

The Big Shift

Why It Matters

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[Measuring the forces of long-term change: The 2009 Shift Index](#)

The Big Shift: Why It Matters

Most analysts and commentators understandably focus on the current economic downturn, trying to assess how deep it will go and how long it will last. At the same time, most of us would acknowledge we are also in the midst of a much longer-term, more pervasive shift in how we do business and how we build relationships, one that cuts across both our professional and personal lives. Many observers have sought to profile facets and slices of this Big Shift – everything from open innovation to offshoring – but few have attempted to describe, much less quantify, the full scope of this profound shift.

Why does this matter? Well, as we shall see, **the Big Shift has dramatically intensified competitive pressures on firms over decades. Firms have so far failed to respond successfully to these mounting performance pressures.** It is imperative that we make sense of this long-term trend. What is driving these performance pressures? Why have firms been so unsuccessful in responding to these pressures?

Making sense of the current situation – to understand the deep structures and dynamics that are shaping our broader professional and social environments – is helpful, but it certainly not sufficient. We need roadmaps that will help us to build on this understanding and make progress by improving long-term performance on a wide range of dimensions. This paper will provide a brief overview of some our recent research into both the nature of the long-term performance pressures and the specific approaches required to address these performance pressures successfully. **In brief, we hope to make sense of the long-term changes unfolding around us and help all of us make progress by turning these changes from challenges into opportunities.**

Quantifying the performance challenge

To help managers in this decidedly challenging time, we have developed an index to measure the changes that have had the biggest effect on business over the past five decades. Our first release of this *Shift Index* highlights a core performance challenge for the firm.

- **The return on assets (ROA) for U.S. firms has steadily fallen to almost one-quarter of 1965 levels at the same time that we have seen continued, albeit much more modest, improvements in labor productivity.**
- **The ROA performance gap between winners and losers has increased over time, with the “winners” barely maintaining previous performance levels, while the losers experience rapid deterioration in performance.**

- The “topple rate,” at which big companies lose their leadership positions, has more than doubled, suggesting that winners have increasingly precarious positions.
- U.S. competitive intensity has more than doubled during the last 40 years.
- While the performance of U.S. firms is deteriorating, the benefits of productivity improvements appear to be captured in part by creative talent, which is experiencing greater growth in total compensation. Customers also appear to be gaining and using power as reflected in increasing customer disloyalty.
- The exponentially advancing price/performance capability of computing, storage, and bandwidth is driving an adoption rate for our new “digital infrastructure”¹ that is two to five times faster than previous infrastructures, such as electricity and telephone networks.

Given these long-term trends, we cannot reasonably expect a return to normal as the current economic downturn begins to dissipate—on the contrary, all long-term trends point to a continued erosion of performance, and continuing performance pressure.

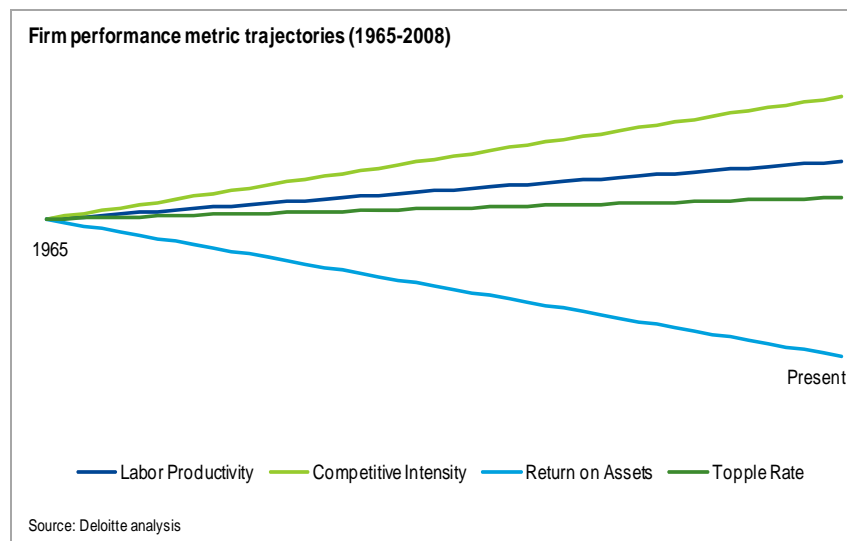


Exhibit 1: While U.S. workers’ productivity has grown, ROA has dropped

¹ More than just bits and bytes, this digital infrastructure consists of institutions, practices, and protocols that together organize and deliver the increasing power of digital technology to business and society.

For today's big institutions, these conclusions underscore a performance challenge on two levels. At the first level, labor productivity is improving at a rate far slower than the underlying increase in performance of our digital infrastructures. The gap between the potential performance made possible by digital technology and actual financial results is steadily widening.

At a second level, firm performance continues to deteriorate as competition intensifies, driven by the spread of a new digital infrastructure and public policy initiatives that reduce barriers to entry and barriers to movement. In other words, firms are failing to capture the benefits for themselves or for their shareholders of even the modest productivity improvements they have achieved. These benefits instead appear to be captured increasingly by creative talent and customers, who are gaining more market power as competition intensifies.

