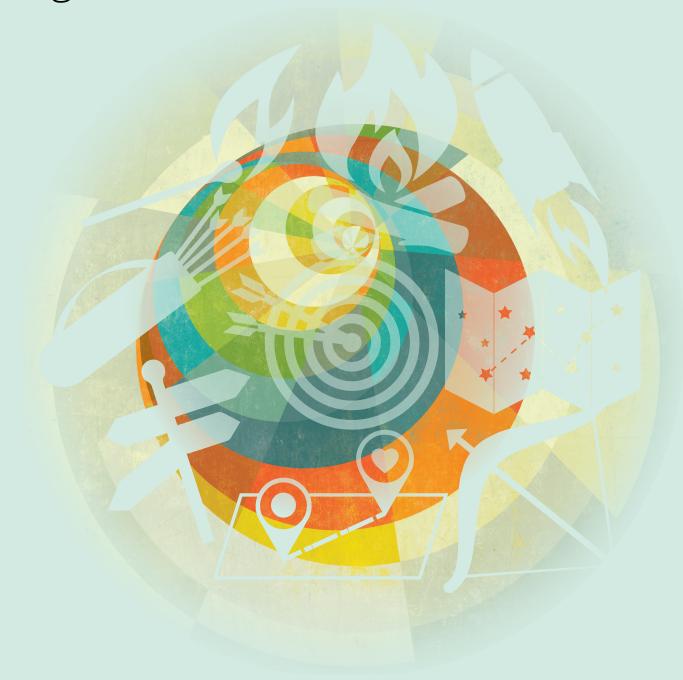
Deloitte. Insights



Getting better, faster

Unleashing the power of frontline workgroups

Getting better, faster

ABOUT THE CENTER FOR THE EDGE

The Deloitte Center for the Edge conducts original research and develops substantive points of view for new corporate growth. The center, anchored in Silicon Valley with teams in Europe and Australia, helps senior executives make sense of and profit from emerging opportunities on the edge of business and technology. Center leaders believe that what is created on the edge of the competitive landscape—in terms of technology, geography, demographics, markets—inevitably strikes at the very heart of a business. The Center for the Edge's mission is to identify and explore emerging opportunities related to big shifts that are not yet on the senior management agenda, but ought to be. While Center leaders are focused on long-term trends and opportunities, they are equally focused on implications for near-term action, the day-to-day environment of executives.

Below the surface of current events, buried amid the latest headlines and competitive moves, executives are beginning to see the outlines of a new business landscape. Performance pressures are mounting. The old ways of doing things are generating diminishing returns. Companies are having a harder time making money—and increasingly, their very survival is challenged. Executives must learn ways not only to do their jobs differently, but also to do them better. That, in part, requires understanding the broader changes to the operating environment:

- What is really driving intensifying competitive pressures?
- What long-term opportunities are available?
- What needs to be done today to change course?

Decoding the deep structure of this economic shift will allow executives to thrive in the face of intensifying competition and growing economic pressure. The good news is that the actions needed to address short-term economic conditions are also the best long-term measures to take advantage of the opportunities these challenges create. For more information about the Center's unique perspective on these challenges, visit www.deloitte.com/centerforedge.

Getting better, faster

N A WORLD that's rapidly changing, what's high-performing one day might be low-performing—or no longer even relevant—the next. If we aren't accelerating performance improvement, we'll likely find ourselves falling further and further behind.

How can we escape this trap of diminishing returns? We need to shift our attention from Business **Process** Reengineering, which lends itself to automation, to *Business Practice Redesign*, which better reflects the work that humans are meant to do.

After all, much of the work today—at least the work that offers the potential for differentiation—is no longer routine or predictable. And when conditions and requirements constantly shift, processes inevitably become less and less efficient.

So what do we need to do to accelerate learning and impact in a world of constant change? Two things.

One, focus on frontline workgroups. They are often the first to encounter emerging opportunities and challenges, and the first to need new ways to address them. Keep in mind: Many workgroups will likely need to look and operate differently than they do today.

Two, cultivate practices that will help workgroups accelerate performance improvement.

New challenges demand new approaches.

But we all have the opportunity to get better, faster *today*.

It's up to us.

John, JSB, Andrew, and Maggie

Contents



Executive summary



Beyond process

How to get better, faster as "exceptions" become the rule



Business practice redesign is an untapped opportunity Nine practices for accelerating performance

Frame a more powerful question 59 How to move beyond incrementalism

Seek new contexts How to see through new eyes

Cultivate friction How to foster conflict to generate insights

Commit to a shared outcome 91 How to get everyone pulling in the same direction

Bias toward action How to get past the greatest risk of all—failing to act

Priortize performance trajectory How to make a bigger impact, more quickly

Maximize potential for friction 125 How to combat complacency and overcome groupthink

Eliminate unproductive friction How to bring people closer through conflict

Reflect more to learn faster 147 How to slow down to increase impact



Workgroups in action | 159

Cultivating new practices to create more and more impact



GE FirstBuild 164

A trailblazing workgroup builds community with the crowd to speed innovation



Southwest Airlines: Baker workgroup 177
Reducing disruption and delay to accelerate performance



Red Cross: Regional Disaster Unit 187 A regional disaster response unit ups its game to help more people in need



The sparks & honey: Culture briefing workgroup 197

Embracing a diverse world to sense and make sense of cultural signals



Royal Caribbean Cruises Ltd.'s Newbuilding & Innovation workgroup 209 Designing and building new possibilities



Southwest Airlines: Field Tech workgroup 219

Fixing the problems no one else can to keep an airline flying high



League of Legends: Team SoloMid 229

Rigorous metrics-based experimentation



US Joint Special Operations
Task Force: Al Qaeda in Iraq 239

Adopting new approaches to fight an unconventional enemy

Endnotes 247

U	Getting better, faster			
	New challenges demand new approaches. Efficiency is no longer enough—we			
	New challenges demand new approaches. Efficiency is no longer enough—we need new ways to create value.			

Executive summary

NDER MOUNTING PERFORMANCE pressure, many corporate leaders are looking to business process reengineering to improve performance, and in many ways that makes sense—after all, processes give shape to an organization and are often useful for coordinating routine flows across large organizations. The routine work of a company *should* be done as efficiently as possible, which increasingly means incorporating automation.

But organizations may be missing a much greater opportunity to improve performance.

Here's the thing: Much of the work of many organizations today—at least the work that typically offers the potential for differentiation—is no longer routine or even predictable. When conditions and requirements shift constantly, processes fail. While process optimization can still certainly help reduce costs and streamline operations, leaders should consider a different kind of organizational rethinking for significant performance improvement.

And in an environment of accelerating technological advances and rapid and unpredictable change, constant performance improvement is a must. Competition can come from anywhere—doing well relative to the competitors on your radar isn't enough. Many barriers to competition are falling, and many boundaries, between industries and between markets, are blurring. Consumers have more access to information and alternatives than ever, along with a coincident increase in expectations. Workers have more access to information and alternatives—and increased expectations.

At the same time, many employees, in all kinds of environments, face increasing pressure to reach higher levels of individual performance. The useful life of many skills is in decline, creating a constant pressure to learn fast and reskill.

Many companies have struggled to effectively respond to these pressures since long before the Internet of Things and cognitive technologies added new layers of complexity. The average return on assets for US companies has declined for the past several decades, and companies find themselves displaced from market leadership positions more often than they used to. While the price-performance improvement in the digital infrastructure has increased exponentially, most companies are still capturing only a small fraction of the value that ought to be available through the technologies built on this infrastructure. Existing approaches to performance improvement appear to be falling short.

It begs the question: In a world of digital transformation and constant change, what does *performance improvement* mean? Many companies suffer from at least one of three broad problems that can misdirect their focus:

- 1. Thinking of performance improvement too modestly. Leaders often think of performance advances as discrete, one-time jumps from A to B, or even a series of jumps to C and D. The initiatives that typically generate these bumps are similarly construed as pre-defined, one-time changes rather than as unbounded efforts that have the potential to generate more and more improvement. As we discuss in more detail in Beyond process,2 not only do most companies need to continually improve their performance—those that don't start accelerating may fall further and further behind and become increasingly marginalized. Accelerating improvement, then, should be a goal of operations, not just one-off initiatives.
- 2. Thinking of performance improvement too narrowly, focused only on costs. Process optimization and cost reduction have dominated much of performance improvement efforts for the past several decades, focusing

largely on the denominator of the financial ratio of revenues to costs. But costs can be cut only so far, and technology-based process efficiencies can be quickly competed away, especially at a time when the changing environment and shifting customer expectations are making many standardized processes quickly obsolete. Further reductions can become harder to achieve and have less impact.

The relevant performance might be more about an organization's ability to create significant new value. Workers across an organization regularly encounter new needs, new tools for meeting needs, and opportunities to identify new ways of delivering more value and impact in multiple dimensions, including helping other parts of the organization generate more value. The potential for value creation isn't confined to certain roles or functions, and is bounded primarily by an organization's ability to create new knowledge and creatively address new problems. Focusing on new value creation may be the key to getting on a trajectory of accelerating performance improvement. Doing so would require an organization to move beyond efficiency and

- standardization and begin focusing on cultivating the behaviors—such as experimentation and reflection to make sense of what has been learned—associated with new value creation.
- 3. Thinking of performance improvement at the wrong level. Most organizations manage performance where they measure it—which is to say where they have data: broadly, for the department and organization, and narrowly, for the individual. Both levels can miss where work, especially value-creating work, increasingly gets done: in groups. As a result, organizations can miss the opportunity to shape how work actually gets done. Focusing on performance where it matters most to the organization's work might be a key to having a significant impact on the performance that matters.

The imperative to act seems simple: Today's environment seems to offer no reprieve, no stabilization that gives us a chance to catch our breath and say, "OK, now we've got it figured out." The methods and processes that led organizations to great success in the past seem to no longer be working. For sustained performance improvement, companies may need to change their focus and look in new directions.

DEFINITION OF A FRONTLINE WORKGROUP

For our purposes, a frontline workgroup is characterized by size, sustained involvement, and integrated effort. A workgroup pulls together three to 15 people working interdependently to deliver a shared outcome that could not be achieved without all members working on it together. The members spend the significant majority of their time interacting with each other, formally and informally, on tasks that cannot be highly specified or sequenced in advance.

What a workgroup is not:

- · an entire department
- a task force or committee in which decisions or recommendations are made but not executed by that task force or committee
- a set of people whose work is determined by highly specified, tightly integrated tasks
- a standing unit whose composition remains stable over a long period of time
- a team that meets on an infrequent basis to perform some tasks together

Where will organizations find performance improvement instead?

Fortunately, many companies have a largely unexplored opportunity to not just improve performance but to accelerate that improvement, breaking out of the trap of diminishing returns and moving onto a performance curve of increasing returns. And it isn't an opportunity only for the organization but for the workers as well.

If an organization is to take advantage of this opportunity, it may need new business practices—focused on new value creation—that help it get better and better, faster. The opportunities to identify and create significant value will likely emerge on the front lines, where workers are encountering changing market needs and dynamic conditions almost every day. These unexpected demands, or "exceptions," fall outside of the standard processes. As the demands and conditions become more complex and unfamiliar, frontline workers could have to work together in order to address them, since an individual alone will be less likely to effectively solve an issue or develop an opportunity.

An opportunity for companies, then, is to shift to cultivating the workgroup practices (see sidebar, "Definition of a frontline workgroup") that can accelerate improvement in the operating metrics that seem most relevant to a company's performance. These groups' ability to accelerate their own learning and impact as they encounter exceptions can be key to improving their own operating metrics, which in turn could be critical to overall corporate performance.

PRACTICES TO ACCELERATE PERFORMANCE IMPROVEMENT

We identified nine key practices that help frontline workgroups accelerate performance improvement.

First, what do we mean by *practice***?** A practice is the way work actually gets done, the activity involved in accomplishing a particular job.³ We use it in contrast to formalized process, referring to the way work and information flow is organized and coordinated across stages. Process is how work can be done in a controlled and predict-

able environment where the solution is understood and predetermined.

Processes leave little room for variance. They can be documented. They are often handed down from above and manifest the command-and-control often thought necessary to drive performance efficiency in a predictable, scalable efficiency model. Practices, by contrast, are not typically codified. They are mostly tacit and emerge through action—for instance, there's no learning to ride a bike except through the act of trying. Practices tend to be context-specific and are constantly evolving—much like today's business opportunities.

Practices can be difficult to articulate; they don't translate into a "practice manual." Specific instances of practices will share some similarities that guiderather than govern—our actions. That is part of what can make a practice so powerful. One can describe a practice and what seems to be most important about it at a high level, but the actual practice will develop in a way that is specific to the context. Studying Xerox field technicians in the 1990s, anthropologist and organizational consultant Julian Orr observed that even supposedly identical machines, once deployed in the field, develop peculiarities depending on age, usage, and the characteristics of the physical environment in which they sit. As a result, in all but the most straightforward cases, the issues technicians faced fell outside of the documented process for which they had been trained. Fixing any given machine on any given day depended upon a set of undocumented and evolving practices that helped field technicians learn faster what would work or not work in a specific context.4

Practices that may help accelerate performance improvement in the workgroup would:

• Emerge in the workgroup: We distinguish the practices of a group from management practices, which tend to require organizational leadership to implement, or individual practices, which rarely have the scope to affect an organization's performance. By providing the space for experimentation and reflection, workgroups can be a uniquely effective environment for cultivating the tacit knowledge of practices. Practices may more readily be observed, tried out, refined, and informally shared within a group's narrower

confines and deep, trust-based relationships. In this way, groups can both learn new practices and use those practices to potentially learn faster how to improve performance.

• Drive learning embodied in action: The learning that is important here is not just sharing existing knowledge or data but creating new knowledge. That might mean coming up with more creative ways of acting on information or dealing with entirely new situations.

technology: Practices should catch up with technology. As new technology. As new technology platforms and tools emerge, practices should evolve to harness the potential in technology.

Evolve as context
evolves: Business
practices may not sound
revolutionary. In fact, the shift
from focusing on business process
optimization to cultivating workgroup practices,
which could evolve and diverge, is subversive,
empowering work and workers and undermining efforts to standardize and, ultimately,
control them. Shifting to practice more than
process can lead to a proliferation of ways to do
things on the front line, defying documentation
and standardization.

While practices themselves are usually contextdependent, the need for practices can transcend contexts, including "culture." Some cultures may naturally lean toward certain practices over others, while some may seem unsuited for any of the practices. Regardless of the existing culture, however, organizations aiming to stay relevant will likely need to move toward a culture in which workgroups accelerate performance improvement. These practices can help create the conditions for groups and, perhaps ultimately, organizations to rapidly evolve.

This report hardly constitutes an exhaustive blueprint of everything a workgroup should do—a well-functioning group will no doubt develop other useful practices and processes that help members accomplish their work. The practices we identify specifically focus on what may be needed to accelerate performance improve-

ment. However, they are also not exhaustive in the sense of even detailing what a

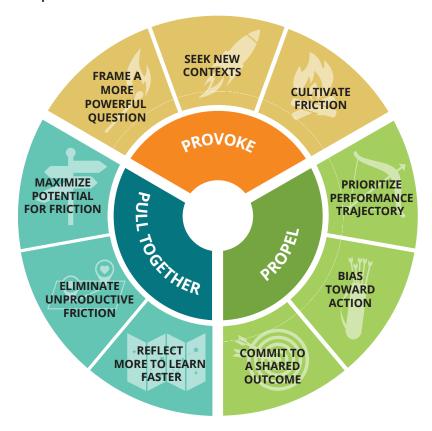
workgroup might need to do to accelerate performance, since the conundrum of writing about practices is that, by their nature, even the act of trying to capture a practice has a way of changing it. We have tried to describe what is most pertinent: the practices that seem to drive the type of continuous learning in action that is needed to accelerate performance. We also

Note that we deliberately are not talking about the practices for *high-performing teams*. The distinction is more than semantics. Others have extensively discussed practices for high performance, and we don't intend to challenge or recreate that research. Nor do we dismiss it. The organizations that learn how to get on an accelerating performance trajectory—where they continuously develop new and better ways to deliver new value rather than becoming more efficient at delivering the same value—could be the ones that thrive in an increasingly unpredictable world, one in which a strength can rapidly turn into a vulnerability. The practices that aim to generate high performance as typically

offer examples of more-specific sub-practices

and tactics.

Figure 1. The nine practices



The practices for accelerating performance improvement work together: provoking the workgroup to push boundaries, propelling the group into action, and pulling the members together to achieve more and more impact over time.

Source: Center for the Edge.

Deloitte Insights | deloitte.com/insights

defined within an organization—delivering the results that leaders expect—are unlikely to generate accelerating performance improvement and may actually hinder it.

THE PRACTICE BUNDLE

In this report, we identify nine practices (see figure 1) that are key for accelerating performance improvement in operational workgroups. Taken individually, they can help provoke, propel, and pull together, building momentum around a challenge. Combined, they reinforce and counterbalance each other to help workgroups learn faster and have more impact.

Given the limitations of text and language, we write about each practice individually. Two points

THE NINE PRACTICES PLAY THREE ROLES THAT CAN ACCELERATE PERFORMANCE AND LEARNING:

- Those that can **provoke** the workgroup to think differently about a challenge and possible approaches and create better alternatives
- Those that can **propel** a group into action to gain additional insight into the next best move to make a greater impact
- Those that can help members pull together to harness diversity and come up with ever-higher impact and outcomes

should be clear: First, the power of the practices is as a bundle—the more the better. They tend to amplify each other to accelerate performance and learning within a workgroup. While implementing any one practice can help a frontline group accelerate performance, the goal should be to bring together as many of the nine as possible.

Second, workgroup leaders should not think of these practices as sequential—and certainly not as siloed. Many of us in organizations are so oriented toward thinking in process steps that it can be almost impossible to look at nine practices and not immediately start thinking about them in a sequential way. Resist the urge. These are not stages or handoffs; they don't have defined inputs or outputs. Rather, these are ways of working in which most, if not all, group members would be engaged much of the time. They reinforce each other.

For example, prioritizing performance trajectory can help amplify the shared outcome by establishing tangible objectives that the team can pursue. Additionally, having a bias toward action and a commitment to a shared outcome could direct a group forward but also might mean that workgroups stick to the way things have always been done. However, pairing it with cultivate friction and reflect more to learn faster might ensure that teams go beyond "good enough" and look beyond the old way of doing things.

CASE STUDIES

Over the course of developing this framework and identifying and describing these nine practices, we talked to 60-plus workgroups across 20 markets and three continents. We sought to focus in particular on groups that seemed to be improving their performance over time. For a representative list of these groups, see exhibit A in *Beyond process*.

Full case studies for eight workgroups can be found in *Workgroups in action*. Although our research suggests that few organizations collect any type of systemic data at the workgroup level, members of the groups we profile believe that they are indeed accelerating performance. Each have adopted at least one practice from each category (provoke, propel, pull together). The two most commonly used practices are *commit to a shared outcome* and *maximize potential for fric-*

tion, which seems to make sense: To get better over time, the groups we studied had to be committed to a specific outcome, and all of them had tried to bring in divergent ideas around achieving those outcomes. Where many workgroups fell short was around cultivating friction to harness the creative potential of that diversity. The case studies illustrate how real workgroups across an array of industries are using practices to accelerate their own performance improvement.

How to use these practices

Practices may look different for every workgroup. We present the nine practices in a format intended to guide exploration and practical use.

Each write-up includes the following:

- An introduction, describing the potential value of the practice in terms of driving performance improvement over time for a workgroup
- What the practice is: definition and key distinctions
- What it isn't: misunderstandings that can send you down the wrong path
- You know you need this practice when:
 You have to start somewhere; use this section
 to get a sense of which practices might have
 the biggest impact on your workgroup in the
 near term
- Putting the practice into play: discussion and examples of how a practice can become real, including a deeper look at techniques that could help bring theory into practice
- Antibodies at work: Why isn't this easy? What are some of the key obstacles you might face in the organization when trying to put the practice into practice?
- Questions for reflection: practical questions designed to help you develop the practice within the context of your own workgroup

How to get started

In *Beyond Process* we discuss how moving down this path of accelerating performance will require shifts in our performance focus, operating focus, and learning focus. But, here's perhaps the best news: This doesn't have to be a huge organizational transformation. Get started today, one workgroup at a time, starting with those that might have a disproportionate impact on the organization's operating performance. Small moves, smartly made, can set big things in motion.

Anyone, whether an executive or a frontline worker, can use these practices to begin changing how her organization works. Leaders may have to resist the urge to make it a major initiative and instead be very targeted, focusing on one or two workgroups with the most potential for impact to generate proof points and build momentum. Staying small and focused could help avoid alerting the organizational immune system, affording more space to demonstrate impact. On the other hand, employees would have to take initiative to start developing these practices within their own groups, or honoring and cultivating the practices that already exist, without relying on a mandate or even permission from above.

Which practices you start with might depend on whether a particular workgroup has been in existence for a while or if it is just forming. It's safe to say that many organizations could benefit from more productive friction, but some established groups may need to *eliminate unproductive friction* first, while new-forming groups might be encouraged to defy conventional wisdom by forgoing "fit" and seeking to *maximize potential for friction*. A workgroup should choose the practices that seem likely to have the most impact on the challenge it

is facing. Whatever the practices, look to identify a few workgroup metrics that are especially relevant to understanding a workgroup's performance and trajectory. Significant performance improvement, as reflected in a key operating metric, could drive interest in having a more systematic focus on practices to drive widespread performance acceleration.

It is worth repeating that, as momentum builds in one or two workgroups, the goal should not be to standardize these practices for scale across the organization. Measure and monitor performance at the workgroup level, for those groups. Use the selected workgroup-level operating metrics as tools for better understanding the success of certain practices rather than for reporting or compliance. As we discuss in *Beyond Process*, moving down this path of accelerating performance will require shifts in our performance focus, operating focus, and learning focus. But for those that do focus their attention differently, have the potential to change the game.

Business practice redesign is more than a key to unlocking the potential for accelerating business performance improvement. These nine practices can be a key to working in a world of constant change and digital transformation-for working in a world of flow. They have the potential to change the way we work with each other, today. And they might be just the beginning of a conversation about how we will work, tomorrow; they may put organizations on the path to redefining work to focus humans on what we can uniquely do, along with helping to amplify the potential of humans and machines working together. The practices are ready to be made yours and put into practice in your own workgroups—a living, and evolving, list that shouldn't require approvals or change management. It requires only that you get started.

How can workers and companies get better, faster?

Nine business practices aim to help workgroups accelerate performance improvement.



FRAME A MORE POWERFUL QUESTION

Set the stage

Know what you don't know

Ask a question that changes the game

Focus on the who, not just the what

Amp it up

Name one thing

Make it personal

Seek surprise

Look for insights, not answers

SEEK NEW CONTEXTS

Look around

Bust silos

Find a performance edge

Shape serendipitous encounters

Look within

Put context in context

Probe the context

Seek an unvarnished

view

Give before taking Focus on the fundamental Embrace complexity

CULTIVATE

FRICTION

Keep an open mind

Celebrate diversity

Be curious

Play with possibilities

Seek out challenges

Challenge yourself and others

Impose constraints

Create space

COMMIT TO A SHARED OUTCOME

Make the most important thing the most important thing

Take the long view

Be bold

Define the ends, not the means

Capture the feeling

Go public

Make it meaningful

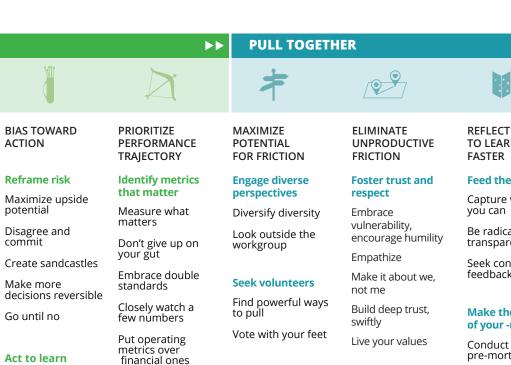
Make it real, now

Keep it real

Raise the bar

EXPLORE THE NINE BUSINESS PRACTICES

Combine multiple practices to expand horizons, focus efforts, and achieve more and more impact over time.



Modularize where possible

Stage your moves

Minimize effort, maximize momen-

Leverage to learn

Accelerate decision-making

Jazz it up

Look for what's not being done

Expand the potential for *improvisation*

Improvise in the moment

Build on mistakes

Track trajectory, not snapshots

Focus on accelera-

Keep moving the edge

Tackle tradeoffs

Think both short and long

Put effectiveness before efficiency

Make distinctions

Put the group before the individual

Turn down volunteers

Look for character before competence

Staff for passion over

Prioritize a growth mind-set

Build an all-star group, not a group of all-stars

Evolve a winning workgroup

Change it up

Make it a rule to change the rules

Make roles context-dependent

Have learning conversations

Create a common language

Focus on what's important, be specific

Start broad, go deep

Listen for what's not being said

Manage the temperature

Make it fun

It's up to you

REFLECT MORE TO LEARN

Feed the reflection

Capture what

Be radically transparent

Seek continuous feedback

Make the most of your -mortem

pre-mortems

Reflect in action

Conduct after-action reviews

Reflect on how you reflect

Be your own judge, not your only judge

Make sense of signals

Celebrate exceptions

Recognize emerging and evolving patterns Getting better, faster





Beyond process

How to get better, faster as "exceptions" become the rule

	Beyond process: How to get better, f	aster as "exceptions" become the rule
To accelerate impact in a rapidly ev	volving world, wo'll pood to	shift our atton
tion from Business Process Reengi		
to Business Practice Redesign, which		
meant to do.	i better reflects the work	triat riumans are
meant to do.		

Getting better, faster

Contents | Beyond process

Introduction: A new opportunity for accelerating performance improvement | 24

The external challenge | 26

How to address the opportunity | 29

What we learned | 34

What are the obstacles? | 39

How to get started | 47

Endnotes 247

Introduction

A new opportunity for accelerating performance improvement

Improving performance. For many leaders, it's always top-of-mind. Performance this quarter and next quarter and the quarter after that—that's what keeps us up at night. Yet, for all the attention it gets, we may be missing a big opportunity: There's a new approach that can not only improve performance but accelerate it. This approach allows us to break out of the trap of diminishing returns—in which a single-minded focus on cost-cutting finds less and less to cut—to a performance curve of increasing returns, where targeted efforts lead to better performance, which in turn fuel even better performance.

—HIS IS AN approach for thriving in a world of increasing and rapid change.

Now, granted, organizations may struggle with aspects of this approach, not least because it challenges some basic assumptions about what is required to deliver operating performance. Taking advantage of this opportunity requires focusing on a part of the organization that is largely invisible today: the frontline workgroup. To unleash the potential for accelerating the performance improvement of workgroups, organizations need to both recognize the frontline workgroup as the key engine of future performance and move beyond the notion of "high-performing teams."

Leaders and managers can address this potential by cultivating a set of practices that are specifically designed to accelerate learning within the workgroup, one workgroup at a time, starting with those that have the potential to disproportionately drive the organization's operating performance.

Over the past several decades, the business world has relentlessly pursued efficiency-driven business process reengineering, seeking to integrate, standardize, and automate tasks in ways that can reduce costs, increase speed, and deliver more predictable outcomes. As the landscape shifts, perhaps it's time for organizations to expand their focus beyond business process reengineering to pursue business *practice redesign*, helping frontline workgroups to learn faster and accelerate performance improvement, especially in environments that are shaped by increasing uncertainty and unexpected events. The perspective we outline here goes beyond the growing work done on high-performing teams

and agile practices by focusing specifically on the practices necessary to accelerate performance improvement over time.

This isn't an opportunity for only the organization. Workers can benefit as well. Redesigning business practices can be a key element of redefining work to focus humans on what is uniquely theirs to do, while amplifying the potential of humans and machines collaborating. The scalable efficiency mind-set tends to treat workers as fixed costs to be eliminated as quickly as possible, and unsurprisingly, this mind-set has shaken the relationship between companies and workers, causing many people to fear for their jobs. By shifting the focus to business practice redesign, managers have the potential to change this relationship. If workers can learn more rapidly and accelerate performance improvement,

they can be viewed not as fixed costs but, rather, as assets capable of producing increasing value over time. And if organizations shift their focus toward creating new value, ultimately, the potential could be nearly infinite. With these practices, and the newly available tools and technology, managers can look to create an increasing returns curve, in which the more people who join together, the more value they can create together. These practices can help workers develop more rapidly and achieve more of their potential, and they can help companies create and deliver more and more value. Now, the interests of the workers and the company can align—the same practices could help both parties to thrive in a world of mounting performance pressure. Rather than being pulled apart, workers and companies can band together in a quest that will benefit both.

The external challenge

HILE ACCELERATING PERFORMANCE improvement is a big, unrealized opportunity, we believe it's also an imperative. Organizations that don't get on an exponential trajectory may fall behind and become increasingly marginalized as the world advances at a faster rate. It could be the difference between plodding along, working harder and harder to get equivalent improvements in performance, versus improving performance at a rate that mirrors the surrounding rate of change. Existing approaches to performance improvement are falling short, and companies are already feeling the effects of mounting performance pressures.

Consider the gap between the rate of price-performance improvement in the digital infrastructure and the growth in labor productivity. Labor productivity has been increasing for decades, but this incremental linear increase is dwarfed by the exponential advances in the digital infrastructure (see figure 1). Most companies are still capturing only a small fraction of the value that ought to be available through these new technologies.

The exponential advance of technology and concurrent trend toward less restricted flows of people, resources, and capital—what we've termed the Big Shift—creates opportunities but also greater uncertainty and performance pressure.¹ While previous technological revolutions were characterized by bursts of innovation followed by periods of relative stability, advances in the digital infrastructure show no signs of stabilizing and are enabling similar rates of advance in technologies in a range of domains, from materials science to medicine.² This is already having a significant effect on the broader business environment. On the demand side, customers have more power and choice than ever before and are less willing to settle for the standardized products that long drove the success of large institutions. Platforms have expanded the range of available choices and made it easier to get information about them, and customers can express their feelings about companies globally and instantaneously. So can investors. At the same time, many customers are becoming more demanding, expecting different and more nuanced products and services that are tailored to their specific needs and preferences.3 Ondemand services have further raised expectations for speed, convenience, and customization as basic requirements.

On the supply side, businesses face intensifying competition as new platforms, connectivity, and other advances reduce the barriers to entry in many sectors.⁴ Increasing rates of change in technology and policy, and the consequent speed of social media-driven perception, can cause greater

Gap in performance potential

1965 Time 2015

Digital infrastructure Labor productivity

Figure 1. Labor productivity is lagging behind technology

While labor productivity has more than doubled since 1965, digital infrastructures such as computing capacity have improved 8 million times over.

Source: 2016 Shift Index; Wikipedia

Deloitte Insights | deloitte.com/insights

unpredictability and cases of first-instances and often shorten the time frame to respond. In addition, global supply chains, connectivity, and trading algorithms mean that an event, whether new regulations on trade or revelations of labor abuses in a distant factory, can quickly propagate through the system to become a major and extreme event. These conditions are likely to worsen.

How are companies reacting to these upheavals? Not well, judging by the performance of public companies as a whole over the 50 years since digital technology first began affecting business. For example, even as labor productivity has risen, the return on assets for all US public companies has declined at a significant and steady rate, by over 70 percent (see figure 2).⁵ As the pressure mounts, regular process improvements often don't solve the problem. As reported in the 2016 Shift Index, the

companies that are still around are having a harder time maintaining market leadership amid intensifying competition in many sectors.⁶ Over the past 80 years, the average tenure of a company on the S&P 500 today has declined 80 percent.⁷

A challenge for large companies—or companies that aspire to be large—is that scalable efficiency is often no longer effective. While the model yielded results in a relatively stable environment and may continue to improve productivity over time, it has created an environment that is often hostile to learning, where it is harder, and takes longer, to achieve higher levels of performance improvement.

The challenge for workers is that many, in all kinds of work environments, will face increasing pressure to reach higher levels of performance or risk being marginalized. Even if, as consumers, we benefit from greater power and choice, as workers,

5.0% 4.5% 4.0% 4% 3.5% 3.0% 2.5% 2.0% 1.5% 1.0% 1% 0.5% 0% 1970 1975 1985 1990 2000 2005 2015 1965 1980 1995 2010

Figure 2. Return on assets for the US economy (1965-2015)

Source: 2016 Shift Index

Deloitte Insights | deloitte.com/insights

the useful life of many skills is in decline, creating a constant pressure to reskill. So it becomes important to learn not only how to learn fast but how to construct new frames through which to learn. Meanwhile, many organizations continue to seek headcount reductions wherever possible, driving a wedge of tensions and stress in the workforce. Many people fear automation or losing their jobs to robots, and in this context, knowing that employers are facing significant performance challenges may only fuel further anxiety for the individual.

The imperative to act seems simple: Today's environment offers us no reprieve, no stabilization that gives us a chance to catch our breath and say, "OK, now we've got it figured out." The methods and practices that led organizations to great success in the past seem no longer to be working—they seem fundamentally broken.

If we are to close the gap, we need new business practices that help us get better, faster.

How to address the opportunity

HAT IS LIKELY to ramp up performance for the organization? Accelerating performance uses different levers than have been used in the quest for scalable efficiency. Organizations that want to pursue this opportunity will need to focus their attention differently than where most are today.

