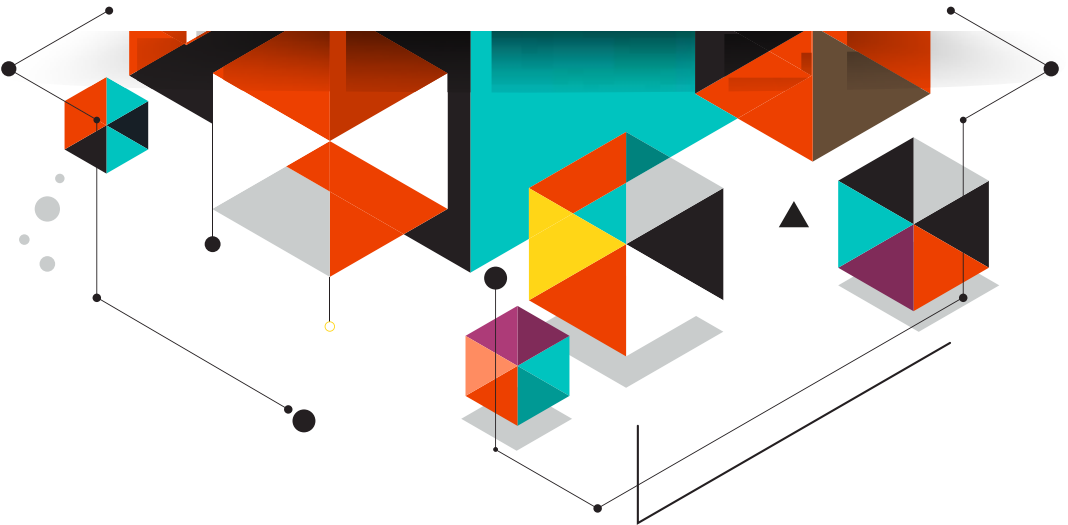


# THE EXPONENTIAL SHIFT: RETHINKING ORGANIZATIONAL BUSINESS MODELS

A REPORT OF THE 2016 ASPEN INSTITUTE ROUNDTABLE ON INSTITUTIONAL INNOVATION

RICHARD ADLER, RAPPORTEUR



# The Exponential Shift: Rethinking Organizational Business Models

*A Report of the 2016 Aspen Institute  
Roundtable on Institutional Innovation*

Richard Adler  
*Rapporteur*



THE ASPEN INSTITUTE

*Communications and Society Program*

Charles M. Firestone

Executive Director

Washington, D.C.

2017

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*This report is written from the perspective of an informed observer at the Aspen Institute Roundtable on Institutional Innovation. Unless attributed to a particular person, none of the comments or ideas contained in this report should be taken as embodying the views or carrying the endorsement of any specific participant at the event.*

# Foreword

For nine years, the annual Aspen Institute Roundtable on Institutional Innovation convened leaders from diverse organizational perspectives to discuss challenges that organizations face as they operate in new business environments characterized by continual change, rapid iterations, global competition and a reliance on digital technologies. The most recent iteration of the annual Roundtable, which took place in Aspen, Colorado in summer 2016, built on the dialogue from the 2015 meeting on exponential business models. This report, written by rapporteur Richard Adler, takes an in-depth look at how organizational change can occur. In addition to focusing on the corporate perspective, it also explores how governmental and non-profit organizations navigate change.

To offer some context, this report delves into the fundamental mechanics of change, using the fascinating example of how General Stanley McChrystal transformed the Joint Special Operations Command (JSOC) to fight more effectively against a network of largely independent bands of insurgents that no longer fought by conventional methods. The account of how he implemented an entirely new operations strategy is very impactful, and elements of his story, such as increasing transparency and empowering individual units, have applicability across all industries.

Along with McChrystal's unique military illustration, this report also features accounts of how large organizations are overcoming hurdles, innovating at the edge and reinventing their leadership and business strategies. National Geographic, Art Basel, T-Mobile, Target and GE all have powerful stories of change that offer valuable lessons for others contending with new strategic pressures.

I encourage you to seek out the earlier volume that precedes this report titled, "*Making the Invisible Visible: Redesigning Business Processes for Exponential Organizations*," and to read the two reports in succession. The reports can be found on the Aspen Institute website, [www.aspeninstitute.org](http://www.aspeninstitute.org). Together, these volumes are a vital tool for designing organizations for exponential growth and success.

## Acknowledgments

On behalf of the Aspen Institute Communications and Society Program, I want to thank the Deloitte Center for the Edge, specifically John Hagel and John Seely Brown, for sponsoring this Roundtable. Without their innovative thinking and leadership, this exchange of ideas would not be possible. I also want to acknowledge the work of Ann Pendleton-Jullian and Stanley McChrystal, who have worked apart from this roundtable to document the innovations that General McChrystal brought to the JSOC, and from whose work this report has greatly benefitted.

Additionally, the Program extends its gratitude to Richard Adler, our rapporteur, for capturing the very nuanced discussions and once again translating them into an engaging, thoughtful report as he has done for every iteration of this roundtable series. As is typical for our roundtables, this report is the rapporteur's distillation of the dialogue. It does not necessarily reflect the opinion of each participant at the meeting, or their employers.

Thanks, also, to Sarah Eppehimer, Project Director, and Tricia Kelly, Managing Director of the Communications and Society Program, for their work on the conference and bringing this report to fruition. Finally, none of the content in this report would be possible without the insights and expertise of the Roundtable participants. We thank them for their valuable contributions to this project.

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June 2017

**THE EXPONENTIAL SHIFT:  
RETHINKING ORGANIZATIONAL  
BUSINESS MODELS**

*Richard Adler*





# **The Exponential Shift: Rethinking Organizational Business Models**

## **A Report of the 2016 Aspen Institute Roundtable on Institutional Innovation**

*Richard Adler*

“I’m all in favor of progress;  
it’s change I don’t like.”

– Mark Twain

For the past nine years, the Aspen Institute Roundtable on Institutional Innovation has been exploring the challenges to corporations and other organizations of operating in the radically changed competitive environment of the 21st century.

The starting premise of the Roundtable, based on the work of John Hagel and John Seely Brown at the Deloitte Center for the Edge, is that the rules of doing business that were the basis for success in the last century are no longer valid. In a relatively stable environment, a company gains competitive advantage by achieving economies of scale that allow it to drive down costs, outperform its competitors and dominate its market. But globalization and the emergence of a radically new information and communications infrastructure have changed the rules. We now live in a “whitewater world”<sup>1</sup> where change is constant and success is no longer dependent on building tightly controlled, durable institutions to scale efficiency, but rather on finding ways to scale learning to enable organizations to adapt to a continuously shifting environment.

Each year, the Roundtable has convened a diverse group of leaders from the private and public sectors to consider the implications of this “big shift.” One conclusion that has emerged from these conversations is that newer organizations that were founded in this new environment have an advantage in operating in ways that are well suited to it. By necessity, start-ups begin with minimal resources and an imperative to organize themselves to address a single challenge. With no track

record or an established structure to rely on, everyone is under pressure to develop a new product and create mechanisms appropriate to the market.

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**We now live in a “whitewater world” where change is constant and success is no longer dependent on building tightly controlled, durable institutions....**

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Some of these start-ups have become “exponential organizations” able to operate and grow faster by an order of magnitude than traditional organizations founded in the last century (or in some cases, even earlier). Even as they have grown, these firms have kept the ability to innovate and to respond quickly to changes in their environment.

These organizations stand in contrast to traditional firms that have been slow to abandon the paradigms on which their past success was based. Many established organizations that are being buffeted by the winds of change are struggling with a structural lag that makes it difficult for them to undertake the transformations they may recognize as necessary. In fact, examples of established institutions that have truly transformed their structure or operations to respond to the challenges of a whitewater world are strikingly rare.

However, a participant in the 2016 Roundtable presented a detailed case study of one venerable institution that, in a time of crisis, did undergo a far-reaching transformation that fundamentally changed not only how it was organized and how it operated but also its basic mission, even while preserving its core values. The unlikely source of this case study was a key component of the U.S. military.

### **The Transformation of JSOC**

In 2003, General Stanley McChrystal assumed command of the Joint Special Operations Command (JSOC), which was responsible for the most elite units of the armed forces—the Navy SEALs, the Army Rangers, the Army Delta Force, the Air Force Special Tactics Squadron and SOAR (Special Operations Air Regiment). At that time, JSOC had

become deeply engaged in counter-terror operations in Afghanistan and Iraq.

Although special ops were the most highly trained and best-equipped units in the military, McChrystal soon recognized that U.S. command and forces had “lost the initiative” in a different kind of war. Trained to fight against conventional forces, they were now confronting a network of insurgents operating in largely independent bands capable of continually adapting to the conditions they were facing. JSOC was organized hierarchically (the military is the quintessential hierarchical organization) and was designed to carry out a limited number of carefully planned operations. Most critically, information gleaned from these operations had to be sent back to intelligence analysts in the U.S. for interpretation, which diminished its operational value. McChrystal decided that Special Operations needed to change to become “flat and fast.”

After gaining the trust of the units under his command by going into the field to get first-hand knowledge of their operations, McChrystal began to take a series of actions designed to give more decision-making authority to individual units and to speed up the process of making use of the raw intelligence gathered by each operation. His first task was to articulate the changes he sought and to identify a new mission: To fight a network, Special Operations needed to become a network. Rather than simply executing individual operations, their mission needed to be to gather actionable intelligence then quickly put it to use. These messages were intended to be compelling emotionally, but also to be ambiguous enough to be adopted locally.

To support the transformation of JSOC, McChrystal introduced a series of new “methods, practices and protocols” designed to change how it operated. To emphasize the critical importance of intelligence and speed up its analysis, McChrystal brought civilian intelligence analysts from Washington and embedded them directly with Special Operations units. The goal was to break down the barriers between the two cultures and introduce a new spirit of shared mission. To increase transparency and encourage greater accountability, he introduced a daily operations and intelligence video teleconference (VTC) that was accessible worldwide to virtually everyone associated with JSOC’s mission whether in the Pentagon or a forward operating base. (Starting small, these VTCs grew to include several thousand daily participants.)

McChrystal tried numerous different strategies and mechanisms to support transforming JSOC into a blend of network and hierarchy and he did this in action. Things that did not work or help were abandoned. In the end, there were half a dozen actions that created the most significant impact. Over time, McChrystal noted, his role shifted from making command decisions to “orchestrating conversations” that led to action. Within two years, JSOC went from conducting 10 operations each month to 300 operations against an increasingly faster and smarter enemy—a truly exponential shift.

