of brand patterns, described in the following article.

Another is the identification of "future-defining customers." These are typically not a company's biggest or most profitable customers. Instead, they are a subset of those customers who act differently from others, who make what seem like odd demands. The challenge lies in distinguishing between those in this group who foreshadow the future—and those who simply have unique current needs. The sales force will be best positioned to recog-nize these future-defining customers: They will be the ones whose unusual needs are being met by new, edge-of-the-radar-screen competitors.

Clearly, these customers cannot be pinpointed with certainty; though they may be younger than average, representing the next generation of customers, it is their behavior rather than their age that defines them. But the process of trying to identify them forces managers to think about their brand's future relevance. The ultimate goal is to determine whether the current brand has the necessary equity to address the emerging priorities of these customers, while not alienating today's customers.

Understanding which attributes of a brand actually cause people tochoose it over competing brands allows a firm to make informed strategy moves.

In the online brokerage business, for example, well-established brands such as Fidelity, Schwab, and Merrill Lynch are threatened by new entrants such as E*trade and Ameritrade, which have a younger image than their established rivals. The incumbent companies must determine whether their brands can be repositioned so that they will be relevant to both today's and tomorrow's prime customers, or whether it will be cheaper and less risky to create a new brand or a sub-brand for their online businesses. In one of the most interesting examples to date, Schwab launched a separate online business under the name E-Schwab, only to conclude after several years that combining its offline and online businesses under the Schwab brand would be more effective.

Am I making the right investments in my brand? Traditionally, investing in a brand meant spending money on advertising. But over time, brand strategists have realized the limitations of an advertising-only strategy. For one thing, determining the return on an advertising investment with any rigor has proved an elu-sive goal. More ominously, spending on advertising alone may squander the greatest opportunities to strengthen a brand.

Because brand value is created or destroyed in each interaction a customer has with a company, managing these multiple "moments of truth" can have a decisive impact on a brand's value. For example, in retail banking, a frustrating interaction with a bank teller can erase, in one encounter, any positive feeling attributable to the brand. Investing to improve the branch experience can produce a much higher return on a brand-build-ing investment than incremental product advertising.

Clearly, knowing when, where, and how customers interact with a company and what will affect their perceptions of the brand are critical to making wise brand-building investments. The good news is that, unlike with advertising, the relative brand impact of different moments of truth can be measured, allowing managers to determine which brand-building investments will yield the greatest return This will help guide decision making on whether to invest in, say, training for customer-facing employees or training for call-center employees.

In addition, the effectiveness of brand-building investments can be assessed by comparing a company's performance against com-petitors on some conventional measures: "marketing effectiveness ratio" (marketing spend/market share) and "relative awareness ratio" (awareness among target prospects/awareness among all prospects). More enlightening still may be a comparison of investments in advertising and investments in brand-building programs that directly affect the customer experience. The dis-proportionate spending on advertising, with its uncertain returns, will surprise many managers.

Is my entire business aligned with my brand promise? Brands need to be built and managed from the top down. All too often, how-ever, corporate strategy is developed in the chief executive's office and brand strategy is developed in another part of the firm. This mutual isolation often results in business decisions—for example, those involving cost-saving measures or the introduction of new products—that either destroy brand equity or don't capitalize on the opportunities presented by a brand.

A formal brand management process—with a "brand czar" who has CEO backing to stop business initiatives because of their impact on the brand—can protect long-term brand equity. The brand management function can also institutionalize assess-ments, such as the one described in this article, through the cre-ation of an ongoing brand health monitoring system. And it can establish guidelines for managing the brand that go beyond tra-ditional identity guidelines to include rules on how, when, and where to use brands in the development of new products and services or in moves to new types of business. Companies with the most successful brands—for example, Disney, American Express, and IBM—typically have this type of formal brand oversight.

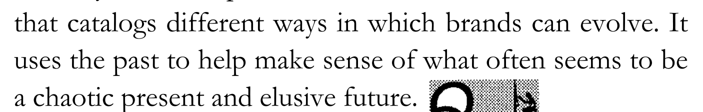
But the powers of a "brand czar" to protect a brand promise has limits. Also critical are customer-facing employees, the "brand ambassadors" of an organization. A brand self-assessment

needs
to gauge how well employees understand the brand promise and
how willing and able they are to deliver on it at key moments of
truth. Their success in doing so will be reflected in measure-ments of customer loyalty—for example, the ratio of new cus-tomers to lost customers. That's because a customer whose expe-rience with a company is consistent with what was implicitly
promised by the company's brand will return again and again.

Winning brands are those that are highly relevant to today's—and tomorrow's—customers.

A springboard to the future
A brand self-assessment helps to identify areas of strength and weakness in a company's current brand strategy. This provides a baseline of information with which to make smart decisions about the next business moves.

American Express's fabled understanding and appreciation of its brand equity has informed its planned partnership with Visa, which the two companies are rolling out cautiously in a few European countries. TotalFina, itself with a name that reflects a recent merger, determined that the equity in the Fina and Elf brands merits keeping them at the corporate level and chose to name the combined enterprise TotalFina Elf. Kmart's BlueLight.com—a reference to the retailer's in-store-only special offers—plans to expand beyond the sale of Kmart products to offer customers continual bargains and such services as free Internet access.

While an analysis of a company's present brand status is a requirement for planning future moves, it may not be sufficient. With customer priorities and the competitive environment changing so rapidly, companies must try to anticipate where tomorrow's brand opportunities will be. This type of analysis, described in the next article, draws on a library of brand patterns
that catalogs different ways in which brands can evolve. It uses the past to help make sense of what often seems to be a chaotic present and elusive future. 

Deconstructing brand equity

Rigorous analysis provides a platform for action

The power that comes from understanding, at a deep and detailed level, how a brand actually shifts demand among different customer seg-ments can't be overestimated. Such an under-standing, reached through quantitative analysis, helps executives confidently plan and execute a brand strategy that will drive profit and share-holder value growth.

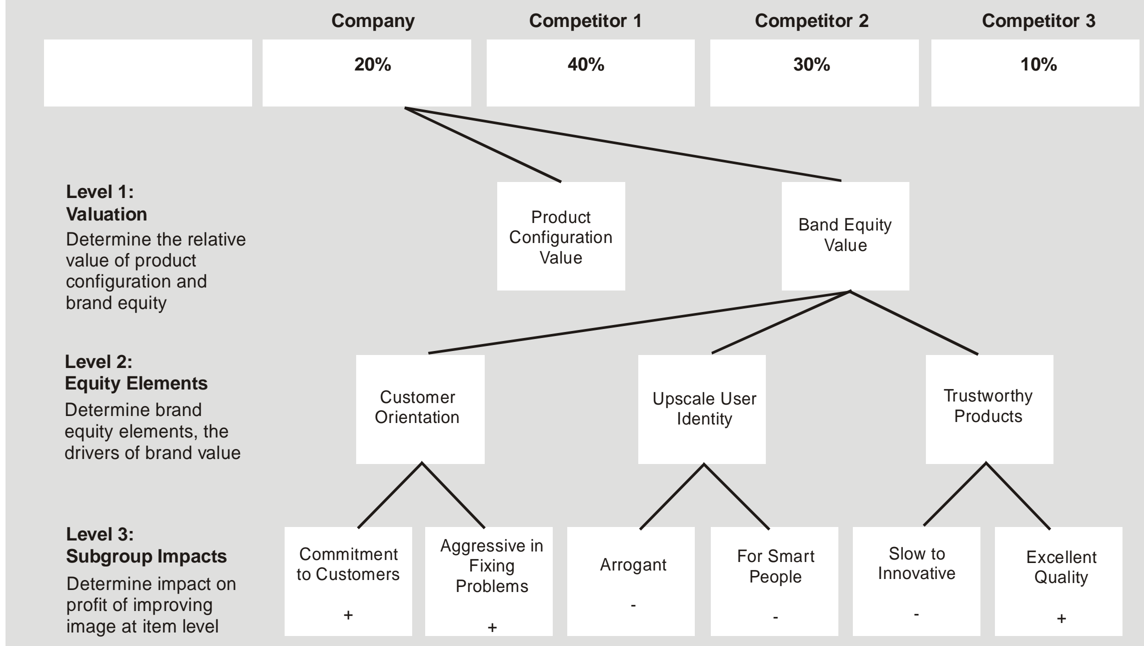
The key to achieving this understanding lies in the quantification of a brand's "equity" through the isolation of its equity elements. Brand equity is the total value of all attributes implicit in a brand that convince a customer to purchase a particular product or service over competing offerings, all else being equal. (It also influences where employees choose to work and where
investors choose to put their money.)

Unlike brand image, which includes all of a brand's positive and negative associations, brand equity represents only those attributes that affect actual customer choices. The equity can have a positive or negative value, depending on whether it makes a customer more or less likely to buy. And, because it represents the value of a brand in the eyes of the customer, it will vary depending on the customer segment.

The different attributes of a brand that influence customer choice are known as equity elements, and they will vary from brand to brand. One means of identifying them and assessing their rel-ativevalue is a marketing science tool, Strategic Choice Analysis (SCA)®. The information that flows from this analysis is rich and detailed, providing a basis for marketplace actions

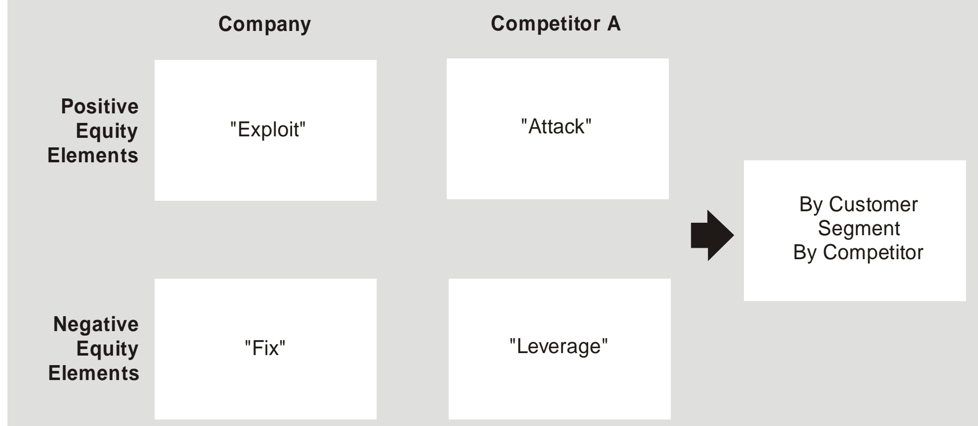
- At the first level—*valuatio*n—the relative val-ues of product or service configuration and brand equity are measured, by customer seg-ment, for the company and its competitors. This analysis provides a high-level, segment-by-segment view of competitive opportunities
and threats directly tied to brand strategy.
- At the second level—*equity element identificatio*n—
brand equity is disaggregated to reveal its key drivers. This analysis reveals points of possible leverage for increasing brand equity, as well as brand elements that currently have unrealized potential or that represent negative
value.
- At the third level—*subgroup impact*s—the diagnosis becomes even more detailed, reveal-ing how individual elements of brand image
drive each equity element. This analysis pro-vides the information needed for companies to take action.

Unlike other common methods for estimating brand value,



such as standard market research surveys or balance-sheet analyses of goodwill, an SCA-based approach directly ties brand image to customer behavior, helping companies to attract and retain the loyalty of the most attractive cus-tomer segments.

Once managers understand brand equity and its drivers (both positive and negative), they can use it to take action (see Exhibit 2):



• A company should above all *exploit* its core equity elements, those that drive positive equi-ty in a given segment.

• It should *fix* its negative equity elements, those that undermine its brand strength and repre-sent lost share.

• It should *attack* its competitors' positive equity elements, in an attempt to neutralize competi-tors' brand advantage.

• It should *leverage* its competitors' negative equity elements, taking full advantage of these weaknesses.

This data-driven approach to brand management can unlock insight and innovation in a way never before possible. It will shed light on previously unrecognized opportunities and help managers make smart decisions concerning marketing and customer experience investments, new product development, geographic expansion, and merger and acquisition strategy. The end result will be significant growth in profits and shareholder value.

