

INTERNATIONAL BUSINESS

The Big Shift: Measuring the Forces of Change

by John Hagel III, John Seely Brown, and Lang Davison

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During a steep recession, managers obsess over short-term performance goals such as cost cutting, sales, and market share growth. Meanwhile, economists chart data like GDP growth, unemployment levels, and balance-of-trade shifts to gauge the health of the overall business environment. The problem is, focusing only on traditional metrics often masks long-term forces of change that undercut normal sources of economic value. “Normal” may in fact be a thing of the past: Even when the economy heats up again, companies’ returns will remain under pressure.

One reason traditional measures alone don’t capture the challenges and opportunities for U.S. companies and the national economy is that the digital infrastructure supporting the lion’s share of industries has sustained rapid performance improvements—especially in computing power, bandwidth, and storage. Previous infrastructures experienced sharp bursts of innovation in underlying technologies, such as the telephone and the internal combustion engine, and then quickly stabilized. Today, we do not yet see any signs of

stabilization, which suggests not only that competitive intensity (which has more than doubled in the past 40 years) will continue to build but also that the digital infrastructure will keep boosting the potential—and necessity—for business innovation.

To help managers in this decidedly challenging time, we present a framework for understanding three waves of transformation in the competitive landscape: *foundations* for major change; *flows* of resources, such as knowledge, that allow firms to enhance productivity; and the *impacts* of the foundations and flows on companies and the economy. Combined, those factors reflect what we call the Big Shift in the global business environment.

The Shift Index

Executives can use the metrics here to gauge the long-term forces shaping the business environment and improve their firms' overall performance. They should:

monitor foundational

- changes in digital technology and public policy that could alter competitive dynamics;
- assess how well their companies participate in

flows

- (that is, the movement of knowledge, talent, and capital), focusing especially on knowledge

Additionally, we have developed an index to measure the changes that have had the biggest effect on business over the past four decades (see the exhibit “The Shift Index”). That set of metrics reveals a dramatic increase in performance pressure on U.S. companies. Their average return on assets (ROA) has steadily fallen to almost one quarter of what it was in 1965, despite the fact that labor productivity has improved. Worse yet, even the highest-performing companies are struggling to maintain their ROA levels and losing their leadership positions at an ever-faster rate. The paradox of falling ROA alongside growing productivity is explained at least in part by the rising total compensation of knowledge workers and

creation and sharing; and

- note the

impacts

- of those foundational changes and flows on markets, firms, and people.

Foundation Index

Technology Performance

Computing. Gigahertz of computing power per unit of cost

Digital Storage. Gigabytes of digital storage capacity per unit of cost

Bandwidth. Megabits per second of bandwidth per unit of cost

Infrastructure Penetration

Internet Users. Percentage of people in the U.S. actively using the internet

Wireless Subscriptions. Number of active wireless subscriptions in the U.S.

Public Policy

Economic Freedom. The Heritage Foundation's Index of Economic Freedom, which measures 10 types of freedom in 183 countries

Flow Index

Physical Flows

other talented employees, and by consumers' growing power over vendors that end up "competing away" their cost savings. An even closer look at the situation shows a fundamental mismatch between the mind-set of today's companies and the environment in which they compete.

Migration of People to Creative Cities. Increase in migration to most-creative cities compared with least-creative cities (as defined by Richard Florida)

Travel Volume. Total volume of transportation by local commuters and airplane passengers

Movement of Capital. Foreign direct investments in and by U.S. companies

Virtual Flows

Knowledge Sharing Across Companies. National worker survey measuring participation in knowledge flows across firms

Wireless Activity. Total annual volume of mobile minutes used and SMS messages sent

Internet Activity. Internet traffic in the 20 U.S. cities with the most domestic bandwidth

Flow Amplifiers

Worker Passion. National worker survey gauging excitement about work, fulfillment from it, and willingness to put in extra hours

Social Media Activity. Percentage of total internet time spent on social media

Impact Index

Markets

Competitive Intensity. Herfindahl-Hirschman Index, which measures market concentration

Labor Productivity. U.S. Bureau of Labor Statistics data

Stock Price Volatility. Average standard deviation of daily stock price returns over one year

Firms

Asset Profitability. Total return on assets (ROA) for all U.S. firms

ROA Performance Gap. The gap between top- and bottom-quartile firms' ROA

Firm Topple Rate. Annual rank shuffling among U.S. firms

Shareholder Value Gap. The gap between top- and bottom-quartile firms' total shareholder returns