### **Navigating a Whitewater World**

The stakes are rarely as high or as urgent for business enterprises as they were for JSOC. One powerful advantage McChrystal had in effecting change was the exigency of battle. As he explained, when a military unit is the target of incoming artillery fire, the only alternative is to move to somewhere else. Exactly where they move is less important than “not staying here.”

To be sure, there are clear indicators that American businesses have “lost the initiative” in the 21st century. According to Deloitte’s Shift Index,<sup>2</sup> over the past 50 years, the return on assets (ROA) of American companies has gone down by 75 percent, and the decline shows no sign of leveling off. During the same time period, the average tenure of a company in the Fortune 500 fell from 75 years to 15 years. Charlie Firestone, Executive Director of the Aspen Institute Communications and Society Program, added that public confidence in large corporations is extremely low, just slightly above that of Congress, which is at the bottom of the list.<sup>3</sup> He also cited the thesis of Moisés Naím and his recent book, *The End of Power*, that in the current volatile environment, power is “easier to gain, more difficult to use and harder to keep” than in the past.<sup>4</sup>

In the face of digital disruption, corporations and other organizations need to rethink their approach for today’s economic realities. Gaurav Tewari, Managing Director of Citi Ventures, acknowledged that “it can sometimes be hard for a 200 year old institution to adapt to a new way of operating” (Citigroup, the parent of Citi Ventures, traces its origin back to the founding of the City Bank of New York in 1812). One way to pursue innovation is to seek out new sources of value

externally as well as internally and includes the possibility of investing in, and pursuing partnerships with, startups. In order to invest, however, Citi must be convinced that an idea can scale up sufficiently to be worth pursuing.

The most formidable obstacle to working in a new way, according to Tewari, is the need to “unlearn” old ways. For example, traditional retail branches have historically defined the public face of a bank. As customers perform an increasingly large portion of their banking transactions through digital channels, the branch of the future might look very different. In response, Citi is starting to explore how to address “higher order” customer needs. A source of inspiration has been the success of ride-sharing startups, which have prospered by recognizing that the traditional taxi industry was underserving the needs of customers for transportation that is convenient, safe and predictable. Citi is attempting to find comparable untapped opportunities in the realm of financial services.

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**The most formidable obstacle to working in a new way is the need to “unlearn” old ways.**

– *Gaurav Tewari*

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Another financial giant, BNY Mellon, is nearly as large as Citigroup in terms of assets under management and has an even longer pedigree: the Bank of New York, founded in 1784 by Alexander Hamilton, is the oldest bank in the U.S. and the 20th oldest in the world. Mellon Financial is not quite as old but is still quite venerable, having been established in Pittsburgh in 1869 by members of the Mellon Family. Caroline O’Connell, Chief Marketing Officer for Investment Services at BNY Mellon, noted that despite these long lineages, the combination of these two institutions, BNY Mellon, is roughly a decade old and includes an amalgam of acquisitions. One of the firm’s biggest challenges is to integrate many different “operating platforms” that it has inherited in order to reach a viable level of scalable efficiency. The firm is highly focused on delivering a single platform strategy, called NEXEN, to achieve scale and transform the business model.

If achieving scalable learning is important for survival, can an organization pursue both goals at the same time? Is it possible to begin to experiment with new ways of working “at the fringes,” even while striving to consolidate the core of the company? O’Connell also raised the possibility that there are certain types of institutions like banks or utilities that people depend on to be efficient and reliable, and wondered how realistic it is for these institutions to seek constant change.

It is not just institutions that have an innate tendency to resist change; so do individuals. Peter Marx, Executive Director at GE Digital and former Chief Technology Officer of the City of Los Angeles, pointed to the importance to workers of being employed as “the elephant in the room.” For many workers, the concept of change is “synonymous with, ‘Will I have a job?’” The reality is that trends like outsourcing and the evolution of technology can lead to the elimination of jobs. Marx cited the example of film editors moving from editing film stock to using computers as being an early example. Not everyone may have the desire or the capacity to adapt to change, and particularly to constant change.

### **Moving from Efficiency to Learning**

What does it take for an organization to transform itself in a fundamental way, and particularly to shift from pursuing efficiency to embracing continuous learning and the constant change that it implies?

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**One necessary ingredient for bringing about change is a willingness to try something new and unproven and be prepared for it to fail.**

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The need to respond to a crisis is one good motivator for change. That certainly was the case in 2003 for General McChrystal, who made it clear to his troops that if they continued to operate in the way they traditionally had, they faced defeat by an enemy that was following a different set of rules. Bringing about deep change like this almost always requires a strong, clear-sighted leader who perceives the need to change that others may not see and has the skill and determination to make it happen.

One necessary ingredient for bringing about change is a willingness to try something new and unproven and be prepared for it to fail. As Marc Spiegler, Global Director of Art Basel, noted, if you want to embrace learning, you have got to accept failure. Yet in many organizations and cultures, failure is not an option.

One field where failure is virtually unavoidable and change is becoming more urgent is medicine. Kelvin Westbrook, President and Chief Executive Officer of KRW Advisors and Chairman of BJC Healthcare (a multibillion dollar nonprofit that operates 15 hospitals and numerous clinics in St. Louis, Missouri), stated that doctors have begun to accept that they are not infallible and are learning to make use of data that gives them a better understanding of what is working and what is not. He cited the example of two surgeons who performed similar operations, one using a surgical set that cost \$10,000, while the other used a \$5,000 set. After data on multiple operations showed that there were no material differences in outcomes, there was a change in practice that reduced overall costs without sacrificing quality.

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**...a wise leader will acknowledge that he got something wrong, describe what he was trying to accomplish, then ask his team to work together to “figure out how to do it better.”**  
– *General Stanley McChrystal*

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Another field where greater availability of data is having an impact is policing. According to Peter Marx, the use of body cameras by police officers is bringing greater accountability for police actions. Smart phones have also helped to change the paradigm of policing: while cops on the beat have traditionally had to operate with very little information, they now have the ability to be much better informed. By tapping into social networks for law enforcement, they can get a more thorough contextual awareness that can help them do their jobs better.

It is also true that the use of smartphones by civilian bystanders to record police actions is bringing more pressure on officers. Some agencies, rather than responding defensively, are recognizing the value of



greater transparency. In June 2016, for example, when a police shooting took place in Fresno, California, the department voluntarily released the body camera video of the incident without waiting for a court order to do so.<sup>5</sup> The result of these dramatic changes, Marx noted, is to “instill equal amounts of optimism and awareness among cops.” They may not worry about keeping their jobs (robocops are still in the distant future), but they do feel that they are potentially being watched by millions of people as they attempt to carry out their duties.

It is noteworthy that some of the most compelling examples of change are coming from three fields—the military, medicine and policing—where the consequences of failure are particularly stark: literally a matter of life and death. General McChrystal noted that even though the military is based on a ranked hierarchy, which is based on an assumption of competence, in an environment in which information flows quickly, everyone will know when a mistake is made. As a result, a wise leader will acknowledge that he got something wrong, describe what he was trying to accomplish, then ask his team to work together to “figure out how to do it better.”

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**Failing faster and smaller at the process level can enable an organization to learn from mistakes and continue to move ahead.**

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Alaina Harkness, a Fellow at the Project on 21st Century City Governance at the Brookings Institution, responded by suggesting that large systems like the military or a big corporation are resilient when they are able to respond appropriately to failures on an individual level. Failing faster and smaller at the process level can enable an organization to learn from mistakes and continue to move ahead.

One way to minimize the impact of mistakes while maximizing opportunities to learn from them is to run a series of smaller experiments rather than trying to engineer large-scale change. Peter Hirshberg, Chairman of the City Innovate Foundation, cited the effort by the City of San Francisco to “Redo Market Street,” one of the city’s major thoroughfares that has long suffered from blight. Rather than

attempting to create a single grand plan for Market Street, the city's planning department invited the public to submit ideas that could be tried out. In 2014, with support from the Knight Foundation, the city held a Market Street Prototyping Festival that attracted approximately 50 different proposals for improving public spaces on the street with winning entries receiving small grants to build and test their ideas.<sup>6</sup>

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**Shifting to this new paradigm requires a new form of leadership: instead of being the person who has all the answers, a leader in a learning environment is the person who has the most powerful questions.**

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Ultimately, making a big shift is a matter of mindset, of seeing learning not as “something that one has to do” but as an adventure that generates new knowledge, new ideas and better ways of doing things. According to Hagel and Brown, the desire to learn is innate in everyone, but too often both schools and other large institutions quell that desire. Students (and workers) are expected to listen to the instructor (boss), follow instructions, and pass the test (do their job), rather than nurturing the passion of the explorer. In a pervasive learning environment, students are not expected to study a book or a manual, but to work together to solve problems. Shifting to this new paradigm requires a new form of leadership: instead of being the person who has all the answers, a leader in a learning environment is the person who has the most powerful questions. (For more on the challenge of leadership, see the final section of this report.)

### **Designing Organizations for Exponential Performance: Reports from the Field**

Start-ups with little past history or set procedures are almost by definition in a situation that requires everyone involved to be constantly solving problems and learning new things. But as organizations grow over time, roles and tasks tend to get defined more rigidly and learning slows down. Is it possible for large, well-established organizations to

re-design their strategies, structures and operations to function more effectively in a whitewater world? Can they become exponential performers? Several Roundtable participants shared their experiences in attempting to pursue this kind of transformation.

### *Digital Transformation at Target*

Target, with more than 1,800 locations and 2016 revenues of \$73.8 billion, is one of the nation's largest retailers. After years of growth, the company was hit by two major setbacks: a large-scale data breach in 2013 that involved the exposure of personal information of as many as 70 million customers, and the failure of the company's expansion in Canada, which ended with the decision in 2015 to close all 133 Canadian stores after they had accumulated billions of dollars in losses. The resulting crisis provided a powerful catalyst for change. But even when everyone recognizes the need for change, it is still necessary to provide people with the tools to bring the change about.

First, Target brought in a new Chief Executive Officer, the first from outside the organization. A major restructuring resulted in the replacement of nearly one-third of the company's core corporate staff and the addition of new people and new capabilities. The company's incentive structure was changed to provide greater rewards for innovation. While these changes were helpful, they were not sufficient to accomplish the transformation that was needed. Most fundamentally, the company's culture had to change. One obstacle was that these changes scared many employees who were worried about their future in the organization. To reinforce the mandate for change, the company rewrote its strategic agenda to communicate what the new beliefs and behaviors needed to be. The new message was to:

- Be bold, aim to lead the market
- Be curious, ask the right questions
- Be accountable, find ways to measure performance
- Be one team, start thinking across the whole organization

These are worthy goals—not all that different from those that General McChrystal set for his Special Operations troops—but according to Casey Carl, Target's Chief Strategy and Innovation Officer, the reality was that the company “didn't know how to be a disrupter.” To

gain this capability, Target hired people who had entrepreneurial experience, partnered with MIT's Media Lab on new projects, established a Digital Advisory Council consisting of tech industry leaders from Google, Orbitz and Match.com, and identified and taught best practices related to the process of innovation.