—*Eric Almquist*

"Brand is really about the customer relationship"

Laurie Lang was until recently the senior vice president responsible for brand management at Walt Disney Company, a position she held for nearly a decade. Disney, a diversified entertainment company based in Burbank, California, had revenue of $23.4 billion in the year ended September 30, 1999; the company has 117,000 employees. Ms. Lang, who now oversees the company's philanthropic initiatives, spoke with Mercer Management Journal *about brand building and management.*

Disney is one of the world's best-known brands. How do you manage such an asset?

Fundamentally, what we try to do is maintain a course for what the brand is—and what the brand should be in the future. In the decentral-ized company that we are, we try to ensure that the divisions have that kind of shared understanding, in terms of product development, in terms of marketing and promotions, certainly in terms of business extensions or expansions. We want to be sure that whatever we do, our activities are consistent with the brand. Early on, there was little control over the level and quality of brand exposure, especially that of the Disney characters like Mickey Mouse or Donald Duck. As a result, it often looked like we were selling out the core assets of the company.

For example?

People would make licensing decisions, market-ing decisions that were driven solely for financial gain, with very little sense of what was right for the brand. And that's where the rub comes in, where you just have to bite the bullet sometimes and say, "We can't do that." Over the history of my time with the company, we have looked at potential acquisitions, for example, where there were certainly business reasons to do it, but which would not have been appropriate for the Disney brand.

How does a brand manager exercise such power?

[Chairman and chief executive officer] Michael Eisner made it clear from the get-go that the brand was very important. However much the core objective is shareholder value, and however interested he was in growing the company, he was not going to do it at the expense of selling out what is one of the core attributes of the company. In addition, besides those individual decisions, he has talked publicly about the impor-tance of the brand. People working in the com-pany take notice of that, and it makes a differ-ence. If senior management, and specifically the CEO, is not behind brand-building efforts, you might as well forget about it.

What do you mean when you talk about the Disney brand?

The definition has evolved as brand management has evolved in this company. It really started with protecting an asset called Mickey Mouse. And then you realize that, in order to project a consis-tent image, it isn't just about ensuring consistent usage of Mickey and the other characters in licensed products. It is really about all of your products and your retail presence, about what you look like in the theme parks and how your movies are perceived. If you are within the Disney family of brands, that really requires you to live up to a consumer expectation for the brands. And it has to be delivered right across the prod-uct mix. Finally, every customer exposure to the brand, every interface with the brand, has to be a brand-building experience. It's totally integrated. Like many companies, I think we had an understanding on an academic level of the importance of the brand, because people are bright enough to know that the brand influences customers and Wall Street. But there wasn't a real appreciation that the brand is really about the customer relationship.

How does a global company like Disney maintain that consistency around the world?

We found that the further away you are from the core, not surprisingly, the less understanding there is of the brand. So you have to focus on creating that understanding, and this involves more than a cursory: "Here's a brand usage manual.

Read it. Follow it." At the same time, you do have to take into consideration market and local differences because, remember, it's about the consumer. You have to see it from a consumer perspective. And I do believe that there are differences between people in the U.S. and Japan and France. There has to be an understanding of how far you can bend the brand before it breaks.

Looking beyond Disney, what are some examples of firms with successful brands?

Well, there are the classic brands like Coke and Marlboro and Kellogg's Corn Flakes, brands that have stood the test of time and continue to have strong consumer relevance. I might add Microsoft as another brand that, while not as long-lived, has certainly become a brand leader, just as it is the business category leader. Then there are some powerful newer brands that have yet to prove themselves over time. Some that come to mind are Virgin Atlantic, Yahoo!, and Nickelodeon.

In highlighting these as successful brands, what criteria are you using?

Well, for one thing, there's a cohesive and shared identity and imagery from a consumer perspec-tive. There may be some semantic differences in how customers describe the brands. But overall, they have a strong understanding and image of what these brands are. And this image is consis-tent across a broad population. Second, that imagery and that identity is not only known but also believable; it's consistent with the product delivery. People don't just buy the product or service; they buy into it. Finally, wherever cus-tomers are in their lifecycle, the brand still makes sense to them. Even if I decide not to eat Corn Flakes anymore because of nutritional reasons or some other reason, they're still in my mental basket of goods. I consider it more than other cereals because I immediately identify it when I'm walking down the cereal aisle.

So how does this apply to, say, Virgin?

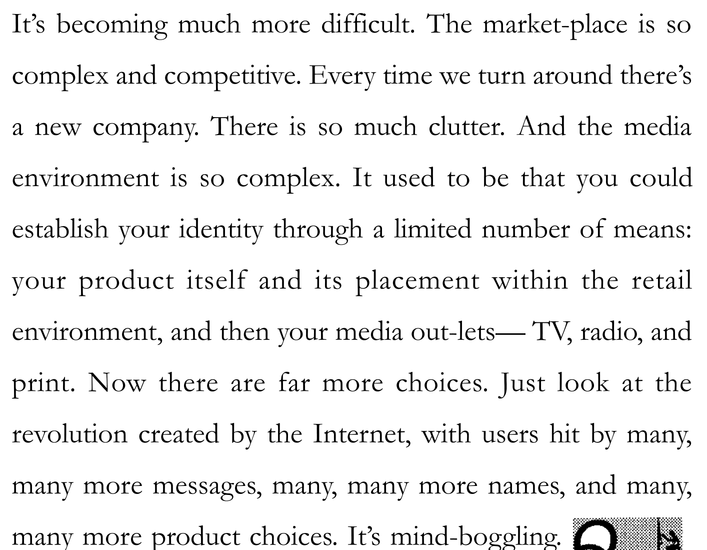
Well, the consistency begins with Richard Branson and his personality: kind of out there, risk-taking, adventurous. And then it's played out through their advertising and it's provided through their service—for example, the airline's willingness to break rules and change some of the paradigms that exist within the airline business. It's interesting, because Virgin's two areas of business—the music business and air-lines— do seem to work together. They are both anchored in a similar kind of sensibility of what they're about and what they offer in terms of a consumer experience. Both the sales clerk in the music megastore and the flight attendant on the plane project this sensibility.

Do these same principles apply to the Internet?

Most of them, certainly. For example, dot-com companies starting out in the past couple of years were able to be edgy and cool and out there, because that's who the user base was. I think that's changing and these companies are being forced to become more mainstream. And as you become more mainstream, and your audi-ence is more mainstream, you have to be relevant to them as well. Again, it's about the consumer.

Is it becoming easier or harder to build a strong brand?

It's becoming much more difficult. The market-place is so complex and competitive. Every time we turn around there's a new company. There is so much clutter. And the media environment is so complex. It used to be that you could establish your identity through a limited number of means: your product itself and its placement within the retail environment, and then your media out-lets— TV, radio, and print. Now there are far more choices. Just look at the revolution created by the Internet, with users hit by many, many more messages, many, many more names, and many, many more product choices. It's mind-boggling.



Winning in Smart Markets

Rashi Glazer

The past two or three years will likely lie remembered as the time when the long-heralclecl, but often postponed, “information age” finally became a reality. For business, the information age has led to the emergence of “smart” markets, or markets defined by frequent turnover in the general stock of knowledge or information embodied in products and possessed by competitors and consumers. In contrast to traditional “dumb” markets, which are static, fixed, and information-poor, smart markets are dynamic, turbulent, and information-rich. They are based on new kinds of products, competitors, and customers:

• Smart products. These consist of products and services that have intelligence or computational ability built into them (e.g., microprocessors). More generally and more important, smart products include any offering that adapts or responds to changes in the environment as it interacts ‘with (or is used by) consumers (for example, the process of ordering a customized computer from Dell or the Grafting of a personal financial portfolio from Charles Schwah). • Smart competitors. These are competitors that, from a company’s standpoint, are changing or about which a company continually needs to update its information. The pervasive phenomenon of “convergence” — where firms from historically separate industries now find that they are direct competitors (in such areas as entertainment, telecommunications, and financial services) — is a direct consequence of smart competitors. • Smart customers. These are customers that, from a company’s standpoint, are changing or about which the firm continually needs to update its information. As customer demographics (e.g., where they live, their family and job status) and purchasing patterns (including increased switching among competing firms) display more frequent changes than in the past, firms are finding that an ever larger portion of their consumer portfolio is made up of “smart customers.”

Smart companies have tried to sustain a competitive advantage in the face of the challenges raised by smart markets largely through their information technology (IT) infrastructure. Indeed, IT is transforming business practice. The experiences of companies as diverse as American Airlines, USAA Insurance, Federal Express, Dell Computer, and pharmaceutical wholesaler McKesson — each of which has altered the dynamics of its industry and changed the requirements for competitive success — are among the most prominent recent business stories.

Consumers increasingly assume that firms can provide anything with respect to the product or service in question.

In almost all cases, the companies involved first put in place an IT infrastructure to solve the bandwidth problem, thus making possible dramatic increases in channel capacity (the speed with which information is transmitted and the amount of information that can be processed). What has distinguished firms that have gained a significant competitive advantage is that, having introduced an IT infrastructure, they have then gone beyond the technology to view the information itself as the core asset and the management of information as their main priority. In so doing, they have been pioneers in the development and execution of what have come to be called “information-intensive” strategies.’

Information-intensive strategies are an appropriate response to the emergence of information-intensive or smart markets. Individual business functions (and the discipline of strategy itself) are being reshaped by both the need and the ability to incorporate higher levels of information processing into their activities. Many of the most important developments have arisen in marketing, typically the function charged with managing the relationships between the company and its customers. An understanding of how consumers are adapting their behavior to the demands of an increasingly information-intensive environment has been the starting point for companies that have achieved success in smart markets.

Consumer Behavior in Smart Markets

Emerging research suggests that consumer behavior in smart markets is based on twin expectations: freedom of choice and help in making choices. The emergence of smart products — which, by definition, are not really complete until they have interacted with the customer — leads consumers to

expect greater freedom of choice in product and service selection. Consumers increasingly assume that firms can provide anything with respect to the product or service in question. They become more demanding and expect to be treated as individuals.

At the same time, the resulting proliferation of options produces information overload and a marked increase in consumers' desire for help in processing information. Of course, consumers have always wanted help in making choices; this is the essence of "solutions selling." In traditional markets, however, consumers' desire for help is rooted in the assumption that information is in short supply. In smart markets (and, more generally, in the information economy), information is abundant. What is scarce is the ability to process information. The need to conserve that ability drives consumers' desire for help in choosing among alternatives.

The twin requirements of freedom of choice and help in making choices point to three consumer benefits beyond those associated with a particular product category:

• Convenience (one-stop shopping). Customers wish to purchase the widest set of related products and services from the same supplier, thus conserving their most valuable resource — time spent attending to any particular product or service.

• Participation. Customers desire the supplier's cooperation in the design, production, and delivery of the product or service. The goal is to break down the boundary between company and consumer by, for example, having the company provide a menu of options from which the customer can choose.

• Anticipation. Customers want the company to be able to read their minds. The firm should be proactive with certain product or service offerings and communication interventions, based on an understanding of customer lifestyles and behaviors.

Information-Intensive Customer Management

How to deliver the value proposition that consumers want — convenience, participation, and anticipation

— is the key marketing challenge that a company faces as it tries to develop a sustainable competitive advantage in smart markets. Leading-edge firms have responded to the challenge by creating information-intensive customer-management strategies that are designed to manage proactively the full set of potential relationships between company and customer. These firms have moved well beyond the limited goals of customer retention or data mining that have received so much attention. By observing the activities of these firms across industries, we can identify generic strategies and develop a preliminary taxono-my, or categorization scheme, that can be used to compare and contrast them. The placement of individual strategies within a conceptual framework provides managers with guidance in making customer-management decisions.

The activities observed are rooted in an expanded view of what the company is offering: its capabilities as an information processor as opposed to a set of products and services. The organizing tool, or asset around which the full range of strategies is based, is the customer information file (CIF) — a single virtual database that captures all relevant information about a firm's customers. The database is described as virtual because, while it operates as if it were an integrated single source housed in one location, it may in reality be composed of several isolated databases stored in separate places throughout an organization.