Focus on exception handling as a catalyst for performance improvement. One consequence of the relentless, rapid changes of the Big Shift is that many employees in large companies are already spending more of their time on "exceptions"—those unexpected issues that fall outside the realm of existing standardized processes. These exceptions can be early signals of changing customer needs or shifting contexts that represent potential threats or significant new opportunities for growth for the company. Embedded in them is the opportunity to develop new approaches and new solutions to deliver more value in response to some new need or circumstance. Organizations that focus on improving their ability to handle exceptions-not just to resolve or eliminate them but to glean learning and create value from them-will discover a valuable source of performance improvement, especially if exceptions increase. Variances and deviations from the norm are the bane of efficiency but can

fuel learning and new ways to improve performance over time.

Focus on frontline workgroups as the location of the work that is most relevant to organizational performance in a volatile environment. Workers on the front lines of operations—whether a customer service unit or a supply chain management group, a cybersecurity response group or back-office IT department-will be the ones to first encounter the aforementioned exceptions. And it is at the front lines that new approaches to address these changing needs will likely first be crafted. These frontline workers are often best positioned to see change first, and they can learn from addressing the unexpected challenges and emerging opportunities. And yet, organizations often overlook and undervalue these workgroups. In an environment in which physical assets and intellectual property rapidly lose value, workers—humans—possess the boundless ability to adapt and continuously push the limits of performance improvement.

Why workgroups? First, no matter how smart you are, you'll likely learn faster if you're collaborating together with other equally motivated people who are challenging each other to come up with better, more creative ideas. As the environment and the challenges become more complex, they demand

DEFINITION OF A WORKGROUP

A workgroup pulls together 3 to 15 people working on an interdependent, collaborative effort to deliver a shared outcome that could not be achieved without all members of the group working on it together. The members spend the significant majority of their time interacting with each other, formally and informally, on tasks that cannot be highly specified or sequenced in advance.

What a workgroup is *not*:

- · an entire department
- a task force or committee where decisions or recommendations are made but not executed by the task force or committee
- · a set of people whose work is determined by highly specified, tightly integrated tasks
- a standing unit whose composition remains stable over a long period of time

more creative solutions. Any one individual will typically be less effective at developing and delivering creative solutions to address them than a small group working together in deep, trust-based relationships. And while informal collaboration can still be valuable, the imperative to learn faster will likely drive workers toward more sustained collaboration over time.

Although there are many definitions of teams and workgroups, some inconsistent or contradictory, we start from the definition in the sidebar "Definition of a workgroup." The power of the workgroup comes when the members, collectively, can create or accomplish something that none of them could have done on their own. They can challenge and build off each other because they trust the intentions and commitment of other members. The workgroup is also small enough that everyone, regardless of expertise, can experience the same context and less structure is required for communication and coordination. It isn't about the members contributing their own piece (or expertise) to an aggregate in which the individual components are still distinct and recognizable. Instead, the output of a workgroup is a completely different material, the result of interactions that act upon the contributions of each member and on the members themselves, like a chemical reaction that transforms and binds.

The workgroup may be the most important and relevant working unit to address the unpredictable challenges and opportunities that will arise on the front lines of a rapidly changing world-thus our focus on the frontline workgroup as the catalyst for accelerating performance and sustaining advantage in the future. The opportunity is to create what we call "edge workgroups": frontline workgroups that are pushing the boundaries and limits of performance improvement to accelerate performance improvement while addressing unanticipated challenges or opportunities. Edge workgroups focus on their performance over time and might sacrifice short-term efficiency to achieve higher performance over time. They attract people who are committed to learning how to make more and more of an impact. Edge workgroups are characterized by deep, trustbased relationships and mutual accountability. While few are today, all frontline workgroups could eventually become edge workgroups.

Focus on accelerating trajectories. Success in this environment may require getting on a trajectory that mirrors the exponential rate of technology and technology-enabled change of the world around us. The most relevant measures of performance and the appropriate rate of improvement will be a function of the context of each company and workgroup. In order to achieve an accelerating trajectory, it

cannot be overemphasized that organizations and workgroups will have to adopt a relentless focus on that trajectory rather than getting tugged back into looking at snapshots in time, absolute numbers, and comparisons with competitors. Workgroups that just stick with doing "what works" risk falling behind when what works stops working.

Focus on value creation as the key driver of performance. While costs can't be cut any lower than zero, the potential for value creation has no such bounds. Focusing on new value creation can be the key to getting on a trajectory of accelerating performance improvement. Given that technology is improving exponentially, the way to close the gap between business performance and technology performance is likely to look for ways to create significantly more value than just being efficient or more flexible. At the same time, as noted earlier, customers' increasing power and expectations, as well as their own rapidly changing needs, offer an opportunity for organizations and workgroups to be more creative and imaginative in finding ways to constantly create new value. To do so would require companies to learn faster about the changing needs and preferences of customers; the changing tools, potential partners, and resources available to serve customers; and how to leverage and develop capabilities into new approaches capable of creating significantly more value for everyone involved. While the ultimate driver of value creation opportunities is the customer, there are endless opportunities for workers deep within the organization to find ways to create more value for others as everyone mobilizes to address evolving market opportunities.

Focus on a different form of learning—learning through action. When we talk about scalable learning, we aren't talking about what most people think of when they hear "learning" in a corporate context:

- We are talking not about learning for learning's sake but about learning as a means to
 achieve ever-higher performance in a business environment characterized by mounting
 performance pressure.
- We aren't talking about knowledge management or sharing existing knowledge. This learning is about creating the new knowledge needed to solve new problems. It is the by-product of focusing on accelerating performance improvement.
- And we are talking about not skills acquisition through formal training programs but, rather, the kind of learning that occurs day-to-day, on the job where work practices are embodied in action.

In a world where the underlying technologies and the approaches for using them are changing more rapidly, skills themselves have a decreasing half-life. Stocks of knowledge about what to do or how to do it will become obsolete faster and are less valuable as a result. In this type of environment, creating new knowledge will be more important to performance than improving access to existing knowledge. The people and institutions that will likely have more success in this new world are those who learn faster by creating new knowledge through action—coming up with new ways of doing things that can increase impact.

The power of the workgroup comes when the members, collectively, can create or accomplish something that none of them could have done on their own.

Focusing on accelerating performance improvement can accelerate learning, particularly in the trust-based environment of the workgroup itself, where deep relationships can overcome some of the obstacles (status-seeking, blaming) that might otherwise stand in the way of learning.

Focus on the practices that will help accelerate performance improvement in the workgroup. The term "practice" is often used loosely, but at its most basic, practice is the way work actually gets done. To capture the opportunities available to us, we need to focus on developing a specific type of practice: those that can help accelerate performance improvement in the workgroup. How do we do our work together in ways that can accelerate our performance? The key seems to be that our practices have to catch up with the technology. And here it's important to recognize the connection between technology and practice. As new technology platforms and tools emerge, often so do new practices.

Practices are mostly tacit and tend to be contextspecific. They are not codified but, rather, emerge through action and are constantly evolving. Yet, there is also continuity. Specific instances of practices will share some similarities, such as intent and approach, which guide-rather than govern-our actions. That is part of what can make practice so powerful. So while you can describe a practice and what seems to be most important about it at a high level, the actual practice will develop in a way that is specific to the context. The way, for example, a firstresponder unit reflects on a rescue will be different than the way a customer success team reflects on a data import, but even an urban fire-and-rescue unit will practice reflection differently than a suburban fire-and-rescue unit. As a result, there is almost infinite variation in practice because of the infinite variation in context.

All of this can make practices difficult to articulate, and even trying to make them visible tends to change them. It's just like riding a bike: You can provide a bit of coaching, and the learner may pick up a few techniques through observation, but there's

no learning to ride except through the act of trying. Workgroups, however, can be a uniquely effective environment for transferring the tacit knowledge of practices. Practices may more readily be observed, tried out, refined, and shared, informally, within a workgroup's narrower confines and deep, trust-based relationships. In this way, workgroups can both learn new practices and use those practices to learn faster how to improve performance.

Within the sphere of the many management, individual, and business practices that exist in organizations today, we are focusing specifically on the set of practices that can accelerate performance improvement.¹⁰ We identified nine practices, each amplified by the others, that can help a frontline workgroup accelerate performance. These practices can be grouped into three categories (see figure 3):

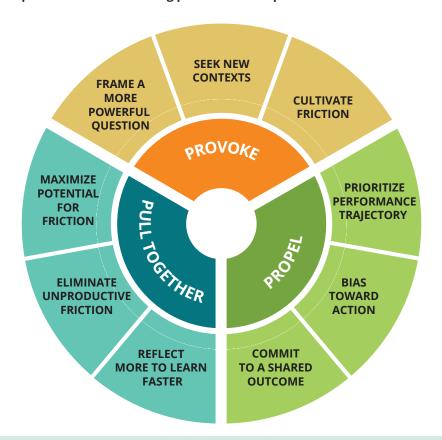
- Those that provoke the workgroup to think differently about the challenge and possible approaches and create better alternatives
- 2. Those that *propel* the workgroup into action to gain additional insight into the next best move to make a greater impact
- 3. Those that help the workgroup *pull together* to harness diversity and come up with ever-higher impact and outcomes

Within the nine practices, we've identified important and useful sub-practices (and even sub-sub-practices) to consider; they can be found in Exhibit B (in the appendix) and will be discussed in greater detail in Part 2 of this series. While these practices and sub-practices aren't intended to be the comprehensive final word on accelerating performance improvement, based on the work we've done, they represent a robust tradecraft for getting better faster. They may go much deeper, and they are likely to evolve as people use them and adapt them to harness evolving technological tools.

Interestingly, the practices that can unlock the potential of frontline workgroups as engines of acceleration for performance are also the ones that harness the uniquely human traits and capabilities: empathy, creativity, imagination, and divergent thinking. The practices are mostly agnostic of technology, although technology may be an amplifier in many cases and could enable new practices and certainly sub-practices. For example, technology that allows unmediated, real-time access to biometric and movement data would offer new affordances for how some types of workers might think about experimentation and reflection. Technology, however, could be a distraction if the organization doesn't first focus on cultivating and supporting the practices that could drive accelerated performance improvement.

If we take seriously these practices and the new tools and technology that are available to us, we have the potential to create a business environment with an increasing returns curve, where the more of us that join together, the more value we can create together. And if we shift our focus toward creating new value, ultimately the value we can provide may be infinite. If we work this way, we have an opportunity to achieve more of our potential, express more of our individuality, and achieve far more impact, together.

Figure 3. Nine practices for accelerating performance improvement



See our interactive at deloitte.com/us/betterfaster to explore the building blocks for getting better, faster.

Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

What we learned

E LOOKED ACROSS a variety of rapidly evolving arenas from those in hightech environments, such as an airline's network operations control center, to those in lowtech environments where even a cellphone signal can be hard to come by. We looked at some of the most elite units in organizations such as the New York City Fire Department and the Joint Special Operations Command, and in some unexpected places like teams in the massive multiplayer online game League of Legends. We looked at start-ups such as Away and at frontline workgroups within corporate giants like GE. We asked ourselves: Where are environments changing very rapidly, and how are workgroups improving performance in those environments? We sought to focus in particular on workgroups that were improving their performance over time.

Our sense was that if we could identify those practices that appeared to be contributing to improving these workgroups' performance, these practices could help frontline workgroups throughout the company to accelerate their performance improvement. In total, we talked to 60-plus workgroups across 20 arenas and three continents. Figure 4 depicts a geographic sampling of territory we covered just in the United States. Exhibit A represents a cross-section of the workgroups we studied where we found frontline workgroups engaged in at

least some of the practices required for accelerating performance improvement.

We were unable to locate any workgroup that had adopted all nine practices and had achieved quantifiable accelerating performance improvement as a result. In some cases, however, we encountered workgroups that may not have been pursuing a practice but that, when introduced to some of these practices, thought they might be useful in further improving performance. Most of the workgroups believed that they were getting better, rapidly, and had the sense that their improvement was actually accelerating. Unfortunately, they had collected too little systematic data to determine whether performance improvement was accelerating rather than increasing linearly.

Of these workgroups, all seemed to have adopted at least some of the practices for accelerating performance improvement, and all were achieving improved performance over time. None of the workgroups had adopted the full set of practices, however, and part of the untapped opportunity is to get the workgroups that have already improved performance with some of the practices to adopt the full range of practices, to accelerate their performance even further. In addition, there is an opportunity to encourage more workgroups everywhere to adopt, deliberately, the practices required to accelerate performance improvement—to become edge workgroups.

Figure 4. Workgroups aren't dependent on geography



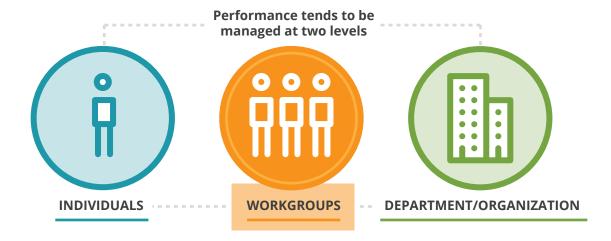
Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

One reason this opportunity hasn't been recognized is that there is a performance management paradox: The very workgroups that drive organizational performance are often invisible from a performance management perspective (see figure 5). While many leaders agree that this type of work-

group is important to an organization's performance, few companies track performance at the workgroup level, much less track how these workgroups are doing over time. To the extent that they do evaluate workgroups, it tends to be a static measure of how the group performed relative to others, and efforts

Figure 5. Few organizations focus performance measures at the workgroup level



Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

to improve group work tend to center on developing high-performing teams that excel in the moment. We found none that collected good, systemic data at the workgroup level. While we found examples of potential edge workgroups, we could not find any organization that systematically focuses on what is required to accelerate workgroup performance. Just imagine what could be accomplished if organizations pursued an explicit goal of accelerated performance improvement in their frontline workgroups.

Part of the discrepancy in the effort invested to manage performance at the individual and department or business unit levels versus the workgroup level can be attributed to the metrics that leadership and investors use and how they use them. In many cases, both internal and external stakeholders are concerned primarily with financial metrics. From this perspective, individual workgroups may not appear to contribute meaningfully to an organization's cost basis, and their revenue is often marginal. Any one workgroup in a large department might not register meaningfully on overall financial metrics. Yet, if you look at the operating and frontline metrics, workgroups do have a significant impact, through the operating metrics, which are typically *leading* indicators of performance. They could become more and more important as the key drivers of organizational performance as processes and the departments that house them become less significant for performance improvement.



Exhibit A: Representative workgroups. While we spoke with and learned from many more than we can list here, the following is a cross section of the types of organizations and workgroups with which we spent time.

Royal Caribbean Edge workgroup

Royal Caribbean Cruises Ltd. (RCL) is a global cruise vacation company that owns and operates three global brands: Royal Caribbean International, Celebrity Cruises, and Azamara Club Cruises. In addition, RCL has ownership stakes in the German brand TUI Cruises, the Spanish brand Pullmantur, and the Chinese brand SkySea Cruises. Together, these brands operate a total of 49 ships, calling on approximately 535 destinations on all seven continents. The **Newbuild Innovation workgroup** collaborates closely with company leaders, architectural designers, and naval architects to push the limits of ship design as RCL expands its fleet."

Sparks & Honey Culture briefing workgroup

Sparks & Honey (S&H) is an "agency of relevance." S&H works with organizations from McDonalds to DARPA to identify and name elements of culture before they become mainstream trends. The culture briefing group brings the agency's cultural intelligence to life through a bespoke system called QTM. Each day, they hold a briefing to make sense of the latest cultural signals mined from across the spectra of life, the Web, and a human network of contributors from around the globe.

Southwest AirlinesBaker Group Field Tech Group

Southwest Airlines (SWA), based in Dallas, operates more than 4,100 flights daily to more than 100 destinations. As the nation's largest carrier in terms of originating domestic passengers boarded, SWA operates a point-to-point network with a fleet consisting entirely of 737s. SWA prides itself on quick turns at the gate from time of arrival to time of departure.

The Network Operations Control, SWA's nerve center, is home to the Baker and Field Tech workgroups.

- The Baker workgroup is a combination of dispatch superintendents and tech developers charged with increasing on-time performance during unanticipated operational and weather events.
- The Field Tech workgroup is a specialized unit of maintenance mechanics whose job begins where the maintenance manual ends. They fix what the regular maintenance crew cannot.

Joint Special Operations Command (JSOC)

Joint Special Operations Taskforce (ISOTF)

JSOC is a unit within the US military with representation from the nation's most elite warfighters, intelligence analysts, and civilian support. Activated in 1980 to address covert and challenging missions, JSOC operates task forces in conflict areas throughout the world. JSOTF, led by Gen. Stanley McChrystal, was tasked with defeating Al Qaeda in Iraq, an enemy that seemed fundamentally different from what US forces had seen in the past.\(^{VII}\)

Fire Department New York City FDNY Rescue 1

The FDNY is the largest fire department in the United States and considered one of the world's busiest and most highly skilled emergency response agencies. VIII Part of FDNY's special operations command, **FDNY Rescue 1** is the most elite rescue unit in New York, responding to all major incidents in lower Manhattan. One minute, responders might be on the Empire State Building, rescuing a window washer dangling off the 80th floor; the next, they could be in the subway, lifting a train off someone struck on the platform.

Red Cross

Regional Disaster Unit of Central/ Southern Illinois The American Red Cross is a humanitarian organization that provides disaster relief and emergency assistance to those in need in incidents ranging from tornadoes, floods, hurricanes, and earthquakes to house fires, acts of terrorism, and other manmade disasters. For over 135 years, the organization has "been helping neighbors down the street, across the country and around the world." \(^{10}\)

The **Regional Disaster Unit of Central/Southern Illinois** is responsible for responding to all emergency/disaster incidents across the region and leads the entirety of Disaster Cycle Services, including Preparedness, Response, and Recovery programs for the 3 million people and 78 counties in their region across Illinois, northeast Missouri, and southeast lowa.

GE Appliances— FirstBuild

With headquarters in Louisville, Kentucky, and manufacturing facilities in Alabama, Georgia, and Tennessee, GE Appliances has long been known for energy-efficient refrigerators and washing machines in the US home appliance industry. As technology and innovation expanded to the mass market, GE Appliances began to explore new ways of better serving changing consumer needs. GE Appliances was acquired by the Haier Group in 2016. **FirstBuild**, a subsidiary of GE Appliances, was created to more rapidly develop and deliver innovative products to market. It operates an open innovation platform to co-create with a global community, striving to ensure that better products reach consumers faster.

Riot Games League of Legends Team SoloMid

League of Legends (LoL) is an online, team-oriented, multiplayer videogame developed by Riot Games. Popular around the globe, LoL appears to be on the forefront of the growing e-sports industry, which generated over \$275 million in North America last year. Riot hosts championship series and estimates there are more than 100 million active LoL players each month. Some 43 million viewers watched the 2016 LoL World Finals. Team SoloMid is among North America's top e-sports teams, competing in at least three tournaments each year against 170 other professional teams. It has won five tournaments in the North America LoL Championship Series and has been in every LoL World Finals since 2009.

Away

Away is an e-commerce luggage start-up with a direct-to-consumer model aiming to bring "first class luggage at a coach price." "NV

IsraAID

Founded in 2001, IsraAID is a **humanitarian NGO**, committed to providing life-saving emergency relief and durable solutions for populations affected by natural disasters, epidemics, and post-conflict situations. Its medical teams, search-and-rescue units, post-trauma experts, community specialists, and other professionals have led international responses in natural disasters and civil strife around the world. After the initial emergency period, IsraAID shifts to long-term programs. As it operates in volatile and uncertain environments, it remains committed to amplifying its impact over time. As of 2017, IsraAID has responded to crises in 41 countries and has ongoing programs in 14 countries.^{XVI}

Kaiser Permanente – Healthcare Continuity Group

Kaiser Permanente is one of the nation's largest integrated health care delivery systems, with 11.8 million members, 39 medical centers, and more than 22,200 physicians across eight states and the District of Columbia. The **health care continuity management group** prepares for worst-case scenarios and ensures that Kaiser is equipped to assist those in need while providing a consistent level of care for current patients. The workgroup has played a major role in the health care system's response to events ranging from anthrax to earthquakes to the Zika and Ebola outbreaks and threats of terrorism.

IRESS

Community Networks workgroup IRESS is an Australia-based company that develops specialized financial services software. Since its 1993 founding, IRESS has grown to more than 1,800 employees operating in seven countries, providing technology solutions for clients in verticals ranging from wealth management to financial markets and the mortgage sector. XVIII The **community networks workgroup** combines and pairs resources that otherwise might not have come together on their own. XIX

I. Royal Caribbean Cruises Ltd, "About our company," accessed October 12, 2017. II. Andrew de Maar and Dalia Katan, interview with Irineu Romano, project manager, Royal Caribbean Cruises Ltd, June 6, 2017. III. Sparks & Honey, "Meet Q, the machine at the heart of sparks & honey," July 10, 2017. IV. Information provided by the company in interviews. V. Southwest, "About Southwest," accessed October 26, 2017. VI. Southwest, "Southwest corporate fact sheet," accessed October 26, 2017. VII. Stanley McChrystal with Tantum Collins, David Silverman, and Chris Fussell, *Team of Teams: New Rules of Engagement for a Complex World* (New York: Portfolio, 2015), p. 25. VIII. Fire Department of the City of New York, "Overview," accessed October 26, 2017. IX. American Red Cross, "Brief description," accessed October 26, 2017. X. Robert Elder, "Esports will break a billion in 2017," *Business Insider*, July 22, 2016; SuperData, "eSports market report 2016," accessed October 26, 2017. XI. Estimates for monthly viewership as of September 2016. The private company previously reported figures of 67 million monthly players and 27 million playing daily in January 2014. Paul Tassi, "Riot games reveals 'League of Legends' has 100 million monthly players," *Forbes*, September 13, 2016; Phil Kollar, "The past, present and future of League of Legends studio Riot Games," *Polygon*, September 13, 2016. XII. Bradmore and Magus, "2016 League of Legends World Championship by the numbers," LOL eSports, December 6, 2016. XIII. GosuGamers, "LoL rankings," accessed October 26, 2017. XIV. Wikipedia, "League of Legends world championship," accessed October 26, 2017. XV. Andrew de Maar and Ryan Gatti, telephone interview with Away Travel co-founder Steph Korey, July 13, 2017. XVI. Information provided by IsraAID, October 2017. XVIII. Kaiser Permanente, "Fast facts about Kaiser Permanente," accessed October 26, 2017. XVIII. IRESS, "About us," accessed October 26, 2017. XIX. Information provided by IRESS.

What are the obstacles?

T'S EASY TO talk about where you should focus, but this approach necessarily requires calling into question some key assumptions that many organizations have about their operations, their performance, and how companies or other large in-

stitutions function. There may be significant obstacles to overcome when asking people to abandon what they believe and take on a new framing.

Broadly, we have identified three shifts, three areas in which organizations or workgroups would have to refocus, in order to move down

this path toward accelerating performance: performance focus, operating focus, and learning focus.

Shift 1: Redefining how we think about our performance focus

From relative performance to dynamic trajectory. Under the influence of the financial markets, in which investors continuously decide where to allocate capital among competing op-

portunities, organizations—particularly public companies—have come to approach performance as a relative concept. Although analysts often compare quarterly performance numbers on a year-over-year basis, the focus is less on trajectory than on a current

snapshot of performance improvement as well as on absolute performance for that period. Even the meaning of the absolute performance and the performance improvement is typically viewed through the lens of how it compares to other current competitors rather than against what is possible.

This mind-set tends to breed complacency in those companies doing better than their competitors, despite the fact that all of them could be falling behind the pace of change around them. Across many sectors, incumbents are increasingly vulnerable to disruption by new entrants that wouldn't even have been on their radar as competitors in a previous period, in large part because of the accelerating rate of change in the Big Shift.

At the workgroup level, the story is largely the same. To the extent that companies are actively targeting initiatives at group-level performance, most

OVERCOMING THE OBSTACLES

Shift 1: Redefining how we think about our performance focus

Shift 2: Redefining how we think about our operating focus

Shift 3: Redefining how we think about our learning focus

Figure 6. High-performing teams vs. edge workgroups



HIGH-PERFORMING TEAMS

- Stick with what works
- Seek harmony
- Focus on performance in the moment

Source: Center for the Edge



EDGE WORKGROUPS

- Look for and find a better way
- Cultivate friction
- Focus on performance improvement over time

Deloitte Insights | deloitte.com/insights

are focused on creating "high-performing" teams/ workgroups rather than edge workgroups. The differences between high-performing and edge aren't trivial (see figure 6). Most high-performing groups focus on doing the best that they can, in the moment, and assess performance relative to themselves, or to other teams, in a specific context. They tend to stick with what works, seek harmony, and focus on performance in the moment. After all, why mess with success? High-performing groups can, thus, fall prey to the trappings of scalable efficiency; as a result, their performance can breed complacency. Edge workgroups, in contrast, might sacrifice short-term efficiency for long-term growth. What often gets lost with the emphasis on in-the-moment snapshots is that where a workgroup, or organization, is at, at any point in time matters less than where it is headed and where its performance trajectory can take it.

This focus on the trajectory of performance improvement, across changing contexts over time, is the crux of where we depart from high-performing teams and agile approaches. Both are valuable concepts that have delivered value and are crucial to performance in some settings. However, neither appear to target the opportunity we're discussing: accelerating performance improvement over time.

They may be necessary to address the challenges of an exponential world—but they're not enough.

Agile, despite the similarity of organizing around small groups and a bias toward taking rapid, experimental action, focuses on speed and especially flexibility, optimizing short-term deployment for solving a particular problem in a given context at a point in time rather than over time. The frontline workgroups with which we're concerned will be facing a wide variety of complex and unknown problems across dynamic contexts. Agile practices seem to do little to support the learning or development of relationships or capabilities within the workgroup to get better at handling these types of problems over the long term. If you organize around performance improvement over time as a means of learning faster and improving faster, everything can change.

From efficiency and cost-cutting to value creation. In a scalable efficiency mind-set, performance is often synonymous with efficiency, cheaper/faster, and driving out costs, which puts organizations in a diminishing-returns mind-set. When efficiencies define performance, the more performance we eke out, the harder it can be and the longer it can take to achieve a next level of per-

formance improvement. It also assumes that these institutions' constituencies will settle for standardized products and services that meet the lowest common denominator of need.

Most customers, however, are less and less willing to settle for standardized products and services, and technologies (for example, cloud-based or social) have already reduced costs. For many, the type of performance that may matter most and may give them advantage is likely to be the type of performance associated with creating more and new value (better/different versus faster/cheaper). The numerator-revenue growth-comes from developing new opportunities, creating new value, and meeting new needs in novel ways. For organizations to get better at creating and delivering significant new value, they should move beyond promoting efficiency and start focusing on tracking, measuring, and supporting the behaviors associated with value creation.

From financial performance metrics to operating and frontline metrics. Financial metrics drive behavior at the top levels of most large organizations today. Yet, these metrics tend to be lagging indicators of performance; they are backward-looking. If you're serious about getting on an accelerating trajectory, you should identify and rigorously track the relevant leading indicators. Operating metrics are near-term, leading indicators of an organization's performance. Key operating metrics drive financial metrics and have typically been thought of as measuring the success of a key business process. The connection between operating metrics and frontline activities-and associated frontline metrics—that drive them is generally more immediate and understandable. For example, in a customer support unit, a frontline activity such as validating the installation might drive an operating metric around issue resolution rates, which in turn might drive a key operating metric-customer churn—that drives revenue growth. In addition, a workgroup can directly affect operating metrics and operating performance, making them more relevant than financial metrics.

Shift 2: Redefining how we think about our operating focus

From business processes to workgroup **practices.** Most large companies today formally organize around processes;12 Jeff Bezos, in his annual letter to shareholders, notes large organizations' tendency to too often make process a proxy for results. Indeed, workers-and entire organizations-get so caught up in "doing the process right" that they lose sight of the outcomes. 13 And processes are increasingly inadequate to drive significant performance improvement. The value of further optimizing processes to deliver products and services seems to be rapidly diminishing. What can be standardized likely will be, and those processes will likely be automated, but where will the next level of performance come from? Focusing on process efficiency and eliminating variance may not help companies gain a competitive advantage. More importantly, in this environment, most processes can't keep up with addressing the new challenges and opportunities served up by the Big Shift world nor can process optimization likely help companies figure out how to create more value for their customers.

Not only can routine processes be an avenue of diminishing returns-they can actually be barriers to performance improvement. Trying to update and optimize processes to conform with the ever-changing reality, and ensure compliance to those processes, is typically time- and resourceconsuming. Continuing to optimize processes can divert the organization from investing in the capabilities to make sense of the changing reality and learning how to better create and capture value for it. Machines are increasingly able to perform the tightly specified, highly standardized tasks that support scalable efficiency more predictably and reliably than humans. As a result, many companies have invested in automating processes-removing people wherever possible-rather than exploring how these tools might better reflect and amplify the

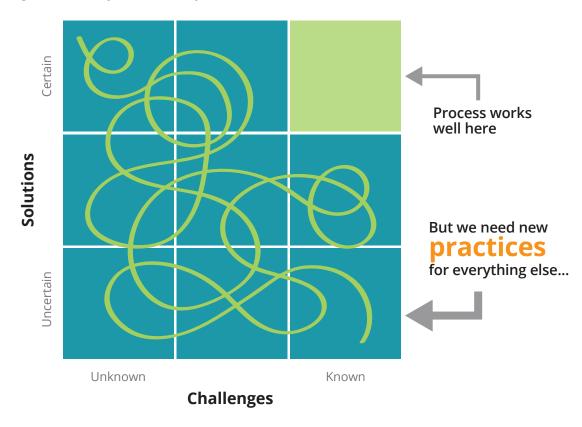


Figure 7. Where processes and practices work

Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

business *practices* of the people who could be deployed to create more value for the business.

The world of the Big Shift is one that is less and less about "known challenges" with "certain solutions" for which process and efficiency models thrive (see figure 7). Yet the temptation for most large organizations is to focus on controlling what they can. Consider the example of 3M, where, in the early 2000s, a new CEO decided to "optimize" R&D by systematically stripping away inefficiencies. Controls were brought to bear on R&D: Processes were formalized, with forms developed to ensure engineers innovated efficiently and tighten compliance; 3M's operating margins quickly improved and Wall Street rewarded it.¹⁴ But the company soon found that R&D wasn't creating new sources of value as effectively as it once had, and not until a new CEO

came in to unwind those efforts was 3M able to turn things around, in 2012. ¹⁵

In fact, rigid processes may have never been an effective way to tap into the workforce's value-creating potential. Actual compliance to many processes can be low. The act of process reengineering, however, *was* a useful line of inquiry into the work of the organization; done well, it could highlight opportunities to create feedback loops, ease bottlenecks, and reduce unacceptable errors in products for which the consequences of variance were high—for instance, airplane engines. As David Weinberger notes in his introduction to *The Social Life of Information*, process "assumes that people follow the steps, and that all people follow steps the same way. But people aren't like that." And now, the work that most people are asked to do is less

and less like that. Rather, workers more often need to use their creativity to effectively address unexpected events on the fly, and organizations should be ready to recognize and pursue the potential opportunities—for new products, services, and approaches—that reside in those events.

If processes have a growing potential to become prisons that keep us trapped in a world of diminishing returns, workgroups might be the catalysts that can help us achieve more and more of our potential. And if managers take as their primary objective accelerating learning and performance improvement, then the practices of the workers in those environments may have to be redesigned.

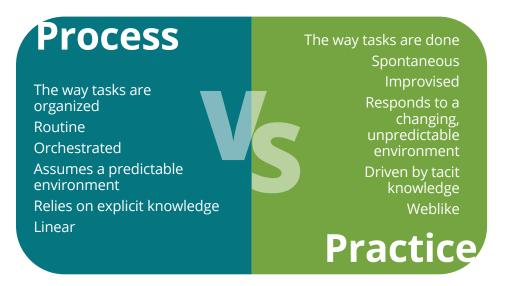
While technology can certainly enable and support new ways of working, the practices embedded in a workgroup can either foster or extinguish its potential. For example, if failure is frowned upon, the group may shy away from making decisions. On the other hand, if the workgroup has a practice of celebrating the learning from failure and making its learnings visible to others, that group

may be more likely to take on greater challenges over time.

Further, we believe that the types of capabilities that can help companies thrive are those that are amplified and accelerated by the practices of workgroups rather than the processes undertaken by machines (see figure 8). What's predictable can also be easy to automate, and what's automatable can be easier to copy. The kinds of approaches that will create new value and have the potential for sustained advantage will likely be those that are harder to copy, those that rely on capabilities that are distinctly human—imagination, empathy, creativity, compassion, and judgment.

From tightening controls to enhancing the frontline workgroup's ability to improvise. Today, exceptions are generally resolved through workarounds: Workers may struggle to find the colleagues with the information, skills, or authority they need, often in different departments, and often must work outside the rules to access the relevant information and resources to resolve the exception. What they did and learned is largely

Figure 8. Process vs. practice



Source: John Seely Brown and Paul Duguid, "The social life of information."

Deloitte Insights | deloitte.com/insights

lost to the rest of the organization, and the workers who take on these challenges may not receive credit for their efforts and may even be penalized for not complying with processes and policies. In fact, faced with a lack of both decision-making authority and informal empowerment, many workers turn to process as a refuge from the ambiguity. As has been seen in, for example, some highly publicized airline incidents, frontline employees often feel they lack the permission or the resources, or even the expectation, to improvise creative approaches when faced with dynamic, unpredictable situations.

