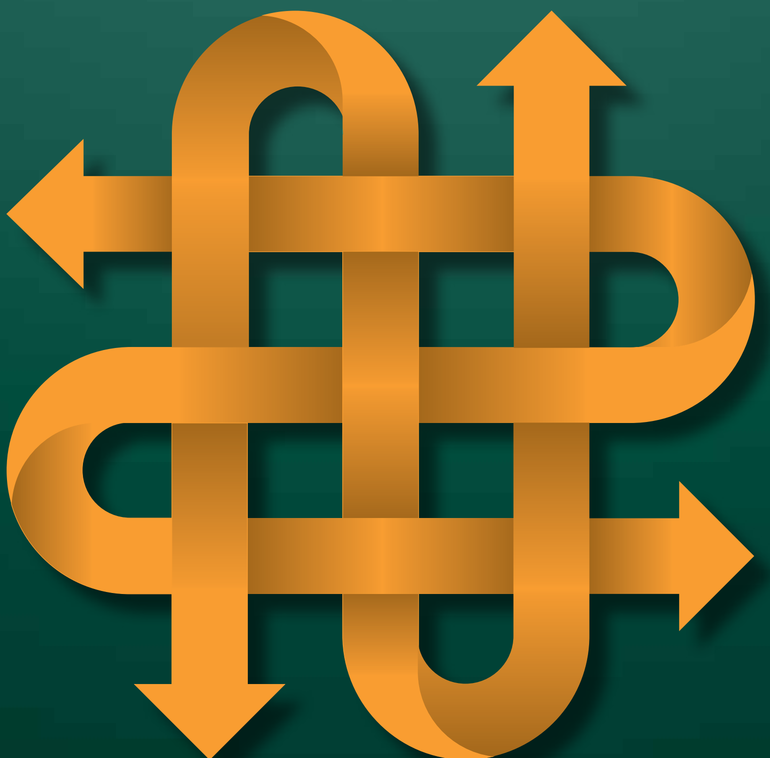
BCG

THE BOSTON CONSULTING GROUP

Changing the Game

Five Requirements for Success in a Volatile World



50 YEARS
SHAPING THE FUTURE. TOGETHER.

The Boston Consulting Group (BCG) is a global management consulting firm and the world's leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 78 offices in 43 countries. For more information, please visit bcg.com.

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Contents

Preface

If this feels like an exceptionally disruptive period, it's for good reason. Volatility in revenue growth and operating margins has more than doubled since the 1960s, while periods of economic turbulence have increased in duration and frequency.

The state of the global economy only adds to the feeling of being at sea. We are more than five years removed from the onset of the financial crisis, and growth is still not where it should be. Developed markets are propping up unsteady recoveries, while some of the most dynamic emerging markets have downshifted. The landscape, as a whole, has become more complex. The two-speed world is a thing of the past—markets are growing at different rates, are in different states of financial health, and face different structural problems.

The challenges are real and the uncertainty is pervasive, but leaders cannot afford to let the big picture—and all of its dark undercurrents—take on a false sense of permanence or obscure plain realities.

To truly understand the prospects for long-term growth, we have to separate myth from reality. In many developed markets, the recovery has been far from smooth, but the fundamentals of their economies are strong. In emerging markets, we have to look beneath the surface of the headline-grabbing GDP story. A number of trends—including the growth of the middle class, the emergence of global challengers, and the rise of large cities—will ensure that these markets remain the biggest sources of growth for decades.

And then there are the changes happening across markets and industries. The relentless march of technology—in particular, the transformative power of big data and analytics—is threatening existing business models while creating significant opportunities for growth and value creation.

In the immediate term, leaders have an opportunity to turn adversity into advantage. Turbulent times have a way of bringing out the best in great companies and great leaders. It's a truism, admittedly, but it bears repeating in the current environment. Inaction and complacency are the greatest risks.

The notion of pressing ahead when others are pulling back recalls BCG's early days. When Bruce Henderson founded the firm 50 years ago, he positioned it as a catalyst for change for our clients, converting uncertainty into competitive advantage—and competitive advantage into superior value creation. It's a simple equation, and it continues to inspire us.

To mark BCG's 50th anniversary, we launched a program of thought and action designed to help organizations thrive in a world of accelerating change and rising volatility. The Game-Changing Program blends key ideas, insights, and ways to win—practical solutions to real problems—that will inform and generate success. It is centered around five requirements for success:

- *The Growth Imperative.* Growth has become more elusive and therefore more valuable. Successful companies—guided by a clear understanding of where value is created—will find new sources of growth by moving into markets and adjacent sectors, allying with traditional adversaries, and innovating. Emerging markets will invariably be part of the mix.

- *The Fitness Factor.* Companies are in a global race with new types of competitors, but many are ill-prepared for a struggle to survive, let alone thrive, in a fast-changing economy. Governments need to become fit, too. They should create health systems and educational opportunities to build more productive workforces—and develop more agile ways of delivering essential and affordable services.

- *The Adaptive Mindset.* Adaptability is the antidote to turbulence and volatility. Quick to read and react to signals of change, adaptive companies move faster than their rivals. They experiment rapidly, frequently, and economically—not only with products and services but also with business models, processes, and strategies. They learn to detect, decode, and act on marketplace signals.

- *The Two Sides of Connectivity.* Companies need to be masters of both bits and bricks. About $40 trillion in infrastructure spending will be required over the next two decades to rebuild the infrastructure of mature markets and construct new infrastructure in emerging markets. The digital revolution, meanwhile, is rippling through the entire economy—not just the tech sector.

- *The Perpetuity Principle.* The boundaries of trust have widened. Beyond customers, partners, and shareholders, companies have to pay particular attention to their role in society and their relationships with regulators. Leaders ultimately will be judged by their ability to shape a more resilient and responsible future, not just whether they deliver a quick earnings kick.

For each requirement, we have selected two publications from 2013 that illustrate different ways that organizations can position themselves for success. The publications are accompanied by links to related pieces on bcgperspectives, including reports, articles, and multimedia.

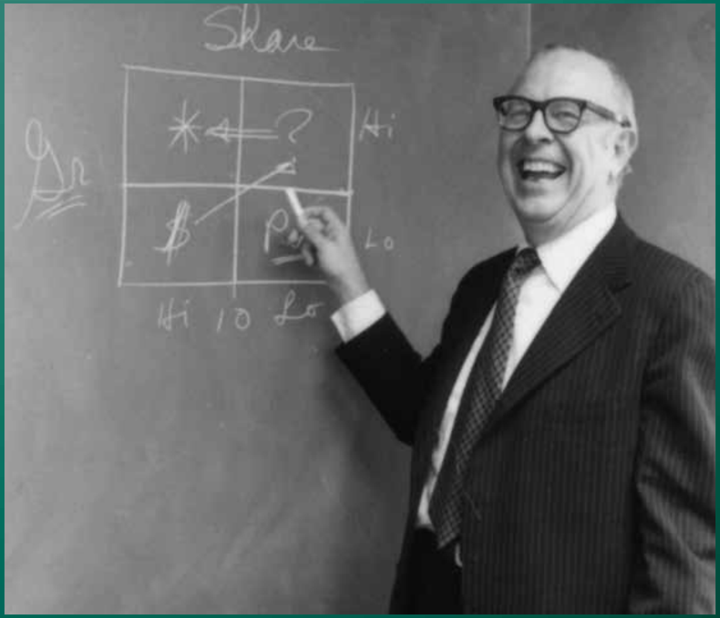
Bookending the ten publications are snapshots from the past and the present. The compilation begins with a brief overview of BCG's history, taken from a longer narrative that was prepared for our 50th anniversary. It concludes with a series of photographs from an exhibition, curated by Magnum Photos, that captures aspects of the five requirements through the lenses of world-class photographers.

I hope you find this collection thought-provoking and useful. It is by no means the final word on the challenges facing today's leaders or the solutions at hand. It does, however, provide a cross-section of the strategies and capabilities we believe will help organizations move forward with confidence and purpose in the face of near-constant change and disruption—to own the future rather than simply react to it.

I wish you all the best for a healthy and prosperous new year.

Rich Lesser

Rich Lesser



The Story of BCG

A Commitment to Impact

The Boston Consulting Group began not as just another management consulting firm but as a pioneer of bold new business approaches. Its focus on strategy would have a profound and lasting impact on both corporate management and business academia. Yet the firm went on to accomplish something equally remarkable: After carving out a distinctive niche in a crowded marketplace, BCG has successfully evolved from a boutique into a full-service consultancy—while preserving key elements of its founding culture. Along the way, it has continually adapted to the changing needs of its clients—adding layers of new capabilities—to become one of the world's major global-management consultancies.

Unleashing a Revolutionary Startup, 1963–1972

In 1963, the leaders of the Boston Safe Deposit and Trust Company were looking to expand beyond wealth management in New England. They saw the growing industry of consulting services as a promising complement to their mainstay business.

The consultant they hired to launch the new operation, though, had an entirely different idea. Bruce Henderson, then 48 years old, had spent most of his career in the purchasing department at Westinghouse. Unlike many of the line managers at that manufacturing giant, he had a rebellious spirit that made him question established practices.

The work started slowly with a few referrals from acquaintances, mainly for projects focused on information gathering, but revenues grew every month. Henderson hired a few people to help, most of whom were academics.

The firm's breakthrough came a year after its founding when it was hired by a large manufacturer of grinding wheels. The manufacturer was losing market share to smaller competitors that "cherry-picked" its most vulnerable product categories. Henderson helped the client devise a plan that would leverage its size to make these products more attractive, even at a higher price.

Henderson had long been fascinated with competition, and he knew that it was only under pressure from the marketplace that most companies would change long-established ways of doing business—or hire upstart consulting outfits, for that matter. He soon latched onto the concept of strategy, an emerging idea in business circles.

As the fledgling consulting division looked for a standout offering, Henderson pushed for strategy. His colleagues worried that the concept was too vague, but he saw the vagueness as an advantage: they could define it themselves. And so they did, focusing on the high-level actions a company could take that would yield advantages over its rivals. This emphasis on the competitive aspects of strategy and how to secure advantage—rather than the general approach that most analysts used—successfully positioned Henderson and his colleagues in the marketplace.

For Henderson, the attention to strategy was as much a personal crusade as a business calculation. Over the years, he would aspire to bring intellectual rigor to the management decisions of American business as he had once hoped to do for Westinghouse. He aimed at transformative—not incremental—change.

In 1964, he developed a new marketing approach centered on two novel elements. The first was Perspectives, a series of brief and provocative essays on strategy published in a brochure format small enough to fit easily in an executive's coat pocket. The essays attracted attention, but the firm still needed a personal connection to make a sale. For that, Henderson launched the second novel element: conferences aimed at the concerns of CEOs. Attendance was restricted to invited executives. As Henderson and his colleagues started presenting their developing ideas, interest ramped up. Within a few years, invitations became highly sought after, even from the leaders of large companies.

In 1968, the bank spun off the consulting arm as a legally separate but wholly owned subsidiary. In a nod to Henderson's growing prominence as a novel thinker, The Boston Company suggested he call the new outfit Henderson & Company. But Henderson recognized that only as a team of engaged and independent thinkers could the firm have the far-reaching impact to which he aspired. Accordingly, he took a more collegial approach and named the business The Boston Consulting Group.

Henderson's ambition extended to the entire developed world. He acquired or set up joint ventures with firms in Tokyo in 1966 and London in 1970, and the firm established the Paris office in 1972.

The next few years brought more ideas that built on the early concepts of the experience curve and growth-share matrix, most of them focused at the nexus of production economics, finance, and market competition. Each new client gave the firm access to more data that BCG could use to generate and test additional ideas. By 1973, it had earned a reputation that far exceeded its still relatively small size—about 100 consultants and more than $5 million in revenues. BCG was on the move.

Managing Growth as an Industry Pioneer, 1973–1979

Growth was a blessing and even a necessity. Yet managing that growth was a challenge, especially for a professional services firm that aimed to provide its consultants with a high degree of autonomy while encouraging the collaboration and cohesion they needed to be effective. In the 1970s, the firm managed to maintain a coherent culture and a sustainable form of governance, even as it rode a wave of expansion.

Soon BCG was doing even better than expected, powered by the growth-share matrix in particular. The firm's reputation continued to soar, and BCG opened offices in Menlo Park in 1974 and Munich in 1975. Profits were strong enough to allow the BCG Employees Trust to pay off the amount due to The Boston Company in 1979, five years ahead of schedule. The newly independent firm had 250 consultants bringing in revenues of more than $30 million a year.

Then Bruce Henderson did something truly extraordinary. As founder and longtime leader of the firm, he could have designed an ownership structure that gave him the lion's share of the firm's equity and voting rights. Yet he structured the transaction so that he held only 5 percent of the firm's shares for himself. The rest of the shares of BCG were distributed to all regular U.S. employees.

Henderson also gave himself and all the other officers a single equivalent vote in the firm's decisions, demonstrating his clear commitment to the collegiality of the firm. That focus on the institution over the individual did much to ensure BCG's continued success long after Henderson retired in 1980.

That same year, Alan Zakon was elected the new CEO. A management committee was appointed to help run the new firm. It was a move consistent with Henderson's philosophy of collegiality—and also a hedge against the prospect of another dominant leader.

Embracing Implementation, 1980–1990

Newly energized CEOs, having realized the urgency of problems revealed by competitive analysis, were increasingly more intent on doing something about them in organizational terms. Although strategy work continued, implementation now took center stage. Looking ahead, Zakon and the management committee realized BCG needed to follow its own advice and focus on achieving sustainable growth.

Zakon began pushing an initiative called "Make It Happen." Brilliant ideas and analysis were no longer enough; to have substantial impact, consultants would have to work on follow-up implementation with the client. The client service model had to evolve.

John Clarkeson, who succeeded Alan Zakon in 1985, understood what it took to build an institution, and he had a disarming personality that served the maturing firm well over his four three-year terms as CEO. He also knew that the Make It Happen initiative was an ongoing effort that would take years to play out.

As BCG moved deeper into implementation, expertise in particular industries was also needed. Even strategy work had become more industry specific, as companies focused on core businesses. In 1987, BCG founded practice areas in four industry sectors (financial services, consumer products and retail, health care, and high tech) and two functional areas (organization, and mergers and acquisitions—soon renamed corporate development).

Time-based competition was a new concept born out of George Stalk's efforts to understand the ability of Japanese manufacturers to offer a wide variety of products without allowing the resulting complexity to raise their costs. By establishing "flexible factories," eliminating nonessential processes, and standardizing parts of product development, companies were able to switch production runs quickly and at low cost.

Although it had the same underlying focus on competitive advantage, time-based competition was far more organizational and operational than BCG's earlier breakthrough ideas on portfolio management. It gave BCG an edge in a new wave of implementation projects, and it boosted the firm's credibility with any potential clients who still saw BCG as a strategy boutique.

BCG—with 17 offices across the U.S., Europe, and Asia-Pacific—had taken a big leap forward.

The Rise of the Practice Areas, 1991–2001

If the 1980s were the decade of implementation, the 1990s saw the rise of specialized expertise. The firm needed a special skill that would apply to the broad range of projects it was now working on. It found that differentiator in its collaboration with clients, a natural outgrowth of the partnership-oriented, collaborative culture well established since the early years.

Partners throughout BCG were discovering that solutions developed jointly with clients had a much higher rate of success than those that were not. The new approach not only included the client's people on project teams but also required consultants to step back when developing client plans. The goal was client and consultant working together with mutual respect to find the best way forward.

At the same time, the firm took on a wider range of projects, moving beyond strategic-based efforts. With the advent of stronger practice areas, partners entered a variety of new areas, most notably postmerger integration, reorganization, process optimization, and the restructuring of IT systems. These experiments got a boost when new CEO Carl Stern, who succeeded John Clarkeson in 1998, promoted the "Go North" initiative, which sought to grow BCG's footprint at large clients.

Not long into Stern's tenure, BCG went through the exhilarating and harrowing e-commerce boom. E-commerce challenged established retailers and opened entirely new kinds of markets. Existing clients were looking for help with the new landscape, while high-potential dot-com startups sought old-fashioned strategic advice. BCG was well positioned with bold analysis on how established business models would change dramatically, as shown by BCGers Philip Evans and Tom Wurster in their seminal *Harvard Business Review* article, "Strategy and the New Economics of Information," and book, *Blown to Bits.*

The Global Deployment of Expertise, 2002–Present

By 2000 BCG had assembled all the pieces—a strategic mindset, collaborative implementation, and expert practice areas—to embrace the full panoply of client needs. The firm crossed the $1 billion mark in revenues, and it boasted 50 offices with more than 2,000 consultants. The partners elected Hans-Paul Bürkner as CEO, and the firm launched what later developed into a major emphasis on value creation for its clients.

By the first decade of the new century, many of BCG's clients had expanded around the world, and they wanted their consultants to expand with them. BCG continued to add new offices, but more important was its emerging global mindset. Instead of being a collection of local offices—each with its own internal processes, IT systems, branding, and websites—the firm began to standardize in a number of areas.