Simply put, firms are failing to achieve the productivity improvements made possible by the new digital infrastructure even as the modest productivity improvements they have achieved get sucked out of the firm by increasingly powerful constituencies – talent and customers.

Our institutional leadership, preoccupied with short-term circumstances, events, and incentives, has failed to notice the deeper changes taking the corporate sector ever further into difficulty. Cyclical recovery in the economy may again make the symptoms less immediately apparent but the underlying trends appear to be relentless in their forward march.

How do we reverse this secular trend? For precedent and inspiration we might look to the generation of companies that emerged in the early 20th century. As Alfred Chandler and Ronald Coase later made clear, these companies discovered how to harness the capabilities of newly emerging energy, transportation, and communication infrastructures to generate efficiency at scale—to get ever more productive as they got bigger.

Today's companies must make the most of our own era's new infrastructure through institutional innovations driven by shifting the rationale for the firm from scalable efficiency to scalable learning. These institutional innovations offer the promise of generating greater productivity improvement from our continually evolving digital infrastructure. Even as competition continues to intensify, the substantially greater economic value created should make it easier for companies and their shareholders to capture their fair share. Only then will the Shift Index turn from an indicator of corporate decline to one reflecting powerful new modes of economic growth.

The deep dynamics of the Big Shift

The Shift Index consists of three indices designed to capture three waves of long-term, deep change. By quantifying these forces we seek to help institutional leaders steer a course for “true north,” while helping minimize distraction from the short-term events that compete for their daily attention. Rather than simply reacting to events, institutional leaders will be better positioned to anticipate the changes that will make the greatest difference in terms of success or failure. While this Shift Index offers rich insight in its first release, its value will increase over time as the broader trajectory and pace of change can be more clearly defined for each metric

Wave One – Building the Foundations

The first wave of change involves the rapid, unflagging evolution of a new digital infrastructure and parallel, magnifying shifts in global public policy that have reduced barriers to entry and movement. These foundational forces, playing out over the last five decades, catalyze and contextualize the many other changes occurring in nearly every domain of contemporary life. As a result, the changes in these foundational forces provide powerful leading indicators of the deep changes that will be playing out over time in other waves of the Big Shift.

“Normal” may in fact be a thing of the past. Trends set in motion decades ago are fundamentally altering the global landscape as **a new digital infrastructure, built on the sustained exponential pace of performance improvements in computing, storage, and bandwidth, progressively transforms our business environment.** This infrastructure consists of institutions, practices, and protocols that together organize and deliver the increasing power of digital technology to business and society.

While the core technologies underlying previous disruptions—the Bessemer steel process, the Siemens electrical generator, the automobile—all had one big performance breakthrough and then very modest performance improvements thereafter, today's core technologies continue to evolve at an exponential rate. As they do, the discontinuities that in the past occurred infrequently now erupt on a continuous basis, driven by a digital infrastructure that shows no prospect for stabilization.

At the same time, there has been a **parallel trend over the past sixty years for public policy to move in the direction of economic liberalization around the world.** While this trend could reverse at any time (and there are some disturbing signs of a gathering backlash both in the US and abroad), it is remarkable how sustained and widespread this trend has been.

The combination of these two trends has significantly reduced barriers to entry and barriers to movement on a global scale. This in turn has intensified competition and increased economic pressures on all firms.

The **Foundation Index** quantifies and tracks the rate of change in these foundational forces. Key metrics include the change in performance of the technology foundations of the digital infrastructure, growth in the adoption rate of this infrastructure and a sub-index measuring product and labor market regulation in the economy.

Wave Two – Unleashing Richer Flows of Knowledge

The second wave of change is characterized by increasing flows of capital, talent, and knowledge across geographic and institutional boundaries. **In this wave intensifying competition and the increasing rate of change precipitated by the first wave shifts the sources of economic value from “stocks” of knowledge to “flows” of new knowledge.** In this rapidly changing world, our stocks of knowledge (what we know) obsolesce more quickly and success depends increasingly on our ability to tap into expanding and diverse flows of knowledge to more rapidly refresh our depleting stocks of knowledge. While these knowledge flows are enhanced and enriched by the digital infrastructure, the most valuable knowledge flows – those that result in new knowledge creation rather than simple transfers of well-codified existing knowledge – still most often occur in physical space through face to face interactions. In this rapidly changing world, there is far more value in a tightly knit team or community of practice bringing together different experiences and views of the problem to solve a new performance challenge than in reading a training manual.

The metrics in the **Flow Index** capture physical and virtual flows as well as the amplifiers—such as how passionately engaged employees are with their jobs and social media use—that result from and magnify the effect of the digital infrastructure. Given the slower rate with which social and professional practices change relative to the digital infrastructure, this index will likely lag the Foundation Index. It will be extremely helpful to track the degree of lag over time for specific elements of knowledge flows – is it increasing or decreasing?

Wave Three – Effectively Addressing the Performance Challenge

The third wave of the Big Shift focuses on the ability to transform challenge into opportunity. This will ultimately require a profound re-thinking of our institutional architectures and daily practices. What worked so well for us in the past, and created substantial wealth creation in the early to mid twentieth century, now is likely to become an obstacle for harnessing the full potential of the knowledge flows unleashed

by the digital infrastructure and economic liberalization. **This wave, still in its earliest stages of gathering force, offers us the potential for the first time to turn the diminishing-returns experience curve into an increasing-returns collaboration curve.** Creation spaces will provide powerful platforms to drive this transformation. In the process, we will move from scalable efficiency to scalable peer learning as the primary rationale for our institutions.