It used to be that these activities tended to be limited to the executives at the top. Everyone else just had to execute. In times of relative stability, senior executives could tightly specify what needed to be done and could rely on the front line to get the job done. These hierarchies are giving way to more fluid chains of command; command-and-control mechanisms no longer appear to be as effective.

In fact, to improve in the face of dynamic, unpredictable situations, workers must improvise, and it isn't just a necessary evil. Improvisation is a way of taking action in the moment that moves beyond the status quo and can yield fresh insight about what works or doesn't. Understanding that improvisation can accelerate learning in the moment, managers can look for ways to actually expand the potential for improvisation by reducing the constraints imposed by standardized operating processes. Workgroups can make the most of these opportunities in the moment by tinkering with their approach and push the envelope of performance. Of course, a key element of improvising is building on what you have, and that means that mistakes and successes need to be made visible for others-exception handling can't be kept behind the scenes.

As will become more apparent in the practices, edge workgroups typically have some fundamentally different biases and values than those with which many organizations operate today, favoring initiative and improvisation. For example, these workgroups favor trust-based relationships and mutual accountability over compliance and con-

trols, which can afford them more space to explore variances instead of hiding or minimizing them. Edge workgroups resist the urge to oversimplify, embracing the tension of diverting efficiency for the sake of exploration and greater effectiveness over time. They also redefine risk around the risk of not acting. Inaction is a huge and seldom-discussed risk in most organizations, with significant cost in terms of the opportunity for powerful learning we forgo if we don't experiment and put ideas into action.

One important difference to call out is the role of friction in the practices for accelerating workgroups. Most traditional organizations have tended to try to eliminate friction wherever possible in order to increase control and predictability. Not only can friction slow things down and make them change course-it can generate heat, with unpredictable consequences. It is neither efficient nor comfortable. As a result, most organizations smooth over friction in favor of "getting along." They are so eager to defuse friction and create an environment devoid of discomfort that we never get a chance to inquire into it. Yet what we call friction is what happens when diverse ideas, assumptions, and approaches collide with others that do not align. When this type of friction occurs in an environment of trust and respect, it can be productive: challenging assumptions, testing boundaries, and generating new and better solutions-leading to better performancethan an individual could alone.

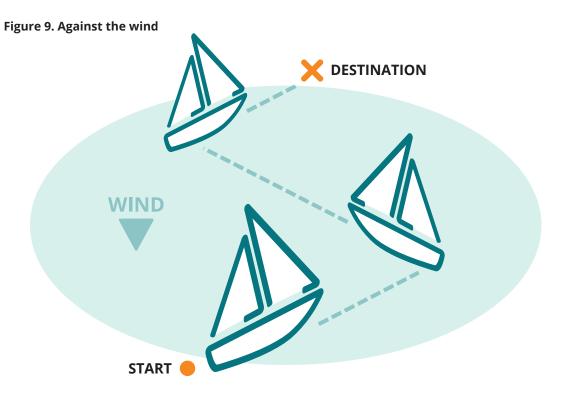
As Steph Korey, co-founder of luggage start-up Away, says, "Friction is how you end up with the best ideas happening. If you had a company culture where you excluded friction, you'd end up with a mediocre product." While many large companies try to eliminate friction, Away decided from the beginning that workgroups that "go along to get along" don't go very far. The company credits this practice of cultivating friction as part of the reason it has continuously operated in the top percentiles of customer satisfaction, even as Away continues to grow at a 5–6x clip.¹⁷

Friction is resistance, and resistance can be a productive force, just as boats sail faster when they sail into the wind, provided the sails are positioned to harness the wind's resistance (see figure 9).¹⁸ In the same way, workgroups can turn friction into a powerful source of performance acceleration and learning, provided they anticipate friction and have practices to harness it toward an outcome.

From siloes to networks. Today, most frontline operations are narrowly construed to focus on just the people within the company and, often, just the department. Information and resources are allocated to specific silos and guarded from others. Yet, when exceptions to the rule increasingly are the rule, what one knows and the experience of having done something before can be less directly applicable to the situation at hand. What worked yesterday may not work tomorrow. Instead, looser, broader, and richer connections can help shift our focus to what hasn't been done before. As the pace of change increases, the peripheries and edges may become more important. Engaging with others can help avoid tunnel vision, and finding ways to motivate others and leverage their capabilities—as well as what they know—can help you to achieve more impact. Organizations will likely need to make decisions and overcome obstacles faster, and may have to seek informal interactions with a broader range of participants to gain the necessary insights to act. This may require organizations to support practices that let individuals be much more networked across workgroups and across organizations so that workgroups can engage with each other to help accelerate performance improvement.

Shift 3: Redefining how we think about our learning focus

From knowledge sharing to knowledge creation. Today "learning" typically means training programs and knowledge management systems. Training programs and knowledge management systems—even those that seek to bring it



Source: Nancy Duarte, "The audience's journey."

Deloitte Insights | deloitte.com/insights

closer into the context of everyday work or make it bite-sized and on-demand at the worker's desk or smartphone-are typically focused on knowledge that already exists. By the time training is created and deployed, it is often already dated. And because the training environment is usually still separate from the actual use of the knowledge in the work, more so in the case of training programs, the knowledge is less likely to be put into action. Often it is explicit or skills-based, "how to do x," and is treated as static, a knowable thing to be conveyed to and mastered by the worker. When the skill is no longer relevant, the worker needs to be retrained. As the relevance of static knowledge diminishes more rapidly, more of the most valuable knowledge is tacit, difficult to articulate or convey except through shared participation. Tacit knowledge often trumps explicit knowledge because it is generally newer, emerging from new experiences and interactions and providing insight into how to act.

In a future where we envision workgroups handling more and more of an organization's differentiating work, the imperative for knowledge creation through action could play out in two ways:

- First, the workgroup itself continuously evolves its approach to have more of an impact with its work: to deliver more or to deliver better or to reach more people with it.
- Second, workgroups themselves could become powerful environments for learning—for both individuals and the organization. In particular, participation in a workgroup may be one of the most effective ways to access tacit knowledge, which resides in our heads and bodies, embedded in the work itself and in our practices around the work. By engaging with other members to address challenges in different contexts, individual workers can gain tacit knowledge from each other and create new knowledge in applying it and evolving it as they move forward.

From training to get performance to pursuing performance in order to learn faster. One of the main rationales for corporate training has long been to equip workers with the necessary

information, skills, or capabilities to do their jobs better, in the hopes that the investment will pay off in improved performance down the line. As we've discussed elsewhere, this type of training is less and less effective as the half-life of specific skills decreases and the number of unexpected exceptions increases. The model of learning and performance improvement flips when you focus on accelerating performance improvement as the primary goal, then cultivate the practices and provide the support to make that happen. Rather than train first and hope for a bang later, you can aim to create an environment in which workers learn faster as they focus together on accelerating their performance. Workgroups can be the most fertile setting for learning faster-more so than an individual sitting alone in an office or an office of workers committed to the department's overall goals.

From fearing exceptions to celebrating **exceptions.** In the scalable efficiency model, where process efficiency is the source of performance improvement, exceptions and deviation from the norm are typically seen as a problem that is either slowing us down or creating costly waste. For those measured on the efficiency of a process, dealing with exceptions can be an unwelcome distraction from executing the standard process. For the individual, the department, and the organization, all of the incentives and systems encourage minimizing variances and even hiding those that occur. Meanwhile, the potential opportunities—to serve the customer in new ways, to use new tools or create new valuego unexplored. This is where the opportunities to improve an organization's performance may arise.

As the number of exceptions increase for frontline workers, organizations should embrace and celebrate exceptions as an opportunity to improve performance. At the very moment when much of business, government, and society is consumed by the idea of machines taking our jobs and what that will mean for humans, we risk letting what differentiates us from machines atrophy. Humans are better at handling exceptions than machines are. Mistakes can be the fuel for learning and improving performance over time.

How to get started

HIFTING PEOPLE'S ASSUMPTIONS and beliefs within an organization can be difficult. In fact, trying to do it head-on will likely result in failure: Such moves often trigger corporate antibodies to defend against a perceived attack. Luckily, there is a pragmatic way to address this opportunity and start overcoming obstacles through small moves, smartly made.

Rather than approach this as a "big bang" initiative to redesign all of the company's workgroups, measuring success through broad adoption metrics, think in terms of targeted impact, designed to build momentum. This approach starts small but smart, by identifying and targeting the handful of workgroups that could potentially have the highest impact to the business unit or company overall. These workgroups become the test beds for cultivating the practices required to accelerate performance improvement.

The key behind making a "small moves" approach work is to systematically identify the frontline workgroups that could be most pivotal in addressing some of the biggest current opportunities or pain points in the financial performance of the business unit or company overall by using a "metrics that matter framework" (see figure 10).

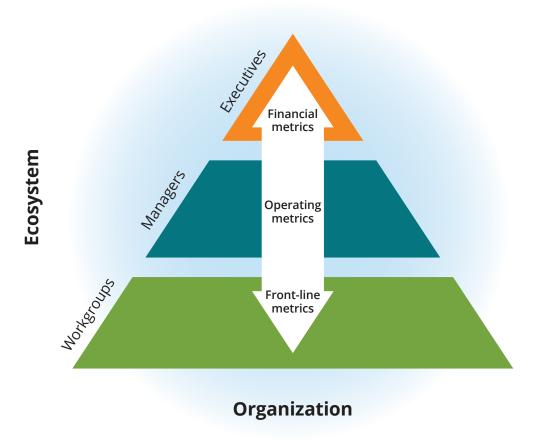
Take, for example an oil-field services company that suffers from low revenue growth. In looking for the drivers of low growth, we discover that the company is experiencing a high customer churn rate. Digging a little deeper, we find that departing customers point to high equipment failure rates in the field. This would lead to targeting a field-services workgroup for which the practices in this article could be cultivated to try to accelerate improvement in a relevant metric, such as first-time repair rate or maintenance compliance rate. Focus on the opportunity that can have a meaningful impact on metrics, and align efforts to support those workgroups' adoption of these practices rather than getting bogged down in trying to drive change across organizational hierarchies and structures.

- 1. **Identify the opportunity.** Use the *metrics* that matter framework to identify the frontline workgroups with the greatest impact on the most significant financial opportunities and pain points of the business unit or company. This will require identifying the operating metrics and ultimately the frontline metrics that will have the greatest impact on the financial metrics that matter.
- 2. **Empower a workgroup.** Start with an existing workgroup that has the greatest ability to influence the frontline metrics that matter, and help it transform into an edge workgroup. With the practices and sub-practices of the Periodic Table (Exhibit B) as a guide, let the workgroup choose a few practices to focus on that they

believe will have the most impact on the challenges they are facing. Other than setting the focus—accelerating performance improvement—the workgroups should largely own how they implement the practices. Encourage the test-bed workgroups to make the practices their own and to identify the metrics they think are most relevant for the challenges they encounter, but help them understand how certain of their frontline metrics make a significant difference to the broader operating and financial metrics that matter to senior management. These types of practices should help the workgroups be more effective, realizing their potential to make more of an impact. In addition, individual workers

- will likely learn faster from each other and gain the experience of taking on difficult challenges.
- 3. Track metrics. Track the agreed-upon work-group metrics and make the trajectory visible. Check in with the workgroup about the trajectory and seek input on how the workgroup metrics might be refined to provide the most relevant indicators of meaningful impact. Treat the workgroups as test beds to better understand, within the context of your organization, what tools or support edge workgroups might need from the organization, and be alert to which practices seem to have better traction with the workgroup members—and which seem to have particular impact on the metrics.

Figure 10. Which metrics matter?



Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

Exhibit B. Nine practices that accelerate performance improvement

PROVOKE PROPEL PULL TOGETHER

Frame a more powerful question

Frame questions that focus on the learning opportunity—and that provoke and inspire others to change the game

> Set the stage Amp it up

Commit to a shared outcome

Focus on the outcome that matters most to foster passion and amplify your actions

Make the most important thing the most important thing Make it meaningful

OLL TOGETHER

Maximize potential for friction

Assemble a group of passionate people who can challenge each other with diverse mind-sets, preferences, and perspectives

Engage diverse perspectives
Demand volunteers
Turn down volunteers
Evolve a winning workgroup

Seek new contexts

Expand your exposure to a range of contexts to discover promising new approaches

Look around Look within

Bias toward action

Move from discussion to action as quickly as possible

Reframe risk
Act to learn
Jazz it up

Eliminate unproductive friction

Reduce the kind of friction that inhibits the potential for new insights

Foster trust and respect Have learning conversations

Cultivate friction

Draw out conflict and learn from disagreements to generate new insights

Embrace complexity Seek out challenges

Prioritize performance trajectory

Track trajectory of the metrics that matter and make trade-offs to accelerate performance improvement

Tackle tradeoffs
Identify metrics that matter
Track trajectory, not snapshots

Reflect more to learn faster

No matter how fast things are moving, take the time to reflect on your experiences, supporting even faster movement

Feed the reflection

Make the most of your mortem

Make sense of signals

Source: Center for the Edge

Deloitte Insights | deloitte.com/insights

Practice, and evolve. If edge workgroups begin having an impact on key frontline and operating metrics, other leaders within the organization will surely take notice, lending momentum to the opportunity to accelerate performance improvement. While momentum is good, it carries a risk: Organizations tend to look to formalize and scale any practice that seems to be successful—in effect, turning a practice into a formal process. It may start out as a defense mechanism to make whatever it is we do look more official, but it is also deeply engrained in our organizations and in ourselves, as an illusion of control. We value process because being able to say, "This is how we do it" can be reassuring.

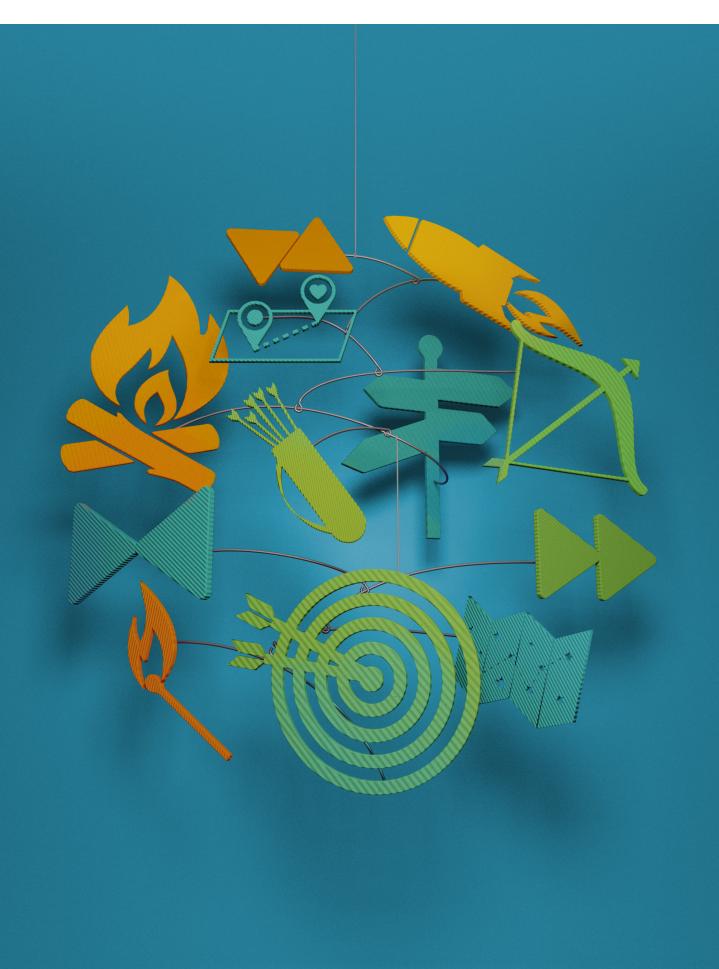
But constraining edge workgroups with formality can be counterproductive. Adding rules necessarily changes the practice itself and, in a rapidly changing world, likely makes it less effective. The goal should be to scale the practices for accelerating workgroup performance across the organization without being explicit about how any given workgroup might implement those practices. Each workgroup operates in a unique context that calls for a unique implementation of the practice.

What to do about it? Stay vigilant to the tendency to try to simplify and make things the same.

Ask yourself and others: What's different about this workgroup or this context at this point in time? How can you adopt and adapt new practices? How might the practices you employ change over time? Keep each other honest about the imperative to shift the mind-set from formalizing and making things controllable to embracing ambiguity.

All of these can also apply if you're in a workgroup. You don't have to be an executive or senior manager to start making meaningful change in your workgroup, or others. Ultimately, the organization should shift the way it measures performance and relax process controls to see an accelerating performance impact at scale, but an individual implementing these practices in one workgroup can have a significant and positive effect on the performance and learning of their workgroup and of themselves, as individuals. Localized successes can garner attention and build momentum. In the meantime, it's likely in your own interest, and the interest of the workgroup and the organization, to adopt the practices that can accelerate performance and learning for an unpredictable future. You don't need permission—just get started, track, and learn.

Getting better, faster



Moving from best to better and better

Business practice redesign is an untapped opportunity

A framework for getting better, faster

The Business Practice Redesign framework is built around nine practices that can be combined to accelerate performance improvement. This is how you get better, faster.

Use the practices to assess what's working and what isn't. Reveal gaps in understanding, or opportunities to do something differently. Find ways to change the game—and move the needle on metrics that matter.

Each practice encompasses targeted questions, tools, and techniques for accelerating performance. Integrate them to generate breakthroughs that can make all the difference.

Getting better, faster

Contents | Moving from best to better and better

Nine practices for accelerating performance

Frame a more powerful question 59

How to move beyond incrementalism

Seek new contexts 69

How to see through new eyes

Cultivate friction 81

How to foster conflict to generate insights

Commit to a shared outcome 91

How to get everyone pulling in the same direction

Bias toward action 101

How to get past the greatest risk of all—failing to act

Priortize performance trajectory 113

How to make a bigger impact, more quickly

Maximize potential for friction 125

How to combat complacency and overcome groupthink

Eliminate unproductive friction 135

How to bring people closer through conflict

Reflect more to learn faster 147

How to slow down to increase impact

Endnotes 247

Getting better, faster



Frame a more powerful question

How to move beyond incrementalism

Getting better, faster

Introduction: Beyond incrementalism

It sounds like a too-good-to-be-true story of inspiration—but it actually happened. In 1943, Polaroid co-founder Edwin Land was taking vacation photos with his family, and his 3-year-old daughter asked, "Why do we have to wait for a picture?" 1

Now, that is a powerful question. It inspired the invention of an entirely new product—and it exemplifies the kind of inquiry that opens up real possibility. Its audaciousness grabs our attention, captures our interest, and motivates us to come together to try to make its vision real. And in an environment that can be unpredictable and challenging, framing a powerful question might provide inspiration and motivation to the workgroup and help lift it out of the day-to-day to zoom out to a bigger-picture, future view.

In a rapidly changing world, with dynamic requirements, assumptions *will* change, including potentially the assumptions that made a particular approach the best one, or made a performance objective the most relevant, or made a shared outcome worthwhile. Consider, for example, the assumption that *film must be developed in a multi-step process in a darkroom*. The target at which you've been aiming may no longer represent what you want to achieve. A powerful question forces the workgroup to continuously challenge its assumptions and focus on what might be most relevant.

A powerful question can also help a workgroup break out of incremental tendencies. Incrementalism allows us to believe we are doing OK because we are busy and getting better at something every day, but it can obscure the real danger of falling ever further behind more rapidly advancing alternatives and expectations. But it's one thing to understand that incremental efforts are not enough and another to let go of running a little harder on the businessas-usual treadmill and to really look for what might make the treadmill obsolete. A powerful question can pop that bubble of complacency, provoking us to reconsider the bounds and rules of the game. Framing a more powerful question is a way for a workgroup to step back and ask: Is this what we should be doing? What else is possible? Is the group's shared outcome still the most relevant and

important thing we should be focused on to have more impact?

Workgroups looking to accelerate performance improvement will have to be able to continuously adjust to focus on the outcomes where they can make the greatest impact and avoid getting trapped making incremental progress against objectives that are no longer relevant. Framing a powerful question can help us not only adapt to change but use it to break new ground.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- The questions we're asking aren't attracting others or leading to new insights
- There are few, if any, opportunities to change the game
- Outcomes don't inspire individuals or energize the workgroup

The frame a more powerful question practice: What it is

A powerful question, as we define it here, is one that reframes what a workgroup is committed to and how members approach it. A practice of framing a more powerful question might mean periodically stepping back from the workgroup's immediate demands and considering what has changed and what hasn't.

A powerful question is:

- Authentic. Powerful questions should expose
 what we don't yet know. They should challenge
 us to embrace our own vulnerability, to admit
 uncertainty about the path forward, and to lean
 into discomfort.
- **Compelling.** A powerful question should pull people out of an incremental mind-set, refocusing workgroups on where they can achieve an entirely new level of impact. Even as a powerful question should require collective exploration, it can also tap into individual passion, generating energy and excitement in members.

EXAMPLES OF POWERFUL QUESTIONS

The right question can animate a workgroup. Here are some variations of powerful questions that have inspired real workgroups and organizations:

- Why do we create appliances for our customers instead of with them?
- How can we make innovative products that the market wants—while it still wants them?
- If we are the "best of the best," why are attacks not disappearing but actually increasing? What game should we be playing, and how do we get better at playing it?
- How do we grow higher-quality barley in a future with half the water supply?
- What would it take to eliminate all car accidents?
- What if we could keep more planes operational? What if we could knock the No. 1 delay driver out of the top 10?
- How can we use technology to see the impact of our decisions and make better ones?
- Open-ended. Instead of inspiring a single, definitive answer, a powerful question should open things up, setting the stage for ambitious, targeted action. It shouldn't be fuzzy or vague, or limited by what the workgroup or the organization has done in the past.
- **Focused.** A powerful question should challenge the why and the what, as well as the who, how, where, and when, *for a workgroup*. It should be a focusing mechanism to help a group focus on what is going to matter to actually achieve breakthrough performance. The question should give us pause yet remain within the context of the workgroup and be about the kind of future a group might strive to shape and create.
- Actionable. A powerful question should come out of deep thought and reflection, backed by commitment to act. It should reflect the conviction that there is value in asking it—inviting new perspectives and ideas to the table—and should generate actions rather than answers.

In short, a powerful question can help a workgroup navigate a shifting environment, directing our attention and guiding our action. Unlike a fixed North Star, a powerful question should leave room for doubt and new information and leave itself open to be challenged. It should prime the imagination, focus passion, and motivate accelerated performance, aligning the group toward a transformative goal.

... and what it isn't

- A "moonshot." A moonshot isn't a question but a declared destination: We will go to the moon. It is inspiring but predetermined, not open to debate. A powerful question also shouldn't presume a single resolving answer or dictate what form the solution will take. Answers are of limited value in accelerating performance and, in an exponential world, tend to become obsolete faster and faster.
- A questioning culture. While there is inherent value both in questioning and in learning to ask better questions, the idea here is to use a single, overarching question as a focusing mechanism—one that could help the workgroup home in on the crucial elements of breakthrough performance.
- A stretch goal or incremental. It's not *How* do we get to 100x performance, but *What could* we do, what kind of impact could we have, if we were performing at 100x? By moving the focus away from numerical measurement and toward



INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

A powerful question can influence every aspect of a workgroup's efforts.

- Maximize the potential for friction. By not prompting an easy answer, a powerful question can force
 workgroups to look outside the group for perspectives and resources that can help uncover or create
 the answer.
- **Eliminate unproductive friction.** A compelling question can create a context for shared meaning in which we can articulate disagreement and explore thoughts and feelings, facts and figures.
- Reflect more to learn faster. The question can shift the scope beyond just the moment at hand, connecting the "moment" to the implications and learnings across moments and over time. What did we learn that informs our powerful question?
- Commit to a shared outcome. A powerful question can set the stage for committing to a shared outcome, while progress toward that shared outcome can create the basis for a more powerful question.
- Bias toward action. A powerful question can help overcome old assumptions and build more of a creative set of conditions.
- **Prioritize performance trajectory.** A powerful question can help identify the area of highest-potential impact, which would guide the performance objectives and metrics that the group will choose to track.
- Seek new contexts. To answer a powerful question, workgroups look for inspiration and exposure to more and different ideas and approaches that might accelerate learning for the group.
- Cultivate friction. Saying from the outset, "We don't know how to get there" can set the expectation of coming at a problem from different angles and challenging them on the way to finding answers. Lacking a ready answer invites productive challenges. In addition, the magnitude of the question can raise the stakes for group members.

fundamental change, framing can set the stage for entirely new levels of impact.

• A postmortem. Rather than asking questions when something goes wrong, the workgroup should frame a powerful question when everything is going well, in the face of success: What else should we be doing to do a lot better?

catalyze a leap in performance? First, set the stage for the workgroup to ask the questions that matter. In an exponential world, what got us to where we are likely won't get us to where we need to be. How can you convey that magnitude of changed assumptions and expectations to engage others?

Part of what makes a question powerful is that it can invite new perspectives and ideas to the table and lead to significant actions that may not have otherwise been considered or possible. How does

Putting the practice into play

A powerful question isn't handed down from on high—instead, a workgroup must articulate and refine it. How do you get to the question that is going to

OUESTION FOR REFLECTION

 How many times have we missed an opportunity by being "realistic"? this work? The framing matters—not only what you ask but how you ask it. Amp it up to turn the question into something that is visceral and urgent, not just a thought exercise, for those who hear it.

The challenge is that there are a multitude of questions that could potentially change the game. The workgroup members must consider how they can make it their own in ways that only they can. The powerful question *and* the possible actions it spurs are unique to the group.

SET THE STAGE

A powerful question may originate from a workgroup's leader or emerge from a discussion. That first question starts to open up the space for getting to the question that matters. Focusing on a question, rather than a goal, is more than semantics: Saying, "I have no idea what that goal will look like

how to get there" is very different om saying, "We will land a rocket n the moon in five years through this agency." This is something new: I think I have a powerful question and an interesting idea, but how could it be more powerful?

The purpose isn't to reinforce ir own opinion or persuade others ir thinking—adding a question a predetermined idea can breed d shut down potential avenues Rather, this type of asking is for

getting petter msight into what matters and where the workgroup can focus to have the most impact. Know what you don't know and ask for help. Organizations often see questioning and admitting to not having all of the answers as signs of weakness. But framing a powerful question that acknowledges the current state of reality-including the areas of weakness and doubt-can get people's attention. It also can build trust. The process might start with being vulnerable and explicit about not having an answer, and lead to a shared acknowledgement of what people don't know and a shared commitment to exploring potential answers. Legitimizing doubt often creates the space for workgroup members to challenge, fundamentally, what the group is doing and whether it should continue to do it. Admitting

imperfection and uncertainty can also unlock a certain human empathy in others beyond the workgroup, allowing you to forge connections to those who otherwise may not have been as apt to help.

Ask a question that changes the game to jolt the workgroup out of business-as-usual. It might not be articulated such that it will be *the* overriding question for the workgroup, but you may need some shock and a sense of urgency to help the group look at the big picture and notice what's new. At first blush, the question might seem impossible, or at least not obvious. The goal should be to treat absolutes as conditional, to recognize that what may be true in one context may not be true in another.

For every one question, there are sub-questions to unpack:

- What assumptions am I making that make this seem impossible?
- What don't I know about that assumption?
- What are the leverage points that might make it possible?
- Does the question fundamentally revolve around value creation and impact on costs and efficiency?

Force the group to identify the issue it is aiming to solve and why it matters. For example, costs will matter, but focusing only on cost might get you nowhere. One problem with posing game-changing questions is that people will likely try to provide answers. Group members may respond with facts, figures, and expertise about how it is done and (more likely) why it can't be done. Try to acknowledge current realities that run counter to the vision of a possible future, and then push on and explore the nature of those constraints.

Consider the elite Field Tech workgroup in Southwest Airlines' Maintenance and Operations Unit: Members didn't ask themselves how they could get planes back in service 2 percent faster than other airlines, or relative to themselves the year before. Instead, the field techs began the question in the context of the shared outcome: If we care about getting passengers where they need to be, how can we keep our aircraft operational all of the time? That was ambitious but too costly relative

to the impact. They unpacked that question to one that motivated action: How can we knock the No.

could have a gen

QUESTIONS FOR REFLECTION

- What should we ask but never do?
- What questions could we ask today that would fundamentally change the game tomorrow?

1 "delay driver" on the issues list out of the top 10? At the time, Southwest people generally believed it nearly impossible to reduce the impact of that No. 1 issue, much less knock it out of the top 10.

The question has value, but so does the asking. Focus on the who, not just the what, to elicit broad participation. The more tightly you frame the question, the less it is going to challenge people in terms of creating new approaches. Not having the answer focuses attention on what can be learned, and in so doing could attract others who want to learn and make space for others to bring forward options and get excited about creating answers.

AMP IT UP

Challenging questions can be overwhelming. The point of framing a powerful question isn't to overwhelm but, rather, to spark urgency and inspire action, including reaching out for help and attracting outside resources. The way the group shares the question with others will likely shape their response. How does a workgroup go about framing and sharing a powerful, challenging question in such a way that it motivates group members, attracts other resources, and gives everyone a sense that there is a way forward? It should be a balance between being narrow and diffuse, between being grounded and making space to accommodate others, between being ambitious and working with constraints.

One way of narrowing the question is to focus just on uncovering points of leverage. It's not about changing everything—the challenge is to **name one thing** that has the potential to change everything.²

Think about a performance goal, but instead of focusing on the goal, frame a question around what

could have a genuinely major impact: What one lever in the organization that, if we shift it, might get us to a different level of performance? What would have to happen for that to become reality?

Having landed on a potentially powerful question, the workgroup should be as open as it can with as many people as it can about the question. The goal is to attract other resources and passionate individuals who are excited about being part of making progress toward an answer.

The messenger matters: People are more likely to help someone they value or respect, especially when that person demonstrates conviction and commitment. **Make it personal** and humanize it: *Why does this question matter to me? What is my story that led me to this question? To what human need does this speak?* Avoid framing in conceptual terms that engage only the mind. When the question isn't

ANTIBODIES AT WORK

- Let's not get distracted by questions we've got to stay focused on results.
- Great question, but we're probably not going to be the ones who figure it out.
- Yeah, sure, this all sounds good—but it's too risky, and here's why it will never work.
- We don't have time for questions.

abstract, people can be more willing to deviate from the standard operating procedures to look for alternatives that might generate more impact.

For example, for a group of supervisors of dispatch at Southwest Airlines, the question was how they could honor the legacy of a colleague, Mike Baker, who had championed using technology to make smarter routing choices and make a complicated job a whole lot easier. They formed a workgroup committed to addressing the very question that he had posed and named it in his honor. "Baker" is now mentioned hundreds of times a day throughout the

organization, and his passion for smarter decisions can live on throughout the next generation of dispatch supervisors.³

If you aren't surprised by the responses to a question, it is not the right question. Don't ask a question seeking to confirm a belief or validate a preferred approach—seek surprise by focusing on what you don't know. Seek to uncover information or resources you didn't know existed. One way to do this is to play with constraints—resources, time, or methodology—to make the question provocative enough to attract attention and elicit focused responses.⁴ For example, a broad question, "How do we win the race with a car that is no faster than anyone else's?" is ambitious but likely to generate broad responses based on what people already know. Constraints—"How do we win if we can't change the body?" or "How do we win if the race is twice

as long?"—could prompt people into thinking about specific dimensions that they have not considered and that they would need to explore further, through action, because they haven't thought about it before. Constraints can force people out of areas where perceived expertise stands in the way of new learning—I have answers—and into unknown territory.

Here, where they are not expert, they can be more open to **looking for insights**, **not answers**. In an exponential world, answers, no matter how good they are, tend to become quickly obsolete. Beyond the boundaries of their expertise, people may be more open to taking in new information, building new constructs, and being more creative and resourceful in developing an understanding of the challenge. The answers that do emerge may be just the starting point for an even better question.

Getting better, faster



Seek new contexts

How to see through new eyes

Getting better, faster



Introduction: New tools and techniques

Doing what you've always done, even if you're really good at it, probably won't accelerate performance improvement. At best, continuing practices could yield incremental improvement; at worst, you might see performance plateaus or even declines as the tried-and-true becomes less suited to a changing context. To *accelerate* performance improvement, workgroups likely need new approaches, and even more so as more cases of first instance appear without proven ways to address them. Workgroups need to rapidly gain new insight, information, and resources to begin developing approaches, and they are less likely to find these within their current context—even when the group has the intent to push boundaries and break from old ways.

Exploring a different context, whether adjacent or seemingly unrelated—along with seeing how others are approaching their own issues and opportunities to reach higher levels of performance—can yield fresh perspective on the nature of the challenge a workgroup is facing. It can help them explore their own context and performance challenges differently and avoid falling back on solutions already in place.¹ More tangibly, it can expose group members to new tools and techniques.

Our assumptions tend to dictate our choices and actions. Workgroups need to be able to test, challenge, and refine hypotheses without being constrained by unexamined and potentially invalid assumptions. Trying to understand an unfamiliar context can bring to light those deeply held assumptions that are rooted in "the way we've always done things." It can help group members to reframe core assumptions,² repurpose and build off the methods of others, break existing frames, and uncover valuable new ideas. In addition, the act of changing context—and engaging with it to

identify similarities and differences—is potent fuel for sparking the imagination, and for inspiring and giving shape to creative new approaches.