While the concept of the CIF as the core corporate asset should be acceptable to marketers, for many, it is an unconventional idea. Many companies pay lip service to the notion that "our customers are our most important resource," but the typical firm views its real assets as its products or services and the facilities and operations that support them. This perspective is reflected in the product (or brand) management organizational structure — in which profit-and-loss responsibility is defined in relation to a set of products — that still predominates in most companies (even those leading the way in information-intensive strategies).[2]

Figure 1

Customer Information File

Low — Transaction Department — High

Customer Characteristics *Who they are*	Response to Company Decisions *What, when where, how, and why they buy*	Purchase History *What, they bought Cost of goods sold profit*	Potential Profit *Customers*
Customer 1	Resposne 1	Purchase 1	Profit ?
Customer 2	Resposne 2	Purchase 2	Profit ?
Customer 3	Resposne 3	Purchase 3	Profit ?

Furthermore, it is important to recognize the degree to which the procedures and practices of most organizations have been designed to minimize actual interactions with customers. By contrast, underlying the notion of the CIF as the key asset is the assumption that the firm's operational goal is to maximize its communication with its customers — to look for every opportunity to "talk" with them — since the data collected from these interactions are the raw materials from which companies craft information-intensive strategies.

The company thus sets as its main objective the maximizing of returns to the CIF (as the key corporate asset). It then chooses any one or several information-intensive strategies to accomplish that objective. This approach represents a shift in performance goals. In particular, concepts such as profitability or market share per product are being replaced with concepts such as profitability per customer (sometimes referred to as "lifetime value of a customer") or customer share (the total share of a customer's purchases in a broadly defined product category — e.g., McDonald's or Coca-Cola's "share of stomach," Levi's "share of closet," or VISA's "share of wallet").

Before discussing the strategic alternatives, I describe the composition of the CIF (see Figure 1). The rows (or records) represent individual customers (actual and potential), not customer segments/ The columns contain data that have been collected about customers. At least conceptually, these data can lie organized into three categories:

• Customer characteristics — typically, demographic information about customers that is independent of tile firm's relationship with (lie customer.

• Response to company decisions — perception and preference (for example, product attribute importance) and other marketing-mix response information (for example, price sensitivity, sources of information, channel shopping behavior) that describes customers (when, where, how, and why they buy), based on some level of interaction between the company and its customers.

• Purchase history — information on what products customers have purchased, along with the revenues, costs, and profits associated with these purchases, based on the firm's actual transactions with its customers.

So far, the matrix is two-dimensional. Technically, however, the ('-IF is at least three-dimensional, since each entry is indexed by time. Furthermore, the categories of data — customer characteristics, response to company decisions, and purchase history — are arranged in order of the degree to which they are dependent on actual transactions or contact between tlie firm and its customers. This sequence does not necessarily parallel the degree of difficulty in collecting the respective data. Thus, both purchase history data and customer characteristics data are typically much easier to collect than response-to-company decisions data. (Purchase history for potential customers is, of course, empty.)

What I describe is "normative" in scope — that is, what an ideal GIF would look like, independent of the degree to which any given company has implemented it in practice. Indeed, since records are associated with individual customers, and since most marketing-mix response data are collected (at best) at the segment level, many of the individual entries in response to company decisions must lie inferred from what has been gathered at an aggregate level. In a similar vein, few organisations know the actual costs associated with having sold a product to an individual customer and thus are unable in practice to identify the respective profits. My discussion assumes that firms have collected and organized all relevant information at the level of each individual customer.

The CIF contains an additional column of information (at the far right), labeled as potential profit (see Figure 7), or the amount that the firm could have realized from a given customer had it made optimum use of its information assets (or the lifetime value of the customer). Potential profit minus profit represents forgone or unrealized profits. The purpose of executing information-intensive strategies is to minimize those forgone profits across all customers in all periods and to maximize the value of the CIF. (If one is serious about the ClF's role as the key corporate asset, then this may also be a measure of the firm's value!)

I now discuss a range of information-intensive strategies in light of this framework. The goal of any strategy is to use information collected about customers and their previous dealings with the company to increase the revenues and/or decrease the costs associated with future transactions. As is true in typical marketing research, in implementing a given strategy, the key questions are: To what extent can a company use customer characteristics data to understand and influence response-to-company decisions? To what extent can a company use response-to-company decisions data to understand and influence purchase history?

Using this framework, we can conceptualize three classes of

generic strategies — column, row, and whole file — and six strategies:

• Mass customization (column)

• Yield management (column)
• Capture the customer (row)
• F.vent-oriented prospecting (row)
• Extended organization (whole file)
• Manage by wire (whole file)

The strategies are not mutually exclusive. They differ only in the degree to which managers focus their attention in particular ways and develop a set of programs that capitalize more on one subset of information in the CIF than on another.

Column Strategies

Customers are different and have different responses (tastes, preferences, and so on) to a firm's decisions. Column strategies represent an extension of the traditional marketing concept ("find out what consumers want and give it to them"): they are taken to the individual customer level in a way that was not possible before the adoption of information technology.

While mass customization is usually associated with flexible manufacturing and operations, it can also refer to strategies based on flexible marketing.

Mass Customization. This most prevalent column strategy takes advantage of developments in flexible manufacturing that enable companies to tailor or customize individual offerings at little additional marginal cost.' Typically, it involves a significant initial investment in fixed costs that effectively replaces hardware-intensive processes with software-intensive ones (the factory as a computer). Thus, customers of National Bicycle in Japan (the Panasonic brand in the United States) sit on a smart bike at the dealer's showroom that takes their vital statistics (height, weight, length of legs, and so on) and relays the data to the factory, where a customized offering is manufactured (in three minutes!) from more than 1 million templates (based on data collected from customers). Levi's has prototyped a similar system for women's jeans, and Motorola's Pager Division has implemented a mass customization strategy that guides telephone customers through a menu of 30 million possible permutations of pagers. R.R. Donnelley is reported to print as many as 8,000 different editions of the monthly Farm Journal — each targeted to a narrow subset of the overall readership.

While mass customization is usually associated with flexible manufacturing and operations, it can also refer to strategies based on flexible marketing methods, that is, customizing the nonproduct elements of the marketing mix. The mail-order catalogue company Fingerhut customizes promotions on different products for individual customers. Furthermore, Fingerhut engages in flexible pricing by offering specialized credit terms on an individual basis to customers (many of whom have low household incomes but are deemed to be credit worthy). Other businesses that are pioneering what are essentially price-discrimination or continuous pricing initiatives range from airlines, where passengers pay different prices for the same service depending on when they purchase the ticket, length of stay, and so on, to computer companies like Dell, which offers different prices for essentially the same product depending on time of purchase, minor variations in features, and competitive activity. In all these instances, the data in the GIF, and the knowledge about individual and aggregate customer preferences and marketing-mix sensitivities, guide the degree and kind of customization that the company is willing to undertake.

Yield Management. The second major information-intensive column strategy, yield management, builds on flexible or discriminatory pricing. It takes advantage of customers' heterogeneous price sensitivity with respect to time (as well as the firm's technical and legal ability to price discriminate) in order to maximize the total return to a fixed asset — particularly when the marginal cost of providing an additional unit is low and the product in question cannot be inventoried. Typically observed in service businesses, yield management has been practiced in its most sophisticated form by the airlines (although the actual pioneers have been the utilities with their peak-load pricing strategies). For example, American Airlines' SABRE division has used the data collected from its frequent fliers to predict temporal ticket-purchase patterns and selectively discount seats on a given flight. If a competitor initiates an advanced-purchase-required, across-the-board price cut on a flight, American may match on only 70 percent of its seats, knowing that the remaining 30 percent will be purchased (at the last minute) by price-insensitive business customers. Information-intensive retailers have also used flexible pricing to move inventory quickly and manage the store's overall yield.

While yield management to date has been used primarily in service businesses, an important, if under-appreciated, relationship exists between this strategy and mass customization that suggests its applicability to manufacturing

and the evolution of information-intensive strategies in general. As noted, the conditions under which yield management is appropriate are (1) a high fixed-cost asset where, (2) the marginal cost of providing an additional unit is low, and (3) the product cannot be inventoried. Increasingly, these are the same conditions that underlie the implementation of mass customization. Thus, although technically National Bicycle or Motorola can inventory their products (whereas American Airlines cannot), much of the impetus for mass customization has been just-in-time manufacturing and the elimination of inventory. Indeed, for both National and Motorola (as for American), the real cost is "downtime on the system," that is, moments when the expensive fixed asset (whether a plane or a factory) is not being used to capacity. At these times, any revenue at all will be a contribution to fixed costs (since marginal costs are so low); to the extent that customers can be separated according to their price sensitivity with respect to time, the mass customizing manufacturer (like the service provider) has the incentive to practice yield management/

Row Strategies

As their name implies, information-intensive row strategies work by attending to particular rows of the CIF, that is, by maximizing both the quality and quantity of the interactions and transactions with individual customers. Given a particular customer, the goal is to learn as much as possible about the widest possible set of responses to the firm's decisions and offerings over time. A focus on the lifetime value of the customer is central to successful row strategies.

Capture the Customer. Also known (perhaps more benignly) as customer intimacy, affinity marketing, or relationship marketing, the objective of the capture-the-customer strategy is to realize as high a share as possible of a customer's total (lifetime) purchases in a given (often expanding) set of product categories." The capture-the-customer approach relies heavily on interactive communications (telemarketing and, increasingly, the Internet or other on-line media) and capitalizes on the firm's ability to use the information collected and processed from previous encounters with a customer to influence subsequent encounters and transactions. The company views marketing expenses (particularly communications) associated with any one customer as an essentially fixed cost that it would like to amortize over as many different product or service transactions as possible. By contrast, column strategies such as mass customization revolve around an initial investment in fixed manufacturing costs that the firm hopes to spread over many different product variants (targeted at different customers).

Companies have implemented capture-the-customer strategies in several ways. Oracle Software's telemarketing sales effort is driven by a sophisticated relational database, from which an Oracle representative interacting with a prospect can call up all relevant information on the product in question, competitors' offerings, and all previous interactions with the caller (including other people at the prospect's firm who have interacted with Oracle). The system has documented yields or hit rates of over 90 percent — referring to the proportion of prospects who, after a single call, have either purchased some product or service or been converted into highly qualified leads. American Express has implemented a relationship-billing program with its commercial customers (e.g., restaurants), in which it first provides a given establishment with a demographic analysis of its customers and then uses this information to sell the establishment advertising space in specialized publications (e.g., restaurant guides) targeted at the same demographic groups. More generally, firms as diverse as Fidelity and Charles Schwab in financial services and Pioneer in seeds and agricultural commodities have used capture-tlie-customer strategies to cross-sell an increasingly wide range of products to the same customer.

The goal is to anticipate the customers life-cycle or other situational needs and to time the interaction so that the company appears with a solution just when the problem arises.

Event-Oriented Prospecting. An increasingly important version of the more general capture-the-customer strategy is the event-oriented prospecting approach, which is based on the firm's ability to store and process life-cycle-related and other situational information about its customers that might trigger a purchase (sometimes referred to as "magic-moment marketing"). The goal is to anticipate the customer's life-cycle or other situational needs and to time the interaction so that the company appears with a solution just when the problem arises — creating the appearance of literally "reading the customer's mind." A leader in using this strategy is USAA Insurance, whose information system will, for example, automatically direct that information about driver education (and automobile insurance) lie sent to a client whose teenage son is about to receive his license.

Whole-File Strategies

These strategies typically rely for their successful implementation on treating the entire CIF as an integrated file rather than focusing on particular rows or columns. For the sake of completeness, I briefly describe the two leading types of whole-file strategies *but* leave a more detailed discussion of these approaches (which represent perhaps the ultimate to date in information-intensive strategic thought) for future research.