The practice areas also benefited from an enormous investment in knowledge development. As Bürkner saw it, consultancies without expertise in a wide variety of offerings could not meet the demands of major clients who increasingly expected consultants to work broadly in the organization.

All these efforts led to accelerated growth that more than made up for the slowdown earlier in the decade. The firm had assembled enough expertise, combined with commercial drive, to compete for the full range of business. Yet it also had maintained its differentiating strengths in strategic perspective and collaboration. Together, these capabilities yielded customized solutions more likely to stick over time. That positioning was a big reason why the firm continued its steady growth even during the Great Recession of 2008–2009.

BCG essentially doubled in size to 5,000 consultants from 2001 through 2010, and it boasted offices in 75 cities. Special management attention in the first decade of the new century brought substantial progress toward integrating Asia with the rest of the firm. The globalized firm was well positioned to compete for a broad range of projects anywhere in the world.

BCG now entered a third wave of progress. The first wave had resulted from the firm's insights into competitive advantage, and the second from its ability to implement that strategy into the organization. Now it needed to enable clients to keep up the changes on their own.

BCG had long been a proponent of building a client's foundational abilities, not just with the collaborative mindset but also with the "competing on capabilities" ideas of the early 1990s. But the firm's enablement initiative, launched in 2011, took these efforts in a far more practical direction. By tying the work to the firm's long-standing advantages in collaboration and strategic perspective, and by relying on entrepreneurial experiments worldwide, BCG has continued to position itself for competitive success.

Rich Lesser was named CEO in the firm's fiftieth anniversary year of 2013. Addressing the entire staff following the December 2012 Worldwide Officers Meeting (WWOM), he pointed to four key areas for the future: attracting, developing, and retaining talented people; improving how the firm demonstrates its capabilities to clients; integrating across the firm's many geographies and practices to serve increasingly large and complex global clients; and investing strategically in practice areas and new capabilities (such as enablement) that match emerging client needs. All of these, he argued, would give BCG a better seat at the table when it comes to gaining clients and creating value.

While these priorities will chart a course for the future, they also invoke the past from which the firm was built—when it challenged conventional business thinking and hired quirky nonconsultants; recognized the need for implementation and started to make it happen; developed an institution and a true partnership; leveraged insight, impact, and trust to deepen client relationships; and expanded boldly into global prominence.

When asked why he joined BCG 25 years ago, Lesser echoed comments from scores of BCGers over the years: "First, I thought BCG had the ability to produce more fundamental change at clients. Second, I thought BCG was much less hierarchical than other firms, and I wanted to join a firm where I would be judged based on my contribution, not on my status. And third, I wanted to build a great firm, not just to maintain one, and I thought at BCG I could really make a difference."

The Growth Imperative

Allies and Adversaries

2013 BCG Global Challengers

Emerging markets have become the world's economic engines, fueled by companies that have the talent, capital, and commitment to grow. Over the past five years, nearly 1,000 public companies headquartered in emerging markets have reached at least $1 billion in annual sales. Many of these companies are content to focus on their home market, while others are expanding abroad. And a number of those going overseas aspire to be global leaders in their industries. These are the global challengers. They are the companies that will shape the global economy over the next decade.

The 2013 BCG global challengers—the fifth version of the list—have moved far beyond the low-cost position that placed many of them on the original 2006 list. These 100 companies are winning with a broad range of strategies and capabilities. In doing so, they are fundamentally altering industries ranging from aircraft manufacturing and medical devices to e-commerce and mobile telephony.

Not just competitors of multinationals, global challengers can be attractive potential customers. In 2011, the 2013 BCG global challengers purchased about $1.7 trillion of goods and services and invested more than $330 billion in capital expenditures. And with the global marketplace becoming more demanding, global challengers are potential partners of multinationals, as they often have complementary skills.

We have entered the era of allies and adversaries.

Global Challengers

Let's examine some of the highlights of the newest class of global challengers.

Growth. From 2008 through 2011, the revenues of global challengers grew by 16 percent annually. Global challengers had higher average revenue in

2011 than the average nonfinancial S&P 500 company did. During that time, earnings of the global challengers expanded by 10 percent and total shareholder return grew by 20 percent annually.

Job growth has been equally impressive. From 2006 through 2011, the 2013 BCG global challengers added 1.4 million jobs, while employment at nonfinancial S&P 500 companies remained constant. Even more striking, revenue per employee of the global challengers now exceeds that of the nonfinancial S&P 500.

From a Global Base. Our 2006 list was dominated by China—where 44 of the companies were based. But newcomers from other countries have pushed some former challengers off the list; there are now just 30 Chinese companies. The number of home countries is steadily broadening. The past two lists have added companies from Egypt, Colombia, Qatar, Saudi Arabia, and South Africa.

Focus on New Consumers. From 2010 through 2020, emerging markets will add 270 million households with discretionary income that makes them attractive to consumer-facing companies. Global challengers stand to benefit from this shift since nearly one-third of them are consumer products or consumer services companies.

Many of these companies have embarked on an acquisition spree. For instance, in mobile telecom, VimpelCom—based in Amsterdam but founded in Russia, its largest market—bought Italy's Wind Telecom for $6 billion in 2011. In travel, the merger between Chile's LAN Airlines and Brazil's TAM Airlines created the largest South American airline, Latam Airlines Group. In fast-moving consumer goods, India's Godrej bought Indonesia's Megasari Makmur Group.

Through such deals, some challengers have risen quickly. But no challenger has a guarantee of success. Challengers are more likely to fall off the list than to rise above it. Twenty-six of the 2013 BCG global challengers are new to the list, the largest reshuffling to date. Meanwhile, since 2006, only seven companies—two this year (Saudi Aramco and Emirates airlines)—have achieved "graduate" status, our designation for one-time challengers that have reached sustained industry leadership.

One of the key ways that the 2013 global challengers differ from their 2006 ancestors is the degree of state ownership or control. The number of state-

owned and state-controlled challengers has dropped from 36 to 26. While the state is still the visible hand in the economies of these markets, many companies under state ownership or control have either chosen not to go global or stumbled when they tried. Since 2011, 12 state-owned or state-controlled companies—most of them Chinese—have fallen off the list. Only nine state-owned or state-controlled companies were added.

Many of the displaced challengers continue to thrive in their home markets. China Mobile, last named a global challenger in 2009, remains a market leader at home. The China State Construction Engineering Corporation, a challenger in 2011, has continued to grow at home and abroad. It broke ground in 2011 on a multibillion-dollar resort project in the Bahamas but has shifted more of its attention to the domestic market.

At least five factors explain the setbacks of state-owned and state-operated enterprises on the global stage. First, their relative competitive advantage often resides in domestic markets, where the state may encourage them to focus. Second, private-sector companies have generally had more success than state enterprises in meeting the needs of consumers, which are increasingly important to global expansion.

Third, people practices within the state sector tend to be less flexible than within private enterprises, limiting the ability to leverage overseas talent. Fourth, state shareholders are often more conservative in putting capital at risk in large overseas M&A transactions. Finally, they can face resistance from stakeholders in other countries as they seek to expand. While many state companies have overcome these challenges, others are at risk of falling behind globally.

To succeed outside of their home countries, state-controlled enterprises will need to attract talent, take risks, develop successful business models, and appease the concerns of key stakeholders in their target markets.

The 2013 BCG global challengers are at a turning point. The cost advantage they once enjoyed over their competitors from mature markets is eroding unevenly. While some countries have had dramatic currency depreciations, lowering companies' costs in global terms, others have experienced currency appreciations. But the global challengers have also been building new capabilities—manufacturing higher-quality products, harnessing their cash resources, and investing in R&D.

High-Quality Products. Many challengers are still low cost, but this description is more likely to describe their business models than their product offering. The Middle Eastern airlines—Etihad Airways, Qatar Airways, and Turkish Airlines—have low-cost structures while winning global awards for exceptional service and quality. Huawei's Ascend D1 quad is among the fastest smartphones in the world.

Capital Availability. Despite spending on aggressive globalization and growth plans, the challengers are still well financed. Many challengers have the capital to make significant strategic investments. During the 2008 to 2010 period, they put their capital to work to take advantage of low equity prices by completing hundreds of cross-border acquisitions that provided access to international assets and management. In the past three years, many challengers have focused on gaining full value from these acquisitions.

Innovation. Global challengers increasingly see the need to become more innovative and are rapidly increasing their research spending. They boosted their annual spending on R&D by 34 percent annually from 2007 through 2011. Mindray, a medical-equipment supplier based in China, generates more U.S. patents per dollar revenue than many global leaders. About 46 percent of Huawei's 150,000 employees are in R&D. Tigre, a Brazilian PVC maker, launches about 500 new products a year.

Many innovations are aimed at creating new business models rather than tangible products. For example, the Fung Group, formerly known as the Li & Fung Group, has pioneered an innovative role acting as a middleman between designers in developed markets and Chinese manufacturers.

Competition and Cooperation

Increasingly, challengers and multinationals are competing head to head. Multinationals have modified their cost structures and product portfolios to pursue opportunities in emerging markets, where they face challengers on their home turf. And some challengers, such as conglomerate Alfa and baker Grupo Bimbo, both from Mexico, are expanding into the home markets of multinationals.

Over the next several years, global challengers and multinationals will heatedly compete on several fronts. They will be vying to develop products and services that appeal to the new consumer class in emerging markets. As these consumers venture online, generally on a mobile device, global challengers will also compete on the digital frontier. Finally, they will be fighting for position in such growth spots as Africa and Southeast Asia. Combining these trends, Naspers, founded as a newspaper in 1915, and MTN have emerged as global players in the media and mobile communications space, respectively, building from a base in Africa.

Paradoxically, as competition between multinationals and challengers has become more cutthroat, these companies are also more likely to face scenarios in which partnerships make sense. Bargaining power is more balanced, and partnerships no longer need to be founded solely on the basis of the low costs of challengers or the high gloss of Western brands but rather on a wide range of complementary skills.

Challengers and multinationals will increasingly come together to develop new products, exchange—rather than transfer—technology, and enter new markets. India's Bajaj Auto and Japan's Kawasaki, a manufacturer of motorcycles and other vehicles, for example, have created an alliance to jointly market products in the Philippines and Indonesia. Meanwhile, Dr. Reddy's, an Indian pharmaceutical company, is teaming with Merck to develop generic cancer treatments. In a twist, Dr. Reddy's, known for generic manufacturing, is conducting product development, while Merck is handling manufacturing.

The Game Has Changed

The global challengers are constantly evolving. Only one-half of the companies selected in 2006 made the cut in 2013. To reach the next level of global expansion, challengers require even greater capabilities and greater engagement with both private and public entities. Meanwhile, the success of the challengers raises the stakes for multinationals. They need to be entering and building positions in emerging markets with localized strategies, partnering with challengers when it will help them get ahead.

Finally, governments, especially those in mature markets, should recognize challengers as a positive force for growth in jobs and income. Rather than imposing restrictions, governments should be actively encouraging acquisitions and investments, developing regional hubs in order to entice overseas investment, and avoiding excessive nationalism and protectionism.

The 2013 BCG global challengers are game changers in their global industries. They are meeting the needs of customers in the world's high-growth

There Are 26 New Global Challengers—and 2 New Challenger Graduates

2013 BCG Global Challengers

Argentina
- Tenaris

Brazil
- Brasil Foods
- Camargo Corrêa Group
- Embraer
- Gerdau
- Iochpe-Maxion
- JBS
- Marcopolo
- Natura
- Odebrecht Group
- Petrobras
- Tigre
- Votorantim Group
- WEG

Chile
- Falabella
- Latam Airlines Group[1]

China
- Alibaba Group
- Aviation Industry Corporation of China
- China Communications Construction Company
- China International Marine Containers Group
- China Minmetals
- China National Chemical Corporation (ChemChina)
- China National Offshore Oil Corporation
- China Shipbuilding Industry Corporation
- China UnionPay
- Citic Group
- Geely International
- Goldwind
- Haier
- Huawei Technologies
- Johnson Electric
- Lenovo Group
- Li & Fung
- Mindray
- PetroChina
- Sany Group
- Shanghai Electric Group
- Sinochem
- Sinohydro
- Sinoma International Engineering
- Sinopec
- Trina Solar
- Wanxiang Group
- Yanzhou Coal Mining Company
- Zoomlion
- ZTE

Colombia
- Grupo Empresarial Antioqueño

Egypt
- El Sewedy Electric

India
- Bajaj Auto
- Bharat Forge
- Bharti Airtel
- Crompton Greaves
- Dr. Reddy's Laboratories
- Godrej Consumer Products
- Hindalco Industries
- Infosys[2]
- Larsen & Toubro
- Lupin Pharmaceuticals
- Mahindra & Mahindra
- Motherson Sumi Systems
- Reliance Industries
- Sun Pharmaceutical Industries
- Tata Chemicals
- Tata Consultancy Services
- Tata Motors
- Tata Steel
- Vedanta Resources
- Wipro

There Are 26 New Global Challengers—and 2 New Challenger Graduates (Continued)

2013 BCG Global Challengers

Indonesia
- Golden Agri-Resources
- Indofood Sukses Makmur

Malaysia
- AirAsia
- Petronas

Mexico
- Alfa
- América Móvil
- Femsa
- Gruma
- Grupo Bimbo
- Mabe
- Mexichem

Qatar
- Qatar Airways

Russia
- Gazprom
- Lukoil
- Norilsk Nickel
- Severstal
- United Company Rusal
- VimpelCom

Saudi Arabia
- Saudi Basic Industries Corporation (Sabic)

South Africa
- Aspen Pharmacare
- Bidvest Group
- MTN Group
- Naspers
- Sasol

Thailand
- Charoen Pokphand Group
- Indorama Ventures
- PTT
- Thai Union Frozen Products

Turkey
- Koç Holding
- Sabanci Holding
- Turkish Airlines

United Arab Emirates
- Etihad Airways

2013 BCG Challenger Graduates
Seven companies with large sustained global positions have moved beyond challenger status.

Brazil	Mexico	Saudi Arabia
Vale	Cemex	Saudi Aramco[3]
Indonesia	**South Africa**	**United Arab Emirates**
Wilmar International	Anglo American SABMiller	Emirates

Source: BCG analysis.
New global challengers are listed in green.
[1]Latam Airlines Group is the result of a 2012 merger of Brazil's TAM Airlines and 2011 challenger LAN Airlines.
[2]Infosys is the new name of Infosys Technologies, a 2011 challenger.
[3]Although Saudi Aramco was not a 2011 challenger, we have designated it as a graduate because it is already a global leader in the oil and gas industry and is on its way to becoming a global integrated energy player.

markets and bringing greater choice to customers everywhere. Established multinationals must both compete and partner with these challengers in order to thrive. We are at the dawn of a major new era of global competition—of challengers and multinationals, of allies and adversaries.

Arindam Bhattacharya
Thomas Bradtke
Tenbite Ermias
Whitney Haring-Smith
David Lee
Eduardo Leon
Michael Meyer
David C. Michael
Andrew Tratz
Masao Ukon
Bernd Waltermann

This article was excerpted from Allies and Adversaries: 2013 BCG Global Challengers.

Further Reading

"More Holes Than Cheese: Embracing the Growth Imperative," BCG Perspectives, October 2013

The Resilient Consumer: Where to Find Growth amid the Gloom in Developed Economies, BCG Focus, October 2013

Playing to Win in Emerging Markets, BCG Focus, September 2013

From the Archive

The African Challengers, BCG Focus, June 2010

The Growth Imperative

The Most Innovative Companies 2013

Lessons from Leaders

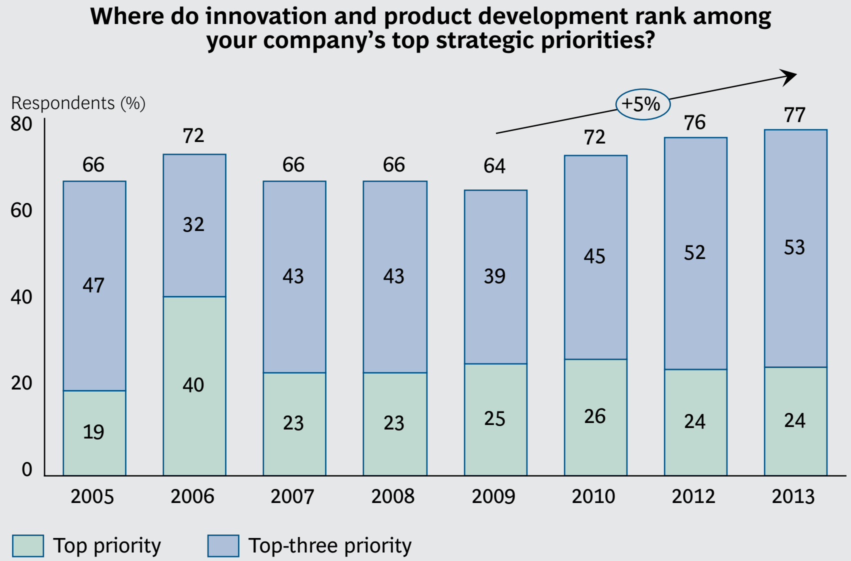
"Innovate or die," goes the oft-cited corporate cry, and according to The Boston Consulting Group's most recent survey of innovation and new-product development, companies across all industries and regions have taken the admonition to heart. Respondents ranked the importance of innovation higher than ever, building on a trend of the last five years. (See Exhibit 1.)