For example, LiveOps, a company that runs customer call center operations, took inspiration from the online game World of Warcraft, in which players create their own dashboards to track relevant statistics as a means of improving their own performance. Building from this completely different context, LiveOps gave each employee a dashboard that showed her own real-time performance across several relevant dimensions, including changes in her ranking among peers on key indicators. The personalized dashboards have helped agents understand and improve their own call effectiveness.³

In a stable environment, seeking new contexts may have been less important because each workgroup could rely on its pre-existing resources and knowledge. But as the world changes more rapidly, workgroups that look first to what they have and know within their own context may find themselves increasingly disadvantaged. Even if your own context doesn't seem to be visibly changing, you should be relentlessly exploring other contexts to find better and better ways to achieve your outcome.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- The market is changing faster than your business
- You rarely seem to have unexpected but relevant encounters with ecosystem participants
- The range of interactions you're having with people and workgroups from different contexts is limited

66 There are many ways, and the way you choose should depend on the current context. You can't solve today's problems with yesterday's solutions.⁴

-Ellen Langer

The seek new contexts practice: What it is

Looking for new contexts means identifying the most relevant and potentially fruitful contexts to learn from and drawing insights that each workgroup can use to have more impact on its own outcome. Groups have only so much time, so be deliberate in choosing where to invest it in exploring new contexts. Contexts change at different paces, which means that the right ones may offer a window into some aspect of the workgroup's future. A targeted approach can help identify contexts that are further ahead in some way and that have the potential to expand the group's understanding in one of three areas:

• Inputs that might matter. Identify new inputs—such as technologies, data sets, or materials— that could help the workgroup reach a higher level of performance. Is someone already using one of these inputs, providing a model from which we can learn?

- **Performance metrics that matter.** Where is someone achieving higher levels of performance on a key performance metric (for example, customer churn rate) that matters for us? Go explore that, and try to figure out what is—and what isn't—context-dependent.
- Outcomes that matter more. At the edge, where change is occurring most rapidly and where performance requirements may be most demanding, the workgroup may discover an opportunity to achieve even more impact.

... and what it isn't

• A time-consuming process of exploration. Immersion can lead to serendipitous insights and connections. But few workgroups have the luxury of time to immerse themselves in a context that may or may not prove relevant. Groups should, then, aim to get better at swiftly

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- Maximize the potential for friction. Seeking new contexts is a powerful way to discover resources
 beyond the workgroup. Part of the workgroup's diversity might be the range of contexts that members
 have experienced.
- Eliminate unproductive friction. The shared experience of a new context can create a touchstone
 that deepens the relationships between members and provides a tangible and neutral reference to
 frame disagreements.
- Reflect more to learn faster. Reflection both in advance and after exposure to a new context can help members identify patterns and draw connections in their observations and signals in order to transform an onslaught of information into useful insights for the challenge at hand.
- Commit to a shared outcome. The workgroup seeks insights that can be useful for improving the shared outcome.
- Bias toward action. The point of seeking new contexts is to draw insights that lead to and inform the
 next action.
- **Prioritize performance trajectory.** Spending time in new contexts can help the workgroup discover new approaches to pushing the boundaries of what they thought was possible for the outcome.
- Frame a more powerful question. The magnitude of the question propels the workgroup to seek insight from new contexts and shapes what might be important about them.
- Cultivate friction. Immersion in a new context can take members out of their comfort zone, challenging their assumptions and mental models in an immediate and tangible way.



identifying relevance and picking up insight with less exposure.

- Random, hoping for serendipity. This isn't
 about just being open to learning or getting outside our comfort zone to see what we can see
 and hoping that useful insights will materialize. While that can be valuable for some individuals, workgroups should be more effective
 at exploring.
- A search for the latest shiny trend. In fastchanging contexts, not all that is new is relevant or useful. It is important to differentiate between the temporary and the enduring.
- Only about others—or only about the group. This is about finding connections across contexts that might drive mutual learning and even reveal opportunities to work together toward outcomes that are of mutual interest.

66 Your brain is designed to make meaning out of what you see and will look for patterns out of whatever information you take in through your senses.⁵

-The Practice of Adaptive Leadership

Putting the practice into play

A fresh context can open a window into the narrow silos of understanding and provide a new lens

on the workgroup's own work. However, the relevance of an unfamiliar context is sometimes less apparent when it appears in a typically unstructured way, through narrative accounts, field memos, news reports, anecdotes, and the collective murmurings of social media. It typically takes practice to know what contexts matter and to uncover the underlying information and draw connections that are not easily observable, finding patterns that we have not previously imagined.

The practice of seeking new contexts, then, broadly has two parts to it: first, knowing how to **look around** to find the most productive contexts to accelerate the group's learning about how to have more impact; and second, knowing what to do with it—**looking within** to gain insight and derive actionable information from the relevant contexts.

LOOK AROUND

The future is unpredictable, but it also doesn't happen at the same time. New technologies, policies, and preferences hit certain arenas, geographies, and markets sooner than others. As a result, one way for workgroups to find a way *forward* is to look *around*.

Practically, this means that workgroups, and individual members, shouldn't stay in their lane. Bust silos and avoid tunnel vision by connecting with others who are engaged around a similar issue but may live in other departments, organizations, or domains. At Facebook, this occurs organization-wide: Employees from different groups get pulled out of their role every 12-18 months to spend a month on special teams to work together on a particular challenge or interesting opportunity. When people return to their old groups, they tend to be more open to questioning assumptions and participate in more informal sharing of ideas and information across groups.6 It is important to bust silos everywhereincluding at the periphery, not just among the usual suspects in the core functions.

As change accelerates, peripheries and edges can become more valuable because they are often moving at a faster pace. Exposure to new contexts at the periphery can shape group members' understanding

QUESTIONS FOR REFLECTION

- What gets in the way of us (organizational polices, practices, silos) connecting with those from whom we can learn?
- When was the last time we encountered an unfamiliar resource that ended up providing incredible amount of value? How did we go about uncovering it?

of certain conditions and inform their own work.⁷ They might be better able to make sense of the sig-

nals they are identifying on the frontlines and better able to identify alternative resources that might be used in unexpected ways. The practice of looking for, and engaging with, new contexts also keeps the workgroup's own boundaries permeable, so that the group can avoid becoming its own silo and better leverage valuable ideas, skills, and resources from others.

Where should we look for context? On the one hand, looking around is about finding the performance edge that matters most to your outcome. On the other, it is about increasing the likelihood that you turn up valuable resources of which

you were unaware. In either case, look for the fast-moving contexts for which the performance requirements are most demanding—this is where the future is likely already happening. Look for the tools they are creating and the inputs they are using. The point isn't to bring those tools and models in whole but, rather, to build upon them and make your own better solution for your context.

Edges can take many forms: They can be other workgroups, enterprises, industries, technologies, or even demographic groups. Find a performance edge likely to generate insights that the workgroup can use to improve its outcome. Relevant performance edges have either achieved a high level of performance on one of the workgroup's key metrics, are targeting a more significant opportunity for impact, or are further advanced using an input that the group believes might be important. For example, an oil-field services group that is targeting customer churn rate might look to a wireless company that has dramatically reduced customer churn. In another example, consider how, in advance of the Southwest Airlines fleet adopting fiber optics, several Southwest field techs sought out the training school to which a leading telecom sends its employees so that they could learn in context with a group that is pioneering the technology.

The relevant performance edge might also be one in which others are engaging with similar constraints. For example, a workgroup aiming to design a radically inexpensive mass-market car might look to a developing region with a vast, previously unmet demand for such products.

OUESTIONS FOR REFLECTION

- What will likely be relevant to our business in the future, and where can we find examples of that in action today?
- How has the periphery changed what we do?
 When was the last time we acted based on something found on the edge?

Knowing what to look for in a performance edge, how do we go about actually identifying a context that meets our criteria? Research and discussion—asking, "Who does it best?" or "Who has faced something similar and is succeeding?"—might help the group create a preliminary list. Accessing digital content—such as blog postings, social media outlets, and analyst reports—can be the first step in learning about potentially useful contexts. To increase the potential for getting a truly different angle on a challenge, however, it may be worthwhile to cast a wider net by tapping into group members' social and professional networks—for example, posting a brief explanation of the issue on social media and asking for recommendations of contexts worth exploring.

Conferences and training sessions, too, can be an effective way to gain preliminary exposure to a new context and make connections for exploring it more deeply if warranted. Workgroups may discover relevant but previously unknown tools, techniques, and resources and, by seeing them in use and being among the people who use them, may gain unique insight into how to apply them to their own outcome. For example, the New York City Fire Department's Rescue Company 1 regularly attends days-long training with fire units from around the country as well as with military and other forms of search and rescue, from marine to alpine, to learn new techniques and potentially encounter useful tools that could be redeployed in the urban rescue context.

Ultimately, finding the relevant performance edge often requires getting "out on the street," talking with people engaged in and around the performance edge to get a better understanding of the performance or input and its relevance to the group's outcome. Physical proximity often leads to connections, from a casual encounter at a surf shop to a formal introduction, 8 that can be invaluable in terms of revealing new facets of the context and new avenues to pursue to unlock the r

Shape serendipi crease the likelihood of beyond the workgroup contexts and drawing While actively search can be valuable, grea come from people ar the radar screen or tabase. Instead, ther crease the likelihood other contexts will se shaping serendipity for individuals, or workgroups as a me the passionate and pected resources, cally, how you can encounters to ide new contexts. Th zational barriers

consider ways to further leverage people outside and across the organization, aiming to tap into their knowledge, expertise, and connections to gain exposure to new contexts without devoting the time to becoming fully immersed or proficient in those contexts.

What might this look like? It might mean establishing a presence in physical or virtual space so that others can find you. The second part of this is being as clear as possible about the metrics and potential inputs in which you are interested. Motivating others to participate through potential, thoughtful posting in these spaces can be helpful, so long as you're transparent about what you're doing.

But the point isn't just to get people to come to you and say, "Here's an idea—go for it." Exploring new contexts is time-consuming. Workgroups need to be both effective and efficient in drawing insights from new contexts. The point is to get people to come to you and say, "Here's an idea, this is what I know about it, this is how I think it applies to your context, and I am going to connect you with this person and take you to this place so that you can learn more."

Part of the work, then, is identifying the talent spikes—the forums and platforms that could be most relevant to other contexts, along with the physical gathering spots, whether a surf shop

hackerspace favored tablishing a presons and challenges thers, and cultivatom promising leads. ves from GE Appliiced to Local Motors s, they were primed rom this open-source or that was upending ct development and ow GE executive with ed their problem came and suggested it might ruitful connection. The months been thinking with anyone who would ype of innovation center opment in their industry. and explicit statement of ing to solve: How can we

create innovative products that the market wants while the market still wants them? When they saw what Local Motors was doing in the automotive space, they realized that the consumer for whom they were designing was a valuable input to a whole new approach. With Rogers' guidance, they quickly learned about creating a community and using platforms and moved to rapidly develop and launch their own model for co-creating appliances. That's how GE FirstBuild (now a Haier company) got off the ground.

LOOK WITHIN

Knowing *where* to look for new context is only half the battle. Understanding *how* to delve within that context and how to extract insights and learning that the group can use to improve performance

is what makes it valuable. For workgroups looking to accelerate performance, the point of seeking new contexts is to help workgroups uproot assumptions and uncover new tools and approaches, and, most importantly, gain insights that point to possible new actions.

Making effective use of exposure, however, isn't easy. The goal is to explore the periphery without being consumed by it. Workgroups that develop practices for how they will explore new contexts may be better able to gather information and, through reflection and discussion, draw out the insights that could make an impact on the group's outcome. Time is always a factor, and it can be tempting to divide and conquer to quickly gather information from as many different contexts as possible. A small group exploring together, however, can gather richer information and help each other make sense of what they see and experience. With practice, workgroups, like individuals, can get better at exploring and experiencing the edges.

How do you approach another context? What works—or doesn't work—in one context may not translate into another. Look for what can be generalized but also what can't. In the GE FirstBuild example, one key difference between contexts that workgroup members didn't grasp at the time was that many people may be less excited about appliances than about cars. One way to begin is to **put context in context**. Take a step back and consider the next, larger context—the slightly larger picture. Just as a chair exists in a room, a room in a house, a house in a neighborhood, and a neighborhood in a city, context is relative. Considering how "the room fits within the house within the neighborhood" can change our perspective and may reveal previously unnoticed relationships and opportunities, both in the context we are looking at and elsewhere.

New context can be overwhelming. Our mindset and dispositions often determine the world we encounter, including what we notice and pay attention to, and the possibilities we apprehend. Similar to how an emergency-room triage nurse makes snap decisions about who should be admitted, we often make quick judgments based on "precognitive responses," guided by our experience as well as by the systems we have constructed in advance, that allow the brain to make rapid decisions.¹⁰ In a cog-

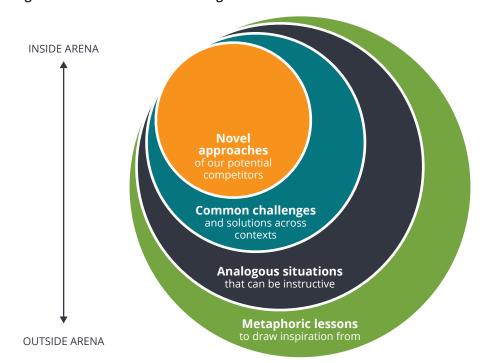


Figure 1. Different levels of looking outside-in

Source: Doblin.

Deloitte Insights | deloitte.com/insights



nitively diverse workgroup, members will naturally notice different things and interpret them differently. The workgroup may find that being more deliberate about **probing the context**, however, can help to reduce the complexity and to stage their moves to balance the breadth and depth of exposure.

Workgroups won't have the time or resources to become proficient and fully immersed in all contexts of interest; the goal of probing is to get enough information for the next move. Probing balances the

immersive richness of physical with the efficiency of virtual, moving from reading a web page to having a phone call to meeting in person to taking a group to visit off-site, stopping at whichever level is appropriate for the value gained. Each nugget of insight can potentially help to develop a new lens and shape the next move. For example, at New York agency sparks & honey, the culture briefing workgroup had been noticing a trend around different milk sources. These "micro trends" were showing up in a range of places including social media discussions, product testing in local markets, and localized menu innovations. After tracking related signals and connecting those to existing "macro trends" in the agency's trend taxonomy, the group concluded there might be something to it. The entire workgroup visited, and eventually immersed themselves in, a tasting that included milk from several different animals, including camels.

Another approach to probing is to assign a different aspect of context for each member to pay attention to or use as a lens (see figure 1). Sparks & honey uses the five senses as lenses but also formalizes sensitivities by "tagging" items along a spectrum from micro- to macro- to mega-trends. Alternatively, workgroups could use a system such as ethnographers' "AEIOU" (Activities, Environments, Interactions, Objects, Users) observation framework, with each member going into a new situation with responsibility for just one category.11 Of course, the most important lens to use against the onslaught of information may come from the shared outcome itself. Calibrate the group's attention to focus on what actually matters to the shared outcome. What information, if we could figure it out, would help us know our

QUESTIONS FOR REFLECTION

- How much time do we spend looking at the periphery versus things closer to the core?
 Do we have the right mix?
- How can we provide more value to the ecosystem, and how can the ecosystem provide more value to us?

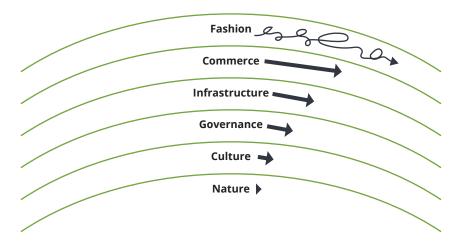
next move? What's different and what's comparable between the context and the outcome we are trying to achieve? Workgroup members may also find it more effective to explore and experience contexts in dyads or triads, rather than altogether, to avoid overpowering the context with their own presence.

Although it's easy to talk about taking on new contexts in the abstract, in reality staying aware and vigilant to signals can easily morph into being overwhelmed. Certain contexts may prove very useful, and in those cases, the workgroup may want a deeper exposure, over time, gleaned from building a relationship rather than just harvesting insights in a one-off visit. Consider what the workgroup can give before it takes: Does it have new knowledge or learnings that might be beneficial to others in the new context? Ideally, the learning becomes open-ended, mutually beneficial and generative, creating a new node or set of nodes from which to gain feedback and perspective on the group's experiments or future challenges, even if the current issue is short-lived. Workgroups that help develop others may begin fielding proposals to collaborate, creating a virtuous cycle of insights and impact. Connecting to these broader networks can provide specific subject-matter expertise where needed and can lead to additional ideas to inform the group's current frame of thinking.12

When group members can maintain an openness to inspiration from other people, areas, and environments encountered throughout the day, the workgroup can continually collect ideas from various contexts that can be used to fuel the productive friction in service of getting better and better at problem solving in other instances.¹³ For example, in Royal Caribbean Cruises Ltd.'s Newbuilding &

Figure 2. Stewart Brand's pace layering model

An example of how different contexts change at different rates.



Source: Stewart Brand, The Clock of the Long Now.

Deloitte Insights | deloitte.com/insights

Innovation workgroup, designers decided to change the configuration of a room after staying in a hotel that made use of limited space in an interesting way: It featured a modular desk that a guest could slide out when needed but made the room feel more spacious when concealed. The unique design inspired several sliding furniture additions that Royal Caribbean made to its Quantum staterooms.

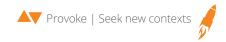
Although workgroups will have to make tradeoffs—going deeper in some areas and broader in

ANTIBODIES AT WORK

- We need to keep our heads down and focus on what we do best.
- Since no one is asking for that, why are you spending time on it?
- Plenty is wrong about what we do today why are you worrying about the future?
- We're the market leaders—others try to copy us.

others, depending on time and resources—it can be beneficial to focus on the fundamental. Not all contexts are changing at the same rate, and facts have different expiration dates (see figure 2). Differentiate between what is changing fast and what is currently stable, what is transient and what is enduring. Look most frequently to the contexts that are changing most rapidly—others may have valuable parallels, but if they're moving more slowly, they'll likely reward only intermittent check-ins.

Drawing insights from individual observations and the flood of information out there requires group members to listen to one another and their surroundings deeply, to recognize patterns and draw connections through discourse and reflection, and to incorporate these insights into their evolving assumptions. Paradoxically, successful exploration of new contexts designed to cope with near-term uncertainty often requires an increased focus on long-term direction. Contexts are shaped by what connects them to each other.



Getting better, faster



Cultivate friction

How to foster conflict to generate insights

Getting better, faster

Introduction: Avoiding a flat trajectory

Friction can lead to better outcomes. The right type of friction can transform individual contributions into something far larger than the sum of the parts. Indeed, creating good friction is the entire reason for forming a workgroup and entrusting it with key organizational work. That power materializes, however, only when the potential for friction is realized and the workgroup draws relevant, actionable learning from it.

And cultivating friction is increasingly important. In this rapidly changing environment, workgroups aiming to accelerate performance will need to learn faster how to make an impact on the performance that matters to the outcome. Issues will likely only become more complex and unexpected, requiring a range of approaches to address them. The right approaches might not exist yet. The type of learning that's perhaps most important to accelerating performance improvement, then, is that which creates new knowledge about how to approach unanticipated problems or situations. It isn't about training in new skills or accessing existing knowledge. It is group learning embodied in action.

A group of people with conflicting perspectives has the power to envision a set of possibilities differently, and more broadly, than any of the individuals alone, potentially leading to emergent behaviors and creation of new knowledge that could not have arisen elsewhere. Creating that new knowledge requires workgroup members to make full use of the group's diversity and the external resources to which it is connected across the range of the group's activities. The ways people diverge in how they think about a problem and differ around approaches, assumptions, and actions can reveal potentially powerful insights.

How does friction come into play? Friction can drive faster, more robust learning to help workgroups come up with better and better approaches. The right types of friction—for our purposes, defined as group members' willingness and ability to challenge each other's ideas and assumptions—can drive groups to reexamine assumptions, test constraints, and push boundaries. It can force individual members to stretch their own thinking, about the prob-

lem and how to approach it, in ways they would not likely get to on their own. "Un-like-minded" people and contradictory evidence or information that runs counter to our current framework can help us see our own thinking in a new light. If we are openminded and committed to improving an outcome, and if we don't feel attacked, challenges could make us reexamine our assumptions, refine our thinking, and even change our approach.² Such challenges can also make us pay attention to new information and resources that fell outside our initial frame.³

Of course, timing matters. Some workgroups need to operate like a well-oiled machine in the *moment*, whether that moment is going into a burning building or interacting with a customer. The key for improving that in-the-moment performance, though, is cultivating the friction between moments, to elicit observations and new options for approaching the next *moment* differently. Focusing on seamless execution (the goal of many high-performing teams) and failing to cultivate friction can result in a flat trajectory, even if the starting point is high.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- There is little space and time for disagreement and debate
- Everyone agrees and talks about agreeing or takes pride in the group's cohesion
- The group seems focused on its own efficiency as the primary measure of success
- Everyone has a designated role and area of expertise for which they are responsible, and the group defers to the expert judgments

The *cultivate friction* practice: What it is

Cultivating productive friction is about benefiting from the potential for learning that comes from diversity—all kinds of diversity. In a diverse workgroup, members are influenced by a range of past experiences, apply different implicit rules, and notice different pieces of information.⁴ Cognitive diversity can create tensions within a workgroup, and those tensions can have unexpected and positive results.⁵ Yet our desire for harmony can be so strong—to some extent, we are biologically wired to mirror the behavior of those around us⁶—and often is so ingrained in organizations that productive friction simply will not happen without taking deliberate action to stoke it.

Friction must be cultivated first within the workgroup, day-to-day, but also outside the workgroup, between the workgroup and others who might have relevant insight, knowledge, or resources. Practically, this means that members are open to being tested and questioned by others and willing and able to see how one idea fits with or builds on another. It also means that the group itself is open to challenges from the outside. The workgroup essentially invites others to "question us" and to introduce diverse external resources.

A workgroup that cultivates friction might be characterized by:

- Energy over harmony. Workgroups that go along to get along won't get far in an environment that demands new approaches and rapid learning. The right type of friction can be exhilarating.
- Challenge and discussion over approval.

 In fact, if the workgroup's output is similar to one of the inputs, there may be too little friction.
- Transparent thinking. Sketching a potential solution or a framework for approaching a problem or even a list of assumptions on a whiteboard can be an invitation for challenges from within the group. Up the ante by putting the board in a public place and inviting outsiders to the conversation.
- Thinking made tangible. Just writing something on a board can reveal assumptions and relationships that aren't apparent in a discussion. As an idea becomes progressively more tangible—for example, moving from spoken idea to written description to drawn pictures to models and prototypes—fresh aspects of the problem and potential solutions can be exposed, stirring up additional friction.

... and what it isn't

- · Brainstorming. Too often groups use brainstorming to get "more" ideas on the table, and the means of doing this is to remove friction. Participants may be told to silence their skepticism and treat all ideas as equally valid and plausible, and at the end, everyone feels good about the number of ideas generated. But stifling any arguments carries a cost, as the potential learning from exploring the trade-offs and unstated assumptions behind the ideas is lost. Lost, too, is the opportunity to candidly interrogate the ideas, to find weaknesses or to see the power to be found in combining two ideas that didn't capture anyone's imagination initially. Workgroups looking to accelerate performance should focus on better ideas, not more.
- Playing devil's advocate (or other roles). If everyone knows that someone is playing a role for the sake of creating some friction, they will likely treat it as a game. The quality of the friction generated would be low, because the challenge wouldn't be grounded in a real perspective or deeply held belief; there would be little to unpack and few insights to discover. The goal should be to stir up and direct the real disagreements and divergence that exist, not to manufacture arguments.

Putting the practice into play

Just setting up the conditions for friction is a start, but the type of productive friction that can help a workgroup learn faster isn't likely to occur on its own, even with a diverse and passionate group. Being open to friction and maintaining a high level of friction generally takes a deliberate and conscious effort, at both the individual and workgroup levels. How can you stir up the right type of friction and sustain it over the group's time together? Workgroups may need to get comfortable with being uncomfortable. It begins with embracing complexity when our instinct is to simplify. Leaning into complexity, with all of its messiness and unpredictability, can help highlight a problem's nuances and the contrasts and contradictions within the workgroup.



INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

Workgroups often need friction across the board, in all of the workgroup's activities, to sharpen the thinking and push the group to be better.

- Maximize the potential for friction. The productive friction a group cultivates can become more
 potent when it comes from a diverse and passionate membership. Members who are passionate
 about the outcome will likely challenge each other and themselves to learn how to have more of an
 impact, faster.
- Eliminate unproductive friction. When the group proves itself capable of managing friction productively, members will be more confident and willing to engage with different perspectives or challenge and explore as a group. It can create a virtuous cycle, wherein they see that friction is beneficial and more confidently bring forth their diversity in future interactions.
- **Reflect more to learn faster.** Challenging each other's observations and interpretations of what happened in-action, and what the results of the action were, is an important element of effective reflection that draws out learning.
- Commit to a shared outcome. The group periodically challenges itself to ensure that it is still
 pursuing the highest-value outcome. The commitment to a meaningful outcome can help workgroups
 tolerate the discomfort of friction.
- **Bias toward action.** To act with the most impact, workgroups need friction not just in coming up with ideas but in planning action, taking action, and making sense of action.
- **Prioritize performance trajectory.** The metrics that matter to the outcome may provide a focal point for discussion and can ground disagreements in data.
- Frame a more powerful question. The right question should create tension that provokes friction.
- Seek new contexts. Immersion in a new context can take members out of their comfort zone, challenging their assumptions and mental models in an immediate and tangible way. Changing context and experiencing a new and very different context can also help create awareness of orthodoxies and assumptions, and through exposure to others' contexts, group members can cultivate a willingness to continuously reexamine, test, and update their own.

But it doesn't end with recognizing that a problem has many facets and group members have different ideas. Having shined a light on complexity, seek out challenges and draw out the group's areas of disagreement and divergence. each are constantly changing. A single approach or toolset won't generally suffice across the range of conditions; mastering a single process or tool can't be the goal. In a complex world, it isn't about how fast you get from break to shore but about how

EMBRACE COMPLEXITY

Performance improvement isn't straightforward, in part because we don't always even know how to assess performance. Proxies such as focus, speed, and efficiency—driving out waste and costs—tend to favor stripping out complexity. But in a world of interconnected systems, the inputs, outputs, and conditions of

QUESTIONS FOR REFLECTION

- Are the unique voices and perspectives in our workgroup being surfaced and heard?
- How can we do a better job of drawing out the diversity that we have?

well you ride the wave. This is second-order performance: how well you adjust and drop what isn't working and pick up new things, how well you stoke curiosity, sample from the edges, and develop new skills and tools.

Workgroups can create tension when they resist the urge to immediately simplify. The perspective you hold, as an individual or a group, is never the only perspective. **Keep an open mind** to consider

> explore the nuances lar situation. There's more to the story: else don't we know? time to consider, for iple, that a refrigor isn't going into a "house" but into a n within a duplex in rinking Midwestern Does that change assumptions? Abacting a problem il it looks like someg with which we are familiar can seem

like an efficient way to handle complexity; do it too early, however, and you risk losing the richness of the problem, which is where the opportunities are likely to be. In the case of the Joint Special Operations Command⁷ in Iraq, when intelligence analysts were teamed with the forces, some important nuances came to life: Although most raids shared some similarities in the abstract, being on the ground in a raid made clear to the analysts that the specific context, the ways in which that raid did not resemble others, often mattered more. Being delib-

others, often mattered more. Being deliberate about interrupting the tendency to jump straight to tasks, to be as efficient as possible, can make space for members to diverge, explore, and start to build on the possibilities without feeling as though each divergent thought is a tangent that is preventing the group from getting on with the "real" work.

Celebrate diversity by being explicit that cognitive diversity is not just a nice-to-have but exactly what the workgroup needs. Be open about the fact that

group members have different backgrounds and skills; this may open the door for members to reveal more of their differences. When workgroups rush to smooth over differences, they can miss the opportunity to sample ideas and techniques and pick up new tools and approaches. Set the tone by provoking members to speak to their belief systems, their reasons for participating, and why the outcome matters to them—even if, or *especially* if, these reasons differ. Resist the urge to resolve contradictions or emphasize commonality. Establishing a tolerance for unresolved tension can ease individuals' fears that disagreement will damage the team dynamic.

The goal should be to create disequilibrium in the group and evolve the options on the table, keeping the intensity high enough to motivate the group toward a creative next step, but not so high that it becomes unproductive. One way to do this is by playing with possibilities to slow down a pell-mell rush to execution. A playful discussion of what-ifs can test the boundaries and conditions rather than treating them as realities. As communicator Nancy Duarte points out, the arc from what could be to what is creates useful tension.8 It doesn't have to be just a mental exercise—tinkering is a way to look for where there is play in physical systems and routines as well. Royal Caribbean Cruise's Newbuilding & Innovation group, for example, uses a variety of design tools and graphical simulations to explore the ideas and possibilities brought forward by domain specialists from aircraft design, fashion, entertainment, and shipbuilding that stretch the group's collective thinking.

Ultimately, it may be as simple as being willing to **be curious**. A workgroup aiming to improve has

QUESTIONS FOR REFLECTION

- Are we turning up the heat enough?
 In what ways do we tend to avoid conflic?
- What if friction wasn't just allowable but demanded? What if we went beyond accepting different points of view and insisted that they be surfaced?

an obligation to be curious. Ask the question when you don't understand, and adopt a beginner's mind-set. Reach beyond your experience, and listen for what an idea could be rather than what it is.

SEEK OUT CHALLENGES

It's one thing to get options on the table, another to transform them into solutions. The goal of cultivating friction is the latter, getting to better and better solutions by learning as a group and embodying it in action. An alchemy of interactions makes a workgroup more than the sum of its parts (or its ideas). Individual ideas bump up against each other and against diverse perspectives, get tested in real conditions, and become different and better as a result. This happens not once but repeatedly, as the context changes along with the group's understanding. To create this alchemy, it isn't enough for members to *tolerate* challenges⁹—they should insist on challenges.

Sometimes, particularly when a group seems to gel quickly and develop instant camaraderie, the idea of doing anything to upset the balance can seem completely counterproductive. But a norm of not rocking the boat can solidify over time, making it seem harder and less likely that a group member will risk a rift. Challenging early on, when the stakes might be lower, can help a group understand and adjust how it responds and reacts to uncomfortable situations. Community—and bonds of trust—can come from crises, even small ones.

Challenge yourself and others to break through any ego and hubris that can prevent individuals from engaging with each other around what is most important, from unwillingness either to show vulnerability by asking questions or to be open to being questioned. Misunderstandings and disagreements can be fertile ground for learning and creating something new. Individuals should

strive to repress the desire to display authority or expertise—and shouldn't let other members go unchallenged by virtue of their expertise. A workgroup, collectively, can help by not accepting serial monologues or presentations and by questioning and exploring assumptions as a matter of habit.

Even people who think they are open to new ideas and learning often have deeply ingrained—and unexamined—assumptions that can shape the way they approach the world. Although it may feel awkward at first, here are some ways to elicit challenges:

- Try to bring more of the invisible and unstated beliefs, experiences, expectations, and theories into the open by asking others to state their core assumptions when they offer a perspective.
- Take the group into a new context temporarily, or bring outsiders in, to help heighten awareness of our own orthodoxies—a key first step to reexamining and updating them. For example, as the Red Cross has begun using more people from local communities in responses, a side benefit has been to expose the organization's professionals to more perspectives that challenge what they "know" about the work.
- Prompt members who are likely to hold opposing perspectives and explore the disagreement. Rather than minimize the differences, try to explicate the "ladder of inference," to working backward from the expressed perspective to the beliefs, experiences, and assumptions that led there. Instead of, "How can you think that?", ask, "I wonder what information you have that I don't?" or, "How might you see the world such that this makes sense?" Even better than asking: Try to experience what the other person does. Going deeper into disagreement may get to a more nuanced understanding of the root problem.

QUESTION FOR REFLECTION

- To what extent are workgroup members ecouraged to speak beyond their expertise?
 - Call out the elephant in the room or question the organization's long-established conventional wisdom and principles. Setting an expectation that the unspeakable may well be spoken is another way to break through complacency and elicit challenges.

The goal of bringing gaps in knowledge and understanding to light is to gain insight into what we don't know: Either others do know about it or the group can create new knowledge around it.¹²

For agency sparks & honey, success depends in part upon cultivating friction in a daily culture briefing. ¹³ The briefing leaders prompt specific individuals on certain subjects and consciously distribute the conversation. Rather than try to resolve opposing or even unrelated perspectives, they use the common language of the agency's cultural intelligence system and framework to focus on looking for the new insights and connections that such divergence might reveal. Over time, many of the briefing participants have also tacitly picked up skills for eliciting diverse perspectives and managing the resulting friction—an ever-growing community of practitioners developed through tacit learning.

Beyond a practice of challenging each other in discussion, another approach is to **impose constraints** as a means of forcing creativity and divergent views by placing an entire workgroup into a stress position. Imposing constraints on the tools and conditions of a solution is one way to do this. Constraining the budget, expertise, or (especially) timing can spark creativity and produce a sense of urgency.