Extended Organization. Also known as the "virtual company," extended-organization strategies go beyond the more traditional EDI (electronic data interchange) processes and involve one firm's use of the CIF to manage a set of activities of another firm in its value chain — in effect, dissolving the functional boundaries between the two (technically distinct) organizations. Thus, Federal Express has built on its original COSMOS customer-service system, which tracks every movement of every package in the network, and now provides customers with terminals and/or software so that they can tie into the system directly — in effect, allowing Federal Express to manage its own shipping department and, in the process, creating high customer switching costs. McKesson, the pharmaceutical wholesaler, whose pioneering ECONOMOST system (placing terminals in drugstores tied to McKesson's central computer) was originally designed to expedite order processing and control inventory, rejuvenated the wholesale drug distribution industry (not coincidentally resulting in the elimination of dozens of competitors) and is now effectively managing retail drugstores for many of its clients by selling back to them summaries of information collected daily. Inland Steel effectively differentiated itself in a mature "commodity" product category by helping customers manage their own operations after installing and operating an interactive computer network; that effort began as an attempt to keep customers informed about the status of their orders and now provides a wide range of value-added services, from billing and funds transfer to consulting on technical product specifications.

Manage by Wire. By analogy to the "fly by wire" methodology in aviation (in which computer systems are used to supplement a pilot's ability to adjust to dynamic environmental changes), the manage-by-wire concept is based on the ability to manage a business essentially by understanding its "informational representation."[7] Drawing on the CIF and other databases, as well as appropriate expert systems and other decision tools, companies seek to model the enterprise and commit to code as much as possible the procedures that form the basis of managerial decision making. The objective is not to replace, but to augment, the managerial function; the assumption is that the complexity associated with information-intensive environments demands a "sense and respond" (as opposed to "command and control") orientation that can be achieved only by combining the decision-making and data-processing capabilities, respectively, of human beings and machines.

To date, no companies have fully achieved the potential inherent in manage-by-wire strategies, but several have undertaken pioneering efforts in limited domains. Mrs. Fields Original Cookies has been able to run a worldwide network of more than 800 stores (company owned and franchised) with a small corporate staff from rural Utah on the basis of its ability to capture in software the way Debbi Fields managed her first store in Palo Alto, California. Brooklyn Union Gas of New York has codified a major portion of its customer-service operations (meter reading, bill collection, and so on), allowing the company to respond quickly and cost-effectively to the individualized service needs of its large customer base. Aetna Insurance has embarked on a similar program in the financial services area, with the goal of enabling its account executives to respond to customer requests for new products and services in rapidly changing and increasingly competitive markets.

Information-Intensive versus Traditional Strategies

It is helpful to understand how the information-intensive strategies fit in the typical strategic framework. Most theorists on marketing strategy describe a trade-off between the two generic strategies of "efficiency" (i.e., cost/volume or market-share leadership) and "effectiveness" (i.e., differentiation or niche). Given a distribution of customer preferences ("ideal points") in a product-market space, the cost/volume or market-share strategy relies on choosing a single point near the center of the overall distribution. By locating its offering in the middle of the distribution, the company hopes to capture as large a segment of customers as possible, knowing that it risks not really satisfying the preferences of any one customer. At the same time, with a single standardized offering, it hopes to become the low-cost producer, taking advantage of both the economies of scale and experience effects that will accrue if the high volume is achieved.

By contrast, the differentiation or niche strategy involves

positioning as close as possible to specific segments, with a unique offering for each segment. The company is assured of satisfying the preferences of each group, but at a higher cost for each offering provided, and is thus constrained in the number of segments (and offerings) it can reach.

The conventional prescription is that the firm must choose one or the other strategy. (Typically, successful efficiency-oriented companies become leaders, and successful effectiveness-oriented firms become profitable followers.) At the marketing level, the decision stems from the need to choose among two different market segments or sets of customer targets. At a more fundamental level, the choice reflects the core notion of strategy as essentially a process of allocating resources across, while at the same time coordinating among, a wide range of separate value-chain activities, with the result that the firm cannot be all things to all people at one time."

One useful way of explaining the choice of strategy is in terms of the associated trade-off between two types of "information" — that is, the trade-off between product- or production-related experience or knowledge and market experience or knowledge.[9] The company focuses on or develops expertise in processing one or the other. This trade-off reflects the prevailing view of market-share and differentiation strategies as polar opposites on the continuum of strategic options, since cost or volume leadership is incompatible with the ability to serve the idiosyncratic needs of specific and diverse segments. The essence, however, of information-intensive strategies is that they permit the company to focus on gaining knowledge and experience in both products and markets. The strategic options open to firms can be viewed as a function of knowledge in a matrix, where the dimensions are product information or knowledge and market information or knowledge, each of which can

Figure 2
Strategic Options as a Function of Type of Information

Product Information or Knowledge	Market Information or Knowledge: Low	Market Information or Knowledge: High
High	Follower	Differentiation; niche or target marketing
Low	Cost or volume leadership, experience effects	Flexible manufacturing and marketing

Trade-off between differentiation and cost leadership strategies may be rendered obsolete.

be either at a (relatively) low or high level *(see Figure 2)*. While, historically, firms have chosen to compete in the upper right or lower left cells, the demands of the changing information environment and the capabilities afforded by information-intensive strategies increasingly are leading firms to excel on both dimensions and compete in the lower right cell.

Considering the different ways in which the respective strategies, in particular, the column and row strategies, employ the CIF offers further insight into the nature of information-intensive strategies. It is helpful to modify the original formulation of the CIF to include an extra dimension — one that represents a set of offerings where the firm can produce each of multiple versions within several different product classes. 10 The dimensions of the cubic CIF are customers X product class X variant, and the entries in the matrix are the responses to the company's decisions *(see Figure 3)*- (Purchase history has been eliminated for ease of exposition.)

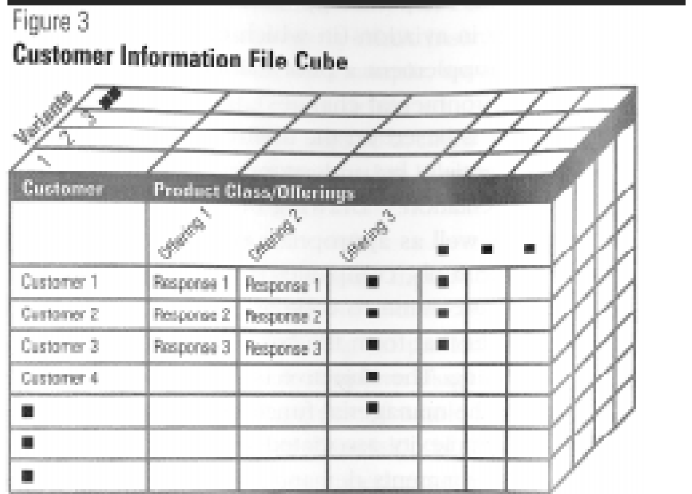


Figure 3
Customer Information File Cube

Within this framework, I can now describe the different strategic alternatives. I focus first on a single product class:

• The classical market-share leadership approach is essentially a one-dimensional strategy, with the firm offering one version in a single product class for as many customers as possible. The strategy is rooted in the belief that a sufficiently large set of different customers will nevertheless respond in essentially the same way to the offering.

• The differentiation or niche approach introduces a second dimension, with the company offering several versions in a single product class. The strategy recognizes that customers will respond differently to offerings; because of cost , the company is limited in how large the set of offerings and therefore the set of customers can be.

In other words, when compared with the market-share approach, the differentiation strategy trades off a smaller setof customers for the value that comes with the addition of a second dimension. Minimizing the company's need to make the trade-off between customers and offerings is the essence of information-intensive strategy.

I now introduce the third dimension into the framework and allow the company offer multiple product classes. This addition does fundamentally change the analysis: the same trade-off exists for each class. The issue is how many product classes can be supported. It is interesting to note that (ignoring prescriptions for the flow of cash resources within product portfolio models), traditional marketing strategy formulations typically focus on a single category. To a large extent, this presumption of product-class strategy independence can be traced to the information-poor environments in which companies are assumed to compete and the absence of real CIFs. Let's consider the strategy of those organizations that traditionally have taken an integrated approach across different product categories, namely, large retailers.

Using the terms of the framework, the large retailer offering "one-stop shopping" is implementing a two-dimensional strategy; in contrast to the differentiation approach, however, the dimensions focused on are customers X product class, and the variants within each class are usually limited in scope. To the extent that the retailer's offerings attract a number of customers, the retailer uses more of the CIF asset than either the market-share leader operating in a single dimension or the differentiation leader operating in a more limited two-dimensional space — which suggests why even traditional "mass market" retailers have been gaining market power at the expense of manufacturers. At the same time, to the extent that the CIF is, in fact, three-dimensional, the traditional retailer is still functioning in a subspace compared with what is possible and is not implementing those information-intensive strategies that are truly three-dimensional in scope."

In summary, while the emergence of information-intensive strategies compared to more traditional approaches may seem like a matter of degree rather than kind, my framework suggests that this is not the case. Whether the analysis is done at the single- or multiple-product class level, the fundamental impact of information-intensive strategies is that they generalize the traditional strategic alternatives by adding depth, or an additional dimension, to the CIF — thus allowing the firm to compete in a richer space with a fuller set of alternatives.

Choosing among Alternatives

The implication so far is that, for the firm to maximize the return to the CIF asset — that is, to take complete advantage of the full three-dimensional space — it must implement a range of the strategies described (for example, an integrated mass-customization plus a capture-the-customer approach). At the same time, it is helpful to explore the conditions under which one particular strategy is preferable to another.

As is true with the choice among traditional strategic alternatives, the desirability of a particular strategy is likely to depend on the congruence or fit between a company's resources and capabilities and the demands and constraints of the market environment. More specifically, three factors influence the process by which a company will prefer a particular information-intensive marketing strategy over another: (1) the relative costs of the respective strategies, (2) the data in the CIF about customer response to the respective strategies, and (3) the firm's capabilities and motivations as a processor of CIF data.

How, for example, might a company choose between a generic column and a generic row strategy? Formally, the firm's objective is to choose a set of offerings so as to maximize its profits. The choice between the two strategies can be framed in terms of whether the company would prefer to choose a maximum set of offerings to a smaller number of the same customers (cross-selling) or a narrower set of offerings to the maximum number of different customers. In other words, to take the simplest case as an example, would the firm prefer to produce two versions of a single offering — each sold to one of two different customers (column strategy) — or single versions of two offerings both sold to the same customer (row strategy)?'[2]

Given two customers, assume that both customers are equally positive about their respective offerings and that the first, customer is equally positive about its respective offerings. The firm's choice between the mass-customization column strategy and the capture-the-customer row strategy will then depend on the relative costs associated with each. Let us assume that there are both fixed and variable manufacturing and marketing costs associated with the two strategies. As noted, the mass-customization column strategy relies on the company incurring heavy fixed manufacturing costs (which it hopes to spread over as many additional units as possible) and low marginal or variable costs for each additional variant produced. At the same time, the marginal marketing cost of reaching additional customers is likely to be high. By contrast, the capture-the-

customer row strategy involves an initial fixed marketing cost to reach each customer (which the firm hopes to spread over as many additional products as possible) and low marginal or variable costs for each additional product offered. However, the marginal manufacturing cost of producing additional products for that same customer alone is likely to be high. Within this framework then, if we assume that the fixed manufacturing costs and variable marketing costs for the row strategy are relatively minor, as are the fixed marketing costs and variable manufacturing costs for the column strategy, the row strategy will be preferred to the column strategy if the fixed marketing costs plus variable manufacturing costs for the row strategy are less than the corresponding fixed manufacturing costs plus variable marketing costs for the column strategy.

A second factor influencing the choice of strategic alternatives is the information on consumer response to the respective strategies. Let us assume that the costs associated with the column and row strategies are constant and focus on response-to-company decisions and the extent to which differences in the available information about customer response will lead the company to prefer one strategy over another. Whether the firm will prefer the column strategy over the row strategy will depend on whether, in the aggregate and at the margin, the responses of multiple customers to the single (multiversion) offerings are more positive than the response of a single customer to the multiple offerings.

Assuming perfect information about customers, the set of customer responses will depend on the firm's actions and skills in responding to a wide variety of tastes through customization (column strategy) and/or developing a deep relationship with a given customer through communication (row strategy) — that is, on how well its offerings actually meet customer needs.]? At the same time, in practice, customer response will depend on the firm's ability to learn about what

In smart markets, the ability to process information, not the information itself, is the scarce resource.