One big shift for Target has been the recognition that its most significant competitor and the biggest threat to its long-term viability was not its longtime rival Wal-Mart but Amazon. (An indicator of Amazon's importance was a large overlap between Target's customer base and the members of Amazon Prime).<sup>7</sup> Other digital behemoths like Google and Facebook represent emerging threats. Although these companies provide interesting opportunities for partnerships, Target needs to be careful in deciding where to collaborate and where not.

### *Reinventing National Geographic for the Mobile Age*

The National Geographic Society (NGS) is a venerable 129 year-old "iconic" nonprofit institution that has sponsored important scientific explorations and research projects around the globe. Its magazine is familiar to almost every American, and the organization has established a strong television presence beginning in 1964 with a weekly national TV series that eventually led in 2001 to the creation of the National Geographic Channel in partnership with 21st Century Fox. In 2014, the NGS hired Gary Knell as its new Chief Executive Officer. As with Target, Knell was brought in from the outside—he had previously been head of Sesame Workshop and of National Public Radio—with a mandate to update the organization to ensure its survival.

Knell devoted his first 100 days on the job to a listening tour with the organization's employees and stakeholders. He learned that the organization was very siloed, with three distinct centers of power: its magazine, its TV operation and its mission-oriented programs that supported important research and exploration activities that included people like Diane Fosse and the Cousteaus. As a non-profit, the organization's culture was highly risk-averse, with the biggest fear being "wasting money." But the big conclusions that Knell came away with were that print was in decline, and that the organization's mission was being overwhelmed by the economics of its television business even though it was paying for its scientific missions. What he saw was an

unsustainable structure. And although the organization was still profitable, he saw it moving toward future deficits.

His first effort at change was to re-orient the organization around a core of teaching and storytelling. But that was not enough to put the organization on a sustainable path. He concluded that a more radical step was needed in order to ensure that National Geographic would continue to be viable in the new world of “mobile a la carte users” who were unlikely to remain loyal consumers of either print or traditional video programming.

So in September 2015, he announced that National Geographic’s magazines and cable networks would move into a new for-profit joint venture that would be 73 percent owned by 21st Century Fox. In return for giving up control of these assets, the organization received funding that grew its endowment to \$1.1 billion that could be devoted to its core missions.

Leading this transition, Knell acknowledged, was the hardest thing he ever had to do. One challenge was bringing all of the organization’s multiple constituencies—journalists, photographers, scientists, explorers, board members and readers—along on the journey. Each one needed to be communicated with in a different way based on its interests. The main message was that this step was not just a “monetization moment,” but was the best way to ensure the future viability of the organization and its mission. In most instances, he found that 20 percent of each constituency were enthusiastic about the prospect of change, 20 percent were deeply opposed, and 60 percent were in the middle and were persuadable. In some cases, he did a buyout of those who were unwilling to support the plan. Perhaps his biggest single challenge was convincing his board: he met with them eleven times before they agreed to the move.

Today, Knell presides over two different teams on the same campus in Washington, D.C.—the for-profit media company and the nonprofit side that invests in the organization’s mission to support teaching, cartography and natural and environmental science.

### *Moving from Hardware to Software at GE*

General Electric (GE) is almost the same age as National Geographic. It has been in business since 1889 when a group of companies founded

by Thomas Edison were brought together to form the Edison General Electric Company. During the twentieth century, the company became one of the country's largest industrial manufacturers by building what Peter Marx described as "machines that spin"—turbines, jet engines, locomotives, etc. But even while GE was making a lot of money from the sale of equipment, it began to make more money from servicing the machines, and increasingly, it sees its future as selling software that will improve their function.

However, transforming a company with 330,000 employees and annual revenues of more than \$100 billion is a formidable challenge. Just as Google has been successful by selling search rather than algorithms (the digital machinery that underlies search), GE's goal is to shift customers from buying hardware to buying energy or thrust or horsepower. And just as Google played a central role in the growth of the Internet, GE is a key player in creation of the "Industrial Internet" that brings the power of connectivity and analytics to the physical world.

In 2015, GE created GE Digital, a new division with the mandate to assist customers in leveraging digital assets. Among its first products is software that creates "digital twins" of machines that can be used to emulate and optimize their operation. Also in 2015, GE launched Predix, a cloud-based software platform, which it describes as an operating system for the Industrial Internet, "similar to iOS or Android, but built for machines." As noted in last year's Roundtable report,<sup>8</sup> GE's Chief Executive Officer Jeffrey Immelt has stated that he expects the company to be a "top 10 software company" by 2020.

In addition to shifting its focus from hardware to software, GE is also experimenting with new ways of operating its existing businesses. One effort involves streamlining the development cycle for new appliances, a process that typically involves up to four years and \$40 million to launch a new product. To explore new, leaner ways of operating, GE launched a partnership with Local Motors, a small company in Louisville, Kentucky, that has pioneered the open source collaborative design and manufacturing of cars and other types of vehicles. In 2014, the two companies opened a "co-creation space" called FirstBuild in Louisville (home of GE's appliance division) that invited community members to work with designers and engineers to devise novel kitchen appliances, then build them in a "microfactory" and offer them for

sale, with the possibility that successful concepts could be moved to a traditional GE manufacturing facility for mass production.<sup>9</sup> To stimulate new ideas, FirstBuild holds twice-yearly hackathons on topics such as “The Future of Cooking.” The venture’s most successful effort to date has been a small countertop “nugget ice maker” that was funded through a \$2.7 million Indiegogo campaign and is now being sold online under the FirstBuild brand.

### *T-Mobile Goes “Un”*

Transformation is not for the fainthearted, according to Kelvin Westbrook. As a member of the board of T-Mobile, Westbrook has watched that company move from being a second-tier wireless carrier far behind the industry leaders, AT&T and Verizon, to being frequently identified as one of the fastest growing and most innovative companies in its industry. The change began in 2012 with the arrival of John Legere as Chief Executive Officer, whom Westbrook described as a “Pied Piper” who took the company’s existing business plan and “threw it out the window.”

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**Transformation is not for the fainthearted.**

*– Kelvin Westbrook*

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Legere came to T-Mobile after a 20-year career with AT&T, where he learned the telecommunications business, and then a decade with Dell, where he learned about operating in a highly competitive marketplace. One of his first steps as Chief Executive Officer was to eliminate the company’s policy that forbade store employees from having tattoos or piercings, a largely symbolic action designed to signal that business was not going to be “as usual.” He then moved on to the larger task of re-branding T-Mobile as the “un-carrier” by systematically re-making the company’s offerings to target the things that customers liked least about other carriers’ cell phone services: he eliminated multi-year contracts, offered plans with no data limits, and instituted a simple pricing scheme that contrasted sharply with the complex plans of other carriers.

Legere, a charismatic leader who is emphatically non-traditional in appearance and behavior, has been able to bring about these big changes “by giving his employees something to rally around: a big, audacious goal” and also by giving them “the tools to change.” And he keeps upping the stakes. Just recently, he announced that he believed that by 2020, T-Mobile would have more subscribers than AT&T (which currently has 132 million subscribers to T-Mobile’s 67 million).<sup>10</sup> The company’s track record over the past few years suggests that this goal may be obtainable: At a time when the industry has essentially reached saturation, T-Mobile has been adding more than a million new customers each year and has been expanding its subscriber base at an accelerating rate. And since Legere became Chief Executive Officer, the company’s stock price has increased from \$14 to \$64.

Although these stories are impressive, the number of established companies that have successfully gone through a major transformation is still very small. Other organizations have recognized the need to change and have embarked on their own journeys but still have further to go.

### *Art Basel: From Local Flea Market to Global Cultural Entrepreneur*

When Marc Spiegler joined Art Basel in 2007 as co-director, the Swiss-based organization was responsible for putting on two major art fairs each year, one each in Basel, Switzerland and in Miami Beach, Florida. By 2012, when he was promoted to being the global director, it was about to launch a third fair, in Hong Kong. The company had grown from its initial role in staging a “flea market for art” in one city to a major international force in the art market, including a collaboration with Kickstarter to generate funds for dozens of art nonprofits around the world; and the BMW Art Journey Awards for emerging artists. But Spiegler, who had a background as a freelance arts reporter and columnist, realized through painful experience that the organization’s centralized decision-making structure was preventing it from expanding further and reacting quickly, especially outside Europe. Starting in 2015, Spiegler worked closely with his leadership team and reorganized the company to give more power to its regional directors. This allowed it to pursue new initiatives, such as Art Basel Cities, a program intended to support cultural collaborations with cities around the world.



As the organization has evolved, it has shifted focus from simply staging discrete events in different cities to building a global brand that can support a variety of initiatives that serve artists and the galleries and other institutions that support them. Spiegler was able to make this shift without having to experience a crisis, but he speculated that at some point, it might almost be necessary to trigger a crisis to catalyze bigger changes.

### *Corning: Glass Half Full or Half Empty?*

Corning, Inc., founded in 1851, is even older than GE and National Geographic. The company started by making glass lenses for railroad lanterns that would not break in the rain. Today it manufactures a wide range of innovative glass and ceramic products including “Gorilla Glass,” the tough protective glass used for the screens of handheld devices, including the iPhone; ceramic emission control devices for catalytic converters; and, perhaps most notably, high performance optical fibers for broadband networks, which it invented in the late 1960s and of which is still the dominant supplier globally. The company prides itself on its capacity to invent innovative new products and invests approximately 10 percent of its revenues in research and development.

David Morse, Corning’s Executive Vice President and Chief Technology Officer, has seen many changes in his 40 years with the company. But Corning’s core mission of creating new materials that serve significant needs has not changed. The company did experience a major crisis at the turn of the century. During the dot-com boom, the company rapidly expanded its production of fiber optics, and the company’s stock soared to over \$100. But with the dot-com crash in 2000, Corning’s stock price collapsed to just over \$1 per share. The company and its stock has recovered since then, and its revenues and profitability have increased over the past decade.

The biggest challenge today for Corning, according to Morse, is to “bring agility to invention.” The company has invested heavily in computer modeling and now has “a couple of hundred” people involved with modeling projects. As a result, it has been successful in accelerating the process of creating new materials. But the scaling up of their production is still not agile. In several cases, they showed new materials to potential customers who wanted them, but they were not able to

manufacture them quickly enough to meet the demand. In fact, the company is “overrun with inventions” that could be turned into products if they could figure out how to be more agile in manufacturing.

## Lessons Learned

What are the lessons that can be drawn from this disparate set of stories? The Roundtable participants offered some answers.