Finally, try to **create space** so that friction can develop from a variety of sources. Silence can be an important tool and is a discipline that supports the need to avoid rushing to answer, resolve, or simplify. Silence itself can provoke tension for some

ANTIBODIES AT WORK

- Don't stir things up—just smile and nod so we can be done.
- There's no such thing as a bad idea and all ideas are equal—let's not judge.
- We're all in agreement and know how this works—let's just get on with it; we've got the A-team on this.

while allowing space for other voices to clarify and emerge. Mediate the conversation to keep multiple interpretations alive so that additional important insights and slow-building approaches can have a chance to materialize.

Although action-oriented group members may become impatient or frustrated when passionate views collide and generate multiple interpretations of a challenge, these collisions and interactions could be necessary to continue to reach new levels of performance. It takes practice, for both individuals and groups, to balance the need to diverge and generate heat with the directive to draw actionable insights that can be used to make progress toward an outcome. As a group's members increasingly employ tensions and disagreements to reach better solutions, they can help create a virtuous cycle of more honest and forthcoming challenges.

Getting better, faster



Commit to a shared outcome

How to get everyone pulling in the same direction

Getting better, faster

Introduction: Focus and alignment

A shared outcome is the reason a workgroup exists; it is why group members come together and what they aim to achieve every day—for example, to *save lives* or to *stop cyber-intrusions*. For most workgroups, this outcome will support the mission of the larger organization, but it is much more within the group's ability to control.

When a shared outcome is significant and meaningful, commitment to that outcome can drive a workgroup to take action. It can rally members from different domains and possibly different organizations to work together despite their having competing perspectives, goals, and even performance metrics. A shared outcome can also compel a workgroup to reach outside its membership for help, insight, and resources. All of these—action, generative collaboration, and leverage—are key for workgroups looking to accelerate performance improvement amid rapidly changing conditions and requirements.

When it comes to accelerating performance improvement, the way an outcome is defined is key. No workgroup can definitively achieve a well-defined outcome in the short term. For example, while a group of firefighters might be saving lives every day, there are always more lives to be saved and, conceivably, better, more effective ways to do so. As a result, commitment to a shared outcome typically helps to focus and align workgroup members on what could be done and drives them to constantly take action to get better at achieving that outcome.

Committing to a shared outcome can help elevate a group's objectives over individual objectives, creating an expectation and a vehicle for putting aside competing agendas¹ and focusing on the issue at hand. The significance and meaningfulness of a shared commitment can also help workgroup members to tolerate the potential discomfort of challenging and being challenged by others as a means of getting better and better at achieving the shared outcome. In fact, research indicates that groups with shared outcomes are half as likely to feel that competing priorities hold the group back and a third as likely to complain about constraints due to corporate politics.²

By being larger than any one member and requiring not just every member of the workgroup but also external resources and learning, a significant shared outcome can lead to learning from others. In a world of mounting performance pressure, one of the keys to success could be finding ways to engage and motivate others to help achieve even more impact. Defining a shared outcome can help a workgroup attract the right talent and connect more effectively with others by being clear both about what it is trying to accomplish and where and how others can help.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- There are competing definitions of success with no consensus
- We have a bunch of solutions but no clarity on what we are solving for
- The workgroup is easily distracted or moving in too many directions at once

The commit to a shared outcome practice: What it is

The optimal shared outcome—this is what we are committed to—can help a workgroup accelerate performance improvement. A well-defined shared outcome should provide clarity, focus, and guidance for making decisions and taking action, orienting workgroups amid uncertainty, and making clear to members where they are heading and what is worth fighting for and what is not.³

Some attributes of a good shared outcome:

- Clear and credible. This is about the basic work of the group; members are the driving influence and doing the bulk of the work.
- Significant. Big enough to inspire and motivate. Group members believe they can achieve it better collectively than individually.
- Broad and open-ended. There is always more that can be done, and doing it typically requires pulling in resources and talent from outside the workgroup.

- Narrow and tangible. Defined to provide focus and guide decisions because it is directly relevant to who they are and the skills and scope they bring to the work. The outcome can give a sense of what success would really look like.
- Meaningful. At its best, a shared outcome has an element that connects to members' values and identity; achieving that outcome can become personal and meaningful to each of the group members.

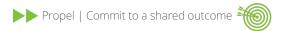
... and what it isn't

• The organization's goals or part of a broader effort. For most workgroups, the shared outcome will support the mission of the larger organization, but it must be within the group's

- authority and ability to make a significant impact on the outcome. For example, if the organization has a mission to "improve lives through wellness," the workgroup's shared outcome might be to "scale a wellness business." The exception might be project-oriented organizations such as an urban fire department.
- A quantified goal or target. Workgroups can get locked in on a specific number, causing them to act more narrowly or even game the system, aiming to achieve that number rather than continuously push the boundaries to achieve better and better outcomes.
- An ideal or vision. Lofty goals that aren't tangible or clear—say, make the world a better place—generally provide too little focus or guidance to prompt action. The group may be inspired but could either become overwhelmed

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- Maximize the potential for friction. A clear, long-term direction around a meaningful shared
 outcome can help attract diverse members who are passionate about the outcome and can help
 mobilize others to engage as well. Without it, the workgroup may attract people best suited for nearterm events but unprepared to make progress toward longer-term objectives.
- Eliminate unproductive friction. By overriding individual agendas, a shared commitment to an outcome can help build the foundation for deeper trust between individuals.⁴
- Reflect more to learn faster. When group members trust each other's commitment to an outcome, they may be more willing to reflect and share honestly in order to learn how to have a greater impact on the shared outcome.
- Bias toward action. The shared outcome provides guidance that enables members to move more
 quickly and confidently into rapid actions that could yield learning, without fear of political reprisals for
 appearing to make a mistake or having to change direction.
- **Prioritize performance trajectory.** The shared outcome sets the context for how success would be measured and what metrics would be most relevant for the workgroup.
- Seek new contexts. Using a shared outcome as a lens for what matters can help you make sense of new contexts and not get overwhelmed.
- **Cultivate friction.** Motivated by commitment to a shared outcome, members may be more willing to endure some discomfort in order to participate in practices that increase the type of friction that is generative of new and better approaches.
- Frame a more powerful question. There is a back-and-forth dynamic between the shared outcome and the question. The shared outcome generally sets guiderails for the direction of the question, while that question animates and adds urgency to the shared outcome. Part of the art is using one to inform the other.



by magnitude of the outcome or paralyzed by the range of potential paths and interpretations of success.

Putting the practice into play

A shared outcome can be valuable for any type of group. However, for edge workgroups, the way the outcome is articulated and the ways that members choose to deepen commitment to it can influence the size and nature of the group's impact. Workgroups can create and sustain commitment to the type of shared outcome that accelerates perfor-



nprovement by making that the most important ngs are treated as the lost important, and by naking the shared outome meaningful to the nembers. These pracces, in themselves, have e potential to drive acerated performance impenent.

e a shared outcome will

remain relatively stable, it should be an ongoing conversation, open to revision as the workgroup and context evolve. Throughout the effort, leaders should entertain suggestions for updating the outcome, periodically surface other interpretations, and then rearticulate the shared outcome to ensure continual team alignment.⁵ This gives the shared outcome renewed credibility by illustrating that it is connected to its dynamic context—and reassures members of the team that they are a part of the shared outcome.

MAKE THE MOST IMPORTANT THING THE MOST IMPORTANT THING

The workgroup shapes the nature of their work through the way members define the outcome they are committing to deliver. Even with organizational expectations of what it will deliver, the right outcome on which to align may not be immediately obvious. For example, a disaster response group might define a shared outcome of "saving lives" or "minimizing trauma" or "restoring normal infrastructure function," each suggesting different priorities and approaches. Without alignment on what the most important thing is for the group, workgroup members may find themselves working at cross purposes or just being slowed down by the need to keep renegotiating priorities. Negotiating and agreeing to a shared outcome will almost certainly raise different and opposing perspectives. This is an opportunity for the group to establish how it will handle friction productively.

Ideally, the workgroup collectively explores how it might define the outcome, up front, to better ensure that all of the members share in and can commit to it. Start by taking the long view, asking: What is the highest impact that we can have? Where can we offer the most value? The idea is to focus first on the future and the opportunities ahead and then work backward. Paradoxically, focusing on a long-term direction could actually help to deal with near-term uncertainty. This can generate excitement, helping groups break free from current constraints and opening up the domain beyond just what group members currently do. For example, a group of firefighters might initially define their shared outcome as "putting out fires" but, upon further discussion, clarify the outcome to be "to save lives" or even "to prevent fires."

In addition to looking to the future, **be bold** in considering unexplored horizons that might not yet seem quite possible. Periodically reevaluat-

When you face a tough decision, or when prospects for success look bleak, reminding one another what you are trying to do provides guidance, sustenance, and inspiration.

-The Practice of Adaptive Leadership

ing the shared outcome can provide an opportunity for the workgroup to draw out potential and possibility over time. IsraAID, an international humanitarian aid organization, defines its mission as acting where it can make the most impact, where others are not, to provide disaster relief and long-term support. Depending on the response effort, an IsraAID workgroup might define a shared

outcome of building public health capacity or creating an infrastructure for future local response. The group responding to the 2011 Japan earth-quake focused on areas and populations that larger organizations were overlooking. When group members discovered that other organizations were failing to offer psychosocial and post-traumatic support—especially for children and elderly victims—the response group refined its shared outcome: to increase local psychosocial capacities to support the local population's long-term sustainability. Ultimately, the IsraAID group worked with local government agencies to train educators in art therapy and offer post-traumatic stress disorder training for counselors and social workers.⁶

A workgroup commits to making the outcome the focus of all activities and to working together to achieve it. And while the outcome should be within the group's scope and authority, the shared outcome should also acknowledge the inherent uncertainty and evolving nature of both resources and contexts. By aligning on only **the ends, not the means**, a workgroup is free to think broadly and creatively about the best approaches to achieve that most important outcome. A compelling *what* combined with an open *how* would also tend to attract relevant resources that the group might have been unaware

QUESTIONS FOR REFLECTION

- Where has a short-term orientation gotten us into trouble?
- What is the most important thing on which we could focus our efforts?

QUESTIONS FOR REFLECTION

- What would be the impact on the organization if we succeed?
- What would have to happen for us to achieve the largest impact?

existed. Defining a group's impact requires flexibility, balancing concreteness and aspiration to arrive at something tangible enough to pursue, based in a concrete understanding of the effort required, but not so tangible that it hinders creativity or kills group members' passion and motivation.

In some contexts, outcomes aren't straightforward and might be difficult to articulate. In addition to defining the outcome, try to capture the feeling that you want the outcome to generate. Then the workgroup can reflect on whether the outcome as defined would elicit that feeling, for the group or others. Appeal to group members' emotions, not just their minds. There are different ways of knowing, and feeling and emotion are powerful motivators that may be overlooked by groups eager to jump to metrics and goals. At Pixar, for example, workgroups often lack objective criteria to assess their progress: They reflect on whether a particular character animation or scene captured the feeling they were trying to elicit, and, if it doesn't, they consider every component—the lighting, the colors, the textures, the shot style and camera angles, visual details, sound, and voice, as well as the actual script and story—to understand what is supporting the feeling they are trying to achieve and what isn't or is working against it. In *Inside Out*, about a child's

> emotions, the filmmakers struggled with the character Joy, knowing they wanted to elicit a childlike optimism and enthusiasm without irritating viewers with too much sweetness.⁷

> With a group commitment to a shared outcome, **go public**. Reinforce it by speaking the commitment out loud to each other and use it to guide the group's activities. Whether through blogs or press releases, conversation or

public speaking, look for ways to publicly share the group's shared outcome to motivate taking action and, more importantly, to attract others to your cause and potentially reveal new resources.

MAKE IT MEANINGFUL

A workgroup is committing not only to the outcome but to the journey together. But the commitment that feels so strong at the beginning, when the challenge is novel and exciting, can fade as the new becomes old and the exciting becomes difficult. Paying attention to what makes a shared outcome meaningful can help to sustain and revitalize commitment over the course of a longer effort-or of many short efforts. The shared outcome should remain relevant even as circumstances change and evolve. How does the shared outcome connect to the larger context of an organization or situation as well as to the smaller contexts of the group members? How can the outcome connect to something larger, something beyond self-interest or ambition? Workgroups that can answer these questions—or at least keep asking them-may be better able to sustain members' commitment.

Make the outcome real now by taking mean-

ingful actions now. An outcome around which the workgroup can mobilize today helps members to begin learning sooner. For accelerating operating performance, small actions help test the assumptions and conditions necessary for achievability, and the actions themselves should also demonstrate commitment. The members' unique and diverse sets of resources and capabilities put the group in a unique position to achieve this outcome. Past per-

formance, in particular, can make the achievability real. Have the people and organizations involved in this effort previously shown themselves capable of focusing their actions and resources on the "most important thing?"

Over time, commitment generally comes from having a connection to the shared outcome and deriving meaning from it. This connection may happen through a negotiation: Members bring their own identities, which initially shape the way each member thinks about the outcome and her individual approach to it. Through defining the shared outcome, a collective identity begins to emerge. The workgroup identity, and the deeper understanding of the impact the group can make, begin to shape the members' personal identities. When members find alignment between the shared outcome and their individual identities, it can elicit their passion to bring the outcome to life and have more and more impact on it. Members can **keep it real** by continuing to shape and evolve the outcome to accommodate what they learn and what is important over time. They frame their actions in terms of the outcome. What they do, why they do it, and who they are can align.⁸

One way in which members can internalize the shared outcome is by articulating what they find personally meaningful about this effort and how the shared outcome aligns with that. Through clarifying the group definition, personal identity, how each individual might approach the problem and her role in the group, and what meaning she will derive can begin to emerge. The workgroup can sustain that commitment by being open to challenges from group members as the context changes and more information comes into the picture, and adjusting their shared outcome and action-taking as a result,

QUESTIONS FOR REFLECTION

- How do we avoid inertia from overcommitment?
- What changes would allow us all to believe in the outcome and feel committed?

showing a constantly improving and credible path. This bottom-up approach to accountability and group identity can allow the entire group to adjust quickly to respond to the changing environment and work together toward their shared outcome.

Beyond remaining relevant as context changes, a shared outcome can be more meaningful when it connects to something larger, an impact beyond the reach or ability of any one individual or workgroup that motivates the workgroup to seek to get better and better at achieving the outcome. This type of commitment typically has an emotional component and connects to individuals' personal passions and identities. Passion makes members feel more invested in the outcome and mutually accountable to getting the work done; more importantly, passion is associated with a desire to learn faster to have a greater and greater impact. Tying the shared outcome to a larger narrative that spans workgroups is one way of **raising the bar**—inspiring, stoking passion, and reinforcing commitment.

A narrative can be a powerful call to action. It should appeal to emotion, not just intellect, and lay out a compelling, open-ended vision that invites others to participate in it, shaping it through their own actions. It is realistic about the challenges and obstacles that may be confronted along the way, but that's why the call to action is so powerful—it makes clear that workgroup cannot achieve the opportu-

ANTIBODIES AT WORK

- The organization already has a mission statement.
- We shouldn't ask for trouble. Restating the organization's goals is the safest way to go.
- Keep it vague. We don't want to sign up for something we can't deliver.
- My boss sets my performance objectives.

nity without sustained, collective action. In times of uncertainty and turbulence, narratives can help

groups overcome risk aversion, short-term thinking, zero-sum views of the world, and erosion of trust. ¹⁰ Organizations or movements might create a narrative; the workgroup probably won't. By definition, the narrative exists outside of the workgroup and is focused externally: How can others participate, taking independent actions to make the vision reality?

So if workgroups aren't creating the narrative, how do they use them? Workgroups can start by becoming aware of the narratives around them and identifying the narrative that can turn the shared outcome into a greater, open-ended aspiration that taps a deep need in individuals and motivates them to go the extra mile to achieve the desired outcome. In the case of a workgroup, a narrative can illuminate how actions support an even greater ambition, one that *can* be accomplished and is being accomplished—not necessarily by the workgroup alone but in part through its efforts.

One way of continuously making the shared outcome meaningful is to keep it visible, front and center, as a guide, a call to action, reminding the group what they are striving for. Whether in physical form, on a whiteboard or dashboard (Southwest Airlines Field Techs), incorporated into a project name (Royal Caribbean Project Edge), or as an open manifesto (sparks & honey), incorporating references to a shared outcome reminds the team what they are trying to achieve and can help guide decisions. Visible cues can often be enough to spark the inspiration and motivation that many members feel when they first join a team.

Getting better, faster



Bias toward action

How to get past the greatest risk of all—failing to act

Getting better, faster

Introduction: Reactivity is not enough

The front line is, of course, where most problems or opportunities first appear—and where people find themselves crafting strategies and taking actions to address them. Such moves usually need to happen at top speed, since the window of time to address the issue at hand is often short—too short to accommodate exhaustive analysis, planning, and approval processes. It's no surprise that many organizations look to speed reactions and solve problems more quickly. But workgroups aiming to accelerate performance improvement should adopt a different mind-set: They should *act* rather than *react*.

In a rapidly changing world, workgroups take a real risk in reacting to whatever is happening at the moment. Reactivity tends to breed modest, incremental improvement at best; at worst, it tends to lock workgroups into their approaches of the past. Groups need to respond quickly to whatever they are confronting—and respond in ways that can move them toward achieving higher impact.

Action is a means of targeted and rapid learning that is an important element of accelerating performance. It is a different type of learning than *training* or sharing existing knowledge. Taking action to engage with a possible solution uncovers a problem's conditions and requirements as well as the capabilities and limitations of our resources. This information informs the next action and ultimately creates new knowledge that can be built into a better approach. Until the new knowledge is embodied in action, the workgroup is unlikely to learn from it.

A group can learn faster how to achieve higher levels of performance by taking more of the types of actions that create new knowledge and matter to the outcome. Balancing the value of fast feedback with the longer-range goal to significantly improve an outcome, a group can avoid the reactive incremental loop and pursue truly impactful learning. This can shape how members will think about what actions to take and which actions and opportunities to pass by.

Further, in a world where what is true today about a given issue may not be true tomorrow, a bias toward action could orient the workgroup to look beyond compliance and the status quo. It can help propel a workgroup past the paralysis brought on by uncertainty and prompt the group to keep testing assumptions and developing new approaches to improve performance regardless of inertia or roadblocks in the larger organization. A bias toward action can also help clarify the overwhelming noise that many workgroups sometimes encounter.

To accelerate performance improvement, work-groups should increase decision-making velocity, taking reasonable and fluid actions—whether that is first responders breaking down a door or a product designer posting a mock-up on a platform—without cumbersome decision-making and approval processes. Groups should be able to take action—small moves, smartly made—over and over and over, to keep testing conditions and assumptions and pushing boundaries to reach higher levels of performance.

Too much planning or approval-seeking without action can defuse momentum, squelch passion, and delay the learning and refinement needed to progress. If workgroups are too slow to try things outside the status quo, they may miss valuable opportunities.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- We are slow at putting our ideas into action; we focus on process (for example, stage gates) more than the results we are trying to achieve
- There is no time to tinker, prototyping new ideas feels high risk, and failure is frowned upon
- Many people can say no, while no one can clearly say go
- We can't get the right people in the room to make decisions—or, worse, we have to get everyone in the room
- The outcomes around which we align cater to the lowest common denominator; we could be missing the opportunities that would have significant impact
- We feel as though we have too few resources to achieve the impact we want
- There are no consequences for not improving performance over time

For example, Polaroid was slow to act when radical changes were occurring in the imaging/camera industry even though the company had the technical capabilities to pursue a new approach. Accelerating performance improvement, then, doesn't necessarily come from response and reaction, no matter how fast, but from choosing where to act to get the best impact on the outcome over time.

The *bias toward action* practice: What it is

In a fast-paced and unpredictable business environment, not all actions are equal. Action matters when it leads to new actions that can ultimately deliver higher impact. Bias toward action is about acting quickly to learn faster, but it's also about choosing where to act; deciding what will drive the most useful learning. It is a balancing act: Groups need to get into action sooner—and also take every possible moment before action to get the most out of it. A strong sense of where the workgroup is aiming, what performance metrics matter most, and what

the workgroup doesn't yet know make bias toward action possible.

Effective action to accelerate performance improvement is typically characterized by:

- **Timing.** Be explicit about the downsides of waiting to act. Knowing when to act can be as important as knowing what to do.
- Leverage. Leverage others' capabilities to learn as fast as possible and focus on what has not been done before.
- The unknown and unpredictable. Aim for actions that haven't been taken before, whose effect is unknown, rather than variants designed to confirm a hypothesis. There shouldn't be a designated result that, if it doesn't turn out that way, the action is a "failure."
- Improvisation. Improvise as you go. Look for ways to tinker with the approach, and incorporate feedback to build on—and build in.
- Short feedback loops. Take action that elicits useful feedback faster. Look for ways to get feedback earlier from actions that take longer.
- Planning. Take time to understand and manage risk in advance. Plan for how the workgroup

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- **Maximize the potential for friction**. A diverse and passionate workgroup can shape and build the actions that will have the most impact on performance.
- Eliminate unproductive friction. Workgroups can act more effectively and learn from actions if members do not fear judgment and repercussions and expect actions to be made in support of the workgroup's learning.
- **Reflect more to learn faster.** Action generates the raw material for reflection. What action can give us the quickest feedback about how to improve the outcome the most?
- Commit to a shared outcome. Action has implications for bridging all of the workgroup's practices into impact on the shared outcome.
- **Prioritize performance trajectory.** Out of all the possible actions, which is most likely to have an impact on the performance metrics that matter most to the outcome?
- Seek new contexts. Workgroups can draw inspiration and insight from other contexts about what assumptions they should test and what types of actions they can take next.
- Cultivate friction. If the point of action is to generate the most impactful learning, groups should constantly question assumptions and look for opportunities to build on and improve other actions.
- Frame a more powerful question. The powerful question can help overcome old assumptions and build more of a creative set of conditions for action.



will gather feedback and learn from actions, and consider whether the action can be made more productive.

... and what it isn't

- Agile. The way many organizations have interpreted and implemented Agile, it is almost exclusively focused on speed-to-market and the ability to respond more quickly. While organizations can find this incredibly useful, workgroups aiming to accelerate performance improvement should focus on the actions that will help them learn faster how to reach higher and higher levels of performance.
- Acting for the sake of action. Without a clear direction and a desired impact to help guide and prioritize possible actions, groups can spread themselves too thin in a misguided belief that more action is inherently better than less. Of all the actions on the table, choose those most likely to have an impact on the performance that matters most.
- Acting recklessly. It's anything but. All failures are not created equal, and those resulting from inattention or lack of effort or competence should have consequences.²

Putting the practice into play

Workgroups aiming to accelerate their impact should act relatively quickly. But they should also act deliberately, to avoid getting trapped into reacting to the moment rather than choosing the actions that have the most potential to propel the workgroup toward its long-term objectives. The practice of biasing toward action, then, is a balancing act between speed and impact. It requires prudence and planning, as well as a nuanced understanding of risk to make it more manageable and place it in the context of other risks and rewards. Rethinking and reframing risk can make taking action more compelling. At the same time, planning actions to be less burdensome, more productive for learning, and designed to accommodate improvisation in the moment can further encourage workgroups to act.

In fact, part of the practice is knowing when not to act—and being focused on exploiting the limited time available to make the next action, and the one after that, have as much impact as possible.³

REFRAME RISK

In a fast-moving environment, inaction is one of the greatest risks that workgroups face. Conceptually, we know that inaction means sticking with the status quo, which means, at best, diminishing returns and a shallow line of incremental improvement. At the outset, though, it may be hard to appreciate the opportunity missed or gauge the cost of a chance to learn passed up. To begin reframing the notion of risk, groups should make the risks of inaction part of the conversation. What are we risking by doing nothing? What is the potential impact of what we might learn? What is the cost of continuing without this learning? The risk of doing nothing is missing the opportunity to jump from a shallow linear curve to an accelerating trajectory of performance improvement: Where could we be in six months, in a year, in 10 years relative to today, if we get on an accelerating trajectory?

The same phenomena—increasing rate of change and shifting expectations and demands-that are moving the action to frontline workgroups also significantly increase the risk of inaction, though few organizations have the tools or skills to really understand the impact of opportunities missed. A group can set a tone by deliberately focusing conversations on action and making the risk of inaction part of any conversation about risk. It can also be useful to draw on well-known examples of the changing dynamics in other domains to be explicit about the potential downsides of waiting (for approval, for clarity, for external pressure) relative to the potential of getting on a higher trajectory in such an environment. Consider, for example, the story of Amazon Web Services. Back in 2005, when a group at Amazon began working on the project, many likely questioned the investment-after all, what did it have to do with books? Yet within a decade, it had reached \$10 billion in annual sales and was growing at a faster pace than Amazon's e-commerce business.4

For workgroups, a large part of developing a bias toward action is to focus on what can be gained

from taking an action and then **maximize the upside potential**. What impact or learning might an action have on the outcome? How could we tweak this action to increase the impact or gain even greater learning? Consider what is desirable, feasible, and viable—in that order. One way to maximize the upside is to focus on actions that haven't been taken before, whose effect is unknown. These will likely have far greater learning potential than trying out variants designed to confirm a hypothesis. The action should generate information or create new knowledge rather than have a designated answer that is either right or the action "fails."

QUESTIONS FOR REFLECTION

- What has prevented us from accomplishing our larger goals?
- Are there types of decisions we make final and unchangeable that shouldn't be?
 How might we benefit from making more decisions reversible?

Putting thought and planning toward action may help to direct the group's efforts toward highimpact goals, but members will likely have different perspectives about which actions have the greatest potential and how exactly they should be taken. The goal should be to balance impact with the speed of getting feedback to drive learning. If a workgroup has divergent views, try to disagree and commit rather than force consensus. This practice is inspired by a phrase from Amazon CEO Jeff Bezos, who credits this concept with the productivity of the company's teams: Feel free to challenge an idea or plan, but when the time comes to make a decision, everyone commits to executing it even if they disagree.5 For workgroups, it generally means knowing when the value from further discussion is less than the value of getting feedback from actionwhen it is time to make a decision and move on. The expectation that many actions will fail to generate anticipated results means that the commitment to

any particular action may be limited. It would generate learning of one kind or another, and if it fails to have the expected impact, the group may well go back and execute the other option.

Developing this sense of open-endedness about a workgroup's decision-making can help that group take action more easily. Members can question their own assumptions about a proposed action's magnitude and finality. Decisions often feel weighty because we assume they are weighty; it's always worth questioning. Consider making it a formal part of discussion to ask: *How significant is this decision? What are the implications for regrouping*

and trying something else if this action doesn't have the expected impact? This is somewhat of a paradox, since workgroups should be looking for actions to take that are significant in terms of potential for impact and learning, while also thinking about them as transitional and experimental. In rapidly changing conditions, this impermanence only increases; as one Southwest field tech put it: "What was 'no' yesterday might be 'yes' today."

Consider playing with assumptions and boundaries to **make more decisions reversible**. Reversible decisions

can be made with less authority or consensus, creating a stopgap for workgroups that might get stuck in analysis paralysis. If an approach or decision fails, the group can quickly recover and try another option rather than live with the consequences for too long. In doing so, members would learn and move on to focus on learning about the biggest opportunities rather than trying to predict the future.

Making risks more manageable can also tip the scales toward action rather than deliberation. Simulate actions by **creating sandcastles** in environments that have a lower cost of tinkering and contain the ripple effect of experiments. Try using environments that aren't dependent on core processes and IT, and leverage virtual tools to iterate quickly on specific actions that would benefit from tinkering. This practice could make it easier for workgroups to embrace productive friction because it would lower the stakes of any one challenge or decision—hey, it's only sand. The group would de-

velop an approach and then immediately build or test it. The immediacy of the action can generate rapid feedback for the group to take in and reflect on, shortcutting the need for long decision-making processes and cumbersome scheduling and buy-in. Having limited downstream effects, a group would have increased degrees of freedom to quickly test out and adjust its approach rather than trying to fix an airplane midflight.⁷

For example, FirstBuild—the open unit of GE Appliances, now a Haier pany8—uses a community of enthusias test concepts for new products. After ing which types of products generate thusiasm, such as a "chewable ice ma FirstBuild might go back to the commu with more detailed concepts. After rowing the concept, the workgroup be a more detailed design, going back to community as needed. Once a desig ready to prototype, the group uses a cr funding site to test the market's intere the product as designed and priced. I market is less interested than expected group can easily pull the product back either kill it or tinker with features and ing to take to market again. In Royal C bean Cruises' Newbuilding & Innova workgroup, members build sandcastle virtual environments where they can s

sands of design solutions in a few hours, swapping out details that would otherwise have been costly or impossible to test in reality. For example, the group adjusted colors of panels, tested how much light structures provided at night versus day, and got to identify safety hazards invisible in blueprints. While members don't get the benefit of guest feedback, the entire group can see the design impact of decisions almost immediately, making for richer reflection and discussion of what actions come next.9

Workgroups should be able to address the issues or opportunities they see unfolding in front of them when the chain of command is occupied with other concerns, or when there isn't time to wait for more complete feedback or further instruction. An assumption of permission—go until "no," both for the group actions and for individual members—is key

for moving quickly and not getting hung up seeking permission, consensus, or buy-in from a wide array of possible stakeholders in advance. Asking for forgiveness rather than permission can help a group maintain momentum and spend its resources on activities that generate new knowledge rather than on navigating the organizational structure.

This assumption of permission may conflict with an organization's broader culture and make

> fortable. In order for this to work, rs would have to trust each other n good faith in the interest of imthe shared outcome and to have understanding of the need to priactions that have the potential atest impact on the outcome. In ingly dynamic environments, actslowly may be riskier than letting ent people exercise their judgment. ining decision-making authority lso constrain a group's learning al and may be unnecessary if the objectives and priorities are clearrstood to guide decision-making. Stanley McChrystal describes in f Teams (his book about the Joint Operations Command during the ar), "I was connected to almost ecision of consequence. This was shing holistic awareness but it also

created a nightmare of paperwork and approvals. . . . The wait for my approval was not resulting in any better decisions, and our priority should be reaching the best possible decision that could be made in a timeframe that allowed it to be relevant. I communicated across the command my thought process on decisions like airstrikes and told them to make the call." 10

ACT TO LEARN

The most powerful learning for workgroups can be through action—getting out there and doing something—rather than sitting around a table and discussing. The more quickly the group gets to action, the sooner it can start learning how to accelerate performance improvement.

The relevant actions for a group often aren't the type that require large investments and extensive planning. If the actions are, instead, a means of learning to improve the outcome, how can we formulate actions to maximize the potential impact on the outcome and also have shorter feedback loops? One way could be to divide complex actions with long feedback loops into a series of assumptions to test. Consider formulating the most impactful actions into a series of small moves with interim milestones designed to elicit new information and create new knowledge. Try to stage your moves to focus on getting the actionable information or feedback that is important to the next step as quickly as possible without losing sight of the larger action. Consider what information or knowledge the workgroup may be missing and what feedback would be sufficient to inform further action. These actions can be viewed as interwoven experiments in a larger experiment that can lead to better solutions and outcomes in the future.11

QUESTIONS FOR REFLECTION

- What do we do best that will make a difference, and what can we rely on others to do?
- To what extent could we make decisions faster with less information and achieve more as a result?

A minimum viable approach (MVA) can help **minimize effort, maximize momentum** by helping groups quickly identify what works and what should be discarded. MVA is frequently used in product development to deploy a product in the market sooner; in the context of workgroups, it has a wider aperture. The group would focus on identifying the barest approach or action that can lead to the next iteration, accelerating the rate of learning and encouraging members to test ideas outside their comfort zone or established approaches with minimal investment of time or resources. ¹² MVA may not be appropriate for all situations (for instance, space

exploration or surgery), and scaling a solution may eventually require greater organizational support.

Workgroups can lower the barriers to action, increase the diversity of perspectives, and reduce risk by leveraging (capabilities, expertise, resources) to learn from outside the group. In fact, setting constraints-time, budget, technical-can prompt more creativity and also focus a workgroup where it is most likely to create value. If someone does it better, let her do it for you. Many work products are openly available and can reduce the cost, time, and effort required to act. Doing this well may require emphasizing rapid appropriation and reusing knowledge from other contexts and tight feedback loops so that participants can rapidly build on the contributions of others. While orchestrating others and using existing third-party tools has costs, mobilizing others can cultivate allies, build relationships, and allow a workgroup to focus on what it does best. The more rapidly a group learns from others, the richer the overarching set of possibilities—both the

nature of the opportunity and the journey needed to achieve it.

Keeping in mind that the reason for adopting "minimum viable" practices is to accelerate the rate of learning, workgroups can **accelerate decision-making** as a proxy for whether they are making progress toward creating an environment where more learning happens faster. A "good" decision made too late for the opportunity or challenge can prove worse than an imperfect decision made in the moment. Part of this practice is to get more comfortable with acting on less

information. Another is to get more creative at identifying proxies for the information you need. A third aspect is to make use of the immediacy and transparency of technological tools to get input much more rapidly than hiding behind established decision-making processes. For example, e-commerce luggage start-up Away attributes the use of Slack to "making decisions in a day that used to take weeks or months." ¹³

Consider how the Joint Special Operations Task Force in Iraq went from 10–12 highly planned monthly raids to more than 300 monthly raids by learning how to take action within, sometimes, min-

utes of receiving actionable intelligence information. The raids may have had more unknowns, but they were also more successful at capturing targets and additional intelligence information because they were acting on information that hadn't gone stale.