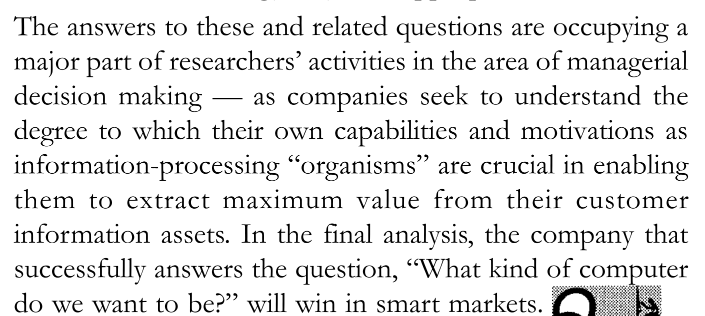
these needs are in the first place — on how well it is able to collect and process information about its customers. In particular, if I move beyond the simple example, as both the sets of customers and offerings expand, the assumption of perfect information is likely to prove false. If so, then the choice between the two strategies is likely to depend on the relative quantity and quality of the data in the GIF about customer response that are associated with each of them.

Many factors will influence how much and what kind of data make their way into the GIF — that is, which particular subsets of customer response to firm decisions are populated with reliable and valid information about customer-response patterns. These factors include technical marketing research capabilities and resources as well as the firm's history in dealing with its customers. At the same time, whether a given subset of data exists in principle somewhere in the CIF is far less important than whether it exists in fact as an aid to decision making and is actually used.

The final factors influencing the choice among strategic alternatives are the capability and motivation of the firm and its individual managers as information processors. As noted earlier, in smart markets, the ability to process information, not the information itself, is the scarce resource; a large, influential body of literature has demonstrated persuasively that individuals' restricted capacity to process information should often be considered the constraining factor in decision contexts. Managers as decision makers do not process the full range of information pertaining to a decision, but instead restrict their attention to a reduced subset." In so doing, they often violate what is referred to as "procedural invariance" — the nor-matively appealing principle that the relative weights applied to various items of information should be independent of the specific procedure used to process the information. The specific procedure used may be based on any number of factors: the perception of its necessity, the information's accessibility, or the ways in which the information is framed or presented.[15]

While any of these and other factors may lead managers to favor a particular strategy over another, one that is perhaps most relevant for decisions based on processing the CIF is the way in which the company organizes and accesses information. For example, the CIF may be a relational database in which presentation is dependent on the different views of the data available, often within a query processing program. Thus, if a manager asks the program to "show me all the information about customer *i,"* he or she is asking for a row view. If the manager asks the program to "show me all customers who respond to my product in this way" (e.g., who is price sensitive?), he or she is asking for a column view. Within this context, we can ask, Can a manager's choice of one information-intensive strategy (e.g., column or mass customization) over another (e.g., row or capture the customer) be influenced by organizing the way the data in the CIF are presented, independent of other considerations such as cost? In particular, if information is presented by column (row), will that bias managers to undertake a mass-customization (cap-ture-the-customer) strategy? Will the bias persist even if other normative considerations (such as the relative costs associated with different approaches) suggest that the chosen strategy may be inappropriate? •

The answers to these and related questions are occupying a major part of researchers' activities in the area of managerial decision making — as companies seek to understand the degree to which their own capabilities and motivations as information-processing "organisms" are crucial in enabling them to extract maximum value from their customer information assets. In the final analysis, the company that successfully answers the question, "What kind of computer do we want to be?" will win in smart markets.



Star Power

Supermodel Marketers? Silver Screen Salesmen? Meet The Superstars who are Redefining the Role of the Celebrity Spokesperson

by Betsy Cummings

Nobody—but nobody—expected Tiger Woods to show up.

In fact, when 200 Nike Golf sales reps gathered in a ballroom at Oregon's Sun River Resort last year to hear about new products, all anticipated the usual drill: a review of the fall line, a rallying pep talk from the president of Nike Golf, a charge to raise sales. Halfway through the presentation, though, the young golf phenom sauntered onto the stage completely unannounced. "I'm switching to Nike's True Accuracy golf ball," Woods declared, "and here's why: I'm hitting it farther. It's better around the green. It gives me more options, and is better in the wind."

The Nike reps were floored. "He sent everyone into a frenzy," says Nike Golf Marketing Director Mike Kelly. For the next hour, Kelly remembers, a mesmerized sales force listened to Woods's pitch on why Nike's ball provided extra distance, better control around the greens, and more stability. Enthused salespeople took Woods's expertise to vendors, along with information they'd garnered from the day's added bonus of a 90-minute personalized golf lesson from the PGA champ and an evening of exclusive tips and anecdotes told over dinner.

While sports greats don't make a habit of dropping in on lowly sales meetings. Tiger's appearance at Nike's sales powwow is a perfect example of a new phenomenon: Not just icons randomly paired with products, celebrities like Tiger, Regis—and even Claudia—are being asked by the companies they endorse to help design, develop, position, and sell merchandise and services (in Woods's case, even motivate reps.)

The marketing strategy has been a boon to companies like Nike, which, since signing Woods in 1996, has seen its share of the golf ball market jump from one to six percent, or $50 million. What's more, Woods has played an integral part in developing a series of golf products and apparel that the Beaverton, Oregon-based sports retailer has periodically altered to reflect Woods' changing personality and design tastes—at first casual, now more sophisticated.

Certainly the PGA superstar's cachet does much to drive Nike Golf's $250 million in annu al sales. But companies that position celebrities as strategic marketing partners are much more likely to boost sales and brand awareness than those that simply slap famous mugs on advertisements, experts say. "The endorsement business is more sophisticated today," says Tulin Erdem, associate professor of marketing at the University of California at Berkeley. "It used to be just for entertainment value. Now marketers are more savvy." And they're introducing new rules for celebrity marketing.

A MATCH MADE IN HEAVEN

HE'S AS WELL- known for his dark, monochromatic shirt-and-tie pairings as his trademark quip, "Is that your final answer?" So when marketers from New York-based Phillips-Van Heusen Corporation were looking for a celebrity to represent their product line, which includes stylish button-down shirts and ties, Regis Philbin, host of *Live With Regis and Kelly* and *Who Wants to Be A Millionaire ?,* was a natural choice.

Philbin not only wears Van Heusen apparel, but is significantly involved in the clothing line's design, says Ken Wyse, the company's senior vice president of licensing, who adds that Philbin approves every design board for the Regis line. "That's good for consumers who recognize that the product line meets Philbin's qualifications from a style and quality standpoint," Wyse says.

Such relationship building between customers and product lines is what drives celebrity-endorsed products. Supermodel and entrepreneur Claudia Schiffer has a busy enough schedule to warrant her need for a PalmPilot, but she's probably not the first face consumers would put with Palm's popular line of electronic organizers. But by promoting her involvement, marketers hope to appeal to female consumers who want to identify with Schiffer's image—a fashionable. extremely busy woman who needs to be organized. When she, along with PTN Media which Schiffer partially owns. helped launch a

signature line of PalmPilots, she assisted in positioning the handheld computer in the electronics marketplace—choosing product colors, such as aqua metallic blue, and accessories as well as selecting her favorite add-on software programs.

And though Schiffer and Philbin may not be computer or clothing experts, executives say including them in the decision-making process not only adds value to the brand, but makes financial sense: Companies paying upward of $10 million dollars for a celebrity's seal of approval are finding that the investment yields a greater return when stars play a hand in business decisions.

FROM BOXING TO PRODUCT DEVELOPMENT

HE MAY NOT be circling the ring anymore, but boxing great George Foreman is still throwing punches in the grill market. Back in 1994, when housewares manufacturer Salton Inc. debuted its Lean Mean Fat-Reducing Grilling Machine and other grills at an industry trade show, they received little attention. Later, marketers paired Foreman (a self-proclaimed hamburger lover) with the convenient indoor hamburger grills and then quickly involved the boxing champ in everything from design changes to infomercial scripting. Sales have since exploded, with more than 10 million grills sold.

There's no doubt that the former boxing great's significant involvement and use of the grills lends credibility to consumers, says Jake Fuller, an equity research analyst at Credit Suisse First Boston in New York. "George has been very active in the marketing of his grills and genuinely believes in them," Fuller says. That helped the Mt. Prospect, Illinois-based Salton bring in $375 million in grill sales last year.

Gary Ragan, a company product manager, says Foreman has reviewed every product, testing each grill in the series before offering his approval. Indeed, some of the grills' design elements are suggestions of Foreman's—enlarging one of the grills to accommodate two burgers at once, for example. That, along with Foreman's involvement in Grafting infomercials, makes his pitch highly believable, Salton marketers say.

A similar strategy has worked for Nike marketers, who recently asked Woods to redesign its True Accuracy golf balls. Last May the links superstar spent several days working with designers, making suggestions that have improved the ball's trajectory, range, and velocity, which Nike says affords average duffers a better shot at achieving par.

OFF-THE-CLOCK MARKETING

CHOOSING CELEBRITIES WHO are intimately involved with a product has an important side effect: Such stars are more likely to plug the product every time they get a chance—even when they're not getting paid for it.

Foreman cleverly takes advantage of what Fuller calls marketing on and off the clock, dropping in periodic mentions of the grill as he announces boxing on HBO, for example. Casual references like these, though they are gratuitous plugs, are effective if done briefly, analysts say.

The key to such off-the-clock marketing is to involve a celebrity so actively in a product that he or she can't help but naturally think about it and comment on it in casual conversation. On HBO, Fuller says, "Foreman briefly mentions the grill in a manner that says he wasn't trying to sell the product; rather, he was just talking about it. He genuinely believes in it." And that is easily recognized by viewers, Fuller adds.

The New Rules of Marketing

THINKING OF ADDING Demi or Arnold to your marketing team? Don't pick up the phone just yet. Here are a few points to ponder:

MATCH 'EM UP Celebrity endorsements make more sense when the star matches the product: ER doctor Noah Wylie featured in the health-focused Got Milk? ads, for example. Proving that a marquee name actually uses the product goes a long way in building trust with consumers.

GET 'EM INVOLVED Just because Jaclyn Smith doesn't have an MBA doesn't mean she can't be part of Kmart's marketing team. Smith has been known to do market research for the cos'fipany b) conducting point-of-purchase interview[1]. with customers. Such tactics help forg';
instant brand loyalty.

MARKETING OFF THE CLOCK Marketing executives who make strategists of stars not only lend credibility to a prod uct, but increase the celeb's chances ui pushing the product off company time. George Foreman might easily mention his Lean Mean Fat-Reducing Grillin;::
Machine while commentating a box'isg match fur HBO. Voluntary plugs iike these do much to boost return on investment.

Having a celebrity endorser who clearly uses the goods is a crucial selling point. When Jaclyn Smith launched her Kmart clothing line in 1985, she was one of the first celebrities to do so for a major retailing chain. Initially hesitant when she was approached by the discount retailer. Smith today queries shoppers at the cash register about her products, says Michele Jasukaitis, Kmart's director of fashion publicity. Such impromptu talks have led to a number of styling changes, Jasukaitis adds, doing much to forge brand loyalty. Smith's line has ballooned to include apparel, accessories, and hosiery, and is today the third-most recognizable line of women's clothes in the country, behind Liz Claiborne and the Gap, experts say, generating $300 million in sales for Troy, Michigan-

based Kmart.

SHE'S GOT PERSONALITY

CELEBRITIES DON'T JUST need to be involved in product development and marketing to ensure success: Their personalities also have to match the brand they're hawking.

Take Duchess of York Sarah Fergu-son. Americans have been hearing about her exploits for years—marriage troubles, partying rampages, weight battles. A risky marketing partner? Not for Weight Watchers International, the diet company she joined in 1997. Ferguson is an ideal spokeswoman for the company, says Eliot Glazer, Weight Watchers' vice president of marketing. "She's disarmingly honest and willing to share her difficulties about losing weight," Glazer says, but she's not too wild to embarrass the company. "She's able to say, 'I'm a human being and I've had problems.'"