Heather Rangel, U.S. Technology Sector Leader at Deloitte Tax, pointed out that the employees of an organization need a clear understanding of its mission and its goals if they are going to support and participate in transformative changes. She can see how powerful it is for her clients who belong to truly mission driven companies.

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**...the goal is...to create an organization where continuous adaptation in response to constantly changing challenges and new opportunities is the norm. – Marc Spiegler and John Seely Brown**

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Caroline O’Connell of BNY Mellon noted that a leader can articulate a mission and offer a vision for change, but unless it is authentic, with concrete proof points, it will not have the power to effect a transformation. John Kunzweiler, an independent corporate and public sector advisor, agreed that, ultimately, “everything comes down to the leader” of an organization. But the most effective leader may be someone who is “somewhat crazy,” who has swagger and doesn’t follow normal rules. This certainly applies to John Legere at T-Mobile, and also to Steve Jobs at Apple. Even Jeff Bezos at Amazon has not followed conventional rules. It is noteworthy that all four of the dominant tech companies, the so-called GAFA group of Google, Apple, Facebook and Amazon, have all been led by their founders for much or all of their existence, and they are all companies where saying “it’s not my job” is not acceptable.

Finally, Marc Spiegler and John Seely Brown noted that in a white-water environment of rapid changes, the goal is not just “to make a change” or “go through a transformation” as a one-time event, but

to create an organization where continuous adaptation in response to constantly changing challenges and new opportunities is the norm. If you are going to take exponential change seriously, Brown concluded, you need a structure that will support continuous experimentation, that empowers people to act as they see fit without having to get permission in advance.

### **Is Government Hackable?**

If transformation and continuous innovation are difficult to accomplish in the corporate world, they are even harder to achieve in the public sector. The Roundtable explored the special challenges of working for change within government and tried to identify strategies that might make it possible.

Jennifer Pahlka founded the nonprofit Code for America in 2009 and served since then as its Executive Director, working primarily with cities, counties and states to develop new apps that improve the delivery of their services. In 2013/14, she spent a year as Deputy Chief Technology Officer for the federal government where her main accomplishment was the launching of the U.S. Digital Service in May 2014.

As someone committed to bringing the creativity and disruptive spirit of tech start-ups to the public sector, Pahlka soon learned that there were several fundamental characteristics of government, and of the federal government in particular, that worked against that spirit: First, government workers can always invoke the excuse that “seeking to bring about disruptive change is illegal.” Government agencies are driven by legislative mandates and constrained by budget allocations. In such a context, avoiding failure is a higher priority than pursuing improvements. The problem with this reasoning, Pahlka concluded, is that focusing on avoiding failure actually makes it more likely to happen.

In addition, there is no such thing as a product manager in government who is responsible for making a program work. When Pahlka reviewed existing IT-based applications inside an agency and identified real problems that could be fixed, she was told that the problems did not matter because no one was responsible for improving them. Ironically, government agencies are motivated by neither a drive toward scalable

efficiency (doing more with less) nor toward scalable learning (getting better faster), but rather by the imperative to “do it by the book.” An example is the resistance within government IT shops to moving from traditional “waterfall” processes for software development—an approach that puts all planning up front and “amounts to a pledge not to learn anything while doing the actual work”—to a more modern “agile” approach that is based on successive iterations of development, testing and refinement to deliver the best possible product. Although the private sector has embraced agile development, waterfall development processes are deeply embedded in government IT operations, and there are simply no mechanisms to fund agile approaches.<sup>11</sup>

When she took the job as the country’s Deputy Chief Technology Officer, Pahlka’s goal was “to change the culture of government.” She ended up believing that it was not possible to change culture, but that it was possible to change individuals’ behavior, incentives and sources of inspiration. One of the core beliefs of Code for America was that “every system is hackable” (in the good sense). But during her time in Washington, she concluded that the system of government was not hackable.<sup>12</sup>

Pahlka’s major accomplishment while in Washington was the launch of the U.S. Digital Service (USDS), which represents a deliberate effort to introduce a very different mindset into the operation of government. As is often the case with major innovations, it owes its existence to a crisis: the initial failure of Healthcare.gov and its rescue by a small team of tech experts recruited from the private sector. The singular success of that effort encouraged President Obama to support the establishment of a small group of professionals based in the White House that could “parachute” into large agencies to work on solving tough IT problems. The USDS was deliberately designed to operate according to a set of principles that stood in dramatic contrast to typical government approaches: “make it simple and intuitive...use agile and iterative processes...default to open.” Among the early successes of the USDS, which gave it greater credibility and increased support, were projects for the Veterans Administration (which, interestingly, was an early adopter of agile software development processes) and the Department of Defense.<sup>13</sup>

Digital Service Plays	
<ol style="list-style-type: none"> <li>1. Understand what people need</li> <li>2. Address the whole experience, from start to finish</li> <li>3. Make it simple and intuitive</li> <li>4. Build the service using agile and iterative practices</li> <li>5. Structure budgets and contracts to support delivery</li> <li>6. Assign one leader and hold that person accountable</li> <li>7. Bring in experienced teams</li> </ol>	<ol style="list-style-type: none"> <li>8. Choose a modern technology stack</li> <li>9. Deploy in a flexible hosting environment</li> <li>10. Automate testing and deployments</li> <li>11. Manage security and privacy through reusable processes</li> <li>12. Use data to drive decisions</li> <li>13. Default to open</li> </ol>

Source: [https://playbook.cio.gov/#plays\\_index\\_anchor](https://playbook.cio.gov/#plays_index_anchor)

Pahlka strongly believes in the potential of data, properly used, as a tool to identify and document problems and motivate change. However, although governments are typically “swimming” in data, much of it is irrelevant or not in a usable form. She cited the example of the food stamp program in California (known as CalFresh), which has widely promoted the use of MyBenefits, a web-based app intended to help potential beneficiaries determine their eligibility and apply for coverage. The reality, however, was that the application was almost impossible to use by ordinary people. As a result, California had one of the lowest rates of program participation in the country even though the state was spending a considerable amount of money to promote it. Pahlka found that there was no useful data available on the performance of the MyBenefits system in terms of abandonment rates or other relevant metrics. She discovered that one simple way to capture and communicate the real problems with the system was to simply record someone who was trying and failing to use the system to get benefits, and then show it to high level officials who might be able to do something about it.

Pahlka acknowledged that it does not make sense to try to make everyone in government innovative. But systems can be “bimodal,” and allow innovation to happen even while continuing to carry out all the

mandated functions. (This same lesson could also apply to banks that want to be more innovative but need to maintain reliable systems that do not change rapidly.)

Sometimes the problems to be solved can be very simple: when she worked with the Seattle Police Department to make information about “superutilizers” of the system more easily available, the solution involved providing officers in the field with mobile phones that increased access to the necessary information. The biggest problem in implementing this innovation was helping the new users learn how to open the OtterBox cases that protected their phones!

In making the case for simplicity, Pahlka argued that the most critical applications should be text-based since text represents the lowest common denominator for users. If government is going to “go digital,” it is important to pay attention to who gets privileged and who may be excluded.

Several other Roundtable participants shared their experiences in attempting to bring innovation to the public sector. As Chief Technology Officer for the City of Los Angeles, Peter Marx had to deal with civil servants who were members of five different unions and had an average age in their 50s who were still running a mainframe in their IT operation. Even though mayors or other elected leaders are often strongly motivated to show progress and do good things, the permanent bureaucracy is held back by process and the need for stability. To make progress, it was necessary for Marx to bring in new people who were committed to making changes, and to get the city’s leadership to recognize and reward people for doing good things. The city has been able to measure progress through such things as customer surveys that show that there is more approval and fewer complaints from citizens. Over time, it is possible to change the narrative that “governments are bad and don’t do new things.”

Another obstacle is the lack of agreement on what defines success in government. Kelvin Westbrook noted that St. Louis County, where he lives, includes 90 separate municipalities and each may measure “success” differently. For example, a consultant to the City of St. Louis who was asked to study the big challenges that the city was facing identified as a top priority the ability to move quickly to prevent the city’s football

team from moving. Providing better public services for the poor did not show up on the list of priorities.

According to Alaina Harkness, it is “astounding” how little we know about customer satisfaction in terms of government services and how little we know about the actual impact of the money spent by public agencies. The impact of the failure of for-profit companies to adapt to the Big Shift can be clearly seen in the steady decline in corporate return on assets (ROA). But there is no equivalent statistic to measure government performance. Perhaps the reason is that citizens just don’t care enough: consider the low level of voter participation in elections and the low levels of usage of 311 systems, particularly in low income neighborhoods where better services are most badly needed.

Are there true change agents in government, and if so, who are they? Like Marx, Harkness sees a big gap between the interest in change from political leaders who say they want to make things happen, and the bureaucratic culture of governmental operations that has a vested interest in keeping things running as they are. While bringing in outside consultants is often an effective strategy for initiating change in the private sector, that approach does not work very well in the public sector where established ways of working are deeply entrenched and outsiders are rarely heeded.

Resistance can also come from private companies that have developed strong relationships with government agencies and have built profitable businesses on providing services to them. When the House Oversight and Government Reform IT Subcommittee held a hearing on the performance of the U.S. Digital Service, it heard no protests at all from the agencies with which the USDS had worked, but it did get criticism from traditional IT contractors who complained that these upstarts were threatening their livelihood (even though a substantial majority of large government IT projects, particularly those involving outside contractors, end up in failure<sup>14</sup>). The consultants’ message was, essentially, “Thanks for your innovation, geeks, we’ll take it from here.”<sup>15</sup> (In a similar vein, Peter Marx described getting calls from people who complained that by moving the City of Los Angeles’s web sites to an open source platform that was lower cost and easier to use than proprietary software, he was taking money away from outside contractors.)

Peter Hirshberg also encountered challenges in trying to encourage innovation by the City of San Francisco over nearly a decade. His effort initially focused on expanding access to data that was being created or collected by the city and showing how it could be put to productive use. He began working at the “edge” of government rather than at the core, which would have been more difficult. He started by getting access to data on public transit services and making it available to artists and others who worked with it in a playful, creative way. He has also been experimenting with getting groups of students to interact with government data and figuring out new ways to use it as a form of civics education. The more playful these encounters are, he found, the more engaged people tend to be.

Based on these small successes, he is now attempting to work with core governmental systems. One thing that has changed is that the success of “digitally enabled” services like Uber has created a new sense of competition with traditional public transit services and sparked concern that busses are becoming less relevant to the community. Hirshberg is part of a public/private effort to look at “mobility as a service,” a vision that would integrate the services of transportation service providers (like Uber and Lyft), with traditional public transit, as well as new demand bus services as a single unified system to be optimized. In his experience, the biggest force for change in how government works is “the outside pushing in.”