Another example comes from Southwest Airlines, where the Baker workgroup has developed a tool to see decisions' direct impact on network operations. At one point, the group wanted to add a graphical dashboard that would show where Southwest was long or short on airplanes. Rather than take weeks to build the functionality, the superintendents of dispatch sat next to a developer in the workgroup, working together to create a summary table built into the system in only a few hours. They began getting feedback immediately as their colleagues began using it.¹⁴

66 If you know in advance that it's going to work, it's not an experiment.¹⁵

-Jeff Bezos

Jazz it up

There is no such thing as perfect experimentation or efficient innovation. Taking action early and often can only produce so much learning if workgroups don't also bring a spirit of play and possibility to their work. Try to take off the guardrails and embrace the messiness of rework and deviation. The point is not to discourage mistakes but to encourage recognizing mistakes, ineffective approaches, and invalid assumptions, and use them

QUESTIONS FOR REFLECTION

- To what extent is the current approach holding us back from achieving more?
- What can we do to learn more from our mistakes?

as inputs into better approaches, sooner. To really draw on its performance improvement potential, a diverse workgroup should embrace the vital role of improvisation, failure, and the unexpected in creating new knowledge that can lead to better and better outcomes over time. Similarly, leveraging capabilities from the outside is nothing more than outsourcing if the group uses those capabilities in predetermined, already-established ways.

With any action, **look for what's not being done**. We tend to focus on the urgent or the easy—because it's right there—but what is most important to the outcome may be neither urgent nor close at hand. Venture into a territory where your efforts can expose or create new knowledge rather than iterating on well-worn ground where the insights are incremental. The more unexpected the outcome, the more potential for valuable learning. If a workgroup is generating few surprising outcomes, it may not be pushing the boundaries that would lead to a new level of performance.

Improvisation is a skill that defies documentation, codification, and outside control. It can be misconstrued as chaotic, with individuals just winging it. In fact, for workgroups, similar to jazz ensembles, the quality of improvisation could depend in part on the foundational skills and talents each member brings, and in part on the quality of listening and riffing on what others are doing-and what has already been done-to make each additional move additive and constructive. Expand the potential for improvisation by relaxing organizational and operational constraints that get in the way. Royal Caribbean, for example, creates the space for improvisation by building change orders into the plan so that the company is prepared, structurally and mentally, to benefit from the interactions of the diversity

of backgrounds brought together in the design workgroups. This also seems to set the expectation that members could build off of each other.

Celebrate the "fast failures" as opportunities to practice **improvising in the moment**. This would keep the focus on problem-solving, incorporating new information, and creating new knowledge. Although failing fast has become almost a cliché when talking about innovation, the key is often to keep improving the group's ability to find the easiest, fastest ways to generate discrete and actionable feedback. Workgroups' limited size and the shorter time frames within which they work typically demand that these practices more closely resemble tinkering than iteration, and small, rapid adjustments rather than formal revisions.

Failing can lead to unexpected outcomes. **Build** on mistakes. Rather than start over after a failure or, worse, hiding it, consider incorporating failures and the learning from them into the next action. Starting with a clean slate loses the learning. Workgroup members may struggle with recognizing the value of what they are learning from unexpected outcomes, and what is relevant may come to light only through discussion and additional viewpoints. Consider the well-known example of 3M and the Post-it note. One of the company's most widely

ANTIBODIES AT WORK

- We need consensus. If we get everyone on board, we're full steam ahead.
- This is it—take your shot.
- Failure is not an option: Screw this up, and you'd better look for another job.
- We don't move until we're sure.

sold products, the Post-it resulted from a "defective" new adhesive that was insufficiently sticky to hold papers together; sheets could just be peeled right off. It was only after consideration that the workgroup recognized the potential for an alternate use.¹⁶

Getting better, faster



Prioritize performance trajectory

How to make a bigger impact, more quickly

Getting better, faster



Introduction: Increasing impact

"Are we getting better at achieving our outcome?" This is the crux of workgroup performance, and almost no one measures it. Not only that, but in times of more rapid change—when the requirements, the technologies, the competition, and the contexts often change minute-to-minute, day-to-day, and incremental improvement can't keep pace—the important questions to consider are, "Are we getting better at achieving our outcome quickly *enough*? Are we getting better, faster?"

It may be insufficient to commit to a particular outcome. In a world of exponential technology advances, we need exponential, or accelerating, improvements in performance. That means committing to a trajectory, not just a target. Frontline workgroups will be making decisions and solving problems, in changing contexts, with limited time and other resources. It can be easy in this type of environment to get caught up in the immediacy of the day-to-day demands, acting to maximize impact in the moment but getting only incrementally better and possibly moving in a direction that could soon be obsolete. Pressures on the larger organization may push the workgroup further to focus on efficiency at a time when it needs to be focused on creating more value or delivering a better outcome. A key to shifting the focus away from efficiency is to identify and prioritize what will have the biggest impact on the shared outcome.

Setting high-impact performance objectives and tracking the trajectory of their improvement can help workgroups make trade-offs that may accelerate them toward better and better delivery of the shared outcome instead of getting distracted by incremental or short-term gains. As Amazon founder Jeff Bezos noted in 1997, "Because of our emphasis on the long term, we may make decisions and weigh trade-offs differently than some companies." Focusing on trajectory can help workgroups prioritize the signals that matter and balance opportunity with distraction, discipline with flexibility, and experimentation with learning.

As workgroups come together to tackle the unexpected, the right performance objectives, and metrics against them, can help the group better understand the impact of their work, improve decision-making around priorities, maximize learning in the short and long terms, and continue to motivate action to figure out how to reach the next level.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- There are no workgroup-specific metrics and/or rewards for workgroup success
- Personal metrics are not tied to the impact they have on the workgroup and the larger organization
- The workgroup's critical priorities are different based on whom you ask
- We don't know where we stand relative to outcomes we want to achieve
- There is no agreed-upon and measurable metric for success that is being prioritized above others
- Metrics are focused on the near term and are mostly backward-looking—for example, ROI

The *prioritize performance trajectory* practice: What it is

This practice is about explicitly identifying and tracking the key metrics that matter for improving the shared outcome. It involves regularly assessing trade-offs across the metrics in order to achieve greater impact faster. The emphasis is on looking at performance over time and not settling for linear improvement. The performance trajectory indicates whether the workgroup is building in enough opportunity for experimentation, learning, and knowledg creation to keep up with, or ahead of, the changing environment.

Focus on value. What does performance mean
in terms of the value we deliver and what we a
trying to achieve? Define better in the context
of the shared outcome, and clarify how it might
be measured

- Focus on workgroup operating metrics. What frontline metrics could have the greatest impact on the organization's key operating metrics? What metrics and performance objectives will support improvement in the outcome? One challenge is that most organizations don't measure workgroup performance, either at a point in time or over time. The individual is measured, and business units are measured, but few organizations track anything at a workgroup level.
- Make small moves, smartly. Take actions to understand the key drivers of the shared outcome, and what aspect of performance is most meaningful to improve for that outcome.

... and what it isn't

- Efficiency. Efficiency-based improvement can increase for only so long before it generally tapers off. You typically won't accelerate performance improvement by focusing on efficiency.
- Financial performance. Revenue is usually an inadequate metric for value and, with few exceptions (such as for sales groups), is almost meaningless at the workgroup level.
- A lot of numbers. The metrics that matter can change over time, but if you have more than three key metrics, you likely have too many.
- Performance snapshots. Performance at a particular point in time offers little useful information about where you are going and how you might get there.

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- Maximize the potential for friction. A clear, long-term direction around a meaningful shared
 outcome can help attract diverse members who are passionate about the outcome and can help
 mobilize others to engage as well. Without it, the workgroup may attract people best suited for nearterm events but unprepared to make progress toward longer-term objectives.
- Eliminate unproductive friction. Tracking and prioritizing group, rather than individual, performance metrics can help group members put aside competing agendas and ulterior motives that can lead to unproductive friction.
- Reflect more to learn faster. Taking the focus off performance snapshots in favor of performance
 over time might free workgroup members to be more open about failures and potentially eager to
 delve into current performance in order to improve the trajectory. Leading indicators point to likely
 areas of inquiry and provide fodder for reflection in advance of and in between action.
- **Commit to a shared outcome.** The shared outcome is what the group wants to achieve; the right performance metrics should help the workgroup assess progress toward that shared outcome.
- Bias toward action. Movement is a key to improving the trajectory. Action can be helpful when it is
 focused and accelerating progress toward a shared goal. Metrics help assess the current action and
 shape the next action.
- Seek new contexts. Finding performance edges in new contexts can help the workgroup get to
 previously unimaginable performance levels.
- Cultivate friction. When group members focus on rapid performance improvement and have data
 as a starting point, they may disagree about how to get to that next level of performance and generate
 ideas for new approaches.
- Frame a more powerful question. If a powerful question and commitment to shared outcome help identify the area of highest potential impact for the group and align the workgroup around it, prioritizing performance trajectory may help the workgroup increase its impact over time.

NINE BUSINESS PRACTICES

Putting the practice into play

Caught up in the action of the day, workgroups often need to make decisions fairly rapidly; even reflection and post-action debriefing may be compressed. They won't have the luxury of waiting for quarterly reports to see how effective their actions were, and the financial metrics would vield little insight into an operational workgroup's effectiveness in any case. Instead, for workgroups faced with prioritizing their own efforts and resources, the question is: What can we look at, today, that can give us an indication of whether we are taking the right actions to achieve the impact we want to in the future? Workgroups that want to accelerate performance improvement will have to identify which metrics matter most and track their trajectory over time to make better, more informed, trade-off.

IDENTIFY METRICS THAT MATTER

The winners in this exponential age will likely be those that can focus most effectively on the relevant leading indicators of performance. Good metrics can provide visibility into impact at any time. This can motivate the group and also overcome complacency, highlighting relevant trends and flagging potential problems and opportunities earlier.

QUESTIONS FOR REFLECTION

- How will we measure success?
- If we can closely watch only a few numbers, which might those be?

If the adage what gets measured gets managed is true, it is important for workgroups to be thoughtful about measuring what matters. Too often, it is also true that we measure what we can, or because we can, not because it matters. Measurement should reflect what you value and what will be most important to achieving the shared outcome at any given time. While it may seem obvious, the most important thing for a workgroup to measure is generally workgroup performance, against the shared outcome and the objectives that support

the shared outcome. Within the workgroup, that means prioritizing group performance objectives over competing agendas, at either the individual or department level. Shifting incentives toward workgroup performance can help, but that decision is often outside the group's control. Beyond the group's performance of the shared outcome, what else matters? Define a few objectives that can have a significant impact on improving the outcome, and identify the associated metrics that will be most important at a point in time to indicate whether the group is on track.

But focusing too heavily on measurement and metrics based on what is available can lead to undervaluing areas in which measurement or data is less available. One consequence of being too focused on the metrics at hand—whether or not they are the right metrics—is that we may dismiss feelings and gut instinct. Don't give up on your gut just because you can't measure something. For a workgroup, that means treating gut instincts and feelings as potentially valuable inputs and exploring them as part of developing approaches and making decisions. Such feelings may reflect important information that hasn't yet fully emerged about the context or connections between disparate and unar-

> ticulated ideas. Workgroups that deal only in facts may miss important information and be hostage to courses of action guided by irrelevant or incomplete metrics. At a minimum, a gut reaction should make us ask some questions: What assumptions are guiding this feeling, and how true are they? If I had no background on this problem, what would I see and believe about it? Do we need to iden-

tify new metrics? Workgroups can use gut instincts to reconsider the objectives or look for alternative proxies that better represent progress on the desired trajectory.

Too many metrics can be as bad as no metrics. The point is to closely watch a few numbers, not to spend a lot of time collecting, reporting, and managing metrics. Too many metrics can dilute the group's focus. Identify the few that can give the group the best information about how they are doing and what to do next to have even more impact. Each Amazon "two-pizza" team, for example, focuses on a single business metric, with that metric serving as the team's "fitness function." The metrics are a tool for discussion, course correction, and learning, not an end point or the basis for assessing rewards and punishment.

Not all metrics are created equal: Some might indicate a company's financial success or highlight a single initiative's marginal impact on reducing turnaround times. While senior executives tend to use financial metrics as a measure of performance,3 workgroups should put operating metrics before financial ones. Good metrics are leading rather than lagging, indicating what impact an action is likely to have, while there is still an opportunity to influence and adjust it. This is important because failures can unfold over long periods of time, and leading indicators can help you get ahead of the potential challenges before the failure plays out. Financial metrics are generally easy to measure but tend to be lagging indicators, reflecting the financial impact of a previous operating environment. They're also often difficult to tie back to specific initiatives or workgroup performance. Operating metrics, such as customer churn rate

or time to introduce new products to market,
d thus more
reflecting
arrent state
performance
is within the
group's abilaffect. They
pate the rent financial
rmance.

Seas, Royal Caribbean Cruises Ltd.'s (RCL) largest and most technologically advanced ship, the company's Ecorizon workgroup was committed to making it the most energy-efficient cruise ship on the seas. The group began with an objective of reducing energy use by 12 percent over the most energy-efficient ship at that time. The workgroup identified 89 initiatives that could improve the ship's energy efficiency—

from the weight and amount of materials used in the ship's hull and the types of engines installed, to energy reminders for guests, glass thickness on balconies, and interior designs that maximized natural light. The workgroup focused on a few initiatives that would drive the majority of the energy savings, but over the course of three years, it also pursued "quick" wins, always keeping an eye on progress against the energy-efficiency metric; ultimately, the group delivered a more than 20 percent reduction in energy use.⁴

Figure out which leading metrics will be most important at any point in time. The optimal operating metrics, ones that can have the greatest shortterm impact on the shared outcome, could give the workgroup a tangible lever with which to improve performance. For example, instead of focusing on call-center costs, a company that aspires to deliver top customer service might identify a short-term objective, such as reducing average time to resolution, that would accelerate progress toward that long-term outcome. This objective, and the associated metrics, might lead the group to prioritize an initiative to find trends across calls. A recent study found that companies that measured a relevant nonfinancial factor (and validated that it had an impact on value creation) earned returns approximately 1.5 times greater than those of companies that didn't.5

How can workgroups target the right metrics? First, understand the connection between action and result through small what-if experiments that can test which metrics have the biggest impact on performance. Beware of metrics that are used as a matter of habit or convenience that could be flawed or inappropriate for the objective. For example, in the well-known story of *Moneyball*, Oakland A's thengeneral manager Billy Beane changed the game when he chose to focus on then-arcane metrics such as onbase percentage and slugging percentage based on a deep understanding of cause and effect.⁶

Operating metrics are just the beginning. With new technologies that make the invisible visible through sensors and real-time capture, workgroups may find new ways to monitor interactions and other patterns that would define new metrics that matter. For example, research on social metrics has

working on

ony of the

revealed that certain patterns of interaction within an organization can help to accelerate the introduction of successful new products and services.⁷

Track trajectory, not snapshots

A trajectory is a path, a series of positions over time. A snapshot, which is how many organizations

look at performance, is a position at a single moment in time. Workgroups that accelerate perfor-

Everything important you manage has to be on a trajectory to be "above the bar" and headed for "excellent."

-Ray Dalio, *Principles: Life and Work*, 2017

mance over time are on a steeper trajectory—over time, the end point could be very different than a workgroup on a path of linear improvement. Looking at any given snapshot, however, wouldn't tell a workgroup whether its performance was accelerating or incremental. Snapshots offer little useful informa-

tion about where you're going and how you might get there. Workgroups aiming to accelerate performance should pay attention to the trajectory—considering where they started, the rate of progress, and the direction they want to go—and not get too excited or discouraged by performance at any given moment.

When Billy Beane started using his new metric analysis to acquire players, the new Oakland A's roster got off to a slow start: After 46 games, the team had

a record of 20 wins and 26 losses. Beane ignored the discouraging snapshot, sacrificing short-term fan approval by refusing to abandon his metrics and bring on higher-salaried stars, and focused on trajectory. By the latter half of the season, the A's had improved to 68–51—and then came a 20-win streak, taking the team's record to 88–51. The A's ended the season with 103 wins and 59 losses. Beane constantly reevaluated his system of leading indicators—beyond the simple win-loss column—as the environment changed, aiming to confirm that he was best using the metrics.⁸

are typically satisfied. There can be two problems with this:

While Beane's example shows the potential value of focusing on the group's trajectory when

snapshots would indicate the group is performing poorly relative to others, it can be equally important to maintain **a focus on acceleration** when

snapshots indicate the group is doing well. An upbeat snapshot can breed complacency: If the snap-

shot indicates that we are hitting a pre-set goal or

performing as well or better than competitors, we

 As industries or markets undergo significant change, an organization's known competition may be less and less likely to be the relevant performance marker, and today's drivers of high

QUESTIONS FOR REFLECTION

- What leading indicators could we use to track performance improvement over time?
- How can we better monitor these key performance levers?
 - performance might be obsolete tomorrow.
 - Snapshots can be easily gamed in the moment by making teams smaller, for example, and pushing the remaining people to work harder. These tactics generally can't be sustained and, over time, generate diminishing returns or even productivity erosion.

For a workgroup to focus on acceleration, it should find a relevant way to track its improvement relative to past performance. For some workgroups, tracking metrics in and across situations over time

might mean clustering projects of similar type or scale or looking at improvements within a longerterm project and being aware of the factors that could limit direct comparison. Focus on metrics that can be tracked in relatively short intervals—these may provide more data about changes over time that can inform how workgroups approach reaching the next level of performance. For example, at sparks & honey, a New York-based advertising agency, every two weeks a small workgroup reviews a key set of operating and performance metrics related to the group's daily "culture briefing," a critical driver of the insights and pattern analysis that underpin the agency's products and services. Looking at the week-overweek changes in the metrics and comparing them to the longer trajectory can allow a fast-growing compa-

QUESTION FOR REFLECTION

 What can we do today to get better, faster over time?

ny to scrutinize what is shaping performance, identify areas to explore or improve, and develop new approaches to reach the next level.⁹

A workgroup can track performance over a series of events even if many of the group members change from one project to another. The performance of the overall pool from which they are being pulled should be accelerating over time, creating new knowledge and practices. This is another argument for keeping metrics simple, easily understood, and few.

But how do workgroup members know if they are on the right trajectory? If competitors aren't a relevant guide for how high to aim or how fast to move, what is? Don't get trapped into comparing against others. The comparison should be internal, to the workgroup's own trajectory so far. **Keep moving the edge.** Where are we improving most rapidly, and how can we do more of that? Where is improvement slowing down, and how can we change what we're doing to improve the trajectory? It can be valuable to look at the performance trajectories on other fast-moving edges, including in un-

related arenas—not to judge success but to ask what can be learned from them, especially about effectiveness. How are they doing more with less? Accelerating performance improvement is unsustainable if it's accomplished by throwing more and more effort and resources at it. Part of the key is learning to get better at accelerating value creation—otherwise you could just get widespread burnout.

TACKLE TRADE-OFFS

In times of uncertainty and rapid change, one of the greatest risks is distraction. Workgroups constantly make trade-offs: between short-term demands and long-term expectations, between learning and efficiency, between better and cheaper, and so on. On the road to accelerated performance improvement, work-

> groups may have to make trade-offs that run contrary to the short-term mind-set ingrained in many organizations. While most companies are willing to sacrifice long-term economic value for short-term earnings, a short-term mind-set can distract a workgroup into activities that deliver a quick

performance bump but don't help the group get on the path for higher performance in the long term and may even send it in the wrong direction.

Workgroups looking to accelerate performance should **think both short and long**. The group has to act in the short term, often addressing a challenge over a short, or very short, time frame. At the same time, the workgroup itself may continue, possibly with a varying subset of members, over a longer period of time, pursuing the same shared outcome across changing conditions. At the organizational level, companies such as Amazon and Netflix have successfully accelerated their performance by focusing on two extreme horizons: Where/what do we need to be in 10+ years? And what two or three initiatives can we take in the next 6-12 months to accelerate toward that goal? The long-term focus helped Netflix see past the significant drop in stock price the company initially experienced when it shifted to streaming services.10 While workgroups might not operate in such a long time frame, this type of two-horizon approach is a useful model for more informed trade-offs: It allows

NINE BUSINESS PRACTICES

workgroups to iterate between where they are now, where they want to go in the future, and what types of actions can address the immediate demands of the present in a way that puts them on the right path toward significantly better long-term performance. Use the long term to aim high, focus efforts, and create opportunity to learn from successes and failures. Use the short term to test assumptions and increase learning.

Some actions result in short-term gains and generate momentum. Some make a long-term impact. Ideally, a workgroup will take pragmatic actions, delivering value and learning in the short term and building the foundations for longer-term

ANTIBODIES AT WORK

- If it ain't broke, don't fix it: We made our quarterly targets—we must be doing something right.
- I'm just trying to survive. Trajectory over time? Making our numbers, today, is what matters.
- · Metrics are meaningless in such a complex, rapidly changing world. Measuring is a waste of time.
- Focus on efficiency. Performance improvement means that costs are going down or speed is going up.
- · I have my own metrics to worry about. I know what I'm measured on, and it isn't this group.

learning and value creation aligned with the longterm objective. Thinking on the extreme long-term horizon can have an added benefit of encouraging the workgroup to think in a space that others are not yet thinking about. This practice allows workgroups to use information and learnings from quick actions to adjust the long-term objective and challenge themselves: Is the most important thing still the important thing?

Returning to the Royal Caribbean example, being in the top echelon of energy-efficient ships is one objective alongside others such as improving guest

satisfaction. These long-term objectives help the workgroup prioritize initiatives and opportunities that come its way, helping it look beyond just the savings that can be built into the ship design. Instead, members also look at opportunities to experiment with different partnerships, on-board experiences, and refurbishments a few years down the line to include innovations that don't yet exist.11

Finally, even for those who nod their heads and recognize some truth in the idea that we are moving from a world of scalable efficiency to scalable learning, chasing efficiency can be a hard habit to break. Efficiency as a goal and a value is so baked into most of our organizational structures—even those that are incredibly inefficient—that workgroups may default to favoring efficiency as a performance objective and will put time and resources to the activities that gain measurable improvements in efficiency. Efficiency tends to be particularly compelling because it lends itself to measurement. But workgroups that want to get better, faster, over time may have to consciously **emphasize** effectiveness over efficiency. Mistakes, while the enemy of efficiency, can be the fuel for learning how to be more effective. This shifts the emphasis away from performance in the moment and away from adhoc measures of success. Paradoxically, it is through focusing on improving performance over time that groups can get better at addressing ad-hoc needs.

This isn't to say that efficiency doesn't matter. The answer to accelerating performance cannot be simply to work harder and harder. No amount of commitment to a shared outcome will prevent eventual burnout if the workgroup doesn't also become more efficient at creating value. The difference is that it is efficiency in the service of value creation.

Trade-offs are part of a workgroup's reality, and a whole group should be engaged in them to make better decisions, avoiding the trap of splitting the group. For example, when part of a group focuses on short-term solutions while others look at longterm goals, each can venture too far down its own rabbit hole, missing opportunities and changing context, and creating an environment in which people talk past one another and become artificially invested in one side or the other.12 The tensions between trade-offs create friction, even if the group doesn't encourage factions. Making distinctions between temporary challenges and enduring problems, nice-to-haves and need-to-haves, big problems and acute ones, can help workgroups better understand what the issue is before deciding what to do about, making the trade-offs, and tensions easier to navigate. Getting better, faster



Maximize potential for friction

How to combat complacency and overcome groupthink

Getting better, faster



Introduction: Generating new knowledge

Friction may generate plenty of uncomfortable moments-but it's essential. Friction fights against groupthink and complacency; it can force a workgroup to reexamine what it is doing and whether there is another way to have more impact. It can take a good idea and turn it into an even better idea; it can transform two better ideas into a great approach or slow down a misguided assumption before it gains momentum. The right types of friction for our purposes, defined as people's willingness and ability to challenge each other in the interest of coming up with better approaches-can transform a workgroup into something larger than the sum of its members. Questioning assumptions and approaches can uncover new opportunities and better ways to address issues or meet customer needs and lead to better outcomes.

This type of productive friction is often absent in workgroups. Few organizations encourage friction-indeed, many leaders work to minimize it in any form. Yet as groups face issues that are more complex, unexpected, and demand fresh solutions, they will need a broader range of approaches to problem-solving and analysis. Productive friction around how to approach a problem is an important element of generating new knowledge embodied in action, perhaps the most powerful type of learning for improving performance.

Maximizing the potential for productive friction across every activity and phase of work can help workgroups to keep pushing the boundaries to accelerate performance improvement. The key is to heighten the conditions that lead to more productive friction.

The maximize potential for friction practice: What it is

Practically speaking, ideas don't clash and transform into better approaches on their own. The friction comes from people. One member brings an idea or an approach or a technique to the table, and another member disagrees or suggests alternatives or brings a different interpretation of the problem.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- People have no passion for the outcomes the workgroup is trying to achieve
- People choose people like themselves
- You have the same people doing the same things and getting the same results
- You're overly focused on only a few types of diversity

Each challenge, if made in good faith and respectfully, can lead the group into a deeper exploration of the problem and potential approaches. This is friction—productive friction. In the end, the output could look quite different from anything that was originally brought to the table.

Additional friction can result when the group takes action against real requirements and complications in a particular context. When we consider the results, we challenge each other's interpretations and evolve our understanding of the implications. From this friction, we create a next approach. Maximizing the potential for friction means ensuring that a workgroup has the right people in the group, and the right connections outside the group, to disagree with and diverge from each other and the status quo.1

The potential for accelerated performance comes from the powerful intersection of diversity of mind and the passion of the explorer in the workgroup's composition:

· Aggressively recruit diverse individuals. Bring people into the workgroup because of their different attributes and styles, not in spite of them. Researchers have done a lot of valuable work on diversity in organizations, creating an array of definitions; for our purpose, for friction that can lead to better problem-solving and analysis, we are concerned with cognitive diversity, most closely aligned with Scott Page's definition.² Individual members represent problems differently, have different ways of interpreting information or developing a solution, and think about cause and effect differently. Cognitive diversity helps a workgroup examine a problem, or

solution, from multiple sides and offer more approaches and broader challenging.

• Seek people who share the passion of the explorer.³ Build a workgroup in which, despite being diverse, everyone is similar in her passion and mind-set. The dispositions for passion—specifically the disposition to quest and a commitment to domain—and a growth mind-set, as well as some basic values, can motivate the members to probe, to challenge others and be challenged, and to seek out additional resources to learn how to make a better impact. With the right mind-set and dispositions to listen and make use of friction, group members learn from each other and from new information and experiences, creating new connections between one perspective and another.

... and what it isn't

- Getting more ideas on the table. Workgroups looking to accelerate performance should focus on developing better ideas, not just bringing in more.
- Narrowly defined diversity. Diversity has an important role to play in shaping and developing ideas. This is not about achieving appropriate demographic diversity. It is about ensuring that workgroups bring different backgrounds, experiences, perspectives, and personalities into the mix to enhance the potential for new and creative ideas.
- **Crowdsourcing**. Crowdsourcing can be useful as a funnel to bring in a higher volume of ideas but typically doesn't increase the potential for friction. Many organizations treat crowdsourcing ineffectively, as a competition to identify the final solution: They pick the best one and run with it instead of working with the top five ideas and combining them to make something better.

Putting the practice into play

Where does the useful friction come from? A group of like-minded people doing what they've al-

ways done is unlikely to naturally generate the type of friction that leads to better and better outcomes. Instead, the workgroup may have to be deliberate about setting up the conditions for friction to occur.

The group itself can be a primary source of friction: Who are the members? What do they believe? What do they bring to the table? What do they care about? How will their way of viewing and interacting with the world challenge others in the group? Secondarily, the workgroup can increase the potential for friction by reaching beyond the group, even beyond the organization—for resources, inputs, challenges, and guidance on gnarly questions—and to connect to a broader network of others who are also on a quest to increase impact. Finally, the workgroup can adopt practices to structure in episodes of friction: periodically changing the routine, context, roles, or membership.

ENGAGE DIVERSE PERSPECTIVES

Research suggests that groups that are more diverse are likely to be more creative and productive than groups that share equal ability but are less diverse. UK researchers Alison Reynolds and David Lewis found that cognitive diversity, defined as "differences in perspective or information processing styles," accounted for the variance in the performance of over 100 groups of executives on a strategic execution exercise focused on managing new, uncertain, and complex situations.4 University of Michigan professor Scott Page further notes that "random collections of intelligent problem-solvers can outperform collections of the best individual problem-solvers," provided the problem at hand is one that will benefit from diverse interpretations, heuristics, and perspectives.5 As the world moves faster and more routine work is automated, more of the work of the frontline workgroup likely will be exactly the complex problems that do benefit from this type of diversity.

Humans have a uniquely unlimited potential to address new contexts and push boundaries. However, a group that shares similar ways of thinking about problems and analysis may have trouble generating alternatives when they get stuck. New, uncertain, and complex situations may require framing problems differently, using different approaches (for example, experimenting versus analyzing), or bringing different interpretations. These



INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- **Eliminate unproductive friction.** The potential found in diversity and passion can be harnessed when members aren't derailed by negative friction.
- **Reflect more to learn faster.** Analysis and adjustment can be more fruitful with more, potentially divergent, interpretations of events and passion to learn to do better.
- **Commit to a shared outcome.** A clear, long-term direction around a meaningful shared outcome can help attract diverse members who are passionate about the outcome and can help mobilize others to engage as well.
- **Bias toward action.** While a diverse and passionate group can bring a broader set of perspectives to shape the actions that will have the most impact, taking action can drive individual learning as well as help to cultivate passion.
- **Prioritize performance trajectory.** Passionate workgroup members can be more likely to want to get better and will help pull the entire group upward.
- Frame a more powerful question. A compelling question can attract others who are passionate to make more of an impact on the challenge.
- Seek new contexts. Experiencing new contexts can cause us to reevaluate our assumptions and broaden or change our perspectives, creating the potential for additional friction for the group and individuals.
- **Cultivate friction.** Group composition and connecting with other resources provides the raw material for productive friction.

differences nudge members to pay attention to different things, leading to fresh understandings of the opportunity and potential resources to address it. While members' experience and skills are key to a group's ability to execute, its capacity to improve depends on its range of approaches to problemsolving and its ability to learn from and use that experience and those skills. In fact, research has shown that without making an effort to make use of members' diversity for better understanding, decision-making, and problem-solving, groups often perform less well than do individuals.⁷

The diversity that can lead to productive friction goes well beyond identity markers. However, just as

QUESTION FOR REFLECTION

 To what extent can we broaden our circles and invite new perspectives? Could/should we do more?

with identity, workgroups will tend toward cognitive homogeneity unless they intentionally **diversify diversity**. In many organizations, hiring and staffing tends to favor like-mindedness, standardized requirements for education and experience, and cultural "fit." Expediency, meanwhile, focuses groups on the resources that are most easily accessible, staffing workgroups from within their own unit, geography, or enterprise. And people's tendency, particularly under pressure, is to choose those with whom we anticipate the least friction, resulting in "functional biases." Workgroups can counter this by deliberately seeking diverse backgrounds and experiences that will make cognitive diversity more likely

and paying attention to the group's interactions to see if further diversity is needed.

Consider the example of the briefing workgroup at sparks & honey, an advertising agency focused on mapping culture and one of several groups we saw trying to engage diversity in more effective ways. Although members have a range of backgrounds—languages spoken, age cohorts,

countries of origin, ethnicities, gender expressions, as well as functional expertise (data science, strategic consulting, brand planning, journalism, anthropology, and social sciences)—these traits don't indicate whether the group has cognitive diversity, and it can fall into some common biases: residing in New York, being "creative," having chosen this type of work. In order to increase the potential for engaging with more diversity of mind, and to overcome biases that arise from social class, personality/temperament, working style, and mind-set, the briefings are open to guests, and the agency cultivates external participation through an advisory board, scouts, and immersive ethnographic studies. The agency's intelligence system also balances these biases with automation: active machine learning that surveys, gathers, and feeds intelligence into the system from the broad (mainstream) to the narrow (fringe).8

Bringing in more cognitive diversity is one thing, but the potential friction can be amped up by bringing group members into closer contact and deepening the level of engagement with each other. Instead of soliciting divergent feedback via email or some other static exchange, a more useful, generative interaction might result from surfacing the divergent perspectives in the workgroup setting, with disagreeing members potentially venturing out into the

relevant context together to test an idea or approach. For example, when the Army's Joint Strategic Operating Command was seeking a better way to fight an unorthodox enemy in Iraq, it coupled intelligence analysts with Navy SEALs and Delta Force operatives to go "shoulder to shoulder" out on raids as well as into analysis.