That's the frank dialogue Weight Watchers' participants need to hear, Glazer adds, and their ability to relate to Ferguson helps them tackle their own dieting challenges. Sales for the Woodbury, New York company jumped 9.6 percent in 2000 to $399.6 million.

"Sarah's very down to earth, and people relate to that," says Florine Mark, a Farmington Hills, Michigan-based Weight Watchers franchisee. "They think, 'If she can do that, so can I.'"

Diet programs need credibility, Berkeley's Erdem says. So it's crucial to show that Ferguson has benefited from the Weight Watchers plan, as the company does in its television commercials.

Make sure your celebrity can deliver, analysts warn. Marketers from weight loss company Jenny Craig undoubtedly regret their decision to use Monica Lewinsky as a spokesperson—some experts suggest that her reputation was a turn-off for consumers. What's more, she was reportedly offered $ 1 million to lose 60 pounds, and didn't stick to her diet. "If the endorser can't benefit from the product," Erdem says, "the credibility of the product becomes jeopardized."

KEEPING IT REAL

CELEBRITIES LIKE FERGUSON who seem more real, more ordinary, indeed carry great credibility, say analysts. Those famous faces who have been deeply affected by a product or cause carry even more weight.

That's why Lance Armstrong has proven to be such an effective spokesperson for Bristol Myers Squibb, the drug company that supplied the winner of the Tour de France cycling race with a series of medicines that helped him recover from testicular cancer.

The drug company has partnered with Armstrong to raise awareness of cancer treatments, not to mention the company's brand image. During one recent marketing campaign, Armstrong conducted online chats with cancer patients and helped design marketing materials and create public service announcements (PSAs) designed to boost awareness for cancer treatments. The campaign generated record-breaking responses from cancer victims and survivors, including 1,400 respondents in an online chat and thousands of letters and e-mails.

Armstrong isn't the only celebrity deeply affected by a product or cause. Four years ago supermodel Christy Turlington began an antismoking campaign to warn Americans about the potentially devastating effects of smoking. "For me it took seven years [to stop smoking]," a tearful Turlington emotes in a 30-second national PSA. "My dad, it was different for him. He stopped December 1996, just six months before he died from lung cancer."

Turlington wrote her own script and insisted on impromptu scenes that would reflect a spontaneous, from-the-heart message, says Melissa Havard, entertainment liaison and house communications specialist for the Office on Smoking and Health at the Centers for Disease Control in Atlanta, which produced the spot. "Our celebrities-against-smoking Web site section is in the top five in terms of traffic [among all CDC Web sites]," Havard says, attributing the interest to sincere testimonials from celebs like Turlington.

Such successes, say analysts, lie in the fact that both celebrities relayed real-life experiences in a genuine manner, without appearing sappy.

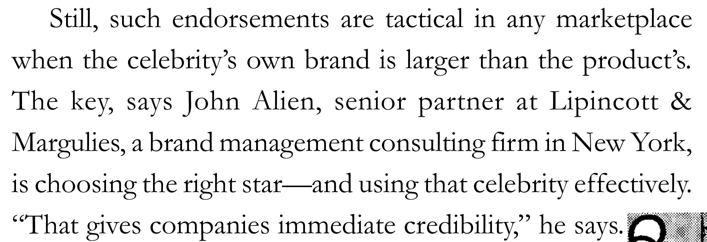
CELEBRITIES FOR ANY MARKET?

CONVINCE SPORTS FANS that George Foreman designs and uses his grills, and marketers have a secure business-to-consumer formula for high sales. But do the same tactics have a place in the b-to-b world? Maybe. Web-based meetings provider WebEx received significant attention when it launched a campaign in December 1999 featuring cross-dressing entertainer RuPaul. As part of a $25 million marketing blitz, the drag queen appeared on billboards and city bus ads next to the tag line, "Meetings are such a drag."

"We doubled our revenues and customer base the quarter we ran that ad," says David Thompson, WebEx vice president of marketing, citing a client list that jumped from 1,500 to 2,500 in 2000. "There were many skeptics who thought RuPaul was a poor choice," Thompson says, "but back when we

launched the site, if we wanted to have a prayer of making it, we had a big job—not just establishing the company's brand, but the category of Web meetings. We couldn't think of anyone better than RuPaul to do that." The celebrated cross-dresser was the surprise guest-of-honor at WebEx's product launch in San Francisco. During the event RuPaul delivered a rousing speech, which he insisted on Grafting himself.

Celebrity marketing in the b-to-b arena can be tricky, however, and experts caution marketing managers to consider


the effectiveness of these campaigns before launching such an expensive venture. (Nike reportedly paid Woods $100 million for a five-year contract.)

Still, such endorsements are tactical in any marketplace when the celebrity's own brand is larger than the product's. The key, says John Alien, senior partner at Lipincott & Margulies, a brand management consulting firm in New York, is choosing the right star—and using that celebrity effectively. "That gives companies immediate credibility," he says.

The Ten Commandments of E-mail

IT'S MONDAY MORNING, and when you power up the PC you find 183 e-mail messages waiting for you—most of them marked urgent. Apparently other folks have no life and spend their weekends dumping work on your virtual desk. You're beginning to feel like you're the bottleneck in an information-flow conspiracy that's fast overwhelming you.

How do you cope? How do you sort out which among those e-mails can wait and which must be attended to? How do you learn what you need to learn— and forget what you can forget?

You've got a knowledge management problem. It's not that you don't have enough data; you have too much. And it's the same story everywhere: we're all awash in information and we feel like we don't have the time even to separate the good from the bad, let alone read and absorb it all.

Let's deal with that e-mail problem by establishing some basic principles. We're going to cope with the overload by turning to the Ten Commandments—the e-mail commandments, that is.

Thou dost have several choices.

Begin by performing triage. Scan the headers, and delete everything you don't need to know or act upon materially. The exceptions to this rule are messages from your kids at college or your closest relations anywhere, like your mother-in-law. Set those aside, virtually speaking, to read later.

Now remember how e-mail works best. What most people, Bill Gates included, seem to forget, is that it's e-mail. It's really a modern form of something your great-grandparents enjoyed every day: the letter. It's best for short, informal messages that need to be both written and read. That's important, and people forget it constantly: don't say anything in an e-mail that you wouldn't want to commit to writing. Permanently. You may delete it, but if it makes someone else laugh or cry, or become furious, it will be saved. Ai»d read. Again and again. By people who say, "How could anyone have been so stupid as to write that?"

A large number of e-mail messages should never be sent. Instead, they should be handled with a phone call. There's an old Arab saying, a form of salutation at the front of letters, that reads, "I have read and understood your letter, praise Allah!" The Arabs realized that the two were not automatically connected. The implication is clear: the possibilities of misinterpretation are many with the written form. Tone of voice, hesitations, silences, emotional outbursts—all of these can have important implications in communications, and they can only be communicated through the voice. If you find yourself worrying excessively over what to say in an e-mail, maybe you should call. Maybe you should write a letter—later, when you're calm. Maybe you should walk down the hall and talk to the person. Maybe, just maybe, you shouldn't even respond at all.

Thou shalt never print thy e-mail.

If you have to print out your e-mail, it means that either you or the sender misunderstand the chief purpose of the medium. If you're sending documents around, in draft form, or for information, try to keep them in electronic form. Better yet, avoid sending documents at all. An enormous amount of time and energy is wasted in the corporate world by people struggling with incompatible formats, files that never arrived, attachments that got garbled or stripped off the message, or the like. Instead, post necessary files on an intranet, or an Internet site that people who need the information can be directed to. If your company doesn't have such a site, establish one. The time saved could launch another profitable division. Keep the e-mail medium for its best use: a substitute conversation, where the information being exchanged is not

controversial.

Thou shalt never send e-mail when furious or exhausted.

It's amazing how many people send e-mail that they live to regret. The old rule about writing letters that your great-grandmother knew still holds true for e-mail: write it down, save it, look at it tomorrow. Does it still look as clever or important as it did the night before? You may decide not to send it at all.

The corporate world has thoroughly absorbed the strange lesson that it's good in most cases to overcommuni-cate. E-mail encourages this dangerous fallacy because of its ease of use. Fight this tendency by deciding to ignore all but the most essential information about time-sensitive events, activities, and plans. The truth is that all business communications should be action-centered. If a communication doesn't promise to lead to an action, consider not reading it or sending it. E-mail should be subjected to the same test.

Thou shalt never substitute e-mail for a necessary face-to-face meeting.

When you're trying to persuade someone to do something, or someone wants to persuade you, there is no substitute for a face-to-face meeting. Never reprimand, reward, or fire someone who reports to you via e-mail. There's a special circle of hell awaiting those who do. We owe it to our humanity to perform these obligations, whether difficult or easy, in person.

Thou shalt never delete names from thy address book.

It's astonishing how many people fail to take advantage of the time-saving devices most e-mail programs offer. Create standard headers and footers for your messages. Think how much time you'll spend otherwise simply typing your name over and over again. And other people's names: Keep an up-to-date address book. Never delete old names (until death do you part); you'll never know who will come back into your virtual life. In many companies, a little attention to design can improve not only the style of your e-mail, but also its readability.

Thou shalt never forward chain e-mail.

One of the most tiresome activities legions of businesspeople engage in is sending e-mail humor that was created by a friend of a friend of a friend of the guy down the hall. The headers and footers on these monstrosities become endlessly long, and they clog up your system and slow down the reading of important e-mail. One particularly virulent form of this disease is the e-mail picture, where someone with more time than he should have has played with x's and o's on his screen until the result is faintly representative of some humorous image. Have you tried to open one of those files recently? Don't encourage this lazy form of communication. Eschew others who do.

Neither shalt thou pass on rumor or innuendo about real people.

If you must gossip, confine it to people who are not real to you—movie stars, cartoon characters, historical figures. Avoid spreading false information about real, live people. It will come back to haunt you. Remember the Microsoft antitrust case: even your deleted e-mails can be resurrected and read in courtrooms by lawyers who are not friends of yours.

Neither shalt thou do so about companies thou workest for or may workest for one day.

The relatively anonymous format of e-mail, and other electronic communication channels, tends to encourage the practice of flaming, whether of institutions or people. Use this simple test before you flame someone or something: Would you say it in person? If the answer is no, you should not send the communication—in any medium.

Thou shalt remember the hierarchy and keep it sacrosanct: First the meeting, then the phone call,then the voice mail, then the e-mail.

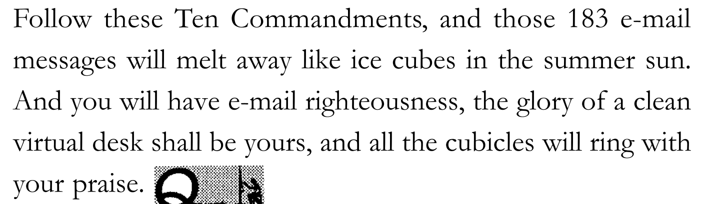
In terms of impact and lasting significance, the wider the "bandwidth" involved in a communication, the better it is. Face-to-face meetings have the most interpersonal bandwidth. Phone calls lose the visual element, but keep the tonal qualities of the voice and allow for clarification and give-and-take. Voice mail keeps tone, but loses the chance to clarify misunderstandings. And e-mail has the narrowest bandwidth of all. Thus, it is the most dangerous medium. Use it with

care. It's difficult to communicate successfully under the best of circumstances, and the narrower the bandwidth, the greater the possibility that something will go wrong or get fatally misunderstood.

Thou shalt send nothing over e-mail that must be error-free.

It is simply impossible to proofread successfully on the computer screen. If a communication is important enough that it must be error-free, it should be sent via some other medium. If you feel you must send something via e-mail that has to be error-free, break the Second Commandment and print it out. Using a ruler, go over the document line by line. Read it once forward, for meaning and grammar, and once "backward," for spelling. The effort is time-consuming, but necessary if one hundred percent accuracy is essential.

Follow these Ten Commandments, and those 183 e-mail messages will melt away like ice cubes in the summer sun. And you will have e-mail righteousness, the glory of a clean virtual desk shall be yours, and all the cubicles will ring with your praise.