### **New York City’s Municipal Dashboard**

To track progress toward fulfilling public promises made by New York City Mayor Bill de Blasio, his administration created an app that displays nearly 1000 separate goals ranked according to priority, and indicates whether work toward meeting these commitments is “on track” (green), “off track” (red), or “at risk” (yellow). Several dozen staff members, including deputy mayors, chiefs of staff and other top city officials have access to the app via their smartphones and tablets. Although Mayor de Blasio himself does not use the app, he receives regular reports generated by the app.<sup>16</sup> To date, the app is being used only by city staffers and has not been made available to the public.



Harkness also affirmed the potential value of opening government data to new audiences and new uses, but put more emphasis on getting better access to internal administrative data. For example, finding one individual who appears in multiple governmental systems could be a potential flag to identify a bigger problem, but there is no simple way to do this today.

It seems increasingly likely that tech—in the form of the proliferation of media channels and social networks that reinforce rather than challenge political perspectives—are part of the problem of citizen alienation from government and other institutions. (As Jennifer Pahlka put it, “Tech is destroying respect for authority.”) Now the question is whether tech can be part of the solution to make government more responsive to user needs and more accountable to its customers.

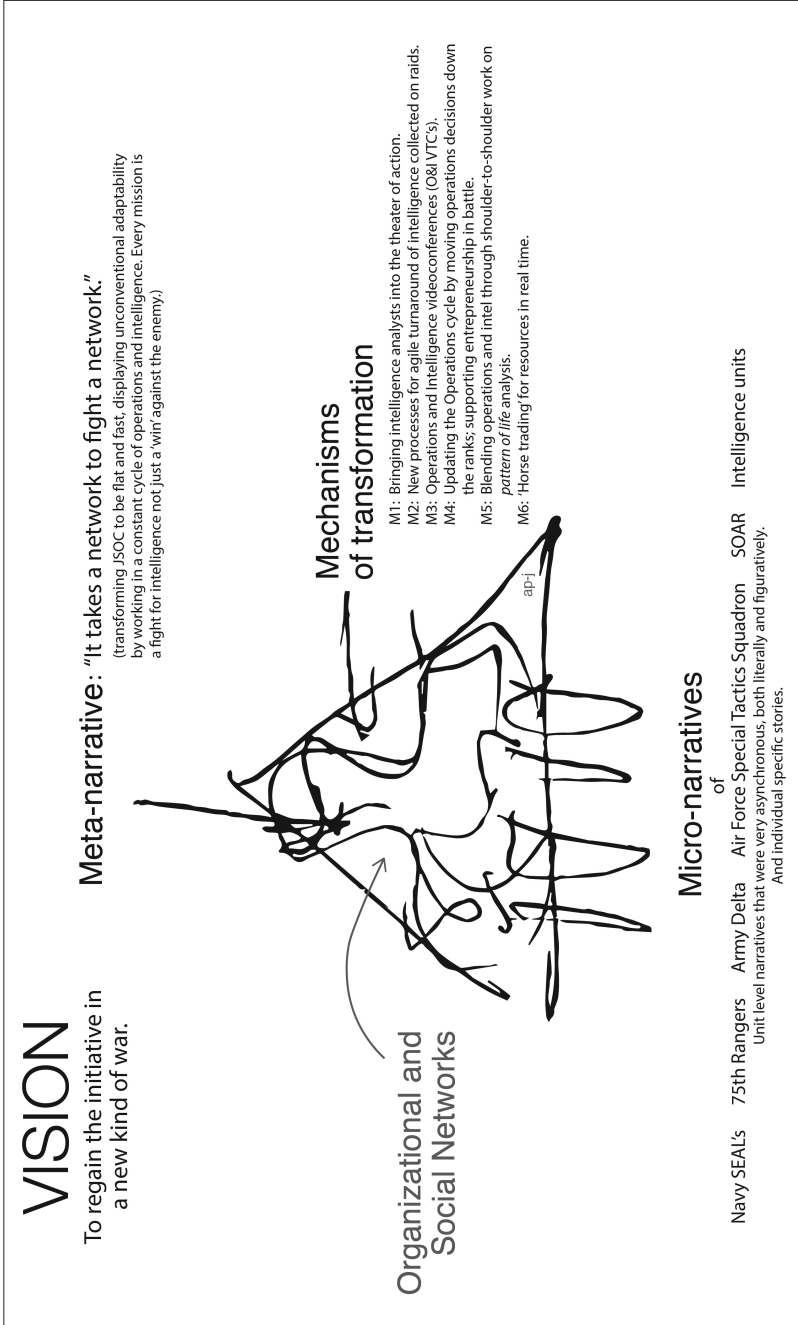
## Understanding the Mechanics of Change

Recognizing the need for change and developing a clear vision of where the change should lead are important steps in bringing about an institutional transformation. And having a committed, charismatic leader is helpful. But while these elements are necessary, they are rarely sufficient to ensure success.

Ann Pendleton-Jullian, architect and Professor at the Knowlton School of Architecture, Ohio State University, has studied and written about the transformation of JSOC by General Stanley McChrystal. In fact, the story of this transformation, based on extensive discussions with General McChrystal and several of his direct commands, is told in a forthcoming book, *Design Unbound: Designing for Emergence in a White Water World* by Pendleton-Jullian and John Seely Brown.<sup>17</sup> Using a conceptual framework that she calls the Change Triangle 3.0, she “unpacks” the elements of McChrystal’s story in terms of the strategies and methods that he used to accomplish his goal of transformation.

The process begins with a *vision*, a high level statement of the change that a leader wants to achieve. In the case of JSOC, the big vision was the goal of regaining the initiative from the enemy in what was, and is, a fundamentally different kind of war, which meant learning to fight in a different way.

Figure 1. CHANGE TRIANGLE 3.0



Source: Ann Pendleton-Jullian

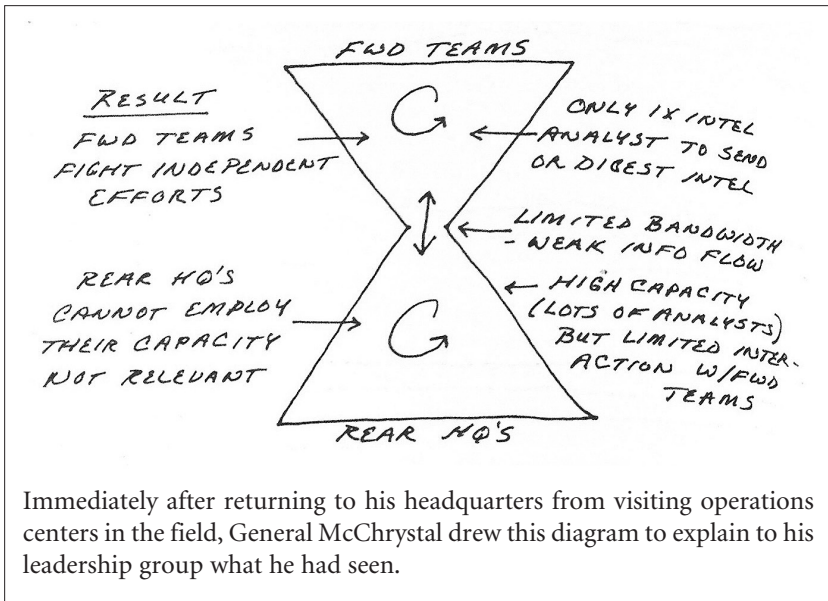
This goal may sound simple, but the process of getting there was not simple or even knowable when McChrystal took command in 2003. It required a deep understanding of *the context*, both external and internal, in which JSOC operated. To understand the external context, McChrystal spent time with his troops, going with them on missions to see first hand what was happening in the field. He soon realized that the nature of the insurgency had changed radically. Rather than being structured in rings of command, with a leader at the center and decentralized, semi-autonomous cells around him, as had been the case in the past, the enemy had evolved into being a network of multiple dispersed actors—“a network of networks” with no center at all. It was also changing and adapting faster than his organization could react.

Equally important was understanding the internal context, the way that JSOC was organized. McChrystal knew that the various special operations troops that made up JSOC—Navy SEALs, Army Delta Force, Army Rangers, Air Force Special Tactics Squadron, SOAR, and the intelligence units—were essentially a series of “tribes” with their own traditions, stories, ways of operating and even languages that bind them together as fighting units. Their focus was on executing discrete operations. To maximize the chances for success, missions were carefully planned, which increased their effectiveness but limited the number of operations they could carry out.

But the biggest problem he saw was structural: the “hourglass” shape of the organization, with the operatives in the field carrying out their missions and collecting large amounts of potentially valuable intelligence information on one side of the hourglass, and on the other side, far away from the action, command and the analysts who received the information and turned it into what was supposed to be actionable intelligence. The large gap between these two key groups all but insured that by the time the intelligence could be fully analysed, it was out of date. In addition, the large geographic gap between the two groups as well as their cultural differences made effective communication between the two cumbersome and slow.

It was not long before McChrystal concluded that “it takes a network to fight a network.” To accomplish his vision of regaining the initiative, he would need to transform the hourglass into a flat and fast operation that would display unconventional adaptability by working in a constant

**Figure 2. GENERAL McCHRYSTAL'S HOURGLASS**



Source: General Stanley McChrystal (via Ann Pendleton-Jullian)

cycle of operations and intelligence. Every mission should not be just a “win” against the enemy but a fight for intelligence. Pendleton-Jullian characterized this as McChrystal’s “meta-narrative,” a large story that communicates the vision to the organization in a way that is emotionally compelling but broad and ambiguous enough that it can be adapted and used by everyone. The meta-narrative enables all levels of an organization to share a compelling goal rather than merely being subjected to a strategic plan. In doing so, it inspires participation in trying to get there. But as a story and not just as a “goal,” a meta-narrative needs to provide corollary texture.

McChrystal understood that whatever their tribal differences, all of his soldiers shared a set of core values—a warrior mentality, the importance of maintaining excellence, the power of brotherhood—that binds them together and provides a tacit meta-narrative foundation. McChrystal added his own high level messages—meta-narratives—that communicated to his troops what the changes he sought would look like in a form that would align with their existing values. At the highest

level, he needed to change the assumption that JSOC was “a strategic organization that carried out occasional raids” to a very different set of assumptions around the new narrative. The way McChrystal put it to his troops, “We’re Rocky Balboa fighting against Apollo Creed. We need to keep hitting our enemy in the midsection so often that they can’t breathe.” This got translated into several specific sub-narratives, or challenges:

1. Their mission was no longer a task to be carried out but a problem to be worked.
2. To fight a network, JSOC needed to transform itself operationally into a flat and fast network. Across its different units, it needed to become “a team of teams.”
3. Their mission was no longer just about shooting, but about fighting to get actionable intelligence in a context in which intel had a rapidly decreasing shelf life.