Over time, these innovations will enable firms to develop and adopt new ways of creating and capturing wealth in the digital era. Initial deterioration in shareholder value and ROA will eventually improve as firms harness the foundational and flow forces of the first two waves of change and accelerate their rate of performance improvement.

The **Impact Index** is for that reason a lagging indicator reflecting the impact of the deep changes playing out in the first two waves on the performance of the firm and equity markets, consumer choice, and the value captured by talent. As companies exploit foundational improvements in the digital infrastructure by creating and sharing knowledge, their performance will improve.

Shift index indicators		
Impact Index	Markets	Competitive Intensity: Herfindahl-Hirschman Index Labor Productivity: Index of labor productivity as defined by the Bureau of Labor Statistics Stock Price Volatility: Average standard deviation of daily stock price returns over one year
	Firms	Asset Profitability: Total ROA for all US firms ROA Performance Gap: Gap in ROA between firms in the top and the bottom quartiles Firm Topple Rate: Annual rank shuffling amongst US firms Shareholder Value Gap: Gap in the TRS ¹ between firm in the top and the bottom quartiles
	People	Consumer Power: Index of 6 consumer power measures Brand Disloyalty: Index of 6 consumer disloyalty measures Returns to Talent: Compensation gap between more and less creative occupational groupings ² Executive Turnover: Number of Top Management terminated, retired or otherwise leaving companies
Flow Index	Virtual Flows	Inter-firm Knowledge Flows: Extent of employee participation in knowledge flows across firms Wireless Activity: Total annual volume of mobile minutes and SMS messages Internet Activity: Internet traffic between top 20 US cities with the most domestic bandwidth
	Physical Flows	Migration of People to Creative Cities: Population gap between top and bottom creative cities ² Travel Volume: Total volume of local commuter transit and passenger air transportation ³ Movement of Capital: Value of US Foreign Direct Investment inflows and outflows
	Amplifiers	Worker Passion: Percentage of employees most passionate about their jobs Social Media Activity: Time spent on Social Media as a percentage of total Internet time
Foundation Index	Technology Performance	Computing: Computing power per unit of cost Digital Storage: Digital storage capacity per unit of cost Bandwidth: Bandwidth capacity per unit of cost
	Infrastructure Penetration	Internet Users: Number of people actively using the Internet as compared to the US population Wireless Subscriptions: Percentage of active wireless subscriptions as compared to the US population
	Public Policy	Economic Freedom: Index of 10 freedom components as defined by the Heritage Foundation

1. TRS – Total Return to Shareholders
 2. Creative occupations and cities defined by Richard Florida's "The Rise of the Creative Class." 2004
 3. Measured by the Bureau of Transportation Statistics Transportation Services Index
 Source: Deloitte analysis

Exhibit 2: The Shift Index consists of three indices that quantify the three waves of the Big Shift - Foundation Index, Flow Index and Impact Index - each measured by a set of indicators.

Shift Index findings

Our initial development of the Shift Index focused on the US economy and US industries. Subsequent releases will broaden the index to a global scope and provide a diagnostic tool to help assess the performance of individual companies relative to a set of firm-level metrics.

The choice of metrics reflected a robust selection process. Many metrics are directional proxies chosen in the absence of ideal alternatives. Some are drawn from secondary data sources and analytical methodologies; some are proprietary. While the data reveals significant correlations across metrics—consistent with the underlying logic of our theoretical framework—the findings are suggestive. We have not attempted to prove causality given the limitations in the ability to generate data to directly and tightly measure many of the deep changes occurring around us, but we are hopeful that the

Shift Index will become a catalyst for a broad set of research to test and refine our findings.

For a much deeper look at our methodology and data—as well as a full discussion of our findings—please see [The 2009 Shift Index Report](#).

Overall, the Shift Index suggests that the deep changes in the Foundation Index continue to move at a faster pace than the changes in either Flow or Impact Indices. The trend line for changes in Foundation metrics has a much steeper slope of 7.83 relative to the slope of 5.95 measuring change for Flow metrics or and the slope of 1.93 for Impact metrics.

This is one important way to track where we are in the Big Shift. We would expect that countries and industries in the earliest stage of the Big Shift will see the highest rates of change in the Foundation Index. Over time, as the Big Shift gathers momentum and pervades broader sectors of the economy and society, we would expect to see the rates of change in the Flow and Impact Indices pick up speed while the rate of change in the Foundation Index may begin to show signs of slowing down.

The current findings suggest that we are at best in the early to middle part of the second wave. The rapid changes in foundations and knowledge flows are gathering momentum, but our firms, designed for another era and an earlier generation of infrastructure, have had difficulty coping with the mounting pressures generated by these changes.