People

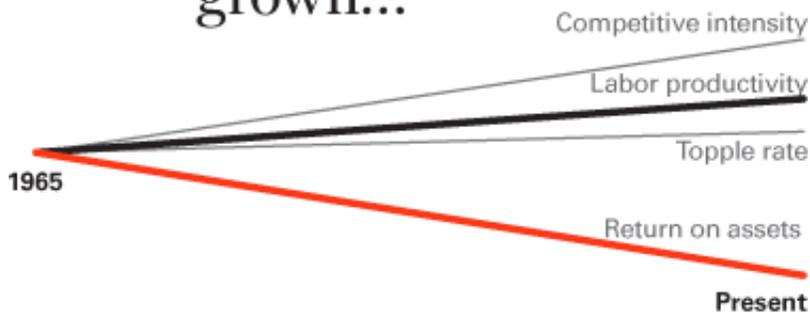
Consumer Power. Consumer survey gauging behaviors and attitudes regarding product choice, access to information about vendors, and other indicators

Brand Disloyalty. Consumer survey measuring willingness to switch brands, tendency to compare prices, consultations with friends about brand use, and other indicators

Returns on Talent. Compensation gap between more and less creative occupational groups

Executive Turnover. Number of top managers leaving U.S. companies

If U.S. workers' productivity has grown...



...why has ROA dropped?

Elements of the Big Shift

The first, foundational wave in the Big Shift consists of the extraordinary changes in digital infrastructure that enable vastly greater productivity, transparency, and connectivity. Consider how companies can use digital technology to create ecosystems of diverse, far-flung users, designers, and suppliers in which product and process innovations fuel performance gains without introducing too much complexity.

The second wave involves the increasing movement of knowledge, talent, and capital. Knowledge flows—which occur in any social, fluid environment where learning and collaboration can take place—are quickly becoming one of the most crucial sources of value creation. Facebook, Twitter, LinkedIn, and other social media foster them. Virtual

communities and online discussion forums do, too. So do companies situated near one another, working on similar problems. Twentieth-century institutions built and protected knowledge stocks—proprietary resources that no one else could access. The more the business environment changes, however, the faster the value of what you know at any point in time diminishes. In this world, success hinges on the ability to participate in a growing array of knowledge flows in order to rapidly refresh your knowledge stocks. For instance, when an organization tries to improve cycle times in a manufacturing process, it finds far more value in problem solving shaped by the diverse experiences, perspectives, and learning of a tightly knit team (shared through knowledge flows) than in a training manual (knowledge stocks) alone.

Knowledge flows can help companies gain competitive advantage in an age of near-constant disruption. The software company SAP, for instance, routinely taps the more than 1.5 million participants in its Developer Network, which extends well beyond the boundaries of the firm. Those who post questions for the network community to address will receive a response in 17 minutes, on average, and 85% of all the questions posted to date have been rated as “resolved.” By providing a virtual platform for customers, developers, system integrators, and service vendors to create and exchange knowledge, SAP has significantly increased the productivity of all the participants in its ecosystem.

The good news is that strong foundational technology is enabling much richer and more diverse knowledge flows. The bad news is that mind-sets and practices tend to hamper the generation of and participation in those flows. That is why we give such prominence to them in the second wave of the Big Shift. The number and quality of knowledge flows at a firm—partly determined by its adoption of openness, cross-enterprise teams, and information sharing—will be key indicators of its ability to master the Big Shift and turn performance challenges into opportunities. The ultimate differentiator among companies, though, may be a competency for creating and sharing knowledge across enterprises.

Growth in intercompany knowledge flows will be a particularly important sign that firms are adopting the new institutional architectures, governance structures, and operational practices necessary to take full advantage of the digital infrastructure.

The initial findings from our research indicate a correlation between the rapidly growing use of social media and the increasing knowledge flows between organizations. Worker passion also appears to be an important amplifier: When people are engaged with their work and pushing the performance envelope, they seek ways to connect with others who share their passion and who can help them get better faster. Self-employed people are more than twice as likely to be passionate about their work as those who work for firms, according to a survey we conducted. This suggests a potential red flag for institutional leaders—companies appear to have difficulty holding on to passionate workers.

The final wave reflects how well companies are exploiting foundational improvements in the digital infrastructure by creating and sharing knowledge—and what impacts those changes are having on markets, firms, and individuals. For now, institutional performance is almost universally suffering in the face of intensifying competition. But over time, as firms learn how to harness the digital infrastructure and participate more effectively in knowledge flows, their performance will improve.