For these high level messages to be effective, they had to resonate with the micro-narratives that belonged to the different units. *Micro-narratives* are held by the guys on the ground, as individuals and as “tribal” groups. McChrystal had to understand his ops and intel guys. To effect change, he needed to know their stories and tribal narratives that express identity, purpose and practices, that motivate and ultimately drive and define actions. In addition, McChrystal had to have a good understanding of the *organizational and social networks* that tied his group together by transferring stories, supporting actions, and generally driving the organization and its culture.

The actual process of transformation took place through a set of “change mechanisms,” which Pendleton-Jullian defines as “anything that does work in the system.” General McChrystal tried many different mechanisms to change how JSOC operates. If they didn’t work, they stopped using them; if they worked, they improved them. In the end, through a process of trial and error, there were less than a dozen critical ones.

Some of the mechanisms already existed in different forms, but were adopted for use with JSOC. Pendleton-Jullian stressed that these mechanisms did not work alone. Rather, McChrystal was able to achieve

monumental results precisely because of the way these mechanisms interacted with and supported each other.

The six mechanisms that proved most effective were:

1. To break the bottleneck caused by the organization's hour-glass structure, McChrystal brought the intelligence analysts from their workplaces that were far from the battlefield (many worked in Washington, D.C.) and placed them in the theater of operations, where they could collaborate directly with the troops who were obtaining the intelligence materials they worked on. In some cases, analysts were able to watch raids live by video, which made them feel that they were "part of the action."
2. As new, more agile processes shortened turn around time for intelligence analysis, it became possible to speed up the pace of operations. Over time, the number of operations that JSOC could carry out increased from 10 a month to 300 a month. At the same time, the focus of operations shifted from eliminating the enemy to fighting for intelligence that allowed them to fight smarter and more effectively.
3. One of the most dramatic and visible mechanisms for change was the introduction of a daily operations and intelligence video teleconference (O&I VTC) that was open to virtually anyone in the military with an interest in what was happening in JSOC operations, from top leadership to unit leaders in the field. Over time, these VTCs grew to include an audience of several thousand people both in the field and back in the U.S. The purpose of the VTCs was to enable everyone to understand what decisions were being made and why. While not everyone could participate actively in these VTCs, everyone could watch the process of leadership in action, which created a "shared consciousness" that had not previously existed.

McChrystal noted that he did not try to "democratize the strategic decisionmaking process," and did not cut leaders out of the decisionmaking process. Rather, the VTCs democratized information *about* decisionmaking by openly sharing information about what was going on. The process also made failures

more visible, which encouraged accountability and greater initiative-taking by frontline troops by demonstrating that failure was not being punished as long as it was not the result of negligence.

4. It became possible to speed up the entire operational cycle by pushing decisions down the ranks to where the action was taking place, essentially encouraging “entrepreneurship in battle.”
5. As intel and ops worked together shoulder to shoulder, what were very separate tribes with different values, cultures and perspectives were transformed into close-knit teams who understood each others’ needs and shared a common set of goals. Together, they learned how to carry out what were called “pattern of life” analyses that could spot small but meaningful changes in the day-to-day activities of their targets.
6. The final mechanism to support a faster pace of operations involved replacing the traditional process of resource procurement with a more dynamic “marketplace” where units could “horsetrade” for the resources they needed to carry out their missions in real time. The marketplace worked because everyone involved understood that if they readily shared the resources they controlled, other units would be more willing to share their resources with them when they need help. The whole process was not run by top commanders: it was “eyes on, hands off.” Although he could intervene at any point, he rarely if ever found it necessary to do so. The entire process “ran magically.”

In summarizing his experience, General McChrystal noted that when he took over JSOC, it operated like “a very specialized sub-contractor” that took on well-defined tasks and carried them out incredibly well. The organization was also highly risk averse and wanted to do everything possible in advance to avoid failure. But while it was “comforting” to focus on targets that could be taken out, the problem was that they were fighting a network that kept changing, and they needed to learn how to change and adapt even faster than the enemy. In essence, McChrystal had recognized the need to transform his fighting force to function in a whitewater world of constant, rapid change.

## **Beyond the Battlefield**

Although General McChrystal's story represents a singular accomplishment, Roundtable participants cited several non-military examples that reflect some of the same elements of Pendleton-Jullian's change triangle. Heather Rangel noted the importance of radical transparency at one of her clients at Deloitte. Every Friday afternoon, the company holds an all hands meeting led by the founder who is committed to answering any question from any employee. Questions are not submitted in advance.

Like McChrystal's JSOC, Rangel's client operates "flat and fast." Also like JSOC, the company has pushed decision-making down the ranks. Big decisions are made by managers, and multi-million dollar contracts may be signed by someone with five years of experience with the company, which is part of what has enabled the company to double in size in a relatively short period of time.

Rangel's client's unorthodox ways of doing business can be challenging for more traditional firms like hers. The client made it clear to Rangel that it did not want to see "shiny shoes" from her firm showing up or to negotiate contracts with senior partners, but rather with the people who would actually be doing the work.

Rangel noted that even though she is viewed as successful within Deloitte, there have been unconscious efforts by more senior executives to "make her more like them." However, she continues to believe that the way to make progress is "by challenging truisms."

Peter Marx commented on the parallels between how McChrystal organized JSOC and how online communities operate. He cited the example of the massively multiplayer online game (MMOG) *Worlds of Warcraft* (WoW), where he had been Chief Technology Officer. The game is organized around a series of quests carried out by members of guilds that involve as many as 100 players. They would get together before hand to plan their quests, carry it out, then reflect on what they learned. Individual reputations were directly based on personal accomplishments. John Seely Brown, who has written extensively about WoW,<sup>18</sup> added that a key to success in the game is the use of dashboards that players maintain to track their accomplishments. By sharing dashboards in after-action reviews, players benefit from providing their own radical transparency.



Peter Hirshberg described a project that he did with Best Buy that made use of social media to bring about an internal transformation among the company's 144,000 employees. It turned out that a large number of employees wanted to use a social network that was originally created to support a campaign around selling home theaters. As it evolved, the network was used to solve both internal and external problems. For example, when the HR Department wanted to increase participation in the company's 401(k) plan, the network was used to run a contest for the best video that explained why employees should join the plan, which resulted in a rise in participation from 18 percent to 47 percent of the staff. This success generated confidence that it was possible to solve problems by letting employees themselves create the media that spoke to other employees. When the company realized that their customer portal "was awful," they ran a contest online to build a better portal, which was completed in 48 hours. In fact, solutions often came from unexpected sources. The person who ended up leading the company's transformation effort had previously been creating store endcaps. Hirshberg explained that the best way he found to explain the need for change to Best Buy's employees was to use a memo that had been created by the Central Intelligence Agency to explain that in order to respond to constant rapid change, it needed to become an emergent adaptive organization.<sup>19</sup> Hirshberg added that the most important thing that the Chief Executive Officer did in supporting the company's change effort was "to keep the team from being shot" by resisters.

General McChrystal acknowledged that corporations do not have the "every day immediacy" that exists on the battlefield and that corporate hierarchies are often designed to insulate executives from the consequences of their decisions. But he pointed out that it was not clear for some time whether his troops were winning or losing the war. Change does not happen by just putting in place a mechanism and letting it run. Rather than getting heavily involved in the nuts and bolts of daily operations, his focus was "on making the right conversations happen," and when that happened, then the right things happened. In fact, after the first year and half of his command at JSOC, he made almost no decisions other than where to put talent in his organization.

Eddie Lampert, Chief Executive Officer of ESL Investments, noted that everyone "wants to feel in control of something," and that people get worried about their jobs when they begin to lose control. How can

a leader get them to buy into change that may be disruptive? And how do you deal with senior people who are not comfortable saying, “I don’t have the answer”? In transforming JSOC, senior leaders were not cut out of responsibility, though, according to McChrystal “key leaders discovered that they weren’t always as key as they thought.” Information was democratized so it was more widely available, and examples were deliberately set up that let everyone see that what was being said was not punished. When an organization becomes “radically transparent,” failures become obvious.

The biggest challenge—in both a military and corporate context—is scaling. McChrystal noted that once you no longer know everyone you encounter in the hallway, the culture of an organization changes. McChrystal’s daily video teleconferences were intended to overcome the problem of size. Eventually, there were as many as 7,500 people participating in the VTCs. While no more than 150 people could speak on any one day, there were 15 chat rooms available for side conversations among sub-groups. Each VTC had an agenda, with some people reporting every day and others perhaps once a week. The purpose of the VTCs was not simply to communicate information, but to focus on the “so what’s.”

In fact, there are multiple ways to scale learning and accelerate performance. John Hagel cited several other models:

- LiveOps, which supplies companies with teams of remote support and customer service agents over the Internet, provides every employee with a personal dashboard that allows them to track their work. The result has been large improvements in performance.<sup>20</sup>
- Intuit, the provider of financial software and services, relies on the use of “experimentation platforms” to reduce the risk of failure. All parts of the organization—sales, marketing, services—are expected to use a process of “rapid experimentation” to test new approaches and new product offerings, and every employee is expected to be experimenting all of the time.<sup>21</sup>
- Li & Fung is a Hong Kong-based firm that coordinates an international network of small apparel manufacturers to serve the needs of large fashion companies globally. By modular-

izing the production process, it creates space for suppliers to test, experiment and improve processes. Rather than building a tightly integrated supply chain, which presumably would maximize efficiency, Li & Fung allows producers the freedom to try new approaches if they can meet requirements that exist at the interfaces between the nodes on the network.<sup>22</sup>

- Recognizing that more diverse teams lead to more creative solutions, companies are using matching algorithms to build more productive teams. Ann Pendleton-Jullian pointed out that even in a whitewater world, where rapid improvisation is a necessity to respond to a continually changing environment, different skills are needed: in addition to the person in the kayak who must navigate through the rapids, successful teams also need a kayak maker who can make use of technology to build a better kayak and perhaps an observer on the bank who can identify the places where trouble occurs and devise better strategies for getting through them.
- Another powerful technique for moving toward exponential operations is a relentless focus on performance improvement. This requires tracking more than just financial results but metrics for operational performance that can lead to and support deep reflection on how to improve.

Turning back to the public sector, the participants considered the complicated issue of domestic policing and the extent to which lessons from the military did or did not apply. While there are some obvious parallels between the two types of organizations and activities, one major difference is that the application of force is a primary tool for the military, while the use of force should be a last resort for police. Alaina Harkness raised the question of how well McChrystal's goal of increasing the pace and volume of operations would translate to a domestic setting. There may be value in having an increased police presence in a community, but what will matter most will be the quality of interactions with the community.