BCG has explored the state of innovation with eight surveys since 2005. The data collected from more than 1,500 senior executives each year allow for comparisons over time as well as across regions and industries. The 2013 report examines companies and innovation through the lens of what gives successful innovators their edge. For the first time, we asked respondents to rate their companies' innovation performance relative to their peers in the marketplace. Approximately one-fifth rated their own performance as strong, another fifth assessed their performance as weak, and about 60 percent said it was neutral or average. In addition to comparing the practices of stronger and weaker innovators, we explore five factors that lead to strength in innovation: the commitment of senior management, the ability to leverage intellectual property (IP), a customer focus, strong management of the innovation portfolio, and well-defined and governed processes.

Innovation in 2013

Most companies continue to rank innovation as a top strategic priority. More than three-quarters of respondents placed it as either number one or among the top three. Even during the depths of the recession, two-thirds or more of companies placed innovation among their most important priorities. More than 80 percent of respondents who put their companies in the top quintile of innovators assigned innovation a top-priority ranking for their organizations, while only 63 percent of those in the bottom quintile did so.

Exhibit 1 | The Importance of Innovation Continues to Increase



Sources: 2005–2012 BCG/Businessweek Senior Executive Innovation Survey; 2013 BCG Global Innovators Survey; BCG analysis.

These attitudes are backed up by investment, which has been rising significantly in recent years. In 2013, 85 percent of strong innovators said they expect to spend more on innovation and new-product development than they did last year, compared with only 39 percent of weak innovators. Overall, 64 percent said they plan to increase spending, a 4 percentage point decline from last year. We believe this drop is partly due to companies' increased focus and smarter spending. Significantly fewer respondents reported projects changing direction once they started. Respondents also said that their companies are doing better than they did last year at the various components of innovation and new-product development. They said that they have the pieces of the innovation puzzle, from infrastructure to people to IP, mostly in place.

Many of the companies—especially the technology companies—that have long occupied the top slots on the list of the 50 most innovative companies continue to do so. Despite its recent stock-market travails, Apple retains the number-one ranking for the ninth consecutive year. Samsung pushed past Google for the number-two position, and Microsoft remains at number four. Joining Toyota in the top ten are two additional automakers—Ford and BMW.

The auto industry makes an exceedingly strong showing overall—3 companies in the top 10 and 9 in the top 20. Four car makers are new to the list, and Volkswagen and General Motors are two of the biggest gainers, moving up 31 and 16 places, respectively. For the first time since we began this survey, there are more auto companies than consumer companies in the top 50 and more automakers than technology companies in the top 20. (For the full rankings from 2005 to 2013, see the interactive at mic.bcgperspectives.com.)

Companies in the automotive and technology sectors lead those in other industries in how important they perceive innovation and investment to be. Almost 85 percent of respondents in both sectors rated innovation as a top priority. One-quarter of respondents at auto companies rated their companies as strong innovators, compared with an average of one-fifth overall. Approximately 70 percent of respondents from auto and tech companies said they plan to increase investment in innovation in the coming year. A survey-trailing 69 percent of respondents from health care companies said they see innovation as a top priority, but only 10 percent of health care respondents view their companies as weak innovators (one-half the average).

We added a new category to our survey this year: up-and-coming companies. These are companies that are still relatively young or have yet to reach the scale of the top 50 global giants but are nonetheless making themselves known for innovation. Their innovations are related, not surprisingly, to the latest technologies—social media, mobile applications, and cloud-based services—and almost all are making use of mobile platforms.

Five Sources of Innovation Strength

From Lockheed's legendary Skunk Works to the garages of Silicon Valley to far more structured corporate programs and processes, innovation takes many forms and follows myriad paths. There's no one right way to "do innovation," of course, but based on our 50 years of working with all manner of clients, and our surveys of companies in more than 15 sectors and more than 20 countries conducted over nearly a decade, we have identified five key attributes that separate strong innovators from their weaker counterparts. These are not individual drivers of success; they are interconnected and reciprocally reinforcing. Strong companies often possess all five.

Leadership Commitment

As is the case with so many other aspects of corporate performance, the commitment of top management has a lot to do with a company's innovation track record. Nine out of ten respondents identifying their companies as strong innovators reported that top management is committed to innovation, compared with less than half as many at weak innovators. Almost half of respondents at strong innovators cited the chairman or CEO as the driving force behind the company's innovation efforts. Four out of five ranked innovation higher than other strategic priorities. The judgment of senior management is the method cited by the most respondents (two-thirds overall) for determining which ideas move into product development.

One of the fundamental drivers of Samsung's innovation efforts is its leadership's relentless pursuit of change and new growth opportunities. Management instills a culture of not accepting the status quo and not being afraid to change. Samsung's leadership is known for recognizing products that can drive the creation of whole new markets—flat screen and smartphones are two examples—and investing heavily in their development.

Leveraging IP

The recent avalanche of high-profile patent cases, mainly in the technology and telecommunications sector, has made it clear that innovation depends, in part, on owning the idea. Protecting IP rights—that is, maintaining exclusive ownership of a product or process—has long been a defensive strategy, but smart companies are increasingly using IP as a means of establishing competitive advantage in the marketplace. Almost 70 percent of respondents said that IP is increasingly important in their industry, and a similar percentage said that owning IP is crucial to achieving a return on innovation. More than half (53 percent) said that their companies use IP to exclude others.

Strong innovators are more than twice as likely as their weaker counterparts to consider IP criteria when deciding which new product ideas to push forward. They also believe, likewise by margins of two to one, that their companies are effective at developing, protecting, and leveraging IP, and they are more likely to use IP as a source of competitive advantage. Some companies have built substantial businesses on the basis of licensing their IP to others.

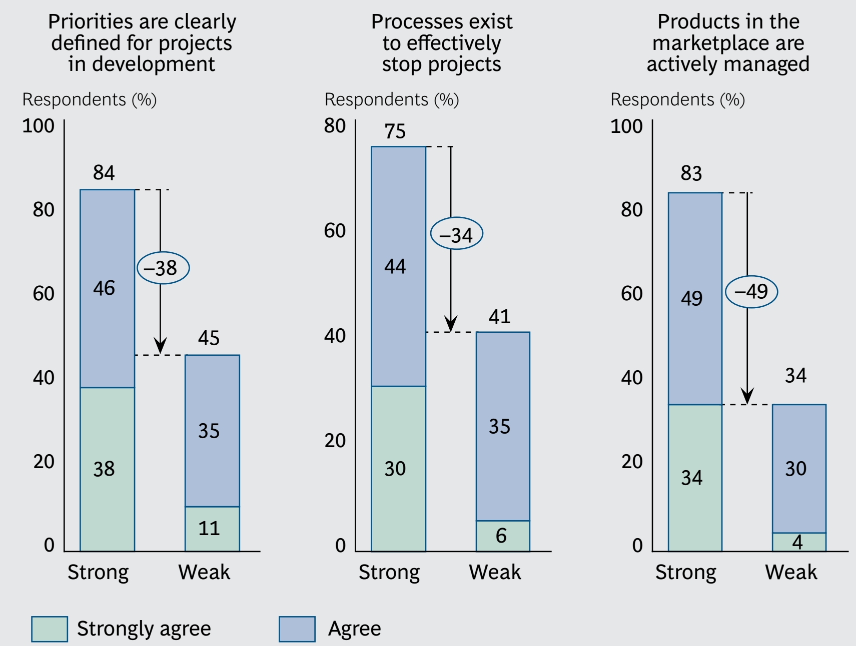
IBM is a notable example. The company reports that it has topped the ranks of U.S. patent recipients for 20 years straight, with 6,478 in 2012 and nearly 67,000 in the past decade. Revenues, which have been increasing at about 6 percent per year, reached $575 million in 2012, not counting an additional $500 million in income from custom development. In IBM's view, innovation, growth, and valuable patents are intertwined.

Managing the Portfolio

In a world of limited resources, effective innovators learn how to devote resources, cut losses, and keep a pipeline of high-potential ideas moving forward. Strong performers are distinctly better at managing portfolios of projects in development and products in the marketplace. (See Exhibit 2.) They define clear priorities, and they have processes in place to stop projects when their promise wanes. These companies are also focused on the future; long-term advantage is a primary goal of innovation for them. They actively manage the mix of incremental innovations and more radical, "new to the world" products, platforms, technologies, and services.

BMW, which moved up five places to number nine in the 2013 survey, has long followed a sophisticated strategy of portfolio management and innova-

Exhibit 2 | Strong Performers Actively Manage Their Innovation Portfolios



Source: 2013 BCG Global Innovators Survey.

tion. The company uses its portfolio lens to apply ideas and insights in ways that are consistent with each brand, and it employs new technologies to substantiate brand promise and ensure differentiation.

Focusing on the Customer

Strong innovators listen to customers. The views of key customers play a significant role in the innovation and new-product programs of 73 percent of strong innovators, compared with only 42 percent of weaker companies and 56 percent overall. Involving customers in the idea development process has at least three big benefits. It helps ensure demand for the company's innovations when they hit the market. It keeps them close to their customers. And it helps avoid the costly overspecifying or overengineering of products beyond what customers need and are willing to pay. More than 70 percent of strong innovators say that key customer views play a critical role in selecting ideas for development, compared with only 42 percent of weaker performers. Almost 60 percent use customer satisfaction to measure innovation success, compared with 41 percent of weaker innovators.

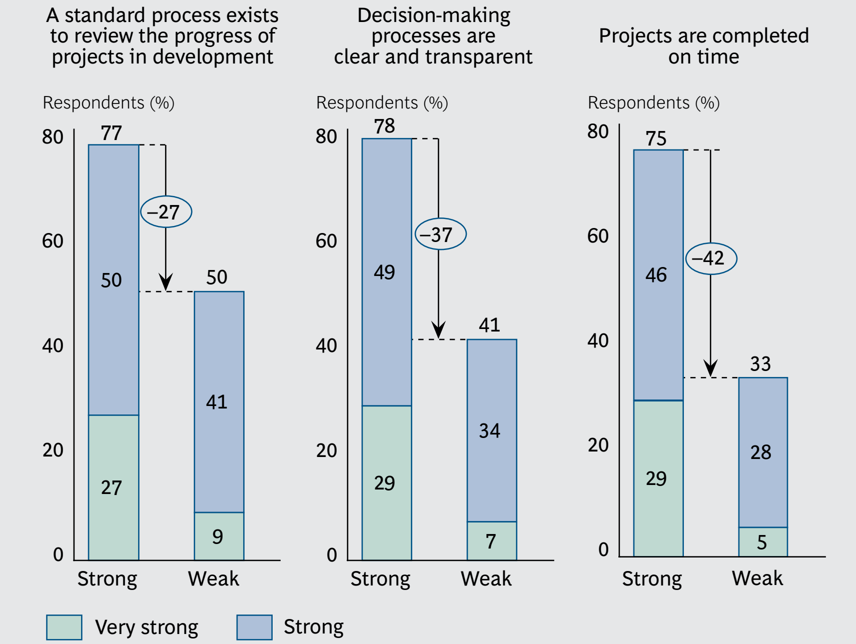
Procter & Gamble, which jumped 26 places to number 23 in the 2013 survey, invests heavily in foundational consumer research, conducting some 20,000 studies involving more than 5 million consumers in nearly 100 countries. It has built innovation centers that provide simulated in-home and in-store environments.

Strong Processes, Strong Performance

Strong performers define governance and decision-making processes, which leads to the on-time completion of projects. (See Exhibit 3.) They are far more likely than weak innovators to follow standardized processes in reviewing the progress of projects in development, adhere to decision-making criteria that are clear and transparent, and complete projects on time. They differentiate clearly among governance, portfolio management, and project management, and they recognize that a strong process requires being effective at all three. They also emphasize teamwork, ensuring sufficient communication among team members and representation on development teams from all relevant functions.

P&G, which seeks to make innovation systemic, replicable, reliable, and integral to its business, has a rigorous four-stage process for idea development, selection, design, and launch. When the company launches a new product, it is striving to create the next billion-dollar brand.

Exhibit 3 | Strong Innovators Rely on Well-Defined Processes



Source: 2013 BCG Global Innovators Survey.

Kim Wagner
Andrew Taylor
Hadi Zablit
Eugene Foo

This article was excerpted from The Most Innovative Companies 2013: Lessons from Leaders.

Further Reading

Business Model Innovation: Ten Lessons from Nonprofits, BCG Focus, July 2013

"The Great, Global Shale-Gas Development Race," BCG Article, July 2013

From the Archive

"Breaking Compromises," BCG Perspectives, May 1997

BEHIND THE AMERICAN EXPORT SURGE

THE U.S. AS ONE OF THE DEVELOPED WORLD'S LOWEST-COST MANUFACTURERS

Export manufacturing has recently become the unsung hero of the U.S. economy. Despite all the public focus on the U.S. trade deficit, little attention has been paid to the fact that the country's exports have been growing more than seven times faster than GDP since 2005. As a share of the U.S. economy, in fact, exports are at their highest point in 50 years.

But this is likely to be just the beginning. We project that the U.S., as a result of its increasing competitiveness in manufacturing, will capture $70 billion to $115 billion in annual exports from other nations by the end of the decade. About two-thirds of these export gains could come from production shifts to the U.S. from leading European nations and Japan. By 2020, higher U.S. exports, combined with production work that will likely be "reshored" from China, could create 2.5 million to 5 million American factory and service jobs associated with increased manufacturing.

Our perspective is based on shifts in cost structures that increasingly favor U.S. manufacturing. In the first two reports in our Made in America, Again series, we explained how China's once overwhelming production-cost advantage over the U.S. is rapidly eroding because of higher wages and other factors—and how these trends are likely to boost U.S. manufacturing in specific industries.[1] Below, we focus on America's increasing cost-competitiveness in manufacturing compared with leading advanced economies that are major exporters.

Our analysis suggests that the U.S. is steadily becoming one of the lowest-cost countries for manufacturing in the developed world. We estimate that by 2015, average manufacturing costs in the five major advanced export economies that we studied—Germany, Japan, France, Italy, and the U.K.—will be 8 to 18 percent higher than in the U.S. Among the biggest drivers of this advantage will be the costs of labor (adjusted for productivity), natural gas, and electricity. As a result, we estimate that the U.S. could capture up to 5 percent of total exports from these developed countries by the end of the decade. The shift will be supported by a significant U.S. advantage in shipping costs in important trade routes compared with those of other major manufacturing economies.

These shifting cost dynamics are likely to have a significant impact on world trade. China and the major developed economies account for around 75 percent of global exports. And the U.S. export surge will be felt across a wide range of U.S. industries.

Production gains will come in several forms. In some cases, companies will increasingly use the U.S. as a low-cost export base for the rest of the world. In other cases, U.S. production will displace imports as both U.S. and foreign companies relocate the manufacturing of goods sold in the U.S. that would otherwise have been made offshore.

The full impact of the shifting cost advantage will take several years to be felt in terms of new production capacity. And the magnitude of the job gains will depend heavily on the degree to which the U.S. can continue to enhance its global competitiveness, such as by ensuring a sufficient supply of skilled labor.

The Pendulum Swings Back

For much of the past four decades, manufacturing work has been migrating from the world's high-cost to its low-cost economies. Generally this has meant a transfer of factory jobs of all kinds from the U.S. to abroad.

The pendulum finally is starting to swing back—and in the years ahead, it could be America's turn to be on the receiving end of production shifts in many industries. In previous reports, we cited a number of examples of companies that have shifted production to the U.S. from China and other low-cost nations. These companies range from big multinationals like Ford and NCR to smaller U.S. makers of everything from kitchenware and plastic coolers to headphones. More recently, computer giant Lenovo opened a plant to assemble Think-brand laptops, notebooks, and tablets in North Carolina. Toshiba Industrial has moved production of its hybrid-electric vehicle motors from Japan to Houston.

There also is early evidence that foreign manufacturers are starting to move production to or expand production capacity in the U.S. for export around the world. Toyota, for example, has announced that it is exporting Camry sedans assembled in Kentucky and Sienna minivans made in Indiana to South Korea. Siemens is building gas turbines in North Carolina that will be used to construct a large power plant in Saudi Arabia. Michelin of France announced that it will invest $750 million to build a new factory and expand another one in South Carolina to make large tires for earth movers used in the mining and construction industries. The *Financial Times* reported that at least 80 percent of the additional output will be exported.

While the impact of this trend on U.S. jobs is currently modest, we expect a significant increase in such announcements starting in the next couple of years, as the economic case for reshoring to the U.S. grows stronger—and as companies adjust their global manufacturing footprints accordingly.