Achieving Peak Performance and Profitability

THE INNOVATION PREMIUM

By Ronald S. Jonash and Tom Sommerlatte

AN OVERVIEW

Businesses that deliver earnings growth thanks to innovation have consistently been valued higher on Wall Street than those companies that maintain stodgy, outdated ideas and routines. Investors reward and pay a premium for innovation. Authors Jonash and Sommerlatte call this the Information Premium. Based on studies of companies that have harnessed this concept and thus, become more flexible and quickly responsive to change, the authors present a framework for capturing the innovation premium focusing on five areas:

• **Strategy.** Next-generation companies do not merely build products; they also build platforms — innovative programs that develop key technologies and capabilities — then apply them as the basis for growth and innovation.

• **Process.** Next-generation companies manage the front and back ends of their innovation processes in such a manner that a steady stream of new concepts and ideas lead to a steady stream of innovative products.

• **Innovation resources.** Next-generation companies must be committed to putting resource muscle behind their mechanisms for innovation, making plentiful investments and eliminating barriers to innovative ideas and the people who create them.

• **Innovative organization.** The next-generation organization must be fluid, networked, partnered, global and led by devoted professionals in order to meet the challenges of an increasingly border-free business environment.

• **Innovative learning culture.** Next-generation companies must build a culture of continual change and learning, distributing the free flow of knowledge across their entire enterprises.

According to the authors, first- and second-generation companies kept innovation limited to research and development departments. In the third-generation companies of today all departments, from marketing to production to R&D, have a role to play in enhancing the company innovativeness. In next-generation companies, however, innovation is pushed beyond the boundaries of the company. Customers, suppliers, and strategic partners are all involved in making the company an innovative leader.

This summary shows you how to make your company a next-generation company.

Meet the Next Generation

Tme innovation is the driving force not only for individual companies but also for entire economies. Managers must realign strategies, processes, and resources to focus directly on innovation and technology, in order to thrive in a business environment increasingly keyed to those efforts. In contrast to traditional research and development (R&D) efforts, next-generation businesses must model their operations on two fundamental principals:

• **Management must drive innovation across the entire enterprise to create value.** Just as true innovation never occurs in isolation, next-generation companies must accelerate learning, build cross-enterprise networks and expect real-time expertise.

What Used to Work So Well No Longer Does

Venturing into new management territory can be daunting; many of us stay with what is familiar and safe, clinging to a routine and avoiding change. There are, thankfully, other aspects of business that counter this inclination — pride in achievement, will to succeed and a thirst for knowledge among them, These characteristics are the same things that spur next-generation companies to innovation and advantage, even in the face of several daunting obstacles:

• Intellectual property is becoming increasingly difficult to protect, preserve, measure and manage.

• Businesses and industries are no longer insulated from their competitors, making innovation leadership difficult to sustain.

•The nature of competition has shifted to cost leadership, and reengineering-driven cost reductions have overwhelmed many innovative initiatives.

•Technology advances have altered research and development, leaving some R&D departments mired in old competencies.

•Traditional R&D managers focus on internal operations, leaving the extended enterprise (suppliers, partners, etc.) unmanaged.

The skills and capabilities of their employees must be aligned with business goals and linked to cross-disciplined networks, which enables the enterprise as a whole to flourish encouraging teamwork and inspiring innovation.

• Management must leverage technology and competency to drive sustainable innovation and capture competitive advantage. Next-generation companies must construct technology and competency platforms, consisting of a powerful combination of human skills, competencies, and state-of-the-art technologies. As shown below, these platforms can then be tapped to generate improvements and innovations in growth and performance. •

Strategy: Build Platforms, Not Just Products

To set the pace for innovation, companies must not only build products. They must also build technology and competency platforms — sets of key technologies and/or capabilities applied as the basis for growth and innovation in a variety of products and services. These technologies and capabilities may be slow to develop and are typically quite demanding, but, once developed, they represent a tremendous advantage over competitors that do not acquire them.

For example, sophisticated technology platforms allow Millennium Pharmaceuticals, Inc. to engage in gene mapping and produce a broad range of scientific compounds. And Canon builds competency platforms to improve digital imaging.

There are four levels of platforms, each one representing. different levels of commitment of resources and time expected from your company:

• **Knowledge and learning**. This exploratory, tangential platform encompasses an area about which you may know little, but which seems promising for innovations. This platform requires minimal managerial control, low investment and a loose alignment with overall strategy.

• **Excellence and leadership-building.** This platform is developed in response to a situation — a technology or trend that will have some as-yet-unidentified impact on your business. In order to stay ahead, develop competencies that will help you meet the challenges imposed by that impact.

• **Innovation and development.** You recognize an area of expertise as the center of a great deal of innovation and creativity — new products will definitely emerge from this platform, and management actively pursues growth in this area.

• **Business-performance and growth.** This platform defines an area that is already turning out successful products/services, one in which you will continue development and defend your position from competitors.

Next-generation companies are constantly searching for new platforms — at any of the four levels — for growth and innovation. Building technology and competency platforms is at the heart of innovation strategy. •

The Chassis Innovation

Platforms originated in the auto industry when companies like General Motors, Ford, Mercedes-Benz and others countered the staggering development costs of maintaining a growing number of models and types of cars by imposing a common chassis on an entire family of autos. Development efforts could then be concentrated on improving brake systems, traction and other features, allowing the companies to broaden their competence in this development, reduce logistical costs and speed up innovations and new models.

How Do You Begin Setting A Next-Generation Innovation Strategy?

Ask yourself these questions:

• **Are continual improvement initiatives going to gain competitive advantage, or will they be enough only to keep pace with aggressive, cost-cutting competitors and erosion of prices?**

• **What is the average life span of your typical R&D effort?** How long can one continue without a successful product or service launch? How are R&D efforts funded? How are their budgets evaluated and measured?

• **Are new cost-reduction breakthroughs necessary?** Are they possible?

• **Are merger-and-acquisition initiatives sufficient to close critical gaps, or are cost and strategic synergies too few and elusive to justify such a move?** Do new partnering opportunities offer better value propositions than mergers?

Follow up with these essential moves:

1 **Develop effective analytical tools to assess key strengths, weaknesses, opportunities and threats (SWOT).** Conduct SWOT analysis across the breadth of your extended enterprise, identifying key gaps and ways to close them.

2 **Develop roadmaps of emerging technologies and business opportunities, and forge a clear view of your subsequent alternative futures.** Look for harbingers of future innovations from every imaginable source and create scenarios of what the future looks like and what it will take to establish leadership in each potential future.

3 **Prepare contingency plans and set forth responses to potential scenarios.** Create plans to cope with any possible exigency that could intrude on your strategies.

4 **Establish a compelling innovation vision tied to a clear strategy.** Develop a plan to achieve your goals and firm up your commitment to innovation.

5 **Play to your strengths.** Focus your firepower on core areas of expertise.

6 **Manage external partners and resources.**
Outsource or enter into partnerships with other organizations to shore up gaps in your innovation platforms.

7 **Align projects with your innovation vision and with platforms and partners.** Realign activities with platforms and partners to build long-term potential while still producing short-term results.

8 **Clarify everyone's roles.** Make certain everyone knows their place in your new strategy. •

Process: Move Seamlessly From Concept to Customer

There are two fundamental features of next-generation innovation process:

• **A wide-open front end in which concepts are varied and plentiful.** The initial stages of a process must drive a search for ideas among a great variety of sources, increasing the likelihood that you will find effective new developments in product and service methods, concepts, ventures or businesses.

First-stage next-generation innovation gives "idea chiefs" the material with which to fashion new concepts, even as they monitor external activities to help clear up a sometimes foggy picture of the future. These activities may include forthcoming governmental regulations, new modifications to technology and unmet needs in the marketplace or with future customers.

• **A broad ending in which an array of products and services are rolled out to customers willing to pay a premium for strong, compelling value propositions.** The final stages of a process promote the commercialization that captures value at every conceivable point — licensing, patents, imaginative distribution channels and the like. In these stages, the innovations at the core of the process are exploited to achieve maximum value — whether you are pursuing the endeavor alone or in concert with partners. An organization's "idea basket" must be constantly full with concepts that relate to both expected and unexpected demands. Every component of your enterprise must contribute — customers, distributors, suppliers, alliance partners and so on. The result will be an innovation process in which a steady stream of innovative ideas move seamlessly from concept to customer.

Abandoning the Product-Development Mindset

Some companies believe that they have a broad, open innovation process in place. Actually, their process is still focused on product development. The product-development process is based on screening and discarding ideas; it does not encourage as many ideas as possible.

Breaking out of product development and into innovation requires adherence to several key points:

• **Exploit the knowledge and intelligence of your entire extended enterprise.** Networking is power;
you must share knowledge with your organization's allies and partners, and keep a close eye on both competitors and new trends and technologies.

• **Integrate your customers and suppliers into the process.** Deploy staff to meet customers and absorb their needs, using one-to-one meetings, focus groups and brainstorming sessions to bring customers and suppliers on board with your innovation efforts.

• **Open up the front end of your innovation pipelines**. The opening stages of any innovation process can be chaotic, something for which many managers have little use. They only want to see the "winning" ideas, not the other, discarded concepts that also inhabit your brainstorming stream. However, this process can be managed by establishing good criteria for what is being sought and using an efficient mechanism to sort and channel what is found.

• **Increase the pace with innovation networks and platforms.** Business moves at ever-increasing speeds. Be aware of the shelf life of products, services, even ideas, and create a high-velocity innovation process to address it.

• **Ask questions that lead to increased value from innovations.** As you work to expand the final, commercialization-driven end stages of your process, address

these and other pertinent questions:
Does your market position allow you to effectively and profitably introduce new products or services ?
Do you have the logistics capacity to pull it off? Can you quickly achieve the best economics of scale?
What is the marketing potential of your innovation, both regionally, nationally and internationally? Do you have sufficient geographical reach to cover the space you need?
Can commercialisation be effected through your own means or are partners required? •

Nokia's Innovative Telephone

" In 1992, Nokia, the Finnish telecom giant, applied its entire organization to the task of creating a portable telephone that provided access to the Internet, including a World Wide Web browser, calculator, clock and built-in e-mail and fax capabilities. It was a bold move in a market still in its relative infancy; the company had to develop new technology platforms and partnerships, and a management scheme that could deliver the product on an aggressive schedule.

To do so, Nokia relied on its proven product-development process, which was driven by a fluid, flexible team drawing on a number of cross-functional resources. The key factor in its success, however, was in the way the company devoted that process to achieving maximum value from innovation, extending it from R&D all the way to users —- a concept-to-customer stream that allowed it to achieve heretofore untold success.

Resources: Invest in Innovative Platforms and Partners

Strategy will set the pace of innovation in your company and next-generation innovation process maintains that pace. To accelerate the pace of innovation, you need to focus on next-generation resources.

Next-generation resources include your company's facilities and equipment and your financial support. They also include employees, suppliers, partners, customers, even competitors. Finally, these resources include your company's knowledge, competencies and technologies.

Here's a closer look at some of the above resources:

Suppliers. Next-generation suppliers help cut costs, streamline product development and perfect the design and delivery of products and services. There must be a coordinated effort between suppliers and customers, with both sides working in unison to reduce costs and save time. There are mutual rewards to be had, and an underlying recognition that survival may depend on how well each side cooperates on projects and programs with mutual benefit.

For example, Chrysler led the development of a concept car in which the brake manufacturer fully funded the brake work, while Chrysler funded all systems related to the auto's suspension. Costs for the seats were shared equally with another partner, and the costs for the exterior trim were divided 60-40 between Chrysler and yet another partner, with Chrysler assuming the larger amount.

People and Competencies. Traditional roles and occupations within next-generation organizations give way to team-based networks comprised of employees who, in addition to their usual assignments, use their expertise to pursue special innovation projects.