Foundation Index

The Foundation Index has increased at a 10 percent compound annual growth rate (CAGR) since 1993, and tells the story of a swiftly moving digital infrastructure propelled by unremitting price performance improvements in computing, storage, and bandwidth that show no signs of stabilizing. **Our findings show that the rate of change in the performance of the technology building blocks substantially exceeds the rate of change in the two other foundational metrics – adoption rates and public policy shifts. It remains the primary driver of all the other deep changes.**

Public policy remains the wild card. There is considerable risk that a policy backlash driving increasing barriers to entry and barriers to movement may gain force in response to the intense pressures of the current economic downturn. The Shift Index will monitor this trend over time relative to the changes in the other foundations.

Flow Index

The Flow Index has increased at a seven percent CAGR since 1993, although the trend analyses are limited here by the earliest dates for which data is available.

The creative classes Richard Florida identified as the driving force for economic development continue to increasingly congregate in concentrated “spikes” of talent. Increasing numbers of creatives are fleeing the confines of the firm, as well. This creative talent is the most passionate about their work, and most likely to participate in knowledge flows relative to their less passionate peers.

The face to face interactions that drive the most valuable knowledge flows—resulting in new knowledge creation—are difficult, maybe even impossible to measure directly. Social media use, conference and web-cast attendance, professional information and advice shared by telephone and in lunch meetings all provide suggestive proxies of various kinds of knowledge flows. Our Shift Index surveys establish a baseline of these activities and indicates that social media such as Facebook may be expanding inter-firm knowledge flows. Future surveys will quantify the magnitude and pace of change of these important flows.

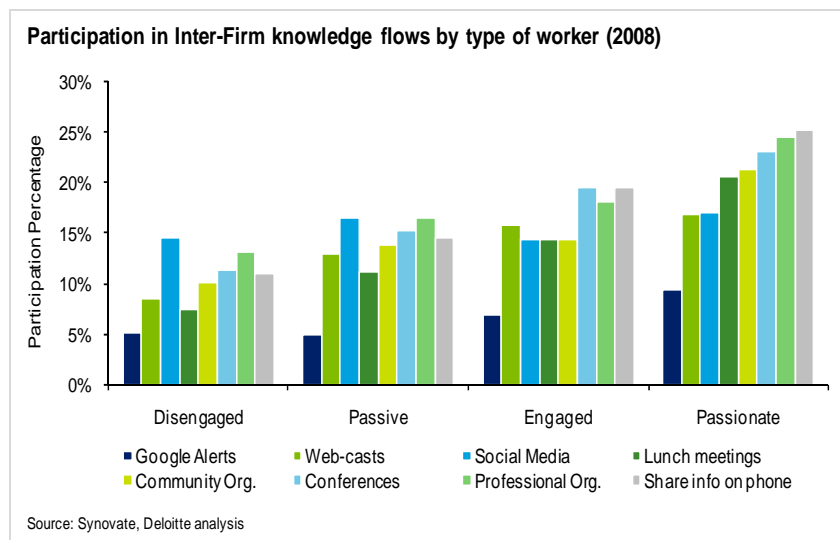


Exhibit 3: Workers who are passionate about their jobs are more likely to participate in knowledge flows and generate value for companies

Impact Index

The Impact Index has experienced a 2.4 percent rate of change since 1993, telling the story of intensifying competition taking its toll on corporate performance despite a steady rise in labor productivity across all the industries in our study. Consistent with our view that the new digital infrastructure creates the potential for greater productivity improvements, it is striking that the Technology and Telecommunications industries – the ones most heavily involved in defining and deploying the digital infrastructure - have led the pack in terms of productivity improvement.

At the same time the economic environment has become considerably more unstable, as shown by increases in the topple rate at which companies lose their leadership positions, a doubling in stock price volatility since 1972, and growing divergence between winners and losers, as measured by both shareholder value creation and ROA.

Meanwhile, creative talent continues to capture increasingly disproportionate returns in terms of total compensation relative to the rest of the labor force. These increases in returns to creative talent appear to be correlated to an acceleration of growth of the most creative cities. On the customer side, new generations entering the marketplace appear to be more willing to exercise their market power to switch to products and services that more effectively meet their needs, putting greater pressure on vendors.

The growing power of creative talent and customers as competition intensifies rises helps to resolve the mystery of why ROA is declining so markedly at the same time that productivity improvements continue to occur. The answer is not to find ways to squeeze creative talent and customers in a zero sum battle to capture more of the existing pie, but rather, as we will see, to discover new ways of organizing and operating to more effectively create and capture new value.

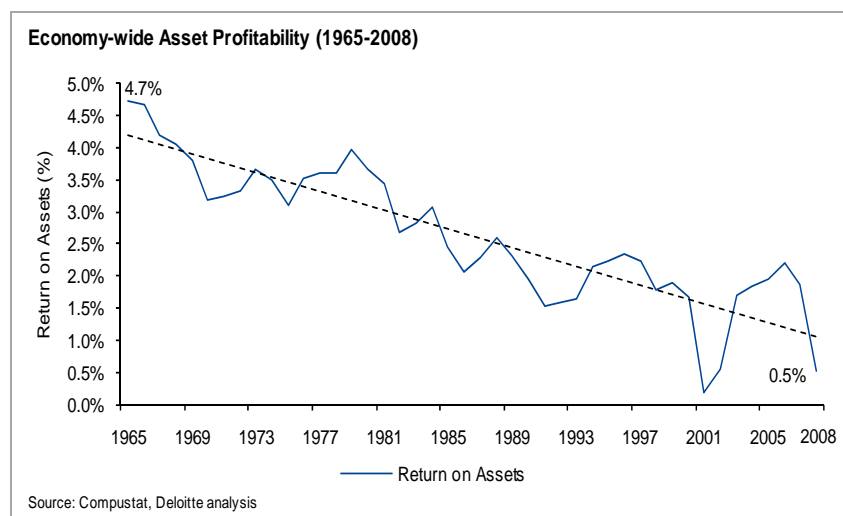


Exhibit 4: Asset profitability for U.S. firms steadily fall more than 75% over the past four decades