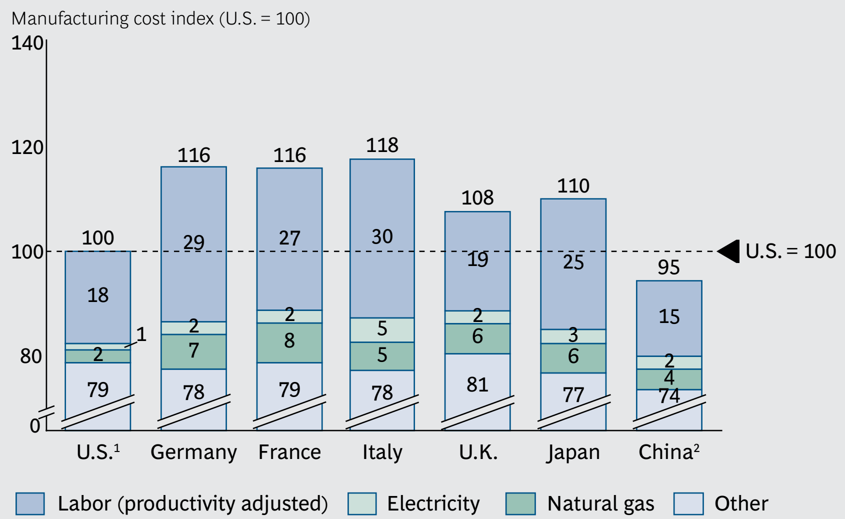
The U.S. as a Low-Cost Country

The U.S. now has a distinct production-cost advantage compared with other developed economies that are leading manufacturers. We estimate that average manufacturing costs in the U.K. will be 8 percent higher than in the U.S. by 2015. Costs will be 10 percent higher in Japan, 16 percent higher in Germany and in France, and 18 percent higher in Italy. (See Exhibit 1.) The key drivers of this cost advantage are labor, natural gas, and electricity.

Labor. The U.S. labor market is currently more attractive than that of all other major manufacturers among the developed economies. This is especially true when factory wages are adjusted for output per worker, which is considerably higher in the U.S. than in Europe and Japan. Only a decade ago, average productivity-adjusted factory labor costs were around 17 percent lower in the U.S. than in Europe, and only 3 percent lower in the U.S. than in Japan. The productivity gap between these nations and the U.S. has widened considerably over the past ten years. We project that by 2015, average labor costs will be around 16 percent lower in the U.S. than in the U.K., 18 percent lower than in Japan, 34 percent lower than in Germany, and 35 percent lower than in France and Italy. (See Exhibit 2.)

Exhibit 1 | Labor and Energy Cost Advantages Will Make the U.S. One of the Developed World's Lowest-Cost Countries

Average projected manufacturing cost structures of the major exporting nations relative to the U.S., 2015

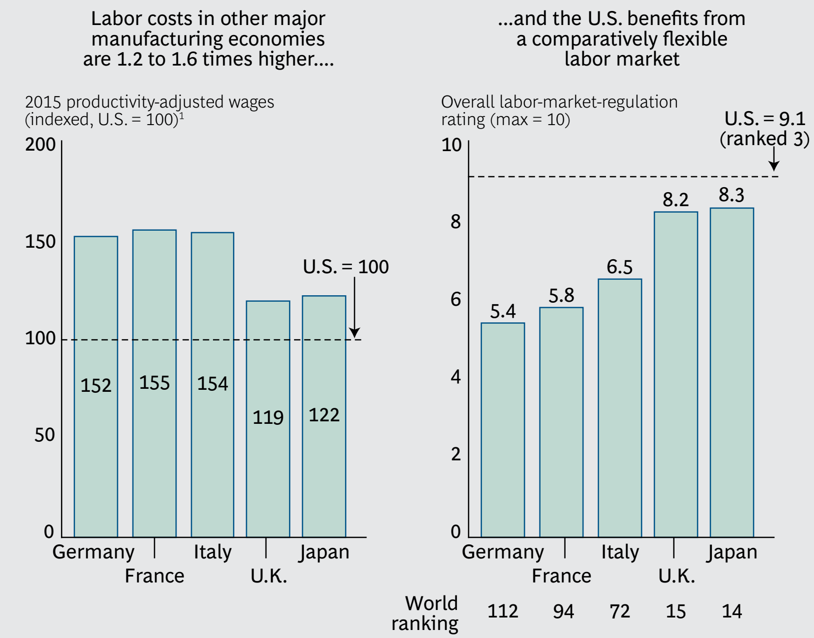


Sources: U.S. Economic Census; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; International Labour Organization.
Note: Cost structures were calculated as a weighted average across all industries. No difference was assumed in "other" costs (e.g., raw materials inputs and machine and tool depreciation). Differences in values are a function of the industry mix of each exporting country.
[1]U.S. figures represent costs in a set of select lower-cost states specified in previous publications.
[2]Chinese figures represent the Yangtze River Delta region.

An added advantage of the U.S. labor market is its relative flexibility. The Fraser Institute ranks the U.S. as the world's third-most-favorable economy in terms of labor market regulation. In contrast, Japan and the U.K. rank 14 and 15, Italy ranks 72, France ranks 94, and Germany ranks 112. A major reason for this high ranking is that it is far easier and less costly in the U.S. than in most other advanced economies to adjust the size of the workforce in response to business conditions. In Germany, for example, we estimate government-mandated costs of approximately $8 million to shutter an average, 200-worker plant and more than $40 million to close a 1,000-worker plant. These are major considerations when companies decide where to make new long-term investments in manufacturing capacity.

Energy. Rapid technological progress in hydraulic fracturing is making it more economically feasible to unlock vast U.S. natural gas and oil deposits

Exhibit 2 | The U.S. Labor Market Is the Most Attractive of All Major Developed-World Manufacturers



Sources: International Labour Organization; Economist Intelligence Unit; Fraser Institute economic freedom ratings, 2012; BCG analysis.
Note: Fully loaded wages from the Economist Intelligence Unit. U.S. wages are the average for lower-cost states.
[1]Projections for 2013 to 2015.

from shale. Since 2003, U.S. production of shale gas increased more than tenfold. This has helped push down the U.S. wholesale price of natural gas by 51 percent since 2005. By 2020, recovery costs from shale are expected to be half what they were in 2005. By 2035, U.S. shale-gas production is projected to double again, to 12 trillion cubic feet.

Cheap domestic sources of natural gas translate into a significant competitive advantage for a number of U.S.-based industries. Natural gas costs anywhere from 2.6 to 3.8 times more in Europe and Japan than in the U.S. The American advantage will likely grow further in the future: the U.S. has four times the reserves of Western Europe. Japan's reserves of both shale and conventional gas are negligible.

There are two important implications for industry. First, natural gas is a key feedstock for chemicals and plastics and is a significant cost in the manufacture of primary metals, paper, synthetic textiles, and nonmetallic mineral products. Second, gas-fired power plants are an important source of electricity in the U.S. Lower electricity rates add a further cost advantage of several percentage points to energy-intensive U.S.-based industries such as metals and paper.

The Impact on U.S. Exports and Jobs

The U.S. export sector is already a little-noticed bright spot in the U.S. economy. Since 2005, export growth has averaged nearly 8 percent per year—despite the global recession of 2008 to 2009. Exports of U.S. goods, excluding food and beverages, now account for around 10 percent of U.S. GDP, the largest share in five decades. What's more, while the share of global exports by Western Europe and Japan declined between 2005 and 2010, U.S. exports have held steady at around 11 percent.

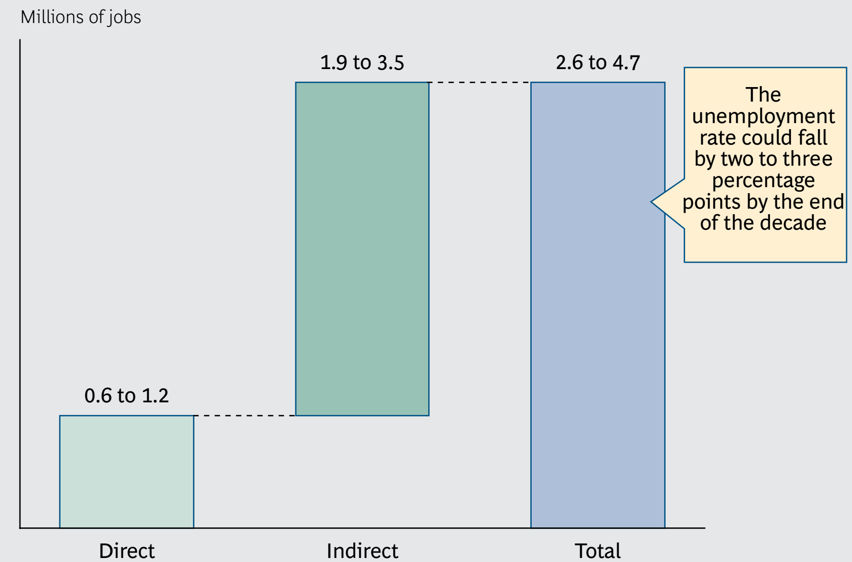
This momentum is likely to accelerate. Because of lower costs, we project that by the end of the decade, the U.S. could capture $20 billion to $55 billion in annual exports from the four Western European nations we studied, which would represent 2 to 5 percent of those nations' total exports. In addition, we estimate that the U.S. could capture $5 billion to $12 billion in Japanese exports by that time, or 1 to 2 percent of Japan's total current exports.

We estimate that the increase in U.S. exports and in the domestic production of goods that otherwise would have been imported will create between 600,000 and 1.2 million direct factory jobs. Another 1.9 million to 3.5 million jobs could be created indirectly in related services, such as retail, transportation, and logistics. (See Exhibit 3.) We base these estimates on average output per worker and the multiplier effect in each industry category. If our projection of 2.5 to 5 million new U.S. jobs is accurate, the U.S. unemployment rate could drop by 2 to 3 percentage points. That would push the U.S. rate toward the "frictional" level, meaning the unemployment that normally occurs in an economy as workers change jobs.

The U.S. is particularly well positioned compared with the five developed economies to increase exports in seven industrial categories: transportation equipment, chemicals, petroleum and coal products, computer and electronic products, machinery, electrical equipment, and primary metals. These seven groups of industries accounted for roughly 75 percent ($12.6 trillion) of total global exports in 2011.

Exhibit 3 | The U.S. Export Surge Could Create 2.5 Million to 5 Million New Jobs

Projection revised upward from our earlier estimate of 2 to 3 million jobs from both reshoring and exports



Sources: U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; U.S. Central Intelligence Agency, *The World Factbook*, 2013; BCG analysis.

The Key Messages for Manufacturers

As we have long advised, companies should maintain a diversified global manufacturing footprint in order to have the flexibility to respond to unanticipated changes and to expand or reduce production quickly in response to the competitive needs of specific markets. We also advise companies to carefully consider the total cost of ownership over the lifetime of the investment when deciding where to build new production capacity.

The shifting cost dynamics, however, suggest that more companies should consider the U.S. as a manufacturing option for global markets. We believe that these companies are the early movers in what is likely to become a more widespread trend by 2020.

Companies that fail to take into account these cost shifts when making long-term investments could find themselves at a competitive disadvantage.

Improving U.S. cost competitiveness compared with that of other developed economies, combined with rising costs in such offshore-manufacturing havens as China, represent what we believe is a paradigm shift that could usher in an American manufacturing renaissance.

NOTE
1. *Made in America, Again: Why Manufacturing Will Return to the U.S.,* BCG Focus, August 2011, and *U.S. Manufacturing Nears the Tipping Point: Which Industries, Why, and How Much?* BCG Focus, March 2011.

Harold L. Sirkin
Michael Zinser
Justin Rose

This article was excerpted from Behind the American Export Surge: The U.S. as One of the Developed World's Lowest-Cost Manufacturers.

Further Reading

"The Key to Corporate Fitness: Agility and Flexibility," *Businessweek* blog, September 2013

Six Steps to Achieving Competitive Advantage Through Cost Excellence, BCG Focus, August 2013

Lean That Lasts: Transforming Financial Institutions, BCG Focus, September 2012

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"Competing on Capabilities," *Harvard Business Review* article, March 1992

The Fitness Factor

High-Performance Culture

Getting It, Keeping It

Culture is hot—for a host of reasons. Leaders trying to reshape their organization's culture are asking: How can we break down silos and become more collaborative or innovative? Others, struggling to execute strategy, are wondering: How do we reconnect with our customers or adapt more proactively to the new regulatory environment?

Leaders overseeing a major transformation want to know how to spark the behaviors that will deliver results *during* the transformation—and sustain them well beyond. Those involved with a postmerger integration grapple with how to align the two cultures with the new operating model—and reap the sought-after synergies. And those simply seeking operating improvements often ask: How can we become more agile? Accelerate decision making? Embed an obsession for continuous improvement throughout the organization?

Regardless of the reasons, there's little debate about what culture is or its importance. Most leaders recognize how critical a high-performance culture is to their organization's success. But many are discouraged by the yawning gap between their current and target culture. Others are frustrated because they don't know why their culture is lacking—or what steps they might take to get and keep a high-performance culture.

Through our work with clients, we have found that culture change is not only achievable but entirely feasible within a reasonable amount of time. Any organization that is willing to make the necessary effort can realize its target culture by implementing change based on the answers to four questions:

- What culture do we need?
- What culture do we have—and why?

- What aspects of the organizational context should we change to get the behaviors we seek?

- How do we make the change happen?

While these questions seem fairly straightforward, they are often shrouded in myths. These myths create hurdles that make the goal of a high-performance culture seem elusive.

What Culture Do We Need?

Some believe that there is one universally "good" culture. Certainly, there are cultural ideals that are universal—for example, having employees who are ambitious, accountable for their actions, and care about their work. But although these attributes are necessary in any organization, they do not in themselves constitute a high-performance culture.

The Reality: A High-Performance Culture Must Be Aligned With Strategy

High-performance cultures require more than a standard set of attributes. We have found that such cultures, regardless of the organization's industry or size, share two characteristics:

- *A Set of "Good" Behaviors, Manifested as High Employee Engagement.* Employees are involved in and committed to their work and to the purpose and goals of the organization.

- *A Set of Specific Behaviors That Align with the Organization's Strategy.* The way work gets done promotes the organization's purpose and goals and the strategy designed to realize them. For example, a high appetite for risk taking may be essential to the strategy of a design company or a venture capital firm but would be disastrous for a nuclear-power utility.

Identifying Your Target Culture

Determining what culture your organization needs first requires having a clearly articulated purpose and set of goals and a strategy to realize them. The target-setting process involves translating the strategy into the specific capabilities and behaviors required to implement it. The target culture is thus a combination of behaviors related to employee engagement and strategy-specific attributes.

We have found that engaged employees have the following attributes: they are ambitious, inspired, achievement-oriented, accountable, and supportive. The organization must determine the level of engagement necessary to achieve its goals. (See Exhibit 1.)

Exhibit 1 | The Degree to Which Each Attribute of Engagement Is Required Depends on the Organization's Goals

Engagement can be described as the degree to which individuals and teams are:	Examples of how these aspects of engagement are manifested in an organization's culture:
• *Ambitious:* they set high goals for individuals and the organization	The organization strives to be the best in its industry
• *Inspired:* they believe in the organization's goals and in the intrinsic value of their work	Senior management authentically communicates the vision of the organization
• *Achievement-oriented:* they meet or exceed performance requirements despite challenges	Exceptional performance is rewarded; poor performance is not tolerated
• *Accountable:* they are held responsible for meeting organizational and individual goals	There is a compelling desire to consistently meet the organization's milestones
• *Supportive:* they mentor and develop direct reports and others	Real value is placed on teaching and mentorship

Source: BCG analysis.

Then the organization's leaders must choose strategy-specific behaviors along the following seven dimensions. (See Exhibit 2.)

- *Structured Versus Flexible:* How specifically are processes and acceptable behaviors defined? How closely are they followed in practice?

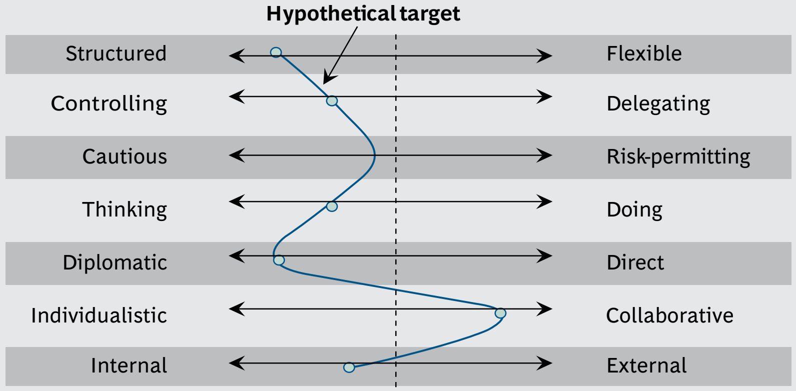
- *Controlling Versus Delegating:* To what extent are power and decision making concentrated at the top or diffused throughout the organization?

- *Cautious Versus Risk Permitting:* How much does the organization support risk taking?

- *Thinking Versus Doing:* To what degree do people spend time developing ideas versus actually executing them?

- *Diplomatic Versus Direct:* How transparent are interactions and communications between coworkers and managers?

Exhibit 2 | Target Setting Involves Choosing the Behaviors That Support the Organization's Strategy



Source: BCG analysis.