McChrystal replied by explaining that their ultimate measure of success was the quality of the intelligence that they gathered and how it could be put to use. The real key was how all of the individual bits could

be put together to give them a big picture of what was going on. The most fundamental change was cultural: by bringing the analysts closer to the action (including allowing them to be connected to raids by video), they were made to feel that they were part of the action, which greatly increased their effectiveness.

Harkness responded that a focus on the value of intelligence could be “a real way forward” in applying the lessons of JSOC to the world of policing. Better data collection could yield greater transparency. She also noted that although the idea of community policing has been around for a long time, it has “never been given a fair shot.” But identifying new metrics and new strategies could be transformative.

Peter Marx shared a story from his time as Chief Technology Officer of Los Angeles about the introduction of body cameras for police that spoke to the reality of unintended consequences. Shortly after the cameras were deployed, two officers were dispatched to respond to a domestic violence call, which can be difficult to handle because of the emotions that are involved. When the officers pulled up in front of the house, “it erupted with people yelling.” But when the cops explained that they were wearing body cameras that were recording everything that was going on, everyone quickly calmed down and became more rational. While the initial goal for body cameras had been to increase transparency, particularly in disputed situations, their presence also led to better behaviors and better overall outcomes.

Ann Pendleton-Jullian concluded that what was particularly impressive about General McChrystal’s transformation of JSOC is that it ran against the tides of so much of the military. His success was a result of having a clear view of the context in which change could happen, then crafting an effective meta-narrative and then finding specific mechanisms for effecting change. The critical challenge is to find the right mechanisms, then putting them into action, realizing that (as in the case of the body cams in Los Angeles), they may lead to an unanticipated outcome.

### **Leading the New Organization: Lessons from Art Basel**

The final question considered by the Roundtable was: What are the characteristics of a leader who can take an organization through a major transformation? What do leaders need to do to prepare their

organizations and its talent for future challenges? Do effective leaders need to be visionary founders like Steve Jobs or Jeff Bezos or charismatic figures like John Legere?

Marc Spiegler came to Art Basel from a career as a freelance journalist. Since he had had neither training nor experience as a business leader, much of his learning was on the job. Among the first things he realized was that he had to lead the organization in a time of rapid, continuous change and in an environment that was being constantly inundated by news and information. Even while he is making plans, things are happening that he has not taken into account.

To illustrate the nature of the challenges he and other 21st century leaders faced, he described a work of art that was created as part of the 2012 Art Basel Miami Beach. The artists (a French team known as Kolkoz) took a rendering of a normal beach soccer field and created a three-dimensional representation of the Apollo landing site on the moon on it, then invited a group of gallerists, critics, and artists to attempt to play a game of soccer on the field.

The world in which Art Basel operates is changing constantly in unpredictable ways. Shortly before their last art fair ended, their largest rival was acquired by a big Hollywood talent agency. Shortly after, British voters approved Brexit. And the German government passed a new law requiring that an exit visa must be obtained for any work of art that is more than 75 years old and that is sold to a foreign buyer for more than €300,000. All of these actions will likely have significant impacts—probably negative—on Art Basel, but exactly what they will be is unknown.

To function effectively in an environment like this requires a learning organization with an experimental culture. But if you want employees to experiment, a leader needs to be comfortable with failure. He or she also must be willing to delegate: if you want a team to make decisions, you must give them decisions to make. A good leader should make as few decisions as possible. In fact, a leader needs to get out of managing the “daily business” of the organization to focus on making only the decisions that only the leader can make and building the relationships that will help deal with future problems.

By forcing others to make decisions, by asking questions rather than providing answers, by clearing away obstacles to success, and by sharing

as much information as possible, a leader creates agency. Not all leadership tasks are pleasant. It may be necessary to drive out of the organization people who need to be micromanaged. The leader may also need to make decisions that others will not understand. But when Spiegler says “no,” he feels a responsibility to explain why, and to indicate that he may give a different answer in the future and that it is OK “to ask again” when the situation may have changed.

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**...a leader...must be willing to delegate: if you want a team to make decisions, you must give them decisions to make. A good leader should make as few decisions as possible.**

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A huge factor in leadership is providing motivation. In a literal sense, what Art Basel does could be seen as “helping oligarchs trade (expensive) trinkets with each other,” not a mission that will inspire anyone (except, perhaps, oligarchs). But the organization’s mission can also be framed as “to become the leading global platform for exchanges that drive the art world forward in an inspiring and sustainable way,” or as “Art is important, and governments won’t pay for it. So, Art Basel connects artists to patrons all over the world.” Essentially, Art Basel does things on a global level that no one else can do, allowing artists to find collectors who will enable them to continue their practice, which is surely an inspirational mission. In fact, the best mission statement does not sound like a mission statement.

A final challenge for a leader in the whitewater world is to understand the differences between how to function inside vs. outside of the organization. Internally, it’s good for a leader to show vulnerability, to ask questions. But the external world still wants to see a strong leader who is confident about what he or she is doing, who is prepared to accept responsibility for everything that happens and to be either praised or blamed for it. Even though it’s important to delegate, it’s hard to do: the leader may give up control but still must be accountable for the results.

Despite all of this, some things do not change. Spiegler shared the messages contained in an artwork created by a Swiss artist duo, Fischli/Weiss, based on a list of ten ways to “work better” that they found on the wall of a ceramics factory in Thailand (Figure 3).

**Figure 3. FISCHLI/WEISS ARTWORK**



### *Priorities for a Leader*

The final discussion focused on two key roles for a 21st century leader: recruiting and retaining the right people, and then empowering them to do their jobs well. While the first of these roles, recruiting high quality talent, may sound simple, in practice it is not. Marc Spiegler commented that an ideal job candidate would have high intelligence, a good attitude and relevant experience for a job. But if someone has the first two qualities, he is willing to let the third one go. If you can hire people who are smart and will fit in well with a team, they will quickly learn what they need.

Hiring the “right” people is never easy and it has gotten even harder in the age of electronic CVs. John Kunzweiler described meeting a job candidate who did not make a positive first impression: he looked “schlumpy,” had mediocre grades, and could point to few accomplish-

ments. But during his interview, he talked about his experience being a third string player on his school's football team who never played in an actual game and never earned a letter. But he described what he did to keep himself motivated, ready to play if he was called on. Kunzweiler hired him. While it is very possible to be misled by a resume, it is always worthwhile to ask a candidate, "Who are you?" and to listen to their stories.

People usually get hired for their hard skills, but are more likely to be fired for a lack of soft skills. Caroline O'Connell illustrated this point by describing what happened when a member of a team she was leading decided to leave the company and she had to decide how hard to work to keep that person. To help her clarify her options, she sat down and wrote out a list of core principles for her team (e.g., the quality of the individual is paramount, value creativity and innovation, never rest on the status quo, be a strong team player, value the contributions of each of your teammates). When she compared the list to the person who was intending to leave, she quickly realized that that person didn't fit with the values of her team. Given this experience, she suggested that it can be useful for leaders to "look around the table at the people that they are working with" and ask if they would hire them again. If the answer is "no," then it is important to do something about it.

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**People usually get hired for their hard skills, but are more likely to be fired for a lack of soft skills.**

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Putting together teams that work together well may, in fact, may be more important than hiring superstars. A few years ago, Google's HR department did a careful study of the characteristics of successful teams. After studying the performance of hundreds of teams, they concluded that "who is on a team matters less than how the team members interact, structure their work, and view their contributions." On the highest performing teams, there was no dominant person but rather a balance in the amount of input from each member of the team. In addition, team members felt that they could take risks, that they could count on other team members when needed, that the work they were doing was



personally important to them, and that it mattered.<sup>23</sup> Another study of team performance done by Deloitte in Australia started from the assumption that the most productive teams would consist of tightly knit groups of people who had worked together over an extended period of time. But, according to John Hagel, it turned out that the most successful teams had both a high level of internal interactions and a high level of external communications. In other words, even while they worked together, they actively reached out to get external input.

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**Putting together teams that work together  
well may, in fact, may be more important  
than hiring superstars.**

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Hagel also asserted that too much harmony on a team can be counter-productive. When he visits a new organization, he uses a simple test to determine how healthy it is: If he looks in conference rooms and sees people who are working together are all smiling and nodding, it is a clear sign that the organization is dysfunctional. But if people are pounding on the tables and arguing with each other, it is a healthy organization. The key ingredient here is “productive friction” which allows people to disagree with each other respectfully in the search for the best solution. In organizations that are seeking to maximize efficiency, friction of any kind is a bad thing that needs to be eliminated. But if the goal is learning and innovation, a certain amount of friction is very useful.

Of course, the maximum friction that an organization encounters comes in a time of crisis. Kelvin Westbrook observed that a crisis is the time when you find out who people really are. When the stakes are high and tension increases, a leader must convince people that they can deal with it, and assure them that “if they couldn’t deal with a challenge, they wouldn’t be there.” In a crisis, the leader’s job is to give people a sense of comfort and ownership, a belief that “together, we can take that hill.”

Perhaps the biggest challenge for a leader is in learning to do less rather than doing more, and to get out of the way to allow individuals and teams to do their work. As Gaurav Tewari put it, “Leadership is about creating conditions that empower people to make decisions.” Stanley McChrystal concurred, adding that “if a leader is doing a lot, it’s often to the detriment of the leading that they should be doing.” At JSOC, his task was not to tell others what they should do, but rather to “orchestrate capacity”—in each individual, in each team, and in himself.

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**“productive friction” ...allows people to disagree with each other respectfully in the search for the best solution.**

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In fact, what kind of person a leader is may be more important than what he does: he needs to have integrity and the ability to be humble and empathetic in order to be able to see a problem from someone else’s perspective. And by demonstrating a strong commitment to communication, a leader can build trust so that the rest of the organization will be willing “to take the journey.”

Fittingly, Marc Spiegler wrapped up the discussion—and the Roundtable—with a series of challenges and open questions rather than a set of conclusions:

- Is it possible to provide broad access within an organization yet still maintain a hierarchy of authority?
- Is it possible for a leader to be vulnerable internally yet confident and strong externally?
- Is it better to make a bad decision quickly or a good decision slowly?
- Since leaders cannot make everyone happy with their decisions, how do they decide whom to disappoint?