Differences in approach between top-performing and underperforming companies are telling. As some organizations participate more in knowledge flows, we should see them break ahead of the pack and significantly improve overall performance in the long term. Others, still wedded to the old ways of operating, are likely to deteriorate quickly.

Closing the Performance Gap

Our research findings highlight the stark performance challenges for companies. What's more, the data suggest that unless firms take radical action, the gap between their potential and their realized opportunities will grow wider. That's because the benefits from the modest productivity improvements that companies have achieved increasingly accrue not to the firm or its shareholders but to creative talent and customers, who are gaining market power as competition intensifies.

Until now, companies were designed to get more efficient by growing ever larger, and that's how they created considerable economic value. The rapidly changing digital infrastructure has altered the equation, however: As stability gives way to change and uncertainty, institutions must increase not just efficiency but also the rate at which they learn and innovate, which in turn will boost their rate of performance improvement. "Scalable efficiency," in other words, must be replaced by "scalable learning." The mismatch between the way companies are operated and governed on the one hand and how the business landscape is changing on the other helps explain why returns are deteriorating while talent and customers reap the rewards of productivity.

So, how can companies narrow the growing gap between the performance promised by digital technology and their actual financial results? Just as twentieth-century firms discovered how to harness then-new energy, transportation, and communication infrastructures to become bigger and more efficient, today's firms must make the most of the digital infrastructure. This requires innovations at the institutional level that better position organizations to succeed both during the current recession and after the economy recovers. By developing diverse relationships across enterprises, firms can accelerate performance improvement as they add participants to their ecosystems, expanding their learning and innovation—much as SAP has done with its Developer Network.

Companies must therefore design and then track operational metrics showing how well they participate in knowledge flows. For example, they might want to identify relevant geographic clusters of talent around the world and assess their access to that talent. In addition, they might want to track the number of institutions with which they collaborate to improve performance.

In contrast to the twentieth century—when senior management decided what shape a company should take in terms of culture, values, processes, and organizational structure—now we'll see institutional innovations largely propelled by individuals, especially the younger workers, who put digital technologies such as social media to their most effective use. But management can play an important supporting role: Recognize that passionate employees are often talented and motivated but also tend to be unhappy, because they see a lot of potential for themselves and for their companies but can feel blocked in their efforts to achieve it. Identify those who are adept participants in knowledge flows, provide them with platforms and tools to pursue their passions, and then celebrate their successes to inspire others. • • •

Performance pressures will continue to increase well past the current downturn. As a result, leaders must move beyond the marginal expense cuts they might be focusing on now in order to weather the recession. They need instead to be ruthless about deciding which assets, metrics, operations, and practices have the greatest potential to generate long-term profitable growth and shedding those that do not. They must keep coming back to the most basic question of all: What business are we really in?

It's not just about being lean; it's also about making smart investments in the future. One of the easiest but most powerful ways firms can achieve the performance improvements promised by technology is to jettison management's distinction between "creative talent" and the rest of the organization. All workers can continually improve their performance by

engaging in creative problem solving, often by connecting with peers inside and outside the firm. Japanese automakers used elements of this approach with dramatic effects on the bottom line, turning assembly-line employees from manual laborers into problem solvers.

Our Research

We pulled together four decades' worth of data from more than a dozen sources, designed and conducted four surveys, and created five proprietary methodologies to compile 25 metrics into three indexes representing 15 industries. Architects of current “gold standard” indexes were consulted throughout the development process. For a close look at our methodologies and data—as well as a full discussion of our findings—go to www.deloitte.com/us/bigshift.

At the end of the day, the Big Shift framework puts a number of key questions on the leadership agenda: Are companies organized to effectively generate and participate in a broader range of knowledge flows, especially those that go beyond the boundaries of the firm? How can they best create and capture value from such flows? And, most important, how do they measure their progress navigating the Big Shift in the business landscape? We hope that the Shift Index will help executives answer those questions—in these difficult times and beyond.

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John Hagel III is Founder and Chairman of the Deloitte Center for the Edge, a research center based in Silicon Valley. A long-time resident of Silicon Valley, he is also a compulsive writer, having written 7 books. His latest, with John Seely Brown and Lang Davison, is *The Power of Pull: How Small Moves, Smartly Made, Can Set Big Things in Motion*.

John Seely Brown, coauthor of *A New Culture of Learning* and *The Power of Pull* as well as many other books and articles, is a visiting scholar at the University of Southern California and independent cochair of the Deloitte Center for the Edge. He was formerly the chief scientist of Xerox and director of its Palo Alto Research Center.

Lang Davison (langdavison@deloitte.com) is the executive director.

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