- *Individualistic Versus Collaborative:* To what extent are employees concerned with their own individual performance versus shared goals?

- *Internal Versus External:* To what extent are processes and behaviors oriented toward the outside world versus the internal environment?

Leaders make these choices by translating the organization's strategy into a set of capabilities and behaviors required to deliver it. The strategy thus governs where employees' behaviors should fall along each of the seven dimensions.

What Culture Do We Have—and Why?

Another myth is that culture is primarily determined by mindsets. This misconception is supported by culture assessment approaches that use pseudodiagnostics to characterize employees: for example, engineers favor technology over process solutions, or customer representatives lack curiosity.

The Reality: Culture Is Primarily Determined by Organizational Context

In many organizations, leaders may simply be unaware of the effect that the organization's leaders, structure, systems, and incentives have on people. It is this organizational context, not mindsets, that drives and sustains culture. Desired behaviors can emerge spontaneously when the context changes.

Diagnosing Culture

To diagnose why you have the culture you've got, you need to identify employees' behaviors and uncover their underlying causes.

Assess behaviors. Using a set of key culture attributes, an organization can conduct a survey to identify the main behaviors that characterize its culture. It can then map these along the seven dimensions described above.

Examine why people behave the way they do. The latest research in organizational sociology offers many ways of analyzing the root causes of behavior. Each approach has different strengths, so it's helpful to use multiple lenses.

What Aspects of Organizational Context Should We Change to Realize Our Target Culture?

The third myth is that it is difficult to know how and where to intervene in order to change employees' behavior. There are too many factors, and the relationships between them and the organization's culture are too complex.

The Reality: Learning What to Change Is a Logical—and an Entirely Feasible—Process

Organizations, like all dynamic behavior systems, are inherently complex. But that does not make them indecipherable. The elements of organizational context work in aggregate; some may amplify while others may neutralize the effects of behavior. Which elements are operative depends on the circumstances. As long as you understand the organizational context and the interplay among its constituent elements, you can effectively change culture.

Designing the Interventions

Leaders have a plethora of levers at their disposal to align employee behavior with strategy. These levers represent a mix of hard and soft approaches that separately and in combination shape behavior. They enable organizations not only to understand the forces shaping their current culture but also to specify what needs to be changed in order to achieve and sustain the desired culture.

The Seven Organizational-Context Levers. BCG has identified seven context levers that influence the seven dimensions of behavior and thus shape organizational culture.

- *Leadership:* leaders' role-modeling behaviors; their manner of communication; how they spend their time, manage their priorities, and interact with direct reports; and the heroes and legendary leaders they revere and talk about

- *People and Development:* the kind of employees who are hired; the kind of career paths and personal growth the organization enables; how talent is promoted and retained; the coaching that supervisors provide; the organization's learning and development programs

- *Performance Management:* the key performance indicators that the organization uses to define and track performance drivers, and its policies and practices regarding compensation, benefits, reviews, promotions, rewards, and penalties

- *Informal Interactions:* networks, the nature of peer-to-peer interactions, and gatherings and events (do active communities of interest exist? do people know whom to contact to access organizational knowledge?)

- *Organization Design:* organizational structure, processes and roles, decision rights, and collaboration processes; units' relationship to headquarters; office layout and design

- *Resources and Tools:* the projects that are funded, access to human resources, management systems, and analytical tools

- *Values:* the collective beliefs, ideals, and norms that guide people's conduct and help them adhere to priorities, especially when facing a business dilemma

For each gap uncovered in the context analysis, organizations must choose the right levers, design the right interventions, and determine when to apply them. Some interventions, such as establishing a recognition system, will generate quick wins, while others, such as a reorganization, will take longer—but regardless, it's important to prioritize them. Consider applying the 80/20 rule: picking the 20 percent of interventions that will have 80 percent of the impact.

How Do We Make Change Happen?

The fourth myth is that changing behavior and culture is a gamble. The complexity of the process makes culture change unpredictable; with all the moving parts involved, you can't count on getting the results you

seek—or even be sure that activating the right levers will make change happen.

The Reality: Behavior and Culture Change is a Predictable Process—and Can Be Orchestrated to Achieve the Intended Results

Our experience suggests that culture change can indeed be orchestrated successfully. If you have conducted a thorough diagnostic and identified, designed, and implemented the right interventions, you can get fairly predictable results in a predictable period of time. However, doing so requires an active, hands-on, systematic approach—and considerable attention to change management.

Implementing Culture Change

A handful of practices can ensure that the interventions you choose will have the best chance of achieving the intended results.

Find and support change champions in the organization. To improve the odds of success, it will be important to train these champions in leading change and ensure that they are rewarded for taking on that role.

Run pilot programs. A crucial step is testing a select set of interventions through pilot programs. The choice of pilot should be carefully considered. For example, it's best to avoid pilots where there are many variables, such as in a unit that interacts extensively with other units and areas. In such cases, it can be difficult to interpret the pilot's results.

Roll out interventions after the pilot. Organizations must decide how to roll out the change: which levers and interventions to introduce in what sequence, and a timetable that makes sense. You will need to create metrics and mechanisms for measuring the change.

Ensure frequent, specific, and transparent communication. The goal of a communications program should be to make culture as tangible as possible, emphasizing what it means for the individuals who will be affected.

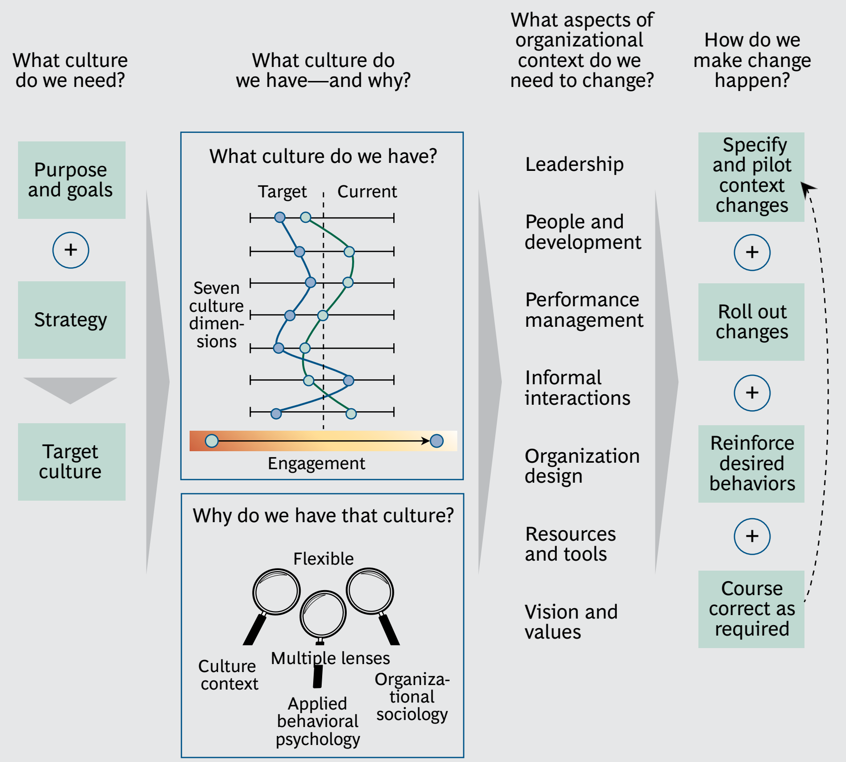
Measure progress, refining interventions as needed. Culture change is predictable but inevitably messy. Changing organizational context in the right ways will certainly reinforce the desired behaviors. But people are human, and their choices are informed by numerous influences. For these reasons, it is crucial to monitor progress to determine whether the desired results are in fact being achieved.

Does Your Culture Need a Makeover?

Sustaining business success can be an uphill battle when the culture isn't right. And no organization can expect the desired set of behaviors to emerge when the organizational context discourages them. Whatever the challenge—whether a postmerger integration or a transformation—the odds of success will be dramatically improved by having the right culture.

Effective culture change requires a disciplined change-management effort. From target-setting to making the changes happen, the organization needs to prepare management to lead the way, engage and excite the extended leadership team, cascade change through the layers of management, and enroll the entire organization in the effort. (See Exhibit 3.)

Exhibit 3 | Culture Change Entails Answering Four Sets of Questions



Source: BCG analysis.

Culture change can be frustrating, but it doesn't have to be. By answering the four questions laid out here—and recognizing culture myths for what they are—you can be confident about getting and keeping the culture you've always wanted.

Jim Hemerling
Julie Kilmann

This article was excerpted from High-Performance Culture: Getting It, Keeping It.

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The Adaptive Mindset

Ambidexterity

The Art of Thriving in Complex Environments

"To deliver growth among the best in our industry, we're strengthening our core business, renewing our focus on discontinuous innovation, and implementing a $10 billion productivity program."

—Procter & Gamble, 2012 Annual Report

Managers today face an apparent contradiction. On one hand, austerity in the developed world and intense competition push them to cut costs and drive efficiencies. On the other, the increasing pace of change means they need to emphasize innovation.

Resolving this contradiction requires *ambidexterity*—the ability to both explore new avenues and exploit existing ones. Companies need ambidexterity when operating in diverse environments that require different styles of strategy simultaneously, or in dynamic environments that require them to transition between styles over time.[1] Companies need to be ambidextrous when operating in both emerging and developed markets, when bringing new products and technologies to market while exploiting existing ones, when integrating startups into their existing business, and in a range of other circumstances.

The need to develop ambidexterity is widely acknowledged: in a recent BCG survey of 130 senior executives of major public and private companies, fully 90 percent agreed that being able to manage multiple strategy styles and transition between them was an important capability to develop. But this aspiration is hard to realize. Exploration and exploitation require different ways of organizing and managing. Exploration is facilitated by long-term targets, a flexible and decentralized structure, and a culture of autonomy and risk taking, while exploitation typically requires short-term targets, centralization, standardization, and discipline in execution. And switching between them is difficult because managers tend to emphasize what delivered success yesterday. In the words of BCG's founder, Bruce Henderson, "Success in the past always becomes enshrined in the present by the overvaluation of the policies and attitudes which accompanied that success."

3M, a company renowned for its culture of innovation, experienced the exploration-exploitation tradeoff in the early 2000s, when it introduced Six Sigma practices in an effort to boost productivity. While the company's productivity did indeed increase, the same practices reduced 3M's ability to innovate, as evidenced by a fall in the proportion of revenues from new products.

Ambidexterity is therefore rare: a recent BCG study of the financial performance of approximately 2,000 publicly listed U.S. companies found that only about 2 percent consistently outperformed their industry in both turbulent and stable periods. But ambidexterity is becoming an increasingly critical asset as the diversity and dynamism of business environments rise. The growing economic importance of emerging markets, for example, is expanding the range of environments that companies need to operate in. At the same time, technological change is overturning existing products and business models at an increasing rate. It took the PC approximately 15 years to go from 10 percent market penetration to 40 percent; it took the Internet 5 years, and smartphones fewer than 3.

Picking the Right Approach to Ambidexterity

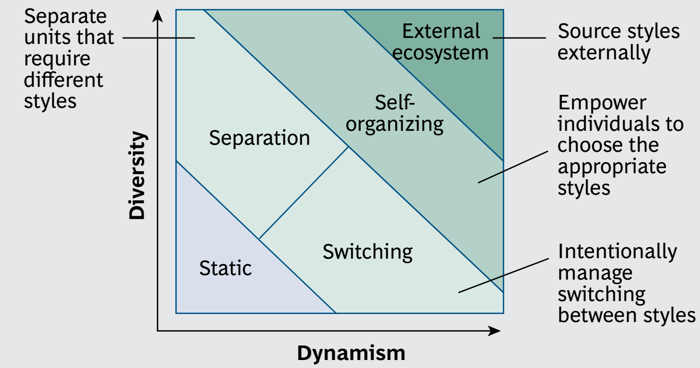
Companies in stable, simple environments do not require ambidexterity—they can thrive by emphasizing operating efficiency. But most others will need to pursue it. Ambidexterity can be achieved through four distinct approaches: separation, switching, self-organizing, and external ecosystem. (See the exhibit.)

Separation is the simplest, most common approach to achieving ambidexterity and is appropriate for companies facing environments that are diverse but relatively stable over time. It involves structurally separating units that need to deploy different strategy styles. A company might, for example, separate its mature business, which requires efficiency and disciplined execution, from its emerging business, which needs to be innovative and flexible.

There are many well-known examples of this approach. In 1943, Lockheed Martin, faced with the task of creating an advanced fighter while at the same time mass producing its established Hudson bomber, opted to create two fully separate units (marking the birth of what would become the compa-

Four Approaches to Ambidexterity

Suitability depends on the diversity and dynamism of the company's environment



Source: BCG analysis.

ny's famous Skunk Works), each with its own physical location, resources, and culture. Similarly, in 2000, IBM separated its established businesses, where a focus on execution and operating metrics was appropriate, from its emerging-businesses unit, which the company used to explore new opportunities and markets.

But separation does not always work, because a company's structure tends to be semipermanent while its environment may not be. Separation also creates barriers that prevent information and resource flow among units, potentially impeding their ability to change emphasis or style when required. Companies such as fashion retailer Zara and industrial conglomerate GE have reduced separation when operating in dynamic environments. At Zara, design and manufacturing work collaboratively to shorten new-product cycles in a highly dynamic industry. GE has in-sourced manufacturing of some of its high-end refrigerators and other consumer appliances and increased integration of design and manufacturing, allowing the business to shift quickly from creating new designs to exploiting them in the market.

Dynamic environments require instead a switching approach. Here, a company changes its style over time as its environment changes, similar to the way in which new companies evolve. Initially, an organization must deploy an exploratory style as it looks for a breakout product, service, or technology. Over time, however, it must transition to a more exploitative style in order to scale up and secure a profitable market position. Amazon was able to rapidly switch from exploration to exploitation. In only two years, it went from exploring (out of Jeff Bezos's garage) the use of the Internet for retailing to exploiting and industrializing its operations, opening its first distribution center, and going public.

Many larger companies also deploy switching strategies. The glassmaker Corning was able to rapidly transition from exploring ways to make super-strong glass films to delivering its Gorilla Glass product, now found in more than a billion mobile devices worldwide.

Switching requires resources and information to flow readily across organizational boundaries. This can be problematic because when senior management makes the decision to change styles, some organizations respond slowly, resource conflicts erupt between units, and staff resist the change, fearful of the consequences of moving to a new project that might not succeed. Startups are particularly good at switching—but that does not mean that a similar culture cannot exist in a large organization.

When a company needs to deploy multiple styles simultaneously—and the styles are changing over time—a *self-organizing* approach is called for, since managing the switching process in a top-down manner becomes complex and infeasible. Here, individuals or small teams can choose for themselves which style to employ and switch between them over time. Companies achieve self-organizational capabilities by breaking the organization down into small units and creating individualized performance contracts. Each unit negotiates with its peers according to local rules of interaction established by the center and deploys whatever style it thinks will maximize its performance.

Chinese consumer-goods company Haier successfully employs a self-organizing approach. Seeking to improve its ability to deliver customer value, the global conglomerate flattened its organization structure and developed 2,000 self-governing units. Each unit functions like an autonomous company, with its own profit-and-loss statement, operations, innovation program, and motivation. This approach has helped Haier go from near bankruptcy in the 1980s to market leadership today.

A self-organizing approach has its drawbacks, however. It incurs significant costs from duplication, the lack of scale of the individual units, and the additional costs of enforcing the local rules of interaction and keeping score. Hence the approach is only appropriate in highly diverse and dynamic environments.

In the most complex cases, companies may need to orchestrate a diverse ecosystem of external parties in order to source the strategy styles they require. This is the *external ecosystem* approach. Apple has used it with great success in the smartphone arena, where winning requires multiple strategy styles. For example, content creation and app development require rapid adaptation to changing consumer needs and fast-moving competition, while component manufacturing and assembly are scale intensive and require a more classical approach. The industry is also highly dynamic. Rather than trying to deploy all strategy styles itself, Apple chooses to shape and orchestrate an ecosystem of companies that exercise the strategy styles it needs. It achieves this by creating common platforms, such as the iTunes Store, that are beneficial to all ecosystem participants.

Companies need to employ an external ecosystem approach when the environment is extremely diverse and dynamic and it is hard to produce the required range of styles internally. This approach is only appropriate in the most complex cases because of the high costs and risks of cooperation—the cost of building platforms such as iTunes, the profits the company must give away to incentivize third parties to participate, and the risks associated with dilution of control over the company's operations.

The Path to Ambidexterity

To build ambidexterity, companies must understand the diversity and dynamism of their environment and choose and implement the appropriate approach. Each approach requires a different set of organizational interventions and implies a different role for the center.

Where separation is required, identify scale-driven (that is, exploiting) and innovation-driven (that is, exploring) business units and set clear boundaries between them by separating objectives, resources, talent, and risk management approaches. The role of the center here is to set and maintain these boundaries and provide centralized services as efficiently as possible.

Where switching is needed, design incentives to break down silos and encourage collaboration, and create a culture of flexibility among managers. The role of the center is to create alignment between strategy style and environment and to modulate style over time. Central functions like HR and IT should be flexible enough to meet the changing needs of individual groups over time.