The Shift Index suggests that in some industries companies have pursued aggressive M&A strategies. While this may help to drive new scale efficiencies and market power in the short term, these defensive strategies are a diminishing returns game. This tends to be confirmed by the fact that “winners” in the growing performance gap are barely hanging on in terms of sustaining existing levels of performance – even they are finding it very difficult to hold on to the bottom line benefits of productivity improvements.

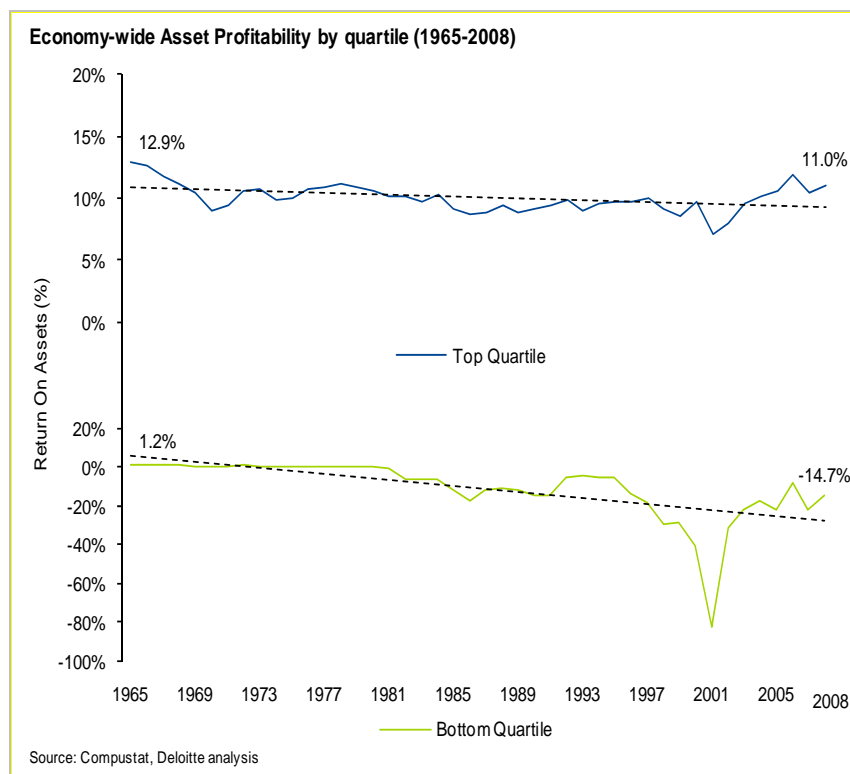


Exhibit 5: Winning companies are barely holding on, while losers are rapidly deteriorating

As an alternative, firms should look to institutional innovations that more effectively harness the performance potential of the digital infrastructure and find ways to unleash the creative potential of the rest of the workforce (not just the “creative” professions). This will generate more than enough economic value to share more fairly with all relevant constituencies.

The growing power of pull

The Shift Index paints a bleak picture for firms. Institutional performance is almost universally suffering in the face of intensifying competition. Even the “winners” are barely hanging on. **These performance trends signify a mismatch between the way most of today’s companies are operated and governed how the business landscape is changing. Something has got to give; the current trajectory is clearly not sustainable.**

To make progress in this world of mounting pressure, we must develop an entirely different set of practices and institutional arrangements that are better equipped to harness the proliferating knowledge flows. If we do this right, we have the potential to turn growing challenges into expanding opportunities.

The roadmap for making progress hinges on understanding that the Big Shift is ultimately about moving from a world of push to a world of pull, from a top-down, centralized, hierarchical, zero-sum, and often bureaucratic approach to doing business to a participative, collaborative, bottom-up, flexible, and often positive sum approach that emphasizes learning over efficiency and talented people over processes and organizational “routines.”

In the early 20th century, when transportation and communication infrastructures were new, we saw the rise of the Chandlerian firm, one that focused on economies of scale. These firms pioneered a sophisticated push-driven approach to mobilizing resources. Detailed push programs designed to ensure that the right resources were delivered to the right place at the right time hinged upon the ability to accurately forecast demands. These push programs and demand forecasts provided the foundation for scalable efficiency, not just in firms but all kinds of institutions, including schools, non-profits, and government organizations.