## Conclusion

The report from the first Aspen Roundtable on Institutional Innovation,<sup>24</sup> held in 2008, cited the work of Venezuelan economist Carlotta Perez on the nature and impact of technological revolutions. According to Perez,<sup>25</sup> over the past two hundred years, there have been five major revolutions—starting with the industrial revolution in the late 18th century and most recently, the information and telecommunications revolution of the late 20th century—each of which has transformed society and helped to create a new, more prosperous economic environment. Although the advent of each new technology brings profound changes, these changes do not happen overnight because existing institutions and social structures are based around previous innovations. It takes time for old organizations to adapt to new opportunities or to disappear, and for new organizations based on these new

### *Carlota Perez: Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*

INSTALLATION	Collapse & Readjustment	DEPLOYMENT
INDUSTRIAL REVOLUTION 1771	CANAL PANIC 1797 (BRITAIN)	<ul style="list-style-type: none"> <li>• Diffusion of manufacturing with water power</li> <li>• Full network of waterways (canals, rivers, oceans)</li> <li>• Development of public companies</li> </ul>
STEAM & RAILWAYS 1829	RAILWAY PANIC 1847 (BRITAIN)	<ul style="list-style-type: none"> <li>• Economies of scale</li> <li>• Joint stock companies</li> <li>• Repeal of tariff laws/free trade</li> </ul>
STEEL, ELECTRICITY & HEAVY ENGINEERING 1875	GLOBAL COLLAPSES OF THE 1890'S (ARGENTINA, AUSTRALIA, U.S.)	<ul style="list-style-type: none"> <li>• Transcontinental rail, steamships and telegraph</li> <li>• Gold standard, global finance</li> </ul>
AUTOMOBILES, OIL & MASS PRODUCTION 1908	GREAT CRASH OF 1929 (U.S.)	<ul style="list-style-type: none"> <li>• Interstate/international highways and airways</li> <li>• Welfare state, Bretton Woods, IMF, World Bank</li> </ul>
INFORMATION & TELECOMMUNICATIONS 1971	NASDAQ CRASH 2000 & GLOBAL COLLAPSES (ASIA, ARGENTINA, U.S.)	<ul style="list-style-type: none"> <li>• Global digital telecommunications network</li> <li>• Institutional framework, facilitating globalization</li> </ul>

Adapted from URL: <http://www.bedfordfunding.com/focus/trends.html>

capabilities to emerge. In fact, a “golden age” in which the full benefits of new technology are fully realized typically doesn’t occur until society goes through a period of “collapse and readjustment.”

The continuing focus of the nine Roundtables held since 2008 has been on the ongoing challenge to organizations to respond to the changes of the 21st century economic landscape. While a number of relatively new companies have emerged as “exponential organizations” capable of growing and changing at a rapid pace, many older companies have struggled to adapt to the new environment.

On a fundamental level, the challenge is not simply for organizations to figure out how they can “make use” of new tools and new capabilities, but how they can transform themselves to operate successfully in a “whitewater world.” The good news is that a growing number of organizations have recognized the need to change, and that the tools for facilitating transformative change are becoming available. There are also examples, such as the transformation, under fire, of JSOC, that can serve as inspirational models. But the not-so-good news is that many large, well-established organizations—in both the public and private sectors—have just started on the journey toward a new, more agile model of operating that is based not on scaling efficiency but on scaling continuous learning that is necessary for survival. In the end, making this “big shift” will require strong leadership. It remains an open question as to whether the current generation of leaders can bring their organizations into a new golden age.

## Endnotes

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# APPENDIX

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## Aspen Institute Roundtable on Institutional Innovation

### *The Exponential Shift: Rethinking Organizational Business Models*

Aspen, Colorado · July 13-15, 2016

### Roundtable Participants

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Distinguished Fellow  
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City Innovate Foundation

**Gary Knell**

President and  
Chief Executive Officer  
National Geographic Society

**John Kunzweiler**

Corporate and Public Sector  
Advisor/Board Member

**Edward Lampert**

Chief Executive Officer  
ESL Investments, Inc.

**Peter Marx**

Executive Director and Evangelist  
GE Digital

Note: Titles and affiliations are as of the date of the conference.

**General Stanley McChrystal**

Founder and Managing Partner  
McChrystal Group

**David Morse**

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**Caroline O'Connell**

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**Harry West**

Chief Executive Officer  
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## About the Author

Richard Adler is a Distinguished Fellow at the Institute for the Future, Palo Alto. He is also president of People & Technology, a consulting firm located in Silicon Valley. His research has focused on the impact of new technologies on fields including business, education, healthcare and aging. In addition to many projects in the U.S. he has worked on technology-related initiatives in Europe, Asia and the Middle East.

Richard is the author of reports from each of the previous Innovation Roundtables: *Making the Invisible Visible: Redesigning Business Processes for Exponential Organizations* (2016); *Navigating Continual Disruption* (2015); *Fragmentation and Concentration in the New Digital Environment* (2014); *Connecting the Edges* (2013); *Institutional Innovation: Oxymoron or Imperative?* (2012); *Solving the Dilbert Paradox* (2011); *Leveraging the Talent-Driven Firm* (2010); and *Talent Reframed: Moving to the Talent Driven Firm* (2009). Other reports he has written for the Aspen Institute include: *Rethinking Communications Policy* (2012); *Updating Rules of the Digital Road: Privacy, Security, Intellectual Property* (2011); *News Cities: The Next Generation of Healthy Informed Communities* (2011); *Media and Democracy* (2009); and *Minds on Fire: Enhancing India's Knowledge Workforce* (2007). He is also the author of *After Broadband: Imagining Hyperconnected Worlds* (Wharton, 2012) and *Healthcare Unplugged: The Evolving Role of Wireless Technology* (California HealthCare Foundation, 2007).

Richard is Fellow of the World Demographic Association and serves on a number of local and national boards. He holds a BA from Harvard, an MA from the University of California at Berkeley, and an MBA from the McLaren School of Business at the University of San Francisco.



# The Aspen Institute Communications and Society Program

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The Program's projects range across many areas of information, communications and media policy. Our activities focus on issues of open and innovative governance, public diplomacy, institutional innovation, broadband and spectrum management, as well as the future of content, issues of race and diversity, and the free flow of digital goods, services and ideas across borders.

Most conferences employ the signature Aspen Institute seminar format: approximately 25 leaders from diverse disciplines and perspectives engaged in roundtable dialogue, moderated with the goal of driving the agenda to specific conclusions and recommendations. The program distributes our conference reports and other materials to key policymakers, opinion leaders and the public in the United States and around the world. We also use the internet and social media to inform and ignite broader conversations that foster greater participation in the democratic process.

The Program's Executive Director is Charles M. Firestone. He has served in this capacity since 1989 and is also a Vice President of the Aspen Institute. Prior to joining the Aspen Institute, Mr. Firestone was a communications attorney and law professor who has argued cases before the United States Supreme Court. He is a former director of the UCLA Communications Law Program, first president of the Los Angeles Board of Telecommunications Commissioners, and an appellate attorney for the U.S. Federal Communications Commission.



## **Previous Publications from the Aspen Institute Roundtable on Institutional Innovation**

*(formerly the Aspen Institute Roundtable on Talent Development)*

*Making the Invisible Visible: Redesigning Business Processes for Exponential Organizations (2016)*

*Making the Invisible Visible*, the report from the 2015 Roundtable on Institutional Innovation, explores how corporate leaders are thinking about exponential business operations—utilizing digital technologies to leverage assets and scaling learning to accelerate innovation. It delves into strategies of modularization, rapid iteration, and utilizing transparent metrics, among others, all with the aim of becoming more adaptive and increasing performance of the organization. The report is written by Richard Adler. 63 pages, ISBN Paper: 0-89843-644-3, \$12.00 per copy.

*Navigating Continual Disruption (2015)*

*Navigating Continual Disruption*, the report from the 2014 Roundtable on Institutional Innovation, explores ways to manage organizations in the face of continual disruption—the constant onslaught of new offerings or business models that can challenge the dominance of core businesses. The report is written by Richard Adler. 66 pages, ISBN Paper: 0-89843-617-6, \$12.00 per copy.

*Fragmentation and Concentration in the New Digital Environment (2014)*

*Fragmentation and Concentration in the New Digital Environment* explores the impact of digital technology infrastructures on the fragmentation and concentration of economic activity. This report, written by Richard Adler, maps the effects of the digital revolution on the business environment, the nature of work and the role of leadership in navigating the organization through the constantly changing landscape. 54 pages, ISBN Paper: 0-89843-606-0, \$12.00 per copy.



*Connecting the Edges (2013)*

*Connecting the Edges* is the report from the 2012 Roundtable on Institutional Innovation. In the current economic environment, growth and underemployment are two outstanding national, indeed international, problems. While technological advances and globalization are often cited as instigators of the current plight, they are also beacons of hope for the future. The report concludes that by integrating the core of an organization with the edge, where innovation is more likely to happen, we can create dynamic, learning networks. 46 pages, ISBN Paper: 0-89843-589-7, \$12.00 per copy

*Institutional Innovation: Oxymoron or Imperative? (2012)*

*Institutional Innovation: Oxymoron or Imperative?* is the report of the 2011 Roundtable on Institutional Innovation. It explores the consequences of the growing disconnect between the fundamental design of most firms and the capabilities of the business infrastructure in which they operate. The report, written by Richard Adler, captures the insights of the participants with a focus on identifying conditions that are favorable to institutional innovation and maximizing the effectiveness of institutional leadership. 63 pages, ISBN Paper: 0-89843-572-2, \$12.00 per copy

*Solving the Dilbert Paradox (2011)*

*Solving the Dilbert Paradox* is the volume resulting from the 2010 Aspen Institute Roundtable on Talent Development. This “Dilbert Paradox” finds expression in wasted opportunities for organizational learning, collaboration, and access to knowledge and ideas outside the corporate hierarchy. The report, written by Richard Adler, captures the insights of the participants during the conference and details how some large organizations, as well as start-ups and small companies, are experimenting by giving employees new opportunities to maximize innovation. 48 pages, ISBN Paper: 0-89843-545-5, \$12.00 per copy

*Leveraging the Talent-Driven Organization (2010)*

*Leveraging the Talent-Driven Organization* details how a number of firms are using social networking tools to open up communication, collaboration and learning across boundaries, and leveraging these tools to develop new products and real-time solutions for customers. The report, written by Richard Adler, is the result of the Inaugural Roundtable on Talent Development. 48 pages, ISBN Paper: 0-89843-519-6, \$12.00 per copy

*Talent Reframed: Moving to the Talent-Driven Firm (2009)*

*Talent Reframed: Moving to the Talent-Driven Firm* offers new rules for organizations seeking to attain and develop a talented workforce amid a rapidly changing and increasingly globalized business environment. The report, which sets the premise for a new series of Aspen Institute Roundtables on the Talent-Driven Firm, explores how organizations can build talent by relying less on traditional command-and-control structure and more on horizontal collaboration and shared learning. The report, written by Richard Adler, also features a white paper by John Hagel and John Seely Brown. 46 pages, ISBN Paper: 0-89843-498-X, \$12.00 per copy