Where self-organizing is called for, break down business units and functions into small groups and set local rules of interaction for how units negotiate with each other and how performance will be assessed. Here the role of the center is smaller: its function is to design and implement the local incentives from which the organization will self-assemble.

Where an external ecosystem is required, create platforms that are attractive to potential partners, develop a vision around which to orchestrate parties, and rearrange the corporate center as coordinator of the external ecosystem.

Although ambidexterity is tough to master, it is an increasingly critical capability for managers struggling with the apparent paradox of exploring and exploiting. The imperative to achieve ambidexterity will only rise as technological change and economic turbulence increase the diversity and dynamism of the business environment. Far-sighted companies are beginning to build organizations that can both explore and exploit. Managers must act decisively or risk being overtaken by ambidextrous rivals.

Note

1. "Your Strategy Needs a Strategy," *Harvard Business Review,* September 2012.

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Filippo L. Scognamiglio Pasini

The authors thank Professor Simon Levin, George M. Moffett Professor of Biology at Princeton University, for his ongoing thought partnership on adaptive strategy topics and his insights on the biology of ambidexterity.

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THE ADAPTIVE MINDSET

BUILDING NEW BOXES

HOW TO RUN BRAINSTORMING SESSIONS THAT WORK

WHEN THE BREAKTHROUGH IDEAS don't come, don't blame the brainstorming process. That's like giving up on hammers after you smash your thumb. It's always easier to blame the tool than to question your technique, but focusing on blame will fail to fix the underlying issue—every time.

Too often, managers assume that all they need to do is assemble people in a conference room, offer some cookies, provide a vague instruction to think outside the box, and promise that no idea is a bad idea, for creativity to burst out. But instead, this kind of approach usually leads to a painful, meandering process with no meaningful result; grist for a Dilbert cartoon or an episode of *The Office,* perhaps, but little more.

There is a better way (though the cookies don't hurt). In fact, as we argue in our book *Thinking in New Boxes,* human brains really are not wired to think outside the box. Rather, we need various "boxes"—mental models, frameworks, and theories—to make sense of the world's complexity. A strategy, a market segmentation, a vision: these and other boxes help leaders interpret and simplify the complex world in front of them.

To really drive ideation, leaders need to shape the new boxes within which their teams can brainstorm freely and productively. BIC, for example, drove decades of successful growth after shifting from the original box that defined its business, "we make affordable plastic pens," to a new one, "we make affordable plastic consumer goods."

In short, a good brainstorming session isn't something that you jump into—it's something you design.

Based on our decades of experience with driving creativity in our clients' companies, we offer five suggestions for how to achieve real, valuable insight from a brainstorming session. Interestingly, almost all of these recommendations focus on what you should do before and after the actual session, not during it, since the session itself is rarely the problem. It's the way people use it that needs some adjustment.

Never forget that framing the question effectively is half the battle. Albert Einstein reportedly said, "If I were given one hour to save the planet, I would spend fifty-nine minutes defining the problem and one minute resolving it." Extreme, perhaps, but the importance of using an effective question, and laying out specific constraints and criteria for success in advance, cannot be overstated.

A good question for brainstorming will be narrow and concrete, so that people feel they know how to begin answering it. Typically, such a question starts with "How could we…?" or "What if…?" It is visceral, enabling people to instinctively understand it in the context of their situation. For example, rather than asking a broad question, such as, "How can we improve our brand image in the Indian market?" try asking, "How can we get a 25-year-old woman in Mumbai to rave about us to her friends?" Rather than wondering, "How can we come up with new marketing ideas for our airline?" try asking, "How can we ensure that our airline is the first thing that every businessperson in Los Angeles and New York thinks of when booking a trip?" or "How can we ensure that every new Expedia customer sets his or her Web browser's home page to our website?"

Create conditions that foster creativity. Be thoughtful about the environment you create for a brainstorming session. Gather a range of people with diverse perspectives, perhaps even some customers or experts. For example, we asked a toy store owner and a children's book author to join us in an exercise with members of a company focused on a children's offering. Try to take people away from their daily routine, to change their perspective and remove their inhibitions. Explicitly encourage full participation, and ensure that junior and senior members alike feel comfortable sharing their ideas, even ones that may seem silly or far-fetched. Make sure that everyone is on board with the plan throughout the exercise: a significant impediment to successful brainstorming is when people in one half of the room are freely generating new ideas while those in the other half are picking those ideas apart.

Don't dive straight into a brainstorming session—begin by revealing and doubting your own boxes. Any significant creative leap begins, first, with a

shift in perception. Whether one is engaged in growth, change management, strategic planning, cost cutting, or product or business model innovation, the first step in the creative process entails identifying and doubting one's current boxes and determining which ones require reevaluation or replacement. Start by making an expansive list of many of the shared beliefs and assumptions about your organization. Discuss them and try to determine which of your organization's boxes are still relevant and which ones need to be redefined. For a recent project with a government contractor, for instance, we began by identifying some critical shared mental models that everyone held about how they worked with various government departments, how they undertook R&D, and how they sold their products.

Bring some potential new boxes to the session to nurture ideation; they can dramatically increase the odds of a useful result. People often lament that the ideas shared in brainstorming sessions are either too trite and expected or too "out there" and impractical. This is a delicate balancing act, and being clear in advance about what you're after will help. Make sure that you have a well-prepared and effective facilitator; you could even take on the role yourself. Think of the facilitator's role like that of a bus driver: a good one is well trained, prepared, adaptive, and alert. He or she knows the rules of the road—and you should have only one per bus. Try conducting a dry run using your proposed question along with some brainstorming techniques, such as changing perspective or experimenting with analogies. This will lead to a clearer sense of what should be on or off the table and what success might look like, as well as help you to develop some examples to share with the group.

After your brainstorming session, remember to follow up. People sometimes tell us that a brainstorming session led to good ideas but little subsequent action or change. Voting on your ideas at the end of a session can be a useful exercise to provide closure to participants—but you can't force consensus. Allow things to continue to percolate. Recognize that more ideas may come after your meeting ends. Follow up with participants once ideas are prioritized and the path forward is clear.

Nintendo was founded as a playing-card company in 1889 but became a global leader in high-tech video consoles and the games and applications that run on them. What basic assumptions in its leaders' minds had to change for that evolution to occur? If executives at Nintendo had said, "We are looking for growth, and we should probably be doing something new, so what should that new thing be?" they would have been engaged in classic brainstorming, in trying to think outside the box. Perhaps they would have succeeded. It's much more likely, however, that they would have ended up running around in circles within their existing box of "We're a playing-card company" and come up with new forms of playing cards. They would have remained trapped in the prison of their old biases and assumptions, their established ways of thinking about Nintendo.

The all-important process of doubting one's most significant current boxes—"What is Nintendo?" "Which customers are we trying to serve, and what are they really after?" "Who are we really competing against?"—is a much more reliable way of achieving the underlying shift in thinking that frees people to generate such winning ideas as Nintendo's Wii or the best-selling Mario Bros. games.

Remember that brainstorming in a creativity session is not a "blue-sky," unconstrained exercise. Taking time to consider the dark clouds on the horizon, to identify and question your existing models and assumptions, and only then to pursue classic brainstorming tools and rules will lead to useful results.

Above all, embrace the ambiguity inherent in any creative process. You cannot plan every minute of an ideation workshop or predict the outcome just because time is short or a lot is on the line. Leave room for the unexpected. Sustain doubt. And allow yourself and your team to think in multiple new boxes.

Luc de Brabandere
Alan Iny

The authors' book, Thinking in New Boxes: A New Paradigm for Business Creativity, *was published by Random House in September 2013.*

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The Two Sides of Connectivity

Big Data's Five Routes to Value

Opportunity Unlocked

In today's world, nothing is certain but death, taxes, and the growth of data. The quantity of information generated from the dawn of time until 2003—some 5 exabytes, according to Intel—is now created every two days. Businesses have long understood that there is value—somewhere—to be extracted from this burgeoning volume of data. And increasingly, they have been able to get at it more efficiently and cost effectively. Yet for all their enthusiasm for "big data," most companies are only scratching the surface of the opportunities that await them. They are analyzing data for insight—an important, value-generating strategy, to be sure—but have yet to exploit the truly transformative role that big data can play in how and where they do business.

The companies that get ahead will be the ones that see and seize the full range of opportunities that big data offers. We envision five major applications: generating new business insights; improving core operating processes; enabling faster, better decision making; taking advantage of changing value chains; and creating new data-centric businesses. Not all of these opportunities will be relevant to every business, but most companies can benefit on multiple fronts. For those that do, the prize won't be just a competitive advantage but, potentially, the ability to reshape the competitive landscape.

Seeing the Big Picture on Big Data

Views on big data have shifted recently for many companies. Skeptics who saw an overhyped route to riches—having been burned, perhaps, by their own costly, complex, and ultimately disappointing efforts to turn data into dollars—are increasingly becoming believers. They're no longer asking whether big data can generate value for them but how it can do so.

Why the change of tune? Data processing and storage costs have decreased by a factor of more than 1,000 over the past decade. Powerful analytical techniques have emerged. And new technologies such as Hadoop and MapReduce mean that data no longer have to be stored in a rigidly structured form to be processed (a costly, labor-intensive proposition). Now information can reside in whatever form it naturally takes—from Facebook posts to audio recordings of customer service calls—in geographically dispersed data centers or in the cloud.

Insights that would have stayed buried just a couple of years ago can now be uncovered routinely and often relatively easily. Businesses understand this. In 2013, big data is forecast to drive $34 billion in IT spending, according to Gartner. And the initiatives are growing more sophisticated and more widespread. At Chevron, an in-house analytics platform mines seismic data for insight into where oil and gas deposits may be located—helping the company focus its drilling efforts and its spending. In New York City, where there are some 1 million buildings but only 200 building inspectors, analytics enable the city to pinpoint those structures most likely to be at risk—increasing the efficiency of its inspectors fivefold.

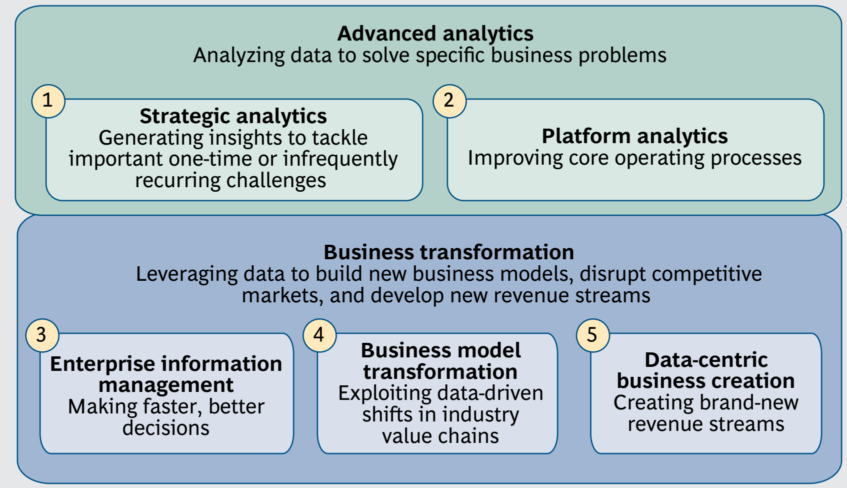
Indeed, the ability of advanced analytics to address high-priority challenges is so great that we advocate its rapid deployment. Instead of remaining on the sidelines, brainstorming grand strategies, businesses need to get started, get experience, and get results. At the same time, however, they need to understand that what they're doing—and the payoff they're seeing—is only the beginning.

At the heart of big data lies tremendous potential to transform the way companies operate, driving not only new insights and processes but new business models. Big data can spur innovation and agility. It can lead to new revenue streams—even in areas far removed from a company's traditional line of business. In BCG's project work, we are already seeing companies benefit from this broader view of big data. For example, a telecom company is leveraging its mobile network data to offer subscribers one-time, location-based insurance policies. By inferring users' most likely activity from their location (travel, for example, if the subscriber is at an airport), the company can offer highly relevant—and thus highly attractive—products in real time. This is the sort of outside-the-box—and outside-the-sector—opportunity that can deliver huge value.

Below we look at the five key applications of big data and how some forward-looking companies are already embracing them—transforming

their businesses and, in some cases, even transforming industries. (See the exhibit.)

Five Routes to Value from Big Data



Source: BCG analysis.

Generating New Business Insights

Most of the advanced-analytics efforts we see have a tactical focus: leveraging data to get a few key decisions right or to solve specific problems (such as where to open a new bank branch or what coupon to send to the smartphone held by a shopper in a store).

The ability to use information in this way has been greatly enhanced by a combination of developments: more data coming from existing and new sources, greatly improved analytical techniques, and lower processing and storage costs. As a result, companies can incorporate data they hadn't previously used in decision making, such as social-media posts and unstructured data that older tools were unable to work with. This has resulted in better, faster, more actionable insights.

Advanced analytics can be applied to a vast array of situations. Vestas Wind Systems, for example, has been able to tackle an important challenge in the wind energy business: where to place turbines. Precise positioning helps maximize energy output over the more than 20-year operational lifetime of a wind power plant. To home in on the optimal location, Vestas analyzes information from a host of sources: wind and weather data, turbulence levels, topographic maps, and sensor data from more than 25,000 turbines that it monitors worldwide. This process gives the company a competitive edge as it helps its customers maximize their return on investment.

In the financial sector, a client has launched an innovative project that analyzes customers' transaction data to infer the occurrence of major life events, such as marriage or a new job. These are occasions that can trigger interest in high-value financial products (such as a home mortgage or a joint savings account). If a financial institution can identify these critical moments, it can better match customers with the most appropriate promotions—and, even more significant, establish long-term relationships. Working with our client, BCG developed a targeting model that, in its initial stages of implementation, is proving 2.5 times more effective than existing approaches.

Improving Core Operating Processes

The use of advanced analytics need not be limited to one-time or infrequent tasks. In fact, integrating analytics into everyday processes, or "industrializing" them, can be particularly beneficial, as the insights gained can be applied—automatically, repeatedly, and often in real- or near-real time—in key business functions.

Such platform analytics are still relatively rare. Yet companies that have taken this step have seen some powerful results. Visa, for instance, integrated analytics into its fraud-detection processes in August 2011. By March 2013, the system had identified $2 billion in fraudulent transactions—blocking them before money was lost. In the e-commerce sector, Amazon.com uses dynamically generated recommendations—based on each customer's purchasing and browsing history—to drive an estimated 25 percent of its sales. Banks, meanwhile, are using platform analytics in risk scoring, automatically processing a variety of internal and external data to judge a loan applicant's credit-worthiness.

The beauty of platform analytics is that it can be incorporated into all manner of processes in a wide range of industries. Some of the emerging uses might seem surprising—far removed from the consumer-related applications most commonly associated with big data. In Italy, a system called *redditometro* uses advanced analytics to find tax evaders. It looks at data from a host of sources—bank records, credit card transactions, insurance payments, statistical research—to determine an individual's likely spending and whether his or her tax return matches up.

Platform analytics have also proven effective in facilitating preventive maintenance. By analyzing data—often from sensors implanted in or on critical infrastructure—companies can predict when failures are about to occur and intervene before trouble strikes. In effect, troubleshooting becomes proactive rather than reactive. Advanced analytics can look for patterns—such as in the type and frequency of alerts—that have historically presaged failures. This approach has enabled one of our clients to predict incidents an hour or two before they occur, providing time for effective intervention. As a result, critical operational downtimes have been cut by more than 50 percent.

Making Faster, Better Decisions

The availability of accurate, real-time management data is critical to decision making (about where to focus R&D efforts, for example, or how to price new products). Yet at most companies, this information tends to be fragmented across the enterprise, with every department working with its own "version of the truth." Making matters worse, this information is often out of date by the time it gets factored into decisions—if it gets factored in at all. In many enterprises, a great volume of potentially helpful data—in both structured and unstructured form—is never used. The result: conflicting decisions, untimely decisions, wrong decisions.

Not surprisingly, one of the most promising applications for big data is in enterprise information management (EIM). The idea is not just to collect and process operational data but also to present it in a clear, consistent, readily available manner throughout the organization—improving the speed and the quality of decision making. We see the ideal EIM system as one that combines a single set of data—from sources both inside and outside the company—with intuitive graphic elements like on-screen dashboards. The result is an accessible, uniform, real- or near-real-time view of operations that allows different departments to speak a common language and base their decisions on the same facts.

Taking Advantage of Changing Industry Value Chains

Big data is upending traditional value chains, presenting risks to companies that don't respond accordingly—and presenting opportunities to those that do. Advanced analytics and new data sources are enabling companies in one sector to play a role in the products and services of other sectors—even ones far removed from their traditional line of business. This is blurring the boundaries between industries and changing competitive dynamics.

Companies that transform their business models in parallel with these shifts will find new doors opening for them. For example, in the home thermostat market—a traditionally staid sector with a small, settled list of competitors—a startup called Nest has been able to challenge the incumbents by introducing a thermostat that employs analytics to learn customers' preferences and use patterns and adjust itself accordingly. Nest's novel, data-driven business model enabled it to enter a market long closed off to outsiders.