The new digital infrastructure and public policy liberalization foster more frequent economic and social disruptions, eroding the ability to reliably forecast demand. Alternative approaches to resource mobilization have become increasingly important. **In particular, we see a growing need for pull “platforms” that help all of us make more flexible connections with people and resources in order to more effectively achieve our potential. In fact, three levels of pull – access, attract, and achieve - are becoming increasingly central to our personal and professional success.**

Access – The first level of pull

Access involves the ability to find, learn about, and connect with resources (people, products, and knowledge) on an as needed basis to address unanticipated needs. In the Big Shift, this capability becomes increasingly central to our survival and a pre-requisite for our success. What tools and approaches help us to harness this capability?

Search engines represent the now-classic example of access, helping us find and connect with a broad range of people and resources. But search engines are only the beginning. Using pull platforms, companies in China and India are pioneering ways to provide scalable access across very large networks of thousands of participants.

These emerging platforms are increasingly necessary to deal with the unexpected events that disrupt our carefully crafted push programs. In a world of increasing uncertainty and more frequent disruptions, we must find more effective ways to connect with resources when we need them. This first level of pull therefore follows naturally from the first wave of the Big Shift as barriers to entry and movement erode rapidly.

Scalability of these pull platforms to allow ever greater access hinges on effective modularization, definition of appropriate standards, and shifting to tight specification of outcomes (the what) rather than activities (the how). If done right, these platforms aggregate resources across thousands or even millions of independent participants. They require clear and simple protocols for interaction and dispute resolution, as well as incentive structures that motivate participants to aggregate their resources.

Attract – The second level of pull

In the Big Shift, a second level of pull also becomes valuable – the ability to attract relevant and valuable people and resources you need but didn't know you were looking for, or even that they existed in the first place. Think here of serendipity rather than search. Serendipity often occurs in social networks, where we unexpectedly encounter friends of friends or even total strangers who prove helpful. Most of us tend to think of serendipity as pure luck – there is not much you can do about it, except be prepared when it happens. In contrast, **we see a growing opportunity to shape serendipity** – to increase the probability and quality of serendipitous encounters by the choices we make about where to live and work—by developing specific practices that encourage attraction, and through various forms of preparedness.

Many of the environments fostering serendipity occur in physical space – for example, geographic spikes of talent and conferences. On the other hand, many of the most interesting environments for serendipity are emerging as platforms in virtual space – in particular, social network platforms and various forms of connection platforms like InnoCentive. For these platforms to work, existing institutions will have to find ways to encourage their employees to participate on virtual platforms in ways that integrate their personal and professional lives. Difficult issues like confidentiality of data and potential legal liabilities will need to be addressed in a much more constructive way than has occurred to date.

Serendipity has always been an important part of our lives. Why is it becoming even more critical to our success now? To answer that, we need to return to the second wave of the Big Shift which generates a growing diversity of rich knowledge flows on a global scale. Many of the most valuable knowledge flows tend to surface on relevant edges where the seedbeds for the next wave of innovations are emerging to disrupt our social and business landscape. These innovations percolate on the edge, unseen by most of us, until they erupt suddenly and quickly transform the cores where most of us live. We need to find ways to attract relevant innovators and edge participants to us so that we can discover early windows into the developments that will end up transforming how we live and work. **Sure, serendipity has always been important, but in a world of near-constant disruption, it becomes essential to survival. Without the pleasant surprises of serendipity, we will instead have to cope with the unpleasant shock of unanticipated disruptions that can undermine all we have worked to achieve.**

Achieving our potential – The third level of pull

The first two levels of pull — access and attraction — are ultimately static: they assume that the right people and resources already exist and that the challenge is merely to encounter them. But in a world of mounting pressure and unforeseen opportunities, we need to cultivate a third level of pull – the ability to pull from within ourselves the insight and performance required to more effectively achieve our potential. We need to understand how we can use pull to learn faster and translate that learning into rapidly improving performance, not just for ourselves, but for the people with whom we connect.

This third level of pull builds upon the first two levels of pull – we can use access and attract to more effectively achieve our potential. But it goes one step further and focuses on the techniques required to reach new levels of performance faster and therefore learn faster by working with others.

In a world of growing performance pressure, making our passion our profession can significantly reduce stress. But, as we begin to pursue our passion, we naturally seek out places that can help us to improve our performance more rapidly. In particular, we focus on creation spaces – an emerging set of physical and virtual environments that attract performance-driven teams and help those teams to improve performance even more rapidly by fostering rich interactions both within and across teams. By encouraging the formation of teams and supporting those teams as they tackle difficult performance challenges, creation spaces make it easier for participants to form deep trust-based relationships that can be helpful in accessing tacit knowledge – the knowledge shaped by our experiences that we often have difficulty in articulating but that drives our actions on a daily basis. At the same time, these spaces prove highly scalable because they make it easier for participants in individual teams to communicate with participants in other teams and obtain additional insight in how to tackle challenging problems. More and more teams therefore have an incentive to come together in these

creation spaces and engage in a broader set of interactions as they seek to drive performance to new levels.

While many elements of these creation spaces emerge over time as a result of the interactions among participants, key elements are carefully designed from the outset by the organizers of these creation spaces to ensure that performance improvement initiatives are productively focused and that a critical mass of participants can be mobilized quickly. These creation spaces are carefully crafted to integrate three elements: participants, interactions, and environments. For example, these spaces are designed with very low barriers to entry and participation as well as the potential for rapid advancement in the early stages. The environments effectively integrate deep interactions within teams with a much broader set of interactions as participants reach beyond their teams for additional help. While the environments do include external incentives and reputation mechanisms, much of their success hinges on being able to appeal to the powerful intrinsic motivations that drive people to challenge their limits. These environments also strike a careful balance between challenging participants to get better faster while not overwhelming them on the one hand and boring them on the other. Our forthcoming book on Pull: How Small Moves, Smartly Made, Can Set Big Things in Motion, explores early experiences with creation spaces in much greater detail.