Workgroups can further broaden the range of perspectives by **looking out-side the group**, whether to specifically solicit additional perspectives, to test and debrief a new approach, or even to partner in delivering a solution. Casting a wider net, beyond your own networks, may be particularly important for complex or thorny issues. Workgroup members can exploit what sociologist Mark Granovetter calls "weak ties," looking beyond their small circle of deep relationships—where people often share similar values, interests, and experiences—to their looser network, where connec-

tions, insights, and unexpected resources might be more far-reaching and diverse.⁹

For many workgroups, the nature of the issues and exceptions will dictate that the actual membership changes over time or episodically. Diverse groups can be rapidly staffed from larger pools. In fact, as frontline workgroups take on more important, value-creating work, companies may scrap much of their organizational chart, instead organizing as pools of workers assigned to flexible workgroups that stretch across boundaries. If groups are diverse and passionate, the pools would also become more diverse over time as members rotate back. However, leaders would still have to be deliberate in assembling cognitively diverse workgroups. For example, at the Red Cross, responders are often pulled from an external, formal pool of local resources who are likely less similar in background to each other or the professional staff. Members of this local pool share certain basic training, but each brings a unique perspective and set of tools and resources to the specific problem. For instance, each local resource might have a unique take on how and where to procure supplies, how to navigate back roads to get from one site to another, or what the most powerful coalitions of local service group leaders might be.10

QUESTION FOR REFLECTION

 What can we do more to access and attract those outside our workgroup to achieve more of our potential?

SEEK VOLUNTEERS

Asking for volunteers attracts people who are motivated to make a difference and who can attract others like them. As Gillian Tett notes in The *Silo Effect*, "People who are willing to take risks and jump out of their narrow specialist world are often able to remake boundaries in interesting ways." Since even the most passionate people need something to be drawn to, workgroups should make themselves known and discoverable, whether formally,



creating blogs or websites that state the group's purpose and goals, or informally, through word of mouth. In either case, try to find powerful ways to pull. For example, Team Solo-Mid, a group that plays the multiplayer online battle game League of Legends competitively, posted a recruiting message on a well-known League community website: "Our goal is to improve and to constantly develop strategies. The purpose of this clan is to constantly increase the skill level of the upper-level play." Tap into the passion of potential members with a succinct description of the issue that also speaks to the outcome and the way the group will get there—the practices and opportunities to accelerate individual learning. A small set of willing members can build momentum, making membership in such a group more attractive to others.

Even if the group has to start small, letting people **vote with their feet**—opting in or self-nominating rather than being "volun-told"—attracts those who are passionate about a particular challenge and want to be involved.¹² Choice about where to focus people's efforts can fuel dedication, accountability, and excitement. At Google Analytics 360, for example, people can self-nominate to be part of the response group that forms whenever a competitor launches a product. They can also self-nominate into more sustained workgroups, choosing to participate on the issues about which they feel most strongly or where they are excited by the type of challenge or the customers with whom they'd work.

TURN DOWN VOLUNTEERS

Not everyone who volunteers will be right for a particular workgroup. You want people who care deeply about achieving the outcome—but also people without a lot of preconceived notions about how that outcome could or could not happen. Experience can be valuable, certain skills might be necessary, but overreliance on expertise can be limiting, to both the individual and the group. Expertise can tend to work against openness to learning and new ideas. Workgroup members need to be willing to challenge others, to be challenged, and to be open to learning from those challenges.

Consider what can happen with an issue that is perceived as high-visibility, one that might have leaders calling for the "cream of the crop." Having all risen to the top of the same organization, these individuals will likely have breadly similar concep-

tual tool kits, problemes, and mind-sets. This pronounced in narrow more specialized field lead specialists to appropriate to a similar variation of the converge in their find Deliberately busting spulling skills and expert from across organizational and functional barriall-star group rathe of "all stars"—can be

cognitive homogeneity problem. This can

be an exercise in releasing control and trusting the workgroup to do what they've been assembled to do, which is *not* to just execute the status quo. It is yet another acknowledgment that the organization can't predict the future or the shape of the solution that will emerge.

Character also matters. Diversity in core values is generally unproductive no matter how strong a person's skills, and the skills and tasks required may change. Values persist. The values might be broad: *Behave ethically; don't do anything illegal*. Or they might be specific to a workgroup and context. Consider this example from a Deloitte leader who credits some of her success in growing account revenue over the past decade to **looking at char**-

QUESTIONS FOR REFLECTION

- What workgroup values do we want to stand for—and, quite possibly, make more explicit?
- How might we select for the kind of challenge-seeking, boundary-pushing behavior that will create new opportunities for the workgroup and the organization?

Figure 1. How do we define quality?

10	A little humility goes a long way	We need to continue to win over our clients.
9	The customer is always right	Treat clients with respect—always.
8	"Nothing propinks like propinquity"	Show up. Be proactive and deliberate in building relationships (internally and externally) and delivering services.
7	We need clear leaders	Clearly distinguish leaders and advisers in proposals and delivery.
6	We are the advisers in the room	When you see your client may be headed down the wrong path, speak up and escalate professionally.
5	We work it out	Break down any functional barriers and do what's right for the client and our organization—even when it's difficult. Communicate!
4	When paint falls off the ladder, everyone gets splattered	We are one organization to the client. Finger-pointing is unhelpful, so work as a team to solve challenges.
3	Nothing gets better with time	If you sense a client issue, be quick to address it.
2	Deadlines aren't guidelines	Do your best to adhere to commitments and deadlines. If you are not going to meet a deadline, provide ample notice to your client.
1	The client is your buddy	And his requests are exceedingly reasonable.

Source: Deloitte analysis.

Deloitte Insights | deloitte.com/insights

acter before competence in staffing. She has created a list of guidelines for behavior and attitude (see figure 1 that addresses character.) The list is both a filter and a way of setting expectations at the outset to increase the likelihood that all members are suited to creating value in that environment.

So if not skills and performance ratings and other résumé criteria, and not the friction-killing cultural "fit," what criteria might guide whether to accept a potential group member?

Passion and a growth mind-set.¹⁴ Without these, a workgroup is unlikely to constantly push boundaries in pursuit of learning how to make a greater impact.

Aside from certain nonnegotiable competencies, **favor passion over skill**. People who have passion—what we've defined as passion of the explorer¹⁵—seem driven to learn how to have more of an impact, faster, on a particular domain. To that end,

they tend to embrace challenges and connect with others around those challenges and typically find the unexpected and difficult more motivating than fatiguing. They continuously pursue new approaches and better solutions and will persevere and look for learning in nearly every situation. In a group of passionate members, the desire to make an impact can overcome organizational tensions and barriers. For those with passion, a workgroup can be an attractive opportunity to connect with others and learn faster on significant challenges. At Southwest, for example, the selective Field Tech group looks for "folks who are frustrated because they could perform their job so much better if only they had this tool or that tool." One perk of the job is being empowered to create or obtain whatever tools people need to do their job better. The group looks for members who have technical aptitude and a good work ethic



but also "love trying to fix something that can't be fixed by anyone else." ¹⁶

One challenge is that this type of passion is scarce, characterizing only around 13 percent of the workforce, although 52 percent of workers surveyed have at least one attribute of this type of passion on

which to build. For those who haven't fully realized their passion within the confines of a job description, participation in a workgroup may help cultivate the questing, connecting, or commitment characteristic of the passion of the explorer. Through deliberately breaking silos, workgroups can have the added benefit of connecting the passionate with other passion-

ANTIBODIES AT WORK

- We want people to want to work here—we don't want them to fight.
- We don't have time to go out and create the perfect team—just make do with what you have.
- We need to be a well-oiled machine, not one that's constantly in the shop.
- We need to minimize the potential for conflict, not maximize it.

ate people from across the organization.

Connecting and working with others who are passionate can be a powerful motivator. ¹⁷ For example, at Facebook, voluntary hackathons showed that many people would take time outside of their day job to come together purely because they were interested in a specific problem and wanted to be a part of creating a solution. (For example, a manager of the site's News Feed created a Facebook feature specifically for in-laws because she was close to her husband's mother and had no way to classify their relationship on the site.) This in turn can create more demand for the opportunity and attract others who may not have understood the impact previously.

EVOLVE A WINNING WORKGROUP

Over time, informal practices may harden into formal processes, expectations may become codified, and perspectives and beliefs may converge.

QUESTION FOR REFLECTION

 What rules do we need to change or make more context-dependent?

> This may be comfortable but is not good for friction. What wins in one context may lose in another. Change it up with new people, ideas, and conditions that are surprising rather than predictable. Look for people who tend to play with, rather than within, the boundaries. Try to nudge people out of their comfort zones. Even changing the work environment—meeting in person if the group is remote or working off-site if it's normally in the office-can refresh the dynamic. Structure in ways to avoid the trap of tried and true by making it a rule to change the rules. At sparks & honey, the briefing group's goal, every day, is to run the most productive and insightful one-hour meeting possible. They have honed the format to a specific pace, hitting benchmarks of discussion and analysis throughout the hour. When something works, members stick with it—except for on Fridays, when they try some new structure or technique, keeping the group offbalance and interested and discovering useful new techniques to incorporate along the way.

> Individuals can be stretched and motivated and the group dynamics shaken up by making roles context-dependent. Switching up the structure and roles will likely make some members uncomfortable and may cause frustration because it works against the drive for efficiency into which we tend to fall. Being in different roles and relationships could challenge the expectations of a group and create potential friction for individuals and the group collectively. For example, the Red Cross has a practice called *blue sky/gray sky* that allows for members to adopt entirely different roles from their normal day-to-day in a disaster response. Depending on the context and their own skills, someone might be the incident commander in one response but be boots on the ground loading water for the next one. The explicit move to gray sky seems to eliminate the friction that can come from hierarchies and refocuses everyone on achieving the shared outcome.

Getting better, faster



Eliminate unproductive friction

How to bring people closer through conflict

Getting better, faster



Introduction: How much is too much?

When diverse people with different ideas come together, friction is inevitable—and can be highly generative. When workgroup leaders are able to channel that friction into challenging and strengthening the group's thinking, new approaches can emerge. For workgroups that need to constantly develop better solutions in order to accelerate performance, the more diverse the flows coming together—the more friction—the better. The point isn't just to bring in more ideas but to create something new and better when—not *if*—the knowledge, ideas, data, and resources conflict.

That is productive friction. Group members bring their diverse perspectives to challenge each other's thinking, and such challenges can expose inadequacies in the approach and uncover gaps in understanding. They can also broaden the possibilities and point a workgroup to explore new, more fruitful directions. Indeed, a virtuous cycle can develop: When we see friction leading to better results, we may be more willing to bring challenges and divergent views to the table, expanding the flows.

But there's a limit: Too much friction, or friction of the wrong kind, can flatten flows and derail a workgroup. With tensions festering, a group might lose energy and lack the time or energy to seek out the flows that might have the highest impact. A group may not risk interrupting progress to question its assumptions or approach. Members can become less willing to challenge their own beliefs, show weakness, or expose themselves to criticism, and less willing to push boundaries and take risks as a group.

Whether a workgroup has been in existence for a while or is just forming, in most organizations members don't likely share an overabundance of trust. When unproductive friction goes unmanaged, a group doesn't work to create better approaches, and performance may slip. Members can become frustrated, further losing trust in the workgroup; they may withdraw either formally or by increasingly declining to express divergent ideas or challenge other members. Minimizing and managing unproductive friction is key to building trust and encouraging members to put forward more of the types of friction that can generate better solutions.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- People seem frustrated or unhappy
- People feel put down upon, dismissed, or rejected
- Some voices are not being heard
- Hierarchy is preventing people from being forthright
- We spend most of our time talking about what we agree on versus what we don't
- Our best talent doesn't stick around for very long

The *eliminate unproductive friction* practice: What it is

This practice is about fostering trust and creating an environment that encourages more productive friction while minimizing the types of friction that might make workgroup members hesitant to challenge and interact.

Productive friction can help a workgroup actively create new knowledge. It can arise from engaging

- 66 Teams that bring these diverse styles together should, in theory, enjoy the many benefits of cognitive diversity, ranging from increased creativity and innovation to improved decision-making. Yet time and again, diverse teams fail to thrive.¹
 - —Suzanne M. Johnson Vickberg and Kim Christfort

diverse individuals around an outcome about which they are passionate and playing with the resulting tension—if the individuals are willing and able to challenge and build on each other's perspectives. That typically means the friction is focused around the *what* or the *how* instead of on individuals.

Unproductive friction is often rooted in members feeling threatened, misunderstood, or disrespected, which can escalate conflicts and harden positions such that a group reaches poor compromises and continually sub-optimizes. Unproductive friction can be caused by, among other things, miscommunication, interpersonal conflict, competition for resources, political behavior, status-seeking, zero-sum mind-sets, a culture of blame, or different personalities and styles. Friction can also become unproductive when it occurs at the wrong time or place.

Creating friction and eliminating the unproductive elements of that friction is a balancing act. It's often challenging to get the balance right, and perhaps understandably, many organizations have aimed to reduce friction in the first place. After all, no one is penalized for insights not surfaced—they aren't visible. But friction is visible, often in a negative way. Avoiding conflict is always the easier path.

- Eliminating unproductive friction balances:
- Preventing certain types of unproductive friction from occurring. Build trust, and focus on the learning opportunity and the group's larger goals. A sufficiently meaningful and urgent outcome, such as the life-ordeath nature of firefighting, tends to minimize unproductive friction.
- Making friction more productive. This
 might include leading with questions rather
 than making pronouncements—for example,
 instead of, "That won't work—we already tried
 it," asking, "What has changed that makes us believe this could work?"

... and what it isn't

• **Being more efficient.** After decades of scalable efficiency, there's often an underlying assumption that friction is always unproductive

- and undesirable. Friction can definitely slow things down, at least in the short term. But accelerating learning in order to achieve greater impact isn't simply executing against a plan.
- Eliminating all friction/fitting in. Much of the focus on group dynamics tends to be on minimizing differences and focusing on common ground. We often lack confidence in our ability to manage friction and, naturally, look to get along with everyone, especially as the workplace itself becomes more diverse. As a result, the bias is to assemble like-minded teams and favor fit, though "team players" often go along to get along rather than provoking a group to improve itself.
- Removing emotions and feeling. Emotion and feeling play a vital role as a source of understanding and motivation as well as of friction. When people are passionate about an outcome, they bring emotion. Creating space for feelings can help to foster the relationships that workgroup members may need to work productively through friction.
- Safety from discomfort. At the same time, this practice isn't about creating a safe space where group members won't be challenged on their beliefs, assumptions, and ideas. Challenges should be respectful and with the intent of arriving at a better understanding, rather than to be divisive, but this doesn't mean that people uncomfortable with rigorous discussions should expect to avoid them altogether.

Putting the practice into play

Workgroups can make friction more productive and subvert the unproductive aspects by fostering trust and respect and having learning conversations. The two reinforce each other: trust is a prerequisite for learning, and as learning happens, trust and respect deepen. At the same time, you can't really have trust, or learning, until you have friction. In disagreement, conflict, or crisis, you get to see how people behave. These moments can also reveal the hidden depths and strengths of a community.

FOSTER TRUST AND RESPECT

Our notion of trust has changed. An organization's success used to come from owning some knowledge or formula that no one else knew, applying those knowledge stocks in distinctive but repeatable ways, and doing it efficiently. Trust was grounded in having the specific skills and knowledge necessary to deliver the expected results. The leader had to trust that subordinates would execute his plan, efficiently and without challenging it; the workers had to trust that the leader's plan would be effective, with minimal changes or need for rework. Strength and certainty reigned.

QUESTIONS FOR REFLECTION

- What dimensions of friction do each of us find most unproductive?
- What makes us dread or avoid collaborative work?

Trust based on knowledge stocks, predictability, and efficiency is no longer as compelling. In fact, when the goal is to achieve more impact than the sum of the workgroup's parts, trying to establish trust in this way can actually erode it. While past actions or accomplishments suggest how we can expect someone to act in the future, trust is becoming more about whether we believe a person has the disposition and values to learn and work together even if his existing skills are being challenged or made obsolete. Any person, whether a leader or a peer, claiming to know all the answers rings false when we see the environment changing rapidly and know ourselves to be increasingly in unfamiliar situations. Instead, the type of trust that workgroups may need comes in part from attributes that used to be considered weaknesses.

Expressing vulnerability and encouraging humility can establish a trust that isn't premised on power, control, or omniscience. At the workgroup level, this might start with collectively acknowledging a situation's realities and difficulties. When a workgroup makes a practice of establishing what we don't know, what else don't we know?, and

this is what we need help with, it makes space for individuals to be open about needing help or having gaps in understanding or ability. Other group members would trust more, and be likely to admit their own vulnerability, further deepening trust. Asking for help can give others a mechanism to step forward to help fill the gaps—and is what can make vulnerability powerful.

It isn't just OK to admit weakness—for this type of trust, it is essential. This is important: When members don't conceal deficiencies and don't delay asking for help, the group can learn more rapidly and uncover valuable new resources. Of course, be-

ing vulnerable should be a prelude to discussion, not an ending—no one wants a group member who regularly throws up his hands and says, "I need help!" without an inclination to dig in and work together to figure it out. The practice is to become more aware of what we lack and more effectively frame our needs to elicit better help.

Trust and respect together can provide the basis for being open to new information, listening deeply and working to understand divergent ideas, and being willing to accommodate

contradictions and embrace discomfort.

Group norms that can reinforce respect can emerge through the way the group discusses and frames the challenge. Start with the expectation that members will treat each other with courtesy and an assumption that everyone has value to offer. Build a respectful climate by letting people with conflicting positions explain their reasoning—within time constraints—rather than quickly jumping to "agreeing to disagree." This can be the time for group members to practice challenging ideas rather than people and begin to demonstrate that they can engage with others' observations without either sugarcoating or overreacting. Groups may have to be more deliberate to guard against the subtle reactions that communicate that honesty and interpersonal risktaking hinder a workgroup's forward progress.

Even in a group where members appear predisposed to extend courtesy to each other, disagreements and misunderstandings often arise. Being able to **empathize** with other members—and to recognize that disagreements might arise from

unmet, unarticulated needs rather than from bad intentions or incompetence—can reduce the negative friction. Try to meet in person, at least at the beginning, and discuss different working styles, preferences, and strengths. A framework, such as Deloitte's Business Chemistry (see figure 1), can provide structure for understanding and discussing differences that lead to unmet needs and can set the tone for embracing the differences that cause friction.²

Making it about we, not me can help keep the workgroup focused on a shared outcome and members' mutual commitment to it rather than on their individual identities, fears, and ambitions. Language can matter in subtly shifting the group; avoid assigning ownership to specific ideas or questions and actively guide the discussion away from who is right and toward what is right. Of course, even in a workgroup that celebrates group successes and shares rewards and recognition, some individuals might not be able to shake the me-first mentality. The Royal Caribbean Cruises Ltd. Newbuild & Innovation workgroup, which includes external designers and other specialists, learned that no matter how talented a member was, the group would benefit only if she was committed to the shared outcome and open to being challenged. Now everyone, including designers with brand recognition, presents to the entire workgroup to reinforce that all decisions are about the shared

Deloitte Insights | deloitte.com/insights

SHARED TRAITS These tendencies are observed in both adjacent types Embrace Risk Decide Quickly Brush Off Mistakes Driver **Pioneer** Call The Shots Try It Out Outgoing **Ouantitative** Detail-Averse Logical Spontaneous COMMANDER -Focused Risk-Seeking Adaptable Competitive Imaginative SCIENTIST -Experimental **Deeply Curious** SHARED SHARED Build Relationships **Build Spreadsheets** Prefer Teamwork Value Individual Work Express Emotions Contain Emotions Display Flexibility Display Discipline Question People & Ideas Trust People & Ideas Diplomatic **Empathic** = TEAMER Methodical Traditional Reserved Detail-Oriented Relationship-Oriented **DREAMER** Practical Intrinsically Motivated Structured .0...0..... Non-Confrontational Loyal Guardian **Integrator** Deliberate Decisions Internalize Mistakes Trust the Tried & True

Figure 1. Understanding business chemistry

Source: Deloitte.

outcome and all members have an investment in those decisions. Designers might ask questions of the architects; restaurateurs might challenge the designers—and outsiders really like working with RCL because they are able to learn so much more through this practice.³

While deep trust and respect often take time to develop, there are tactics that can help **build deep trust swiftly**. As a workgroup:

Assume trust. Extend trust (and respect) to all members from the outset, assuming best intentions and value to offer, and establish that everyone is committed to achieving a shared outcome.

Invite trustworthiness. Find near-term tasks to give individuals opportunities to act in ways that are transparent and show commitment to the workgroup and openness to learning.⁴ This can be as simple as demonstrating, in less significant matters,

QUESTIONS FOR REFLECTION

- How well do we ensure that we maintain the trust of the workgroup?
- What do we do to encourage each other to express vulnerability?

that they are willing to voice their views, to take actions that are consistent with what they voice, and to have their views challenged and changed.

Work together to deepen trust. Deeper trust and respect ultimately come from observing others in action. When members actively work together on a shared outcome, they begin to act as a community of practice, bound together through "shared experience, reciprocal trust, and a collective world view." Working side by side, trust and respect deepen as

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

- Maximize the potential for friction. Eliminating unproductive friction can help clear the way for the
 group to benefit from bringing diverse perspectives and cognitive styles to bear on an issue. Managing
 disagreements and tensions effectively can help members be more receptive to bringing in an even
 greater diversity of voices and resources.
- Reflect more to learn faster. How workgroups handle friction outside of the moment—how they
 honor it and learn from it while managing the more emotional and reactive frictions—can shape their
 ability to act and accelerate.
- **Commit to a shared outcome.** Group members trust each other to act in good faith in support of the outcome. Individuals would be more motivated to work past the unproductive traps of friction and have more incentive to focus on making friction productive if the shared outcome is meaningful.
- **Bias toward action.** Workgroups can't get distracted and waste energy on unproductive friction *in the moment*, when decisions need to be made quickly, especially if lives are on the line.
- Prioritize performance trajectory. Objective data and metrics can provide grounding for disagreements.
- Frame a more powerful question. A powerful question can help to focus workgroups on what is important.
- Seek new contexts. By adopting a different context for a time, a workgroup can gain fresh perspective on its own problem as well as on the group itself.
- Cultivate friction. The more productive the friction becomes, and the more the group trusts that destructive friction will be handled effectively, the more members will likely also be open to challenging, creating a virtuous cycle.

group members see each other **live their values** and gain deeper appreciation for what individuals have to offer.

Research has shown that workgroups identify more strongly as a group and show higher levels of innovation when their members share certain non-negotiable work values. These might include core tenants that guide how the group pursues the outcome, such as treating each other with respect, maintaining personal integrity, and acting legally and ethically, as well as some that might be workgroup-specific, such as acting sustainably or supporting members' personal goals.

HAVE LEARNING CONVERSATIONS

Try to learn as much from friction as possible, especially the disagreements. The point is to learn how to achieve higher and highing the group's interactions as versation, members can channot tentially destructive disagreement into something more informat and unexpected.

The goal of a workgroup's learning conversations is to look at things from multiple

vantage points and expose paradoxes and areas of ambiguity. In these conversations, a group tries to draw out and probe "mindbugs"—the trouble-some blind spots and habits of thought that get in the way when we are trying to break frames and innovate. Mindbugs may be around long-established performance trade-offs that no longer hold, or about conventional wisdom that no longer applies; they can lead us to say that something won't work or to overlook the problems in something we assume will work.

What makes a good conversation?

- Everyone seeks to understand a broader perspective. It isn't a presentation or a debate or trying to persuade others or defend our opinion.
- It surprises us, providing unexpected information or insight and provoking further inquiry.
- Everyone listens and everyone participates—at least, every *unique* voice participates, recognizing that some members will share a common experience or perspective. Researchers have found that relatively equal distribution of voice

in workgroups leads to better work.⁷ The Human Dynamics Laboratory at MIT used a badge technology to track communication behavior in groups and discovered that patterns of communication were as significant to group performance as all other factors combined: individual intelligence, personality, skill, and substance of discussions.⁸ Researchers also found that when some members don't participate fully (whether because of culture, background, or affiliations), the whole group ends up with less energy and engagement.⁹

There is space to clarify misunderstandings.
 With more diverse voices, people might use the same words with very different meanings. We heard this concept expressed as, I don't know what I said until I know what you heard from

pers of the Army for whom backs," repeating an order back giver, are part of the workday. As one general said, upon asking for a plain hamburger and setting a hamburger with absotely nothing on it, the brief back its own isn't enough. **Creating** pmmon language is an ongo-

ing practice of confirming and clarifying what people mean. This could be as informal as interrupting the flow of a discussion to clarify a key term—for instance, *When you say 'X,' what do you mean? What does that look like?* It could also be a formal set of key definitions published or posted where members can see and reference them easily. A common language might be borrowed from another discipline or the organization itself, then customized and periodically updated to the workgroup's needs.

It keeps moving. Time still matters. Strike a
balance between clarifying and being repetitive
or getting mired in minutiae. Hold each other
accountable to focus on what's important—
and be specific. Filling air time without saying
what you mean can block other voices and make
members work unnecessarily hard to find meaning and understand points of conflict. It can also
mean trying to discern the key points of disagreement and understanding their sources, including the emotional context, rather than over-

analyzing peripheral issues. For the Joint Special Operations Command, there was a real cost when meetings bogged down: The task force wouldn't get a chance to digest valuable intelligence until later in the day or the next meeting. The group addressed it by establishing a norm that each presenter had only four minutes, including discussion. It forced the briefers to provide only the most salient information

to the entire group, letting others continue the discussion offline, and to solicit viewpoints rather than wait. Productive idea flow is a delicate balance of reinforcing existing ideas and values to build confidence, while exploring alternative ideas and perspectives. Attend to how ideas flow within the workgroup so that members can incorporate others' innovations to arrive at better actions. **Start broad and go deep** to balance the value of surveying the landscape to identify what issues are most important against the value of getting beneath the surface. Reserve time to delve deeper into the issues that are most relevant to the workgroup.

Workgroups might find it helpful to periodically take a meta-view of their group conversation—using an outside observer, technology such as badges, or through surveys and analysis of data collected from collaboration tools—to get a better understanding of how the workgroup itself is functioning separate from the work of the group.

These insights can help a group leader **control the temperature**, possibly with a moderator's help: *Turn up the heat*, bringing more diverse participation into a conversation that has become lowenergy and monotonous, or using anecdotes to introduce doubt into a conversation that has become too certain. Researchers at Yale found that Major League Baseball umpires assess their accuracy in calling pitches—their ability to accurately see reality—at 97 percent. Yet, when calls were analyzed against Pitch f/x data, they are accurate only 87 percent of the time and, in close calls, only 66 percent. *Turn down the heat* by redirecting the conversation away from issues that have become too emotional or laden with interpersonal friction for the group

QUESTIONS FOR REFLECTION

- To what extent do we create space for conflict versus marginalize those who disagree?
- What values are we striving to uphold, and are we living them?

to be constructive. It can be helpful to acknowledge that the heat is too high and give the group a few options to cool down. Techniques include taking a step back to talk about where the issue fits relative to the shared outcome to refocus the group on the positive vision, looking for small wins to point out, and connecting the dots for group members about how the issue relates to other actions they are interested in. A moderator can also help to de-escalate and clarify tensions around share of voice and depth of engagement.

The best conversations happen between humans. We all have feelings, even at work. When emotions are ignored or denied, the gap between what members think and what they say generally widens, and the potential for misunderstanding increases. Workgroup members don't need to spend a lot of time talking about feelings, but they should cultivate greater awareness and appreciation of emotional context. **Listen for what is not being said**, the *song beneath the words*: Acknowledge the likely emotional subtext; leaders can reinforce this by being more open about their own emotions in the moment, such as saying when a piece of feed-

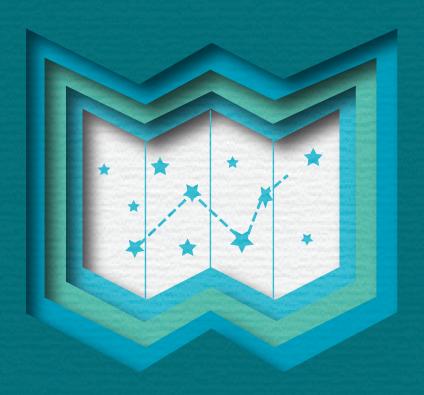
ANTIBODIES AT WORK

- Friction is inefficient. Let's just make sure we don't have it in the first place.
- To be successful, we all have to come to agreement, on everything. Dissension is a problem.
- Don't derail the train—get on board or get off.
- Feelings are a distraction. No place for them in business.

back made them angry or worried. And don't react emotionally: Show care or concern, but act in ways that help the other—through coaching or checking in—rather than devolving into "ruinous empathy" that helps no one. When workgroups make a point

of accepting emotions as normal, interactions can actually become less emotional.

Finally, **make it fun**. Shared laughter or an unusual experience goes a long way toward reinforcing the interpersonal connections that make unproductive friction less toxic.



Reflect more to learn faster

How to slow down to increase impact

Introduction: The dual role of reflection

When it comes to accelerating performance, there's a paradox: If we want to have greater impact, faster, we have to slow down enough to reflect on what we've done and what we're going to do.

It's a balancing act. Speed matters, of course, but we can't focus too much on speed—otherwise there's no time for reflection, and reflection is critical for learning. If your workgroup just acts and acts without pausing to understand what you've learned and how to apply it, you won't likely achieve a higher level of performance. Action without reflection is a waste of time.

At the same time, it isn't about constantly pushing forward to complete the next task. Taking time to step back and reflect on actions, the results of those actions, and our expectations for actions can be a rich source of insight and learning. What seemed to have a greater impact? How can we do more of that and amplify it? This process of reflection and adaptation—before action, during action, after action, and outside action—is often very powerful.

Reflecting as a group holds unique potential for uncovering more insights, drawing more connections, and using them to build better solutions. A group's diversity and passion can be especially valuable when brought to bear on making sense of and interpreting results and data and developing potential new actions. Reflection can serve a dual role, drawing out members' challenges to generate new insights and ideas and, at the same time, helping to build more alignment around a shared understanding of the actions that may have the greatest impact. Workgroups often need opportunities to pull out of the demands of the moment and revisit how near-term actions connect to improving the shared outcome.

Reflection can help workgroups break out of an incremental mind-set at a time when tried-and-true techniques may prove inadequate for the variety of new and unpredictable challenges and cases of first instances that workgroups will encounter.¹ Regular practices of looking at results, observations, and data, and being open to the implications of that information, can help workgroups break from the status quo and chart new paths forward that could better achieve the desired outcome. In reflecting on

near-term initiatives and assessing whether they are accelerating us toward our destination, workgroups also learn more about the destination they are striving to reach. Part of the learning process should be to continually step back and ask how refining our view of the destination might help us progress even faster.

YOU KNOW YOU NEED THIS PRACTICE WHEN:

- The workgroup isn't getting the rich, realtime, and context-specific performance feedback it needs
- All the reflection that takes place is on failures; there's no reflection on successes
- Successes seem rare and appear to be either accidental or stem from heroics rather than discipline
- Performance improvements developed in one part of the workgroup rarely scale to others in the workgroup

The reflect more to learn faster practice: What it is

Reflection, for our purposes, is about understanding and interpreting information—in the form of results, observations, and data—to evolve our actions to get more impact. It is primarily a group activity. For accelerating performance improvement, we should create more opportunities for group reflection. A diverse group of people willing to challenge each other can get much further than any individual sitting in a room with a mountain of data and trying to make sense of it.

Reflection can get a workgroup together to challenge each other around:

- · What worked better than expected?
- · What didn't work as expected?
- What assumptions need to be changed?
- What strengths can we build on to ratchet up the impact?

In addition, reflection is about stepping back to remind ourselves of the group's long-term aspirations and the role of near-term actions in accomplishing it.

. . . and what it isn't

- Learning for the sake of learning. Reflection can be valuable when the workgroup uses it to learn more about impact and to catalyze action toward a destination. Without a destination in mind, groups may learn from their experiences, but the learning won't necessarily help them improve performance.
- Finding fault or failure. Rather than run until something goes wrong, then fix the problem, and keep going, continuous reflection constantly

- seeks greater impact. It is looking at the successes, the partial successes, and the failures, at the errors that happened and the errors that didn't, to try to determine what the workgroup should do next.
- Just reflecting on the problem or the opportunity. To get better faster, the workgroup should reflect on its *approach* to problems and opportunities. In fact, the more you reflect on your approach, the more likely your biggest problems may become your biggest opportunities.

Putting the practice into play

Reflection for faster learning comes from first making a conscious decision to make it a priority for the group. A workgroup should focus attention

INTERSECTIONS WITH THE OTHER EIGHT PRACTICES

Taking the time to reflect is a conscious decision. It can strengthen and support all of a workgroup's other practices and activities—as long as there's a mechanism to translate insights into action.

- Maximize the potential for friction. Bringing together diverse and passionate people can be a necessary condition for rich reflection.
- **Eliminate unproductive friction.** An environment of trust and respect is a prerequisite for the honest and rich reflection that can accelerate a workgroup's learning. Reflection focused on achieving a shared outcome, supported by rich inputs, can make it easier to articulate disagreement in a productive way.
- **Commit to a shared outcome.** Through reflection, a workgroup can learn how to have more impact on the shared outcome and assess whether a shared outcome is still the highest-value pursuit.
- **Bias toward action.** Action creates rich inputs for reflection. Reflection draws the relevant learning from action to accelerate performance.
- **Prioritize performance trajectory.** The performance objectives and metrics can ground and inform a workgroup's reflection about the impact of actions and the performance it is achieving.
- Frame a more powerful question. The question often shifts the scope beyond just the moment at hand, connecting that moment to the implications and learnings across moments and over time: What did we learn that informs our powerful question?
- Seek new contexts. The techniques and approaches encountered in a different context can form the basis of reflection on what is context-dependent and what is more generalizable, and reflection can transform observations into relevant, actionable insights.
- Cultivate friction. Challenging during reflection—with the aim of developing better approaches—is
 important, both pre-action and post-action.



on getting diverse and robust information to feed the reflection. Also, grounding reflection in the group's larger goals for impact can help to ensure that the reflection is most valuable for accelerating performance. Members can practice reflection—at different levels of granularity and at different moments in time—to reexamine the status quo in light of the desired impact and trajectory.