Yet the payoff isn't just for new players. For established companies, new data-driven business models can help keep—and even expand—share in an existing market. In the automobile insurance sector, for instance, Progressive uses driving data—collected from a small device customers plug into their car's diagnostic port—to help calculate premiums based on actual driving habits. Among the data analyzed: when and how far the customer drives and the number of hard brakes he or she makes. Good drivers are rewarded with lower premiums—on average, a savings of 10 to 15 percent. For drivers who have put their Grand Prix dreams behind them, that can be a compelling value proposition.

Creating New Data-Centric Businesses

The large volume of information that companies generate—and the insight it affords—may well have value to other organizations, both within and outside the industry. Social-media sites, for example, often capture data pertaining to users' preferences and opinions—information of interest to manufacturers that want to focus their product-development efforts and marketers that want to target their product campaigns. Mobile network operators routinely collect subscriber location data—of value to retailers that want to know where consumers are shopping. By making this information available—for a price—companies can develop new revenue streams. While the sale of personal information traceable to specific individuals can raise privacy concerns, companies can greatly reduce sensitivities by aggregating and ensuring the anonymity of data.

BCG is working with a large international bank to create new data businesses by leveraging transactional information—such as credit card activity—

captured in the bank's normal course of business. The idea is to provide companies from different industries with information they can use to perform their own business intelligence. But this is just a start. We envision external sources—such as social-media information—playing a key role in the coming years, enriching the bank's internal data and further enhancing its value proposition to its data customers.

The Road Ahead

Identifying relevant applications is, of course, just the first step in deriving value from big data. New capabilities, new organizational structures (and mindsets), and significant internal change will also be required. (We will address these challenges in future publications.) But businesses should not underestimate the importance of zeroing in on the right opportunities. They will need to think outside the box, embrace new models, and even reimagine how and where they do business. A culture that encourages innovation and experimentation, and even some radical thinking, will serve this undertaking well—but so will calling in outside help when needed to assess, prioritize, and develop the different routes to value.

Big data isn't just changing the competitive environment—it is transforming it. Businesses need to change along with it. Seeing where the opportunities lie and creating strategies to seize them will help companies turn big data's promise into reality—and gain new customers, new revenue, and even new markets along the way.

Jon Brock
Ralf Dreischmeier
James Platt
Robert Souza

Further Reading

"The Age of Digital Ecosystems: Thriving in a World of Big Data," BCG Article, July 2013

Through the Mobile Looking Glass, BCG Focus, April 2013

"How Digital Technologies Change the Game," BCG Article, March 2013

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The Two Sides of Connectivity

Infrastructure Problems Solved by Partnerships

Virtually every country in the world today is facing the same problem: in the wake of the recent financial crisis, its needs are bigger than its wallet. Nowhere is this more apparent than in the area of infrastructure.

In China, India, and other developing countries, population growth, increasing urbanization, and rising incomes are driving demand for new roads, schools, power stations, and water and sanitation systems. In the United States and most developed countries, the challenge is different: update, replace, and expand aging and obsolete infrastructure.

Globally, The Boston Consulting Group estimates that it will take an investment of some $4 trillion per year for the next 20 years to meet infrastructure demand.

But the funding isn't there. Between 2008 and 2010, for example, total infrastructure spending averaged just $2.7 trillion per year worldwide. In most developed countries, it has been steadily declining as a percentage of GDP. So even if spending ticks upward as the recovery gains momentum, we still estimate a $1 trillion to $1.5 trillion annual shortfall through the year 2030.

Such funding shortages have significant health, safety, economic, and political implications.

For example, according to the U.S. Federal Highway Administration, more than 67,500 U.S. bridges are "structurally deficient." Twenty-one percent of America's urban interstates and 10 percent of its rural interstates are rated in poor to fair condition. This already has led to tragedy, such as bridge collapses.

It's also costly. A 2011 study by the Texas A&M Transportation Institute estimated that bad roads and traffic congestion were draining some $121 billion per year from the U.S. economy in lost time, wasted fuel, added pollution, and vehicle wear and tear.

The problems are systemic. Many of America's ports are operating at or near capacity. Wastewater treatment plants are aging, leading to sewage spills. The power grid is congested. And the U.S. air traffic control system is dated.

The challenges are similar in scale elsewhere. China's booming economy and rapid urbanization are forcing it to build at a frenetic pace. In the past decade, more than 45,000 miles of expressway have been added, with plans to expand. China also has said it will add 82 new airports between 2011 and 2015, and expand another 101.

Other countries are busy as well.

As consultants to both business and government, we think one of the solutions to the global infrastructure challenge is to get the private sector more involved—not merely as hired hands, but as partners. Indeed, public-private partnerships (PPPs) could be a key part of the solution. But great care needs to be taken in how such arrangements are structured.

While governments worldwide wallow in red ink and mounting debt, the supply of private-sector capital is significant. As of 2010, insurance companies, pension funds, and sovereign-wealth funds held assets under management of $22 trillion, $19 trillion, and $4 trillion, respectively. With fixed-income returns near zero, many of those institutions, according to a 2012 Russell Investments survey, are looking for alternative investments, such as infrastructure projects.

The key to any public-private partnership, of course, is execution. Deals need to be transparent, long-term, and fair to all parties.

From the vantage point of public officials, the steps to success are clear: start with an overall infrastructure plan, select a project suitable for a PPP, and manage the project's life cycle efficiently.

Unfortunately, few countries execute these steps well. Infrastructure planning is too often driven by short-term political agendas. The business cases and traffic forecasts for projects are frequently weak. And regulatory models often apportion risk unevenly, proving to be unreliable over the long term.

Still, public-private partnerships already are a fact of life. Chile, for example, has a long history of successful public-private projects, awarding 21 road projects between 1993 and 2001. In the United States, meanwhile, the Indiana Finance Authority just selected a private consortium to design, build, finance, operate, and maintain the East End Crossing, a bridge crossing the Ohio River near Louisville, Kentucky.

Airports, ports, water systems, and energy offer additional opportunities.

Despite the inherent complexities and occasional setbacks, public-private partnerships are a growing reality. Given the financial pressures of our time, they offer a practical solution to a global challenge.

Jeff Hill
Philipp Gerbert

This article originally appeared in the online version of USA Today.

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Fighting Corporate Hubris

The Four Steps of the Perpetuity Principle

Massive corporate fraud, the dot-com bubble, the worst economic crisis since the 1930s—these events have undermined many companies and leaders over the past 15 years. As CEOs begin to absorb the lessons of this turbulent period, they should be careful not to overlook one significant contributory factor: hubris, the pride that comes before a fall.

In a corporate setting, hubris can take many forms, such as:

- Creating grandiose strategies that find their way into glossy brochures, new advertising campaigns, and rhetorical conference speeches—but never get implemented
- Launching high-profile moves into new, exciting, international markets in a costly and flamboyant way—but failing to create competitive advantage
- Pursuing big mergers and acquisitions that deliver scale, bold headlines, and large bonuses for the management team—but no long-term value
- Completing dubious financial transactions that undermine transparency—and serve only to show that the company isn't addressing the fundamentals of business

Time and again, these activities have led companies to overextend themselves, to falter, and—all too often—to fail. CEOs should guard against them at all costs.

Hubris and Its Nemesis: The Perpetuity Principle

The CEO and the executive committee play a critical role in the fight against hubris. They do, by their conduct, set the boundaries and norms of behavior for the rest of the company. Today, the best managers follow what we call the *perpetuity principle,* serving as stewards of their companies and, by doing so, developing profitable, sustainable, and trusted businesses. They focus on results, ensure that substance triumphs over style, and champion a true humility—one that prioritizes ethical behavior, respect for others, modesty, and diligence. To adhere to this principle, CEOs should take the following four steps.

Renew the focus on delivering long-term value. It is all too easy to shrug off a sluggish performance as evidence that the market misunderstands the company's terrific work or to point to a great quarter or two as a reason for ignoring any deterioration in the business fundamentals. But before castigating critics or declaring victory, the prudent leader should take a long, hard look in the mirror: knowing what creates value—and what destroys value—for customers, shareholders, and other stakeholders are core competencies of the CEO.

On a routine basis, the CEO and his or her team should embark on an unsentimental, even ruthless, review of the company's portfolio to identify any underperforming business units or decline in the key drivers of value, such as market share, gross margin, and pricing power.

At the same time, they should pursue strategies to deliver top-line growth. But they must be wary of tempting proposals for fast-tracking growth—such as buying and selling businesses—just to please the markets. Though such strategies have their place, big splashy acquisitions that promise much but turn out to be poorly thought-out, badly executed, and deeply damaging to the long-term health of the company occur all too often. In fact, according to BCG analysis across all industries, more than half of all public-to-public deals between 1988 and 2010 actually destroyed shareholder value.

Ultimately, a company will thrive only if it offers differentiated products or services to its customers and delivers them well. Leaders should never forget this—no matter how much pressure they feel from the financial markets.

Foster an open and questioning culture, and encourage the company's major decision makers to challenge conventional wisdom. Of course, this is not easy to do; for CEOs, encouraging others to question their carefully worked plans can be an uncomfortable process. But cultivating an environment in which executives feel free to articulate their views without fear of retribution is necessary—and usually the company is stronger for it.

There are a number of ways to foster an unfettered dialogue. The most effective is when a CEO initiates the discussion by challenging the existing business model. Another is to conduct an exercise in which one group of executives takes a contrarian view, playing devil's advocate.

A third approach is to develop a series of scenarios, or mental "boxes," that give members of the executive board a chance to gain a fresh perspective on their strategic plan. This is not some tired recommendation to engage in scenario planning or to think outside the box. Rather, it is an exhortation to think in *new* boxes—to question everything, to think the unthinkable.[1]

Whether or not these new scenarios are plausible is beside the point. What's important is that each box be sufficiently provocative to enable the CEO and the executive team to test the merits of their preferred approaches in different boxes and, in doing so, to break out of a tunneled managerial perspective.

As well as creating new visions of the future, CEOs must address, in a very practical sense, the way they manage and organize work. All too often, a CEO orders a reorganization of the company that, despite the best of intentions, leads only to a costly and overcomplicated proliferation of structures, processes, and systems. This is why what we call "smart simplicity"—minimizing structures, processes, and systems while maximizing leadership, cooperation, and engagement—is so important.[2] It avoids the illusion of superficial change, which actually inhibits real transformation, and forces leaders instead to consider some key questions: Are we really going to change what happens, what we do, and the way we work together?

Develop a role as stewards of the company, guiding it toward a prosperous future with a respected place in society. Companies play an important role in society, and their leaders can be significant local, national, and international citizens. CEOs, therefore, should be conscious of their role in the community, set an example through their behavior, and strive both to do well and to do good, today and for tomorrow. A narrow focus on short-term profitability, coupled with excessive bonus payments for top management, undermines the very existence of a company—especially during a time of austerity in the West and widening gaps in wealth around the world.

To set the best example, CEOs should ask themselves this question: "Is my compensation in line with performance?" If the answer is no—then that's a problem. Certainly the best-performing executives should be well compensated. But those who have poorly served—or even defrauded—their shareholders, customers, and local communities should face negative consequences rather than be rewarded with golden handshakes.

CEOs should also ask themselves, "Is my company making an appropriate contribution to society?" With the rising importance of citizenship, trust, sustainability, and reputation, leaders cannot fixate solely and selfishly on the company. They have a role in shaping a more resilient and responsible future for society at large.

Companies can contribute to the well-being of local communities through their products and services, job creation, education, and skills training. They should also pay an appropriate level of corporate tax. Of course, it is the duty of each company to take every legal step to minimize its tax burden. But going too far risks a serious backlash—not least from consumers and especially at a time of large government deficits, which are partly due to tax evasion and poor collection. This risk holds equally true when it comes to labor laws, environmental regulations, and quality standards.

Ensure a regular change of leadership. CEOs should conduct a periodic shake-up of those around them, including their loyal lieutenants. It is lonely at the top—and never more so than when reshuffling the executive pack. But this is a task that CEOs must not shirk: they cannot afford to surround themselves with a cadre of people who stop challenging the status quo (now that they are the status quo), who put career before company, and who stay silent when they should speak out.

In general, CEOs themselves should have time-limited tenures, too. No one is above the company, not even its highest officer. In my experience, most CEOs, in the true spirit of a steward, should step aside after no more than ten years. Now, some leaders may read this and think that a decade in the top job is the kind of corporate eternity they can only dream about. The fact is, however, that some companies are nominally led by people who no longer actually lead.

So why deprive the company of a top leader who has built up a wealth of experience? The answer is straightforward: Over time, it gets progressively more difficult to bring about necessary change. Of course, it is not hard to point to the exceptions that prove the rule—the extraordinary CEOs who defy the years and continue to generate value over decades. But, too often, long-serving CEOs are wedded to ways of doing things that quickly become outmoded in today's fast-changing and volatile world. And while success can

certainly breed success, it can also breed complacency and failure.

Knowing when to hang up one's boots is notoriously difficult, whether in business, politics, or sport. The most successful leaders, wary of destroying the legacy they have built, understand that they should never think they are indispensable.

The CEO's Core Task: Putting the "Execute" Back into "Executive"

Over the past two decades, too many CEOs lost focus: to use the language of sport, they took their eyes off the ball. Today they have a second chance.

The essential purpose of a company is to deliver value to its customers and profits to its shareholders on a sustainable basis—and this means that the organization needs to be a good citizen in the communities where it does business. So the task of the CEO, as the leader of the company, is to make this happen, to get things done, to *execute*—hence the name, "chief executive officer."

To be truly successful in a game-changing way, CEOs must adhere to the perpetuity principle, leading from the front and engaging in a relentless fight against corporate hubris—whether this manifests itself as greed, self-promotion, or ducking the hard realities of the world.

Notes

1. See Luc de Brabandere and Alan Iny, *Thinking in New Boxes: A New Paradigm for Business Creativity* (New York: Random House, September 2013).

2. See Yves Morieux, "Smart Rules: Six Ways to Get People to Solve Problems Without You," *Harvard Business Review* (September 2011). Also available at: https://www.bcgperspectives.com/content/articles/organization_design_engagement_culture_hbr_smart_rules_six_ways_get_people_solve_problems_without_you/.

Hans-Paul Bürkner

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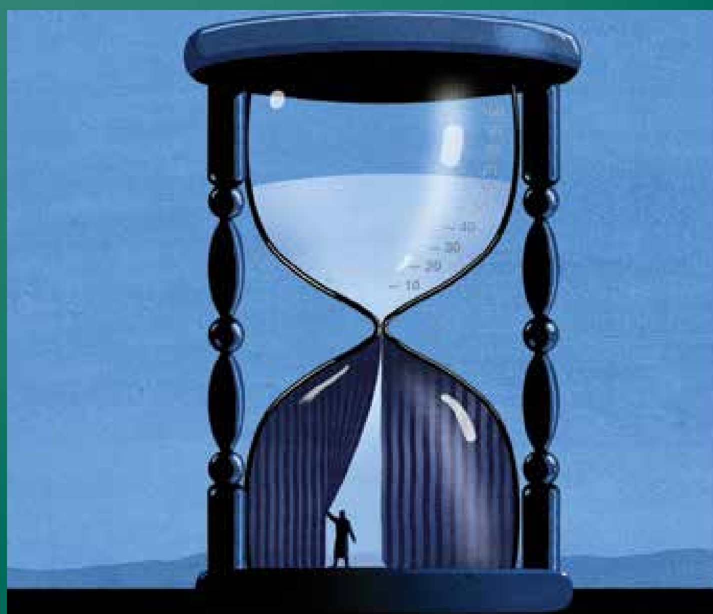


Debunking the Myths of the First 100 Days

The Right Way and the Wrong Way for New CEOs to Approach Their Role

It's tough at the top, and getting tougher. CEOs today have to operate in a turbulent, globalized, and technology-driven business world, one that has made their role more complex than ever before.

Consider that the number of performance requirements for CEOs is about six times greater than in 1955, the year the *Fortune* 500 was created. Back then, CEOs were measured against 4 to 7 KPIs; now they are typically measured against 25 to 40. (See the exhibit.) For newly installed CEOs—a large group, given that at any one time, 14 to 15 percent are in their first year in office—that environment compounds the already significant challenges that come with stepping into the top leadership position.[1]

A New-Look 100-Day Plan for a New CEO

By tradition, newly installed CEOs enjoy a 100-day honeymoon after taking office. During this grace period, they identify challenges, determine their key objectives, and draft a timetable. To facilitate all this, they need to devise—preferably before the starting date—an appropriate 100-day plan.