Creation spaces emerge to serve the needs of individuals seeking to improve performance more rapidly but they are also often driven by smaller, more entrepreneurial firms that are seeking new ways to learn together. Early forms of creation spaces are already emerging in such diverse domains as extreme sports, online video games, digital music and software development. SAP's Software Developer Network is one example of an emergent creation space that aggregates 1.4 million participants and fosters the emergence of teams to tackle difficult software design issues. **While these creation spaces are still in an early stage of development, evidence suggests that learning and performance improvement accelerate as more people participate. In fact, creation spaces have the potential to turn the well-known diminishing returns experience curve on its side – delivering increasing returns performance improvement.**

So, why does this matter? Performance improvement has always been desirable and, since we first emerged from the forests, we have been on a quest to achieve the potential that each of us believes is within us. What's any different now? Once again, we must return to the Big Shift to provide context for why this third level of pull is acquiring new urgency and value.

You'll recall that the first two waves of the Big Shift catalyze intensifying competition and growing pressure. The second wave is shaped by the proliferation of knowledge flows, especially within emerging edges and across edge and core boundaries. In the third wave of the big shift, we as individuals and as part of broader institutions begin to

find ways to more effectively participate in these knowledge flows to drive performance improvement. Our institutions, facing growing competitive pressure and shrinking returns, will become much more receptive to exploring and embracing new institutional forms that offer the potential to improve performance more rapidly. These institutional initiatives will in turn help to reinforce and amplify the efforts of individuals to learn faster. **Without this third wave, growing pressure, amplified by proliferating knowledge flows, will rapidly overwhelm us. With this third wave we have the potential of transforming the growing challenges that we all experience into compelling opportunities that can help us to create and capture more and more value.**

The journey ahead

As we reflect on these three levels of pull, one thing becomes clear. **While we may be pursuing each of these levels of pull to some degree today, there is an enormous distance between where we are today and where we need to be in order to fully harness the power of pull and the opportunities created by the Big Shift. Make no mistake. This will not be an easy journey .** The path is only beginning to emerge and there are many risks along the way. If we do not approach the path with some real fear and hesitation, it simply means we haven't fully understood the magnitude of the challenges.

But there is a path that can help us make the journey with greater confidence and likelihood of success. **If we are to succeed on this journey, we must stay focused on integrating three key elements – trajectory, leverage and pace.** Trajectory helps to orient us by providing a long-term direction that can be very helpful in reducing the many tempting distractions along the way. Leverage helps us to amplify our own efforts with the resources and passions of others. Pace ensures that we will find tools and platforms to move as quickly as possible along the path and accelerate our learning in the process.

Unlike the institutional transformations of the 20th century, this journey will begin with individuals distributed throughout the organization. If the task is to re-orient institutions around the challenge of helping each of us to achieve our potential more effectively, we as individuals must begin the journey first. If we have not seen the opportunity created by the Big Shift and begun the journey ourselves, institutions will be in the increasingly untenable situation of pushing us, when they should be pulling us. On the contrary, **we as individuals must find ways to pull the institutions we are involved with away from the models of scalable efficiency into the models of scalable learning.**

Institutional leaders will need to play a critical role in this institutional transformation. Unlike previous generations of institutional innovation, these new organizational architectures cannot be driven from the top down. On the other hand, institutional

leaders can help to define compelling and engaging trajectories for their organization around the notion of accelerated talent development and participating in significant new growth opportunities. This sense of long-term direction can send out a beacon to prompt passionate individuals throughout the firm (and even many outside the firm) to identify themselves as willing to commit to this trajectory. The institutional leaders can then help to mobilize resources and people in the core of the firm to support these passionate individuals who are more often than not distributed on various edges of the enterprise. Powerful new generations of IT platforms can also be deployed to accelerate the pace of various business initiatives organized by institutional leaders to help provide focus to the energy of individuals distributed across and outside the firm.

In part, we will be helped by the fact that institutions are under growing pressure and will be increasingly open to radical change. As we gain more experience and confidence with these efforts, we will naturally expand our horizons and begin to see opportunities to shape broader markets, industries, and social arenas using our newly discovered techniques of pull.

Government policy makers need to understand the techniques of pull and the journey that their citizens and institutions will have to make. Without this deep understanding, there is a strong risk that public policies will block or make an already difficult journey much more challenging. **In a world where comparative advantage hinges increasingly on people achieving their full potential, countries that were once leaders can quickly fall behind. On the other hand, countries that are just now emerging as significant global players can accelerate their progress by harnessing the power of pull.**

Summary

It is understandable that all of us focus on short-term economic events as they play out—particularly in times of crisis and recession. At the same time, however, **it is dangerous to lose sight of the deep changes that will continue to unfold long after the current economic downturn is a memory.** We face a long-term performance challenge that continues to intensify. The steps we take now to address this challenge will not only help us to weather the current economic storms but will position us to create significant economic value in an increasingly challenging business landscape. We believe that the Shift Index can serve as a useful compass and catalyst for the actions required to turn a performance challenge into a performance opportunity.