Partners. Next-generation companies are willing to work with others as equals, sharing information and treating one another with respect and openness, all in < relentless search for the information premium. For example.since 1996, Sun Microsystems has, teamed u] with Novell, Inc. to combine networking software and Java technology for a host of quality products. Sun doi not allow innovation to be confined or constrained wit in its own corporate walls; rather it allows innovation 1 extend forward and backward along the value chain, an outward, to include suppliers, partners and other key people and entities. •

'The Iceberg Survived"

The Advanced Technology unit of the Chrysler Corporation is devoted solely to the development of concepts for Chrysler cars — a development process that is often five to ten years ahead of the time when the cars will reach the public. Company insiders often refer to the unit as "the tip of the iceberg" because its relatively small size belies the resources it marshals.

Once, a visitor asked a Chrysler executive whether the iceberg analogy was appropriate, in light of its association with the Titanic disaster. "Well," the executive responded, "the iceberg survived."

Where Do You Stand with Regard To Next-Generation Resources?

- **Can you name your intangible assets?**
- **Do you see employees as an expensive, albeit necessary, asset?** Do you recognize their worth?
- **Can you recognize the value in funding R&D projects, or does it seem like you're throwing money down a black hole?**
- **How wide is your resource net?**
- **How does your company feel about risk?**
- **Can you rely on and share resources with your partners?** How often do you meet with partners to share ideas? At what point in the product life cycle do you include them in your processes? Do you trust them?
- **When was the last time you listened to and acted upon an idea proffered by an external source?**

Developing and Maintaining Next-Generation Resources

Next-generation resources are assets that must be systematically managed. They lie fallow until they receive the investment and serious commitment that turns them into actions. The following are some of the ways that y(can make the most of your next-generation resources:

• **Resist the temptation to see resources in purely budgetary terms.** Do not overlook the value of yoi suppliers, partners, customers and employees to yoi information premium. If you treat R&D as a cost center, it will behave like a cost center; if you treat:
as an investment vehicle for growth, it will respond accordingly.

• **Leverage what you've got.** Assess your innovatio assets and leverage what you have to what you car accept. Warning: This may require a change of atti tude about control and proprietary information.

• **Eliminate barriers.** Be willing to break down walls or, at very least, create pathways through them, in an effort to allow suppliers, partners and customers to engage in the give-and-take of knowledge required of next-generation companies.

• **Use innovation platforms and partners to make investments in human resources and competencies.** Develop world-class competencies in areas that are most critical to your growth. Then put the best people in charge of bringing that innovation to life.

• **Get the most from your intellectual property.** Develop an understanding of your intellectual property, bundled in a variety of different ways. Then target areas for future investment, by developing explicit asset management plans around the patents, trade secrets, knowledge and other bundles of intellectual property.

• **Develop innovation, resource and asset management plans.** Combine quantitative elements from traditional valuation methods and systematic qualitative assessments, isolating the contributions that different resources make to your business.

Organization: Create Worldwide Networks of Innovators

Strategy, process and resources are all important elements of the next-generation company. But your company's organization is also key to capturing the innovation premium.

What Constitutes a Next-Generation Innovation Organization?

It is fluid. Ideas flow effortlessly from one part of the enterprise to another without having to pass through corporate red tape. This means that senior executives, managers, employees, partners, customers and suppliers can freely exchange ideas without having to deal with boundaries or other roadblocks.

Leadership is critical. A chief development officer (CDO) must manage the innovation process from concept to customer, and must create and capture value in both the technology and product process development pipelines. He or she must also act as a coach for senior innovation leaders and as the central point of accountability for management of resources and technology.

It is networked. Innovation networks are the arms, legs, eyes and ears of the next-generation organization. They involve people from different hierarchical levels in your company, each of whom is accountable to contribute a critical capability so that the network as a whole reflects the organization's insight and experience.

It has partners. Your partnerships with entities outside your company must outlast the specific "deal" or transaction that brought you together. Focus on aligning your organizational structure with theirs, and on managing a broad range of details and links necessary to create growth and innovation for all parties.

It reaches across borders and beyond boundaries. Consider decentralizing your R&D functions, spreading them across the breadth of your business units, closer to customers and the exchange of new innovations and technologies. •

Alcoa's Innovation

Just as walls within organizations must be broken down to allow the free flow of innovation, geographic borders likewise mean very little in the face of companies' worldwide expansions, cross-border integrations and other international pursuits. Organizations must be able to reach into all corners of their international operations; innovation can no longer be isolated and restricted to one central location. Such was the case at Alcoa, which had to find ways to expand from its headquarters in Pittsburgh, Pennsylvania, to a global network of innovators, working together, sharing knowledge and exploring the possibilities of next-generation innovations.

To effect this change, Alcoa did three key things:

Create teams. The company created new teams to insure that the organization works as smoothly as possible. The organization's Technology Board is the forum for senior leadership to set direction, emphasize critical issues, determine high-level goals and set strategies to meet them. Alcoa also created Technology Management Review Boards (TMRB) to drive initiatives and investments across business units, and to set strategy, lead technology deployment and drive innovation.

Establish a wide range of formal and informal innovation networks and platform teams. The company fosters innovation throughout its own internal operations, as well as outward, with valued partners. Together, they leverage their technologies and competencies to great and successful effect.

Lower costs. The company embarked on an aggressive campaign to lower costs and increase the return to shareholders through continuous improvement and the introduction of the Alcoa Production System (APS), which monitors and minimizes waste and encourages efficiency across the breadth of the company's operations.

Building a Next-Generation Organization: Where Do You Stand?

• How often do you get your business unit managers together in the same place to share knowledge?

• Are your key R&D experts on the front line or in the back room?

• Is innovation ingrained in your company's culture, or is it merely a buzzword?

• Do innovative ideas get tangled in bureaucracy somewhere between conception and commercialization?

• Is your company active in pursuing its strategic vision of the future, or merely reacting to the moves of your competitors?

Build a Culture of Continual Change and Learning

Having the right organizational structure and the right culture is vital in capturing the innovation premium. To sustain the pace of innovation, your company must build a culture of continual change and next-generation learning. Learning is the key.

• **It is central and all-encompassing.** Learning must be continuous and company-wide, enabling an organization to capture a set of sustainable benefits that define the innovation premium. Intelligent strategies must be combined with innovative process and the creative use of resources and supported by an efficient organizational structure.

• **It is distributed across the enterprise.** Companies must gather ideas from every corner of its extended enterprise, while at the same time maintaining a firm commitment to finding out firsthand what customers really want. This is done by fostering a model of learning based on innovation of both product and process — each are essential to your continuous learning effort.

For example, British Petroleum was able to transform itself from a debt-ridden and divided behemoth into a sleek, flexible and innovative organization. At the heart of the transformation were cross-unit performance improvement teams (PITs) that encouraged cross-unit and enterprise-wide learning.

How BPDid IT

"Learning is at the heart of a company's ability to adapt to a rapidly changing environment," says John Browne, chief executive and managing director of the British Petroleum Company (BP). "It is the key to being able to both identify opportunities that others might not see and to exploit those opportunities rapidly and fully."

Before Browne took his position in 1995, BP was a debt-mired, confusing amalgam of divisions involved in different fields. Now, the company's debt is down almost 60 percent, it has an annual growth of over five percent, and has embarked on a series of high-profile acquisitions. Many credit Browne's stewardship for the turnaround; with him at the helm, BP has created a strong innovation-and-growth engine that extends from the company's fresh commitment to consistent, company-wide learning. Browne instituted two critical entities within BP:

• **Performance-improvement teams (PITs).** PITs help employees recognize their individual responsibilities to the performance of the entire enterprise by putting into place quantitative performance measurements that stretch across divisions, business units, and enterprise boundaries. Since BP's business groups are, by definition, asset-based, there exists a danger that individuals may become so internally focused that they lose sight of endeavors outside their own realms of responsibilities. PITs help create a more balanced focus on the management of knowledge-based and intangible assets.

• **Peer-assist programs.** These programs encourage employees to seek out solutions to problems within a shared learning environment, simultaneously solving the problem, increasing the knowledge base of BP's internal resources and reinforcing the importance of teamwork. BP recognizes that, until an employee's acquired knowledge and expertise is combined with that of his or her peers, and then is made available to others in a clear and usable form, they cannot generate the intrinsic driver of innovation: ideas. •

How You, Too, Can Champion Next-Generation Learning

• **Make sure your innovation leadership provides learning leadership.** Your organization's learning efforts should have a central individual to take the lead, enlisting every member of your company to buy into the program, thus accepting the challenge to achieve innovation and maximum value.

• **Reinforce the notion of organization-wide teaching and learning.** A greater emphasis on learning must be spread throughout the entire organization;
innovation will wither without it.

• **Establish standing teams to foster sustainable learning.** Long-term success requires more than single-focus, ad hoc teams and one-shot projects; the growth achieved through these measures is simply not sustainable. Organizations must establish standing teams whose learning curve is not task-specific, but steady, cumulative and sustainable.

• **Set aside time to reflect on lessons learned.** Time for reflection is crucial for the sustained learning demanded by next-generation innovation. Dialogue and reflection are vital in order for you to learn from what you do.

Capture the Innovation Premium

True innovation is powerful enough to change the economy. It is the prime force behind the longest-running economic expansion in the history of North America. Standard business cycles are, in many cases, circumvented, thanks to the innovations brought about by next-generation companies in key business areas such as strategy, customer management, operational performance, product development, process and service creation.

One reason that innovation is such a powerful economic force is that the benefits of capturing the innovation premium are not limited to the company itself, but extend to all of the company's stakeholders, including customers, employees, partners and shareholders.

What does it mean for customers?

Creativity benefits customers by providing new products and services and high levels of customer satisfaction. With next-generation strategies in place, companies can focus on specific customers, and service their needs in innovative ways, making it exciting and worthwhile for their customers to do business with them. Organizations can focus on the core facets of doing business in our age:

- **Targeting specific segments of customers,**
- **Tailoring their offerings to each segment's buying needs and preferences,**
- **Soliciting feedback from the customer to continue the process in an efficient and productive manner.**

Next-generation companies also create differentiation strategies to help pinpoint *why* their customers buy from them. They solicit two-way communication with customers, mixing traditional options with newly emerging technologies like the Internet to give customers more ways to make their preferences known.

What does it mean for employees?

Just as the exchange of value between innovative companies and customers creates a rich and self-perpetuating cycle, next-generation companies build employee relationships on the same principles of mutual benefit and perpetuating excellence. Innovative companies attract the best and brightest work force, who turn in the best performance, which attracts more of the best employees, who further fuel the organization's innovation.

Next-generation companies lift the performance of their employees by freeing the initiative, creativity and drive inherent to each one — a far cry from the stifling confines of the traditional corporate environment. The programs these companies put in place to help employees develop individual capabilities and collective competencies lead employees to view the workplace as a place where they can attain their personal and professional goals. This, in turn, leads to increased levels of creativity and lower rates of turnover.

What does it mean for partners?

Next-generation companies recognize the fact that they cannot go it alone in the face of shrinking product development cycles, rising development costs, rapid changes in technology and increasing customer sophistication. Partnering and extending networks are crucial to the value equation that enables next-generation companies to command the innovation premium, capturing value for those very same partners.

While many companies claim to have productive external networks and partners, only the most innovative ones create value and improve earnings performance across the extended enterprise — developing and exploiting opportunities and building a sense of trust, both of which make them very attractive to investors, customers, employees and partners alike. Innovators like Chrysler and Sun Microsystems provide value to their partners, suppliers and customers by implementing programs that help build that extended enterprise.

What does it mean for shareholders?

In industry after industry, market after market, company after company, innovation that cuts across strategy, customer management, processes and products and services has earned next-generation companies greater growth in value; that value, in turn, pays off for investors. A good example of this phenomenon is Chrysler. By tending to innovations in its sourcing and partnering relationships, its customer service and customer segmentation, the company has been able to generate $3 billion of new shareholder revenue and, in the process, has changed the rules of engagement in the auto industry.

There are risks involved in investing in next-generation companies, just as there are risks in investing in any company. Innovation implies risk, and when companies set out on the pathway that leads to the innovation premium, they are, in fact, taking a risk. But to risk is to dare, and to dare is to seize the opportunity to succeed in previously unimagined ways. Properly conceived, executed and managed, innovation repays risk several times over, making seeking the information premium a risk well worth taking.