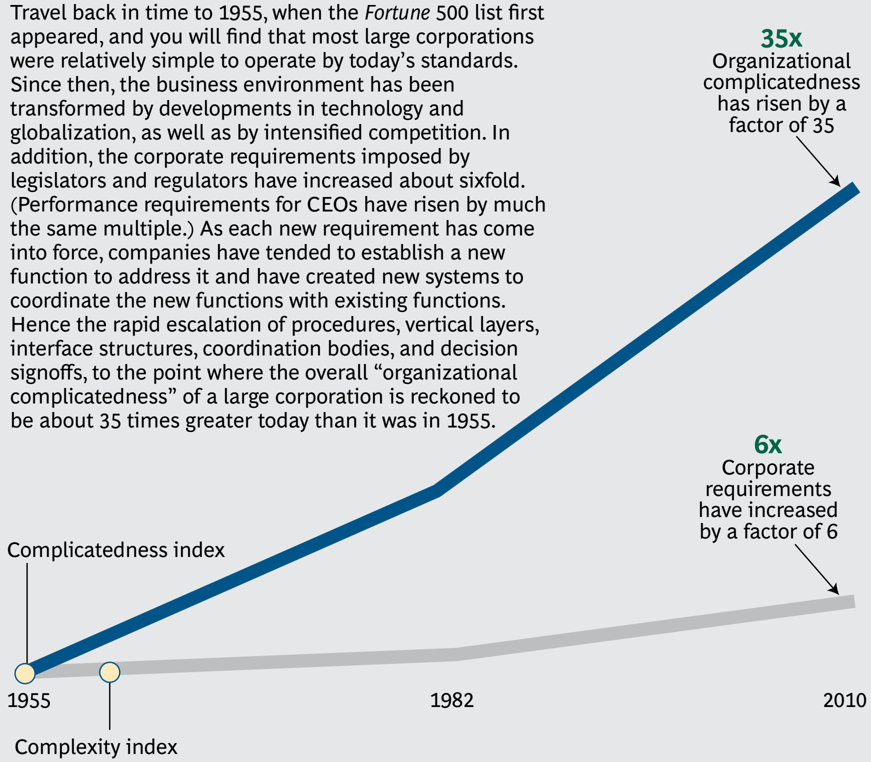
In our work with numerous new CEOs over the years, we've encountered several such plans and identified five common misconceptions that underlie them. These misconceptions—the "five myths of the first 100 days"—might have an appealing ring to them, but they risk destabilizing any CEO launch.

The Myths and the Realities

The following inventory of wrong and right approaches is distilled from our varied client work across industries. For obvious reasons, the details of these cases have been changed and sometimes hybridized.

Brave New World of Corporate Complexity

Travel back in time to 1955, when the *Fortune* 500 list first appeared, and you will find that most large corporations were relatively simple to operate by today's standards. Since then, the business environment has been transformed by developments in technology and globalization, as well as by intensified competition. In addition, the corporate requirements imposed by legislators and regulators have increased about sixfold. (Performance requirements for CEOs have risen by much the same multiple.) As each new requirement has come into force, companies have tended to establish a new function to address it and have created new systems to coordinate the new functions with existing functions. Hence the rapid escalation of procedures, vertical layers, interface structures, coordination bodies, and decision signoffs, to the point where the overall "organizational complicatedness" of a large corporation is reckoned to be about 35 times greater today than it was in 1955.



Sources: Yves Morieux, "Smart Rules: Six Ways to Get People to Solve Problems Without You," *Harvard Business Review,* September 2011; BCG analysis.

Myth 1: New CEOs should direct their attention outward, and study the old way of doing things, in preparation for deciding what to modify

Many incoming leaders put all their initial energies into studying the company intensely and trying to identify what works and what doesn't. Keen to make their mark, they may be tempted to alter the company's previous direction more sharply than is justified.

A case in point: A newly installed CEO at an ailing industrial-goods company spent most of his settling-in time investigating and disparaging the work of his predecessor. The old CEO had brought processes together in order to benefit from scale; the new CEO duly decentralized the organization. The old CEO had established a structured engagement program; the new CEO threw it out "to avoid cramping the style of the staff." The old CEO was methodical in conducting business plans and reviews; the new CEO aimed to agree briskly on business goals. The old CEO liked to have formal monthly staff leadership-team meetings; the new CEO preferred engaging informally.

Soon the perception arose that the new CEO was overturning established practices just for the sake of doing so. A year into his role, this CEO has still not clarified what he wants to do; the company lacks a clear and unifying direction and appears to be drifting.

Reality: When new CEOs develop their plans, one of the first steps is to ascertain and affirm their own preferences and motivations. The newcomers who acclimatize most effectively are those who begin as much with introspection as with outward inspection. They step back to reflect on how they want to lead and what kind of imprint they intend to stamp on the company.

A case in point: The incoming CEO of a utilities corporation, while maintaining the broad strategy of his predecessor, opted to introduce several minor modifications. But the one really big change was in the style of leadership. As the CEO told us, he was simply not a charismatic, "town hall style" orator, as his predecessor had been, and he felt much more comfortable in small groups. In that spirit, he set up a council of second- and third-layer leaders, numbering close to 200 in all, who met regularly and cascaded communications in a more personalized way throughout the organization. These senior and middle managers quickly showed signs of being more strongly engaged and more invested in the company's strategy.

Myth 2: New CEOs prove their mettle by performing bold actions right away

Some new CEOs feel duty bound to make an impact as quickly as possible by notching up some "quick wins." And sometimes they do so without paying proper attention to the corporate context.

Witness the North American career executive who took over as CEO of a foreign-owned technology company. Within a few weeks, he announced a plan to refocus, reorganize, and reinvigorate the business. But the CEO underestimated, among other things, the workforce's tolerance for change. He moved directly to implement his transformation plan, which included an innovation strategy, the closing of two major sites, and a reorganization. The board and management team viewed his actions as heavy-handed and insensitive. A backlash followed that triggered implementation delays and a loss of credibility that took considerable time to rebuild.

Reality: Astute new CEOs ensure that they understand the context fully before they act. Contrary to the myth, the incoming CEOs who make the strongest early impact are typically those who know what makes the company tick. Farsighted CEOs remain sensitive to the company's midterm needs and unique organizational context. This is not to discourage bold actions, just to counsel deliberation in order to avoid unintended consequences.

Mindful of these dangers, the CEO-elect of an established media company devoted all his spare time, in the eight months prior to his accession, to engaging with key leaders throughout the organization and with external stakeholders as well. By analyzing their views, he identified areas of innovation and growth for the company. The new CEO carefully assembled a team that he believed was in tune with his vision. His patience paid off, instilling confidence and boosting morale.

Myth 3: New CEOs should establish a team by seeking out the top talent

For some new CEOs, team selection is a straightforward matter of identifying and recruiting the best and the brightest.

On that basis, the new CEO of a retail-products company appointed a cabinet of outstanding executives, several having been lured from rival companies. But the group turned out to be not a team but an assemblage of superbly able individuals with little in common other than a sense of their own abilities. Silos rather than synergies were created, and resources were allocated to benefit the individual function or business unit rather than the whole organization. As a result, the CEO has found his role to be that of compromise seeker as much as leader.

Reality: A team is more than the sum of its parts; it needs balance and mutual reinforcement. Outstanding *individual caliber* is not a sufficient qualification for entry to a CEO's inner circle of executives. A necessary additional qualification is *suitability.* The members of the optimal team have complementary skills and styles.

One business executive who obviously learned this lesson well was the new CEO of a large European transportation company. She set about choosing her team by seeking the right combination of leadership experiences,

competencies, personality styles, and regional representation. Performance reviews now give weight to cooperative initiatives as well as to solo performance. And to maintain mutual trust and strengthen the spirit of common purpose, the CEO conducts periodic team-effectiveness retreats.

Myth 4: New CEOs should immediately set tough standards for everyone at the company

Some new leaders make a point of setting the bar very high at the outset with a strict timetable of reviews.

Take the case of the new CEO of an entertainment company in the Asia-Pacific region. He formulated an ambitious growth strategy, drawing up detailed targets for managers and demanding frequent progress reports. Some subordinates complained that the targets were unrealistic and that the constant scrutiny and internal reporting were getting more prominence than the delivery of value.

Reality: New CEOs are going to be evaluated themselves; only when the criteria for that evaluation become clear can the CEOs really decide how best to evaluate others. Before taking office, CEOs-elect should have an open conversation about expectations and indicators of success for themselves. Then they can take those criteria into account when deciding the metrics for everyone else.

In that spirit, the newly appointed CEO of a global manufacturing company interviewed various stakeholder representatives to find out what outcomes they were hoping for from her stewardship. She established that a key goal was to develop a high-quality integrated supply chain as a critical platform for growth. She moderated the expectations that she had proposed setting for her leadership team, and explained that performance reviews would give credit to experimentation. The executive team, heartened by this freedom, attempted several untested procedures, and the company emerged with a world-class supply chain.

Myth 5: A new CEO should be the smartest person in the room

Some new CEOs try to master every aspect of a problem, believing that extensive expertise is the best basis for making decisions.

A top-performing executive at a health care corporation was promoted to CEO over the heads of older and longer-serving colleagues. Two of those colleagues had backgrounds in R&D and finance—areas in which he had little experience. He responded to the perceived threat by taking a crash course in the two subjects. Whenever the colleagues made constructive suggestions, he knew better. But he didn't. As one of the function leaders put it, "He imagines himself to know more than he does about any topic."

Reality: Specialized knowledge is useful, but general savvy and good listening skills are essential. The new CEO of a Latin American financial-services business, in contrast, hired from outside the organization, made a modest study of the various technical areas—not enough to claim expert knowledge of them, but enough to ask the right questions. He then conducted one-to-one conversations with each function head, discussing current and potential problems. He acknowledged and deferred to their superior expertise, but he knew enough to challenge any complacency and easy assumptions.

Consistent Tactics for Varied Challenges

Perhaps the most dangerous myth of all is that there must be *some* recipe—still undiscovered, perhaps—that will guarantee success for a CEO during the first 100 days. Forget it. There can be no fail-safe formula.

That said, there are still some constants that all new CEOs are subject to. They need to maximize their preparation for the job, using the interim time to research, consult, and introspect. New CEOs need to steel themselves for intense and often hostile scrutiny from stakeholders, for pressure from various agendas, and for conflicting demands. And they need to remain flexible.

The most successful CEOs are not always the leaders who are most knowledgeable and decisive. Often they are the leaders who create the best team, imbue it with a coherent vision in keeping with the organization's mission, and inspire it to realize that vision.

NOTE
1. For this figure, see *CEO Succession Report: 12th Annual Global CEO Succession Study,* Booz & Company, 2012, p. 9; http://www.booz.com/media/uploads/BoozCo_CEO-Succession-Study-2011_Extended-Study-Report.pdf.

Roselinde Torres
Peter Tollman

This article was excerpted from the BCG report Debunking the Myths of the First 100 Days: The Right Way and the Wrong Way for New CEOs to Approach Their Role. *A short version of the report was originally published as a January 2012* Harvard Business Review *blog at* www.hbr.org *and is reprinted here with permission from Harvard Business Publishing.*

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Winning Practices of Adaptive Leadership Teams, BCG Focus, April 2012

From the Archive

"Jazz Versus Symphony," BCG Perspectives, January 1990

Now Is the Time

The Boston Consulting Group has partnered with world-renowned photographic agency Magnum Photos and designers Kram/Weisshaar to create a cutting-edge exhibition to celebrate its 50th anniversary.

Rather than looking inward, BCG has asked the authors of the exhibit to engage in a collaborative effort to interpret and translate its Game-Changing Program—five sets of actions for companies in an age of economic restructuring and rising uncertainty—into an impression of the fundamental societal shifts that will impact our collective future.

These photos are part of the exhibition, which is a combination of documentary photography and immersive media. You can engage with elements of the final exhibit at our website, bcgperspectives.com/nowisthetime, or you can download our app at nittapp.bcg.com.

Alessandra Sanguinetti

Bogota

A child plays outside his home in the Cazuca neighborhood; the poorest and most violent neighborhood in Bogota.

"I like the idea that children, no matter where they are, are in their own world—they can still dream and imagine better things. I got a sense when I saw him that it was beautiful."

Alessandra Sanguinetti
San Francisco

At the Crunchies Awards afterparty at Davies Symphony Hall. The Crunchies Awards celebrates the best tech accomplishments of 2012.

“My feeling is that if you walk around the city of San Francisco, you don’t know what’s going on—the guy with a baseball cap on, on his bicycle, may be the MD of Twitter. Everything is going on behind closed doors.”

Jonas Bendiksen
Stockholm

Hammarby Sjostad, a new housing development in eastern Stock-holm, in which environmental and sustainability goals have been integrated into the design process.

Jonas Bendiksen
Istanbul

A man takes an elevator in a high-end residential development.

Jonas Bendiksen
Istanbul

Fashion posters in the market area near the Grand Bazaar.

"These billboards were located in a narrow alleyway, so the challenge was how to get the right angle for the shot. I needed to get higher up, so we went into the opposite building which was a mini-market and knocked on doors. Along a row of tailors and shoe makers, we found a couple of windows to the back of a shop, where we had a clear view, and I used a wide angle lens. Sometimes the most amazing images pop up in front of you, but a lot of the time you have to work to get into the right position."

Alex Majoli
Lagos

A phone company employee in his makeshift office.

"This picture was taken on the first day. The guy was sitting in the street under a construction project, recharging sim cards with a proper licence. Just like the Gulf, the story was all about technology connecting a pulsing megapolis, finding its way between poverty and wealth coming from the export of oil and gas."

Alex Majoli
Lagos

Lagos's new light railway, built with investment from China, will be the first modern, rail-based, public transport system in Sub-Saharan Africa, outside of South Africa.

Alex Majoli
Abu Dhabi

New development in the city center.

“Abu Dhabi was architecturally unexpected. I realized that on every block there was a small and active mosque amongst the big building constructions. I could get street shots there much more easily than in Doha.”

Alex Majoli
Doha

Qataris at leisure at Katara Cultural Village.

“On Saturday at sunset, this is where Qatari families and groups of men and women gather. Katara Cultural Village is a white marble amphitheatre, built in a Greek style. With its art center and restaurants by the sea, it’s the equivalent of the Mediterranean promenade in the evening. I felt it was artificial at the beginning, it then became interesting.”

Olivia Arthur
Mumbai

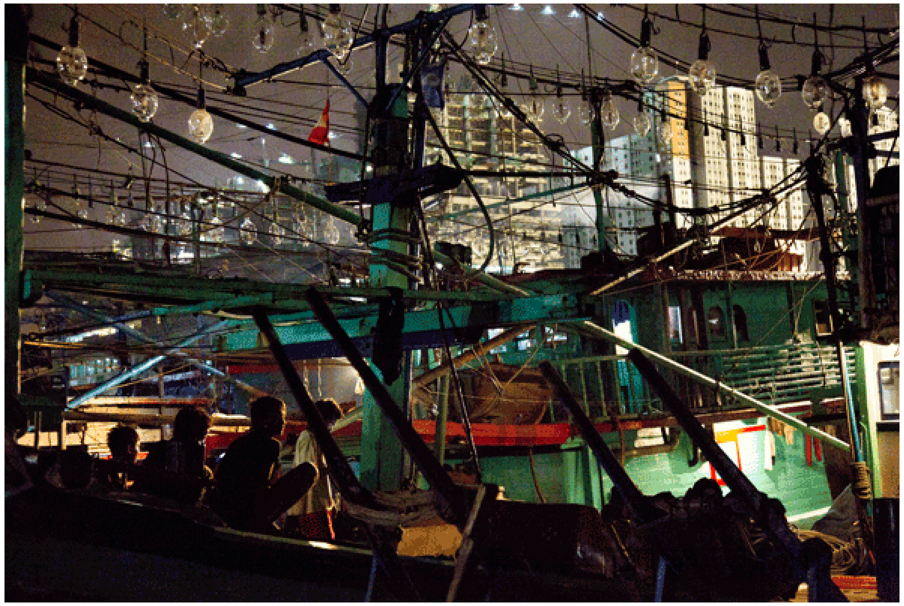
Meerhan Khan spends Sunday at the exclusive Breach Candy Club with her family.

"The Khans are an upwardly mobile family who moved back to India from Australia. They arranged to meet at this club on Sunday. We had coffee and got on well and so I started photographing right away. It was quiet, about 10 a.m. on a Sunday, before other people had arrived. This little girl was happy to be photographed and at ease. It's important for me to have that quiet time and create some intimacy with my subject."

Olivia Arthur
Mumbai

Strobe lights fill the dance floor at Mumbai's Royalty nightclub.

"The strobes came on at a particular time and there was this girl air kissing and I thought, this will be something they will choose."



Gueorgui Pinkhassov
Jakarta

The fish market.

“I visited Indonesia and Korea many years ago and I’ve see many changes. My work involves using the light: countries or events, I read them through the use of light.”

Gueorgui Pinkhassov
Jakarta

Coffee shop in a high end shopping mall.

“I can see that life is changing; a new generation is appearing. The new generation is different intellectually and physically.”

Gueorgui Pinkhassov
Seoul

Samsung D'light, Gangnam.

"The way of life is still traditional, but thanks to the Internet, photography, and communication, a lot has changed and it was interesting to observe."

Olivia Arthur
Shanghai

Finishing touches for a photo shoot with Chinese GQ magazine.

"The access was organized by my assistant, who has a studio in the same building. It was interesting to see an all-Chinese fashion shoot with everyone dressing up as Europeans."

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