But the Shift Index and the broader conceptual understanding of the Big Shift is only a beginning. It helps us to make sense of the deep structures and the deep dynamics playing out around us, with a particular focus on performance implications. This is extremely helpful to orient us and focus us on the long-term trends that are shaping our business and social landscape.

On the other hand, as we emphasized at the outset, making sense is only one part of the challenge. Without first making sense of these long-term trends, we cannot hope to make progress in any sustainable way. But to make progress, we must pursue aggressive institutional innovation and master a new set of practices.

The three levels of pull help to provide a roadmap for the practices and institutions required to harness knowledge flows and create significant economic value. More generally, the emphasis on the pivotal role of the individual in catalyzing the next wave of institutional changes helps to remind us that the difficult but rewarding journey ahead begins with each of us. As we discover and pursue our passions, we will see an increasing need to transform our institutions and harness the power of pull to change the world.

John Hagel III
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John Hagel III has nearly 30 years experience as a management consultant, author, speaker and entrepreneur, and has helped companies improve their performance by effectively applying information technology to reshape business strategies. John currently serves as co-chairman of the Silicon Valley-based Deloitte Center for the Edge, which conducts original research and develops substantive points of view for new corporate growth. Before joining Deloitte, John was an independent consultant and writer. Prior to that, he held significant positions at leading consulting firms and companies. From 1984 to 2000, he was a principal at McKinsey & Co., where he was a leader of the Strategy Practice. In addition, he founded and led McKinsey's Electronic Commerce Practice from 1993 to 2000. John has also served as senior vice president of strategic planning at Atari, Inc., and earlier in his career, worked at Boston Consulting Group. He is the founder of two Silicon Valley startups.



John is the author of a series of best-selling business books, including *Net Gain*, *Net Worth*, *Out of the Box* and *The Only Sustainable Edge*. He has won two awards from *Harvard Business Review* for best articles in that publication and has been recognized as an industry thought leader by a variety of publications and professional service firms.

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John Seely Brown is the independent co-chairman of the Silicon Valley-based Deloitte Center for the Edge, which conducts original research and develops substantive points of view for new corporate growth. In addition, he is an Advisor to the Provost and a Visiting Scholar at the University of Southern California, a position he has held since 2003. This position followed a lengthy tenure at Xerox Corporation, where he served as chief scientist (1992-2002) and director of the Xerox Palo Alto Research Center (PARC) (1985-2000). While head of PARC, John expanded the role of corporate research to include such topics as organizational learning, complex adaptive systems, micro electrical mechanical system (MEMS) and Nanotechnology. His research interests include digital culture, ubiquitous computing, service-oriented architectures, global innovation networks and learning ecologies.



In 2009, John was elected as a member of the American Academy of Arts & Sciences in the field of Computer Sciences. He is also a member of the National Academy of Education, a fellow of the American Association for Artificial Intelligence and a trustee of the MacArthur Foundation. He serves on several corporate and advisory boards. John has published more than 100 papers in scientific journals and authored or co-authored five books, including "The Social Life of Information" and "The Only Sustainable Edge." He holds a bachelor's degree from Brown University, a doctorate from the University of Michigan and honorary doctorates from Brown, the University of Michigan, Claremont Graduate University, the University of London's Business School and North Carolina State University.

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Lang Davison is the executive director of the Deloitte Center for the Edge, which conducts original research and develops substantive points of view for new corporate growth.

In this role, Lang defines and guides the marketplace positioning and development of the center's platforms and key activities, and helps represent Deloitte with select clients. He is also responsible for discovering and developing distinctive intellectual capital and distributing it to audiences in new and meaningful ways.



Lang joined Deloitte from McKinsey & Company, where he was editor of its flagship publication, *The McKinsey Quarterly*. During his 14 years at McKinsey, Lang served in a variety of senior communications, content and media roles, leading the development team for mckinseyquarterly.com, which he edited from 1998 to 2003. He was the collaborating writer for the best-selling and critically acclaimed books *Net Gain* and *Net Worth* and for more than 300 articles in *The McKinsey Quarterly*, *Harvard Business Review*, *Financial Times* and *The Wall Street Journal* by thought leaders like Stanford's Robert Sutton, Harvard's Pankaj Ghemawat, McKinsey's Lowell Bryan and Eric Beinhocker, and International Institute for Management Development's Phil Rosenzweig. Under his own byline he has published in *Harvard Business Review*, *The Conference Board Review*, [Deloitte Review](#), and other publications.

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This abstract is part of a larger research effort around the Shift Index conducted by Deloitte Center for the Edge under the leadership of Duleesha Kulasooriya and Tamara Samoylova with the support of Brent Dance, Mark Astrinos, and Dan Elbert. The perspectives on the three levels of pull will be presented in much richer detail in a forthcoming book, *Pull: How Small Moves, Smartly Made, Can Set Big Things in Motion* (Basic Books, 2010), by John Hagel III, John Seely Brown, and Lang Davison