FEED THE REFLECTION

In order to learn how to get more and more impact, a workgroup needs new information and interactions, along with a growing base of new knowledge, upon which to reflect, draw insights, and determine new actions. **Capture what you can** to feed reflection—data and formal metrics as well as the experiences and observations of group members and others—but try to keep data collection simple. For example, look for ways to exploit and analyze data that already exists, such as the digital exhaust that groups leave behind as they interact with people, technology, and equipment.

QUESTION FOR REFLECTION

• What data do we need to get better faster?

Our technology generates an increasing amount of data, such as the number of times we badge into work, or how we move and to whom we speak, or how much time we spend using a particular app, or the ways we link from one website to another while searching for information. Often invisible to us, this data can provide insight into the underlying factors that influence the effectiveness of a particular approach or opportunities to tinker with how the workgroup itself works to create more impact.2 At Southwest, the Field Tech workgroup has begun to evaluate real-time airline health maintenance data—on the planes' operations, temperatures, rotations, etc.-to identify patterns that act as early warning for parts nearing failure so that they can be addressed before they become an issue. Collaboration tools can bring further visibility into the data around our work-interactions, queries, and searches, distribution of comments, usefulness of

our contributions, and shared objects—for individuals or the group. Often this data is available in real time and can be combined with data pulled from other sources for dynamic feedback.

More data—of all types, even if it involves just short back-and-forth conversations—means more transparency. Look for ways to **be radically transparent** within the workgroup. A more transparent group has more potential value because members can more fully understand the context of what's going on. More context supports more action, trust, and respect, all of which can fuel richer reflection.

If "what gets measured gets managed," the corollary is that workgroups that cast a wide net for potential insights have to avoid the trap of managing everything they measure. Just because data is available and easily collected doesn't mean it is valuable. At the same time, we don't always know the value of data in advance, so it may be worthwhile to consider all sources of information initially. For data and metrics that will require more effort to gather,

go through the thought process of why each type of data would be relevant to improving the outcome—for example, what information would it provide that is currently missing, and will that change the next action?—before deciding to invest in data-gathering resources.

Staying focused on learning how to evolve a group's actions to improve an outcome is important for making reflection productive. **Seek continuous feedback** as just one more valuable source of information to draw insights from about how a new approach is working, the unexpected consequences of an experimental solution, or our own performance in the workgroup. In this context,

FEEDBACK QUESTIONS FOR INDIVIDUALS

- 1. What should I continue to do?
- 2. What should I stop doing?
- 3. What should I start to do?
- 4. What can I do to make the group more successful?

feedback isn't an evaluative or punitive tool or a check-the-box reporting activity. The purpose of giving and receiving feedback is to discover something we don't know—feedback that is expected or confirms what we believe is less useful than that which is surprising.

A key to fostering more productive reflection is to identify and implement faster, and richer, feedback loops to get internal and external feedback on a recurring basis. Workgroups should look for opportunities to establish feedback loops that help members understand what the customer expects or needs and where they stand relative to that; they should also look for opportunities to create loops that help point to where they can focus their efforts to have a greater impact. The feedback that groups need has parallels to the feedback that individuals need.³ In fact, encouraging group members to *ask*

for feedback, understand it within the larger context, and translate that feedback into action at an individual level can establish feedback-seek ing behavior that translates into how members reflect and improve performance as a group. If members aren't pulling for feedback, they aren't likely to get it. Consider how even in loosely or

ganized open-source software initiatives, contributors get rapid feedback from others who try their code. Broad adoption of a team's or individual's work products confers status. Contributors carefully monitor this measure of performance and try to learn from others whose contributions gain much greater acceptance.

The patterns of feedback can also yield insight into feedback loops' effectiveness. For example, when GE FirstBuild launched its open innovation model for appliances, members tried to engage the community on every possible design element, down to the shape of the ice-dispenser lever in the freezer door. Looking at the feedback in totality made clear that FirstBuild's community was disengaged and not giving the group useful, actionable insight. FirstBuild founder Venkat Venkatakrishnan said, "We made one big mistake: We assumed that every-

one that was part of our community had a passion for appliances." The group refined its approach to be less reliant on the community for the day-to-day product development.⁴

MAKE THE MOST OF YOUR -MORTEM

Most people in organizations are familiar with the *postmortem*.⁵ We use the term somewhat facetiously, as workgroups can learn from the practice of examining and reflecting on a problem, its condition, and the circumstances surrounding it—not just in "deaths" or failures but over time—every step of the way. Timing is important: finding time to reflect and determine what level of reflection is appropriate at a point in time—before action, in action, after action, and apart from action. Each has its own objectives and techniques.

These types of thoughtful reviews require

groups to commit time and resources and for members to participate in a spirit of creating something better rather than defending a position, rationalizing results, or gaining status. To generate more actionable insights and avoid check-the-box status meetings, reviews should prioritize whatever

is surprising—good or bad—and focus on causality. The goal is to improve impact, and to do that groups need to better understand what drives impact and how best to affect those drivers. Finally, reflection, even productive reflection, should have an end point to avoid the paralysis of analysis. The goal is to reflect *just enough* to know what to do next to gain even more valuable information about the current question.

Perhaps the most important objective of **conducting a pre-mortem**, or pre-action review, in terms of accelerating performance, is to frame the questions that the activity is intended to answer and to remind the participants of the context surrounding the action. What is the purpose of the action? What is the desired impact? What is the most valuable information that could come from the action? The pre-mortem leverages the group's collective

experiences to clarify what is known and unknown, align on what is needed, identify and mitigate known risks, and talk through possible scenarios and triggers for alternatives in order to give the action the best possible chance of making the desired impact. Pre-action reviews may be brief—in the US Army, units sometimes focus around the simple question, "What's important now?"—but even in quick-turnaround situations, some reflection to envision cause and effect, action and reaction, in advance, can make a difference in managing risks and ratcheting up impact.

QUESTIONS FOR REFLECTION

- What can we learn from our results?
- What are the implications for how we move differently in the future?

Pre-mortems can also be thought of as occurring between episodes or in the absence of an episode. For example, the Field Tech workgroup at Southwest took a largely reactive maintenance program and turned it into a preventative maintenance program by reflecting on and analyzing all of the existing data (pilot write-ups, in-flight diversions, delays) to identify what caused these issues. The insights helped members focus on addressing the most common instances of errors and aircraft downtime before they could even occur through pre-mortem reflection. By taking the time to reflect on the issues as a unit, they were able to uncover larger patterns that led to better overall performance of the maintenance crews and the airline's operations.

Reflection in action—on what's working, what isn't, and how conditions are changing—can help workgroups reorient to be more effective in the moment. In-action reflection often occurs individually or in small groups, in micro-reflections that are so short they might seem involuntary. Taking even a tiny pause to step back and reflect on the action, *during* the action, can yield powerful insights into how the approach might be more effective before key details or ideas are forgotten. Understanding and playing with the in-action time horizon comes

with experience, but a useful first step is to take advantage of small moments outside of action. To the extent that a workgroup can slow down the moment, creating even small spaces for noticing, comparing what we observe against what we expect, and considering the implications for action provide a unique opportunity for learning that might be lost otherwise and provides more concrete input for postmortem reviews.

Increasingly, technology can capture more real-time details and context—think dash-mounted cameras or GPS features in smartphones—that can

> be brought into the postmortem or afteraction review. In addition to supplementing faulty or incomplete observations, one benefit of sensors and other real-time capture technology is that it can be used to create dashboards that support rapid reflection in the moment and more robust analysis in the after-action review.

> Conduct after-action reviews⁶ to create an opportunity for the group to

step back and consider what occurred and what the implications are for the next action. It's often in this stage of reflection that patterns begin to emerge and new approaches are developed. For the firefighters of FDNY Rescue 1, informal postmortems begin as soon as the firemen are riding back to the firehouse, capturing raw observations and impressions, including what was particularly challenging or unique about the situation. The conversations continue back at the firehouse, where other responders hear their stories and share their own insights; together, they are able to draw patterns and develop an action plan for the future, based on the unit's collective experiences. Additionally, when firemen have identified a particularly challenging, complex, or ambiguous scenario, they try to recreate that scenario in training so that all members of Rescue 1 can be better prepared in the future. Effective postmortems can enhance a workgroup's ability to handle a similar situation more effectively in the future-and to identify incorrect decisions or assumptions and how they were made.

An effective postmortem is an opportunity for group members to challenge current ways of thinking and performing, if everyone is open to acknowledging the factors that may have contributed to failure and success. Such candor is often lacking in organizations out of fear of reprisal or loss of status. Workgroups should be committed to norms that keep politics and one-upmanship out of the group's interactions and might find it helpful to use a facilitator and structured questions to offset the fear and loss of control that might come with speaking openly.

QUESTIONS FOR REFLECTION

- Where are we improving most rapidly, and how can we do more of that?
- Where is improvement slowing down, and how can we change what we're doing to improve the trajectory?

Postmortems should spend as much time on what went right as on what went wrong, in particular what had more of an impact than expected, and explore how to build on that and do more of it. While the positive-negative balance makes it a safer environment to explore every aspect of the project, it keeps the group oriented toward future actions and performance. Participants also bring their supplemental performance data—including metrics such as how often something had to be reworked—to ground the discussion away from default assumptions and subjective impressions.

A workgroup's power is that it can come up with better solutions and have more impact than an individual, no matter how skilled, on her own. It's taking what one member knows, coupling it with what another member of the groups knows, getting other members to react and add, and creating something totally original. A group has the ability to continue to get better and better at performing under changing circumstances in a way that an individual can't, by effectively leveraging the collec-

tive passion, knowledge, and experience to create new solutions from which to continue to iterate and improve. Doing so requires the workgroup to invest in one more level of reflection.

The workgroup can evolve its own practices of reflecting and taking action. Periodically **reflecting on how you reflect**—being aware of which reflective practices seem to be generating increasing impact over time—helps guard against falling into a routine with diminishing returns.⁸ Research from

the University of Alabama in Huntsville suggests that groups improve their performance when they meet in a structured environment in which each member reflects on her role and how it relates to the overall performance of the team. By drawing out perceptions, supplemented by data, members can identify patterns in their own interactions and thought processes to understand how they contribute to incorrect or ineffective actions and how to make better decisions that have more impact in the future. Pay attention to the way messages are conveyed and processed as well as what is not being said. What is the timing, and who is involved? What is the energy? What is the result?

Figure 1. Framing signals

What?	Observation	Statement of fact. It reflects a single incident that you heard or observed
So what?	Insight	A pattern in your observations and some degree of interpretation. It may build off of a repeated failure, or something especially powerful
Now what?	Implications	How insights can drive action. How does what you observed affect what you should design? Typically phrased as "how might we address Y" or in the imperative voice as in "provide customers with Y"

Source: Deloitte analysis.

Deloitte Insights | deloitte.com/insights

Consider how the Joint Special Operations Command (JSOC) Task Force¹¹ had to reflect on its own practices when its overwhelming firepower and expertise were failing to slow attacks by Al Qaeda in Iraq. The task force took a step back and through careful thought and reflection came to understand that "AQI operated in ways that diverged radically" from what American forces were accustomed to fighting. In the time it took for US commanders to move a plan from creation to approval, the battlefield for which the plan had been devised would have changed. The task force had to reflect on its own practices for processing and learning from intelligence information, because members weren't learning what they needed to fast enough to respond, much less make progress against the enemy.

The data, when they took time to look at it all together, showed that the tried-and-true tactics weren't working. This opened the door to greater questioning of assumptions about what members "knew" about how things worked. With new insight, they restructured the force from the ground up on the principles of transparent information-sharing and decentralized decision-making authority to make shorter feedback and reflection loops tied closely to the action. As a result, forces began conducting more and more raids per night, getting intelligence information across the chain of command much quicker, and acting on its analysis faster. By being their own judge but not their only judge, relevant outsiders helped units within JSOC perform at their highest potential.

MAKE SENSE OF SIGNALS

During action, in action, after action, and inbetween action—we are gathering more and richer information. It becomes valuable when the workgroup collectively engages with the raw information to learn from it and develop new action (see figure 1). ¹² Group members will likely begin to observe more carefully and bring richer context back to the group as they see the group's capacity to derive actionable insights improve.

Most of us value patterns. But years of standardization have taught many of us to abhor anomalies. We try to hide the exceptions, rationalize the pieces that do not fit, and hope that no one notices. Yet breakthroughs happen when we notice and explore

ANTIBODIES AT WORK

- What we are doing is working; we don't need to change.
- Our workgroups are well regarded for being tried and true. We're successful because we haven't bought into the craze to reinvent ourselves and try new things.
- In our organization, seconds count; we need people to act immediately, not debate what they would do differently.

the inconsistencies, anomalies, and unintended consequences—these are the leverage points that can accelerate impact. **Detect anomalies and celebrate exceptions**, ¹³ acknowledging what you don't see in the data rather than looking just to confirm a hypothesis. Sometimes an insight lies in connecting the dots between what isn't there when new data doesn't align with an existing belief. ¹⁴

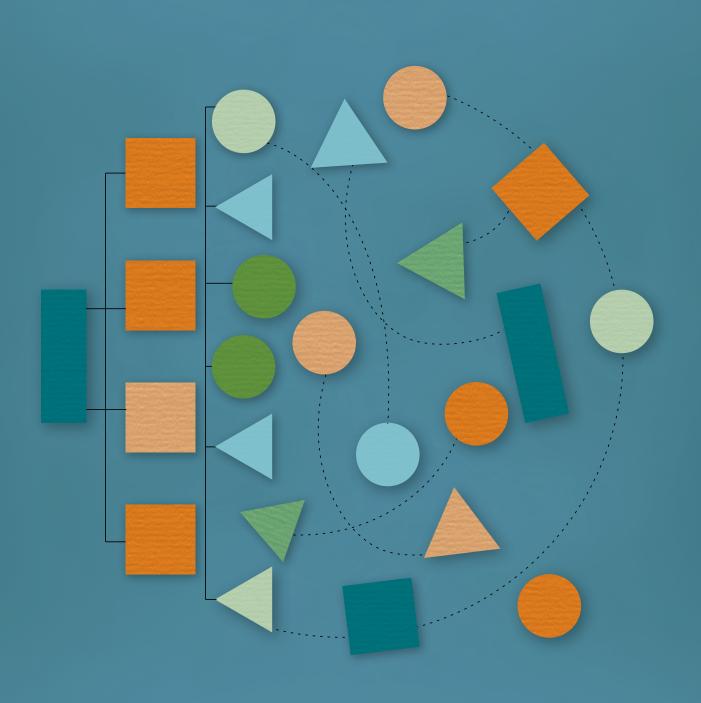
When the group can **recognize emerging** and evolving patterns, it may help to make sense of the passive data it collects and inform the *-mortem* reviews. The frameworks and hypotheses in our heads influence what patterns we uncover. We see what we look for. The patterns a workgroup identifies and how it interprets them can be influenced by the questions it asks and the nature of the problem it is trying to solve. The diverse workgroup members also bring range and variety to how they notice and categorize.

The goal should be to make sense of both what we've seen before and what we haven't, looking for indications of some new structure, or of indications that an existing structure is changing meaningfully. Observations and snippets of information that seem unimportant on their own can heighten our awareness of the periphery and provoke new ideas when considered together with the collected flotsam of other group members. Do the snippets signal a deeper structural change? Or are they superficial noise?

Group members challenge each other's categorizations and add their own, creating and breaking categories on the way to identifying meaningful patterns. They may gain perspective through a

practice of deliberately viewing a new problem as a variant of an old problem from a different context. For example, the research problem we set ourselves was focused on workgroup practices, but one of the ways we tried to gain insight was by choosing to see dynamic workgroups as akin to sports teams. Seeing the current situation *as like* something else

can help reveal opportunities to apply aspects of previous approaches or solutions to our problem; understanding where the similarity breaks down and previous experiences aren't relevant can be informative as well.





Workgroups in action

Cultivating new practices to create more and more impact

Case studies

In developing the Business Practice Redesign framework, we talked to more than 60 workgroups across 20 rapidly evolving arenas on three continents. Each case study focuses on a workgroup that showed clear signs of improving performance over time.

Contents | Workgroups in Action

Case studies in the business practice redesign series



GE FirstBuild 165

A trailblazing workgroup builds community with the crowd to speed innovation



Southwest Airlines: Baker workgroup 177
Reducing disruption and delay to accelerate performance



Red Cross: Regional Disaster Unit 187

A regional disaster response unit ups its game to help more people in need



The sparks & honey: Culture briefing workgroup 197

Embracing a diverse world to sense and make sense of cultural signals



Royal Caribbean Cruises Ltd.'s Newbuilding & Innovation workgroup 209 Designing and building new possibilities



Southwest Airlines: Field Tech workgroup 219

Fixing the problems no one else can to keep an airline flying high

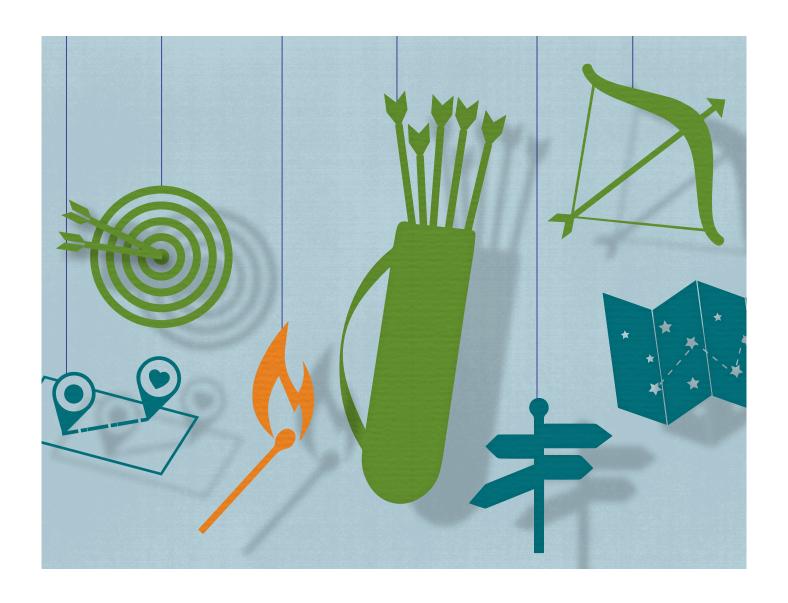


League of Legends: Team SoloMid 229
Rigorous metrics-based experimentation



US Joint Special Operations
Task Force: Al Qaeda in Iraq 239

Adopting new approaches to fight an unconventional enemy



GE FirstBuild

A trailblazing workgroup builds community with the crowd to speed innovation E Appliances—now a Haier company—has long been a major player in the home appliance market.¹ While the company has traditionally produced high product volume at a low price, it found itself facing smaller, more nimble competitors. With a long product-development cycle, the appliance company struggled to move fast enough to keep up with changing market demands and compete with more cutting-edge offerings.²

The workgroup: FirstBuild

To address the challenge, GE Appliances employees Kevin Nolan and Natarajan Venkatakrishnan founded FirstBuild in 2014 and began to build an online and physical co-creation community to develop products in a new way. FirstBuild meets our key criteria for a frontline workgroup:

- Size: Today, FirstBuild is a workgroup of 23
 people, with a variety of skill sets. This is somewhat larger than most workgroups.
- Sustained involvement: Members of the FirstBuild workgroup were recruited from both the GE Appliances' core and externally, but they are now fully dedicated to FirstBuild. They spend all of their time working together on an ever-changing set of activities to bring new consumer products to market more quickly.
- **Integrated effort:** The products are developed and brought to market through the integrated

effort of the full workgroup. Although group members take on different intersecting roles according to each product's needs, and some tasks are independent, the group's interactions can't be specified in advance and the bulk of the product development work can't be done individually. Workgroup members are physically co-located in a separate facility centered on a "microfactory." Here, amid machines and tools and surrounded by recent products and projects, the workgroup prototypes and tests its products.

In entering a space inhabited primarily by start-ups and individual makers, FirstBuild seems to be blazing a new path for product development and traditional manufacturers-getting innovative products to the market while striving to dramatically cut development time, cost, and risk. Rather than the traditional approach of forecasting demand and developing products internally, without help from others, crowdsourcing and crowdfunding are integral to FirstBuild's product development, providing immediate feedback about customer receptivity and interest in the product and its features. Crowdfunding can lock in sales before a product enters production, allowing FirstBuild to move where the market takes it more quickly and with fewer resources. The practice also helps predict a minimum product revenue before launch; units sold through a crowdfunding campaign can fund some or all of a prod-

Figure 1. FirstBuild's 40,000 square-foot facility houses 23 employees; the FirstBuild lab





Source: FirstBuild.

Deloitte Insights | deloitte.com/insights

uct's fixed production costs. And perhaps counterintuitively, innovating in public can help the group counter competitive threats.

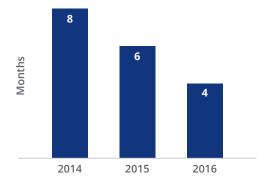
The results: Active user feedback brings innovative products to market faster

FirstBuild was formed with the objective of bringing better products to market faster. While speed and cost are only a part of that goal, they tend to be easier to track and compare than whether the products are getting better. In this case, "better" means new and innovative—the product doesn't yet exist within the business or the market—as well as what customers want, when they want it.

One way the workgroup measures its success is the time it takes for an idea to reach the market—or, as members put it, "from mind to market." When FirstBuild launched in 2014, mind-to-market could take up to four years at GE. In its first year of operation, FirstBuild was able to bring new products from mind to market in an average of only eight months. Two years later, that metric had shrunk further, to just four months (see figure 2).

But this isn't only about moving more quickly through a process of development and validation. By developing products in a fast-moving and feedbackrich context, the workgroup is increasing the number of products and ideas it gets in front of consumers, improving its ability to develop better products. In traditional product development, a majority of the ideas and innovations typically never make it to a point at which a consumer could react or interact with them. FirstBuild, by contrast, has as of September 2017 generated nearly three dozen viable product ideas and is testing a new product every month. Eight have been successfully launched into the market. The remainder were killed with minimal investment, having generated valuable insights about what consumers seem to want and don't want. Interestingly, on certain products, the Appliances core

Figure 2. Time to take product from mind to market



Average mind to market per product FirstBuild

Source: FirstBuild.

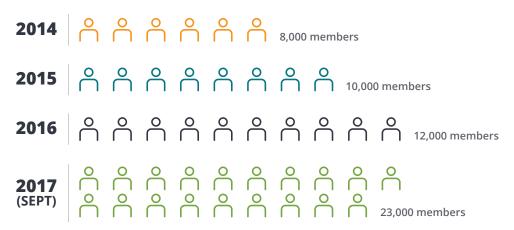
Deloitte Insights | deloitte.com/insights

is adopting some of the group's practices around market-testing prototypes in advance of engaging in a long-term market testing and validation process.

FirstBuild also has far less investment per product relative to the core, with only 23 employees. The all-in cost of getting each new product into the market has typically been less than \$300,000, compared with a cost of around \$4 million to bring a product to market in the core.³ The group continues to get market feedback faster and cheaper than in traditional product development, while using fewer resources. This lowers the risk and barriers to engaging more continuously with the market to learn from potential customers.

Another sign of the workgroup's accelerating performance can be seen in the community of funders, buyers, and product development enthusiasts who propose, validate, and test ideas and product iterations on FirstBuild's open innovation platform. In its first year, that community grew quickly to 8,000 unique users. In the subsequent two years, it grew by another 50 percent and, by September 2017, it had nearly doubled again to 23,000 users (see figure 3), most of them actively engaged in providing feedback on the group's product prototypes.

Figure 3. Size of FirstBuild's community



Source: FirstBuild.

Deloitte Insights | deloitte.com/insights

Practices in play

The FirstBuild workgroup exemplifies eight key, intersecting practices: Frame a more powerful question, Commit to a shared outcome, Maximize potential for friction, Cultivate friction, Eliminate unproductive friction, Bias toward action, Prioritize performance trajectory, and Reflect more to learn faster.



FRAME A MORE POWERFUL QUESTION

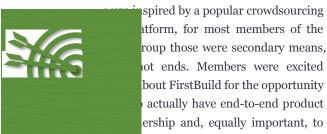
The FirstBuild workgroup was born out of frustration with traditional approaches to product development that seemed to move too slowly to keep up with the rapid changes in technology as sumer preferences. Two leaders began to rethis frustration to articulate their belief there had to be a better way to develop i vative products and get them to market whethey still felt new. Two simple questions is the stage: Why did it take so long to develop new products, and why could smaller hardware entrepreneurs develop them

so much more quickly? Their answer was equally simple: They needed to test more ideas with more people more frequently. This line of inquiry ultimately led the founders of FirstBuild to ask a more powerful question: What would it look like to get better products to market—ones that consumers wanted while they still wanted them? That question resolved into this powerful question: What if a manufacturer developed products with consumers rather than just for them?

COMMIT TO A SHARED OUTCOME

FirstBuild's desire to get its best, innovative ideas in consumers' hands faster than had ever been done by a large company—to create products that the market needs and wants today—became the shared outcome around which the group crystalized.

Although the group's co-founders sensed that they could change the game through crowdsourcing key parts of the design and development process and



see whatever they created actually get to market, to watch customers use and interact with those products. In many large product companies, employees are primarily caretakers of existing products with long histories; they own only a very small piece of it. They can also spend an incredible amount of time building and fine-tuning products that never make it past the hurdles to market. With the First-Build workgroup aiming to get to market faster, they would have to figure out how to bypass those complex webs of handoffs and stakeholder approvals.

FirstBuild has attempted to set itself apart from the competition (and the parent company) in an important way. Its approach and outcome are inextricably linked, reinforcing a tight bond among workgroup members. "We are one team," explains FirstBuild co-founder Natarajan Venkatakrishnan. "We all chip in to help each other in times of need. We have a common mission to design the products that are innovative, and that our consumers actively want."

The group's aspirations for their shared outcome was quantified in a few key performance objectives that spoke to how different this approach would be: Whereas a traditional product development approach at a large manufacturer might have taken four years and \$4 million to bring an appliance product to market, FirstBuild set out to launch new products in only four months, and to get proofs of concept presold, with less than 10 percent of that outlay.

MAXIMIZE POTENTIAL FOR FRICTION

FirstBuild's 23 diverse group members came to the workgroup looking to do something more innovative. The group also brought in outside innovators who had little experience in the home appliance space but offered perspectives, skills, and experience valuable to the group's goals.

Leaders deliberately shaped the g ture to be different; they consciously lected members for their ability to tl differently, to set their own direction, to operate with little or no direction fro above, even though their curiosity, in tiative, and readiness to challenge otl cause friction. In fact, that was the point—too often, in the larger organization, the culture minimized even productive friction. It's no accident that FirstBuild's leaders first reached out to employees growing frustrated with the status quo and nonconformists who had ideas for new products and solutions. Now that the group is established, it consciously prioritizes passion over skill when hiring. The workgroup, Venkatakrishnan says, seeks out "people who can take risks, commit to making an impact, go the extra mile, and figure out how to hack things"—from processes to products. The result is a workgroup unafraid of conflict. New ideas are welcomed and tested—or challenged and refined.

In the beginning, leaders thought that it might be enough to get people who were passionate about doing product development differently and had skills that they could use. What they discovered in large part because many of the initial workgroup members came from the parent company core—is that mind-set and working preferences were also important. For example, one design leader who had been successful in the larger company by dint of being organized and effective at navigating highly structured, hierarchical processes and systems turned out to lack both an openness to change and learning and a comfort with ambiguity. Leaders encountered a few other cases in which they had to let group members go before they figured out what was key to success in this new environment. In Venkatakrishnan's words: "If they ask, 'What should I do?', that's fine. If they ask, 'What should I do, how should I do it, and what should I have accomplished at the end of the day to meet expectations?', that's a problem."

In another move designed to maximize potential for friction by bringing together more diverse perspectives, FirstBuild opened its facility to the community at the University of Louisville, whose student center lies just across the street. Students and faculty are given unrestricted access to the full capabilities of the group's microfactory, which occupies the center of the premises.

FirstBuild also works to engage diverse perspectives in its hiring and staffing, and to attract people who are motivated to make a difference. It actively competes for top talent—not just with other appliance companies but with technology companies more broadly. As one FirstBuild employee explained, "Those guys offer an open and empowering environment—not a do-what-you'retold type of culture. At FirstBuild, the workgroup is always evolving."

One way in which FirstBuild continues to attract diverse and passionate participation is to consciously cultivate talent and support members' careers, even after they leave the group. Operations manager Randy Reeves especially makes it a priority to nurture employees, both current and former: "Many call me and talk about issues they see unfolding and how to advance the next stages of their careers."

CULTIVATE FRICTION

As open as the FirstBuild workgroup is in so many ways, it actively cultivates friction by imposing constraints on resources in order to spark cre-

retivity. Reeves believes that FirstBuild has been ressful in large part because it wasn't source-rich and was forced to do more th less. The workgroup was founded thout a financial lifeline to the parent ompany—only a fixed pool of funds. eyond that, FirstBuild survives on revnues from the products it successfully

crowdfunds.

Guided by a shared commitment to getting better products to market, the group embraces friction as long as it moves it toward getting innovative products that consumers want into the market. In every project, members repeatedly challenge the ideas and designs as they move deeper into the product, from idea to use to production to marketing and selling a real product. That expectation to challenge and be challenged is shared throughout the workgroup, and members honor the perspective of the market. The crowdsourcing platform and community is one more way to seek friction. Members solicit challenges from the community at specific stages of development, testing reactions to the concept, certain features, and major iterations of the product. The results from the crowdfunding platform-how many units were ordered, how quickly the funding goal was reached, and the level of interest in the product—provide additional information that can challenge the group's assumptions and approach for a full market release of a product, including price.

Because they are committed to getting fast external validation, workgroup members tend to be open to friction in the form of conflicting ideas about a given product. They will engage the differing perspectives for a time, but if they reach an impasse in which two approaches seem irreconcilable, members move to quickly test one of the alternatives on the platform, generating new information to inform the debate. With limited time or resources invested in any one iteration and the opportunity to keep iterating, the stakes are lower for any individual idea. Members face no organizational repercussions influencing whether they will challenge an assumption or consider a different perspective. Rather than dig in their heels to defend an idea, members know that they'll have another shot at improving the solution if the market invalidates a given approach. Take the group's chewable-icemaker project. Initially, members staged an online challenge about the icemaker and got 30-plus designers to weigh in. Working with an industrial designer, they developed a preliminary design, with a large central opening that looked good but reduced the capacity. Then they began iterating on that design while getting deeper into its complexity. They involved people who had different depths of knowledge to play with the possibilities while also imposing constraints: How could they double the capacity, what would be attractive on a kitchen counter, what could be produced for a certain price point, what would be easiest to use, what would create the best ice, etc. This happens in large companies as well, of course, but the long time lines and institutional/structural barriers often mean that a designer has only one chance to influence the design; as a result, people often fight for their own contributions rather than broadly considering others' ideas.

The experience with the very first product that FirstBuild developed, a water pitcher kit, seemed to help to cement the group's commitment to seek out and cultivate productive friction in service of making better products. Potential customers seemed to love the idea of the pitcher, and group members assumed that people would modify their existing refrigerators to accommodate it. It turned out that there was less of a market for tinkering with existing appliances than the group had thought. They hadn't sought out disconfirming viewpoints or validated this major assumption and were swayed by their own enthusiasm for tinkering; as a result, they made an error that might have been avoided if they had invited people to challenge the group's assumptions.

ELIMINATE UNPRODUCTIVE FRICTION

No path is entirely smooth, naturally: Bringing aboard those who buck the traditional corporate mold carries a potential for unproductive friction, making it crucial to create a common language and drive toward common goals.

One FirstBuild employee likened possibility of getting sidetracked by unproductive friction to putting diesel into a car that nly takes unleaded fuel—before u know it, you start having en-

gine trouble." In this analogy, the diesel is someone at FirstBuild falling back into the parent company's mind-set and not pushing the group to be better or embrace new possibilities. The instant such mindsets arise, group leaders take steps to maintain the culture that has come to define FirstBuild and find ways to reignite members' passion.

Reeves says the effort to continue to stoke the passion of the group members and embrace the often-strong and conflicting perspectives has paid off: "We've really become a family. This organization will live and die based on the success of everyone here. It's not an individual effort."

BIAS TOWARD ACTION

FirstBuild owes its existence to a challenge—well, perhaps more of an insult. When Ben Kaufmat Quirky, an invention platform that connected inventors with companies, said that Coregularly took four years to design and britto market so much as a door handle, it caug some GE managers' attention and inspired the idea for such a workgroup.

One early hurdle: a space to house Fir Build at a modest price. Group leaders turned to local universities, several of which had long been recruiting partners. The University of Louisville, which was keen on expanding its engineering partnership with GE, proved an excellent fit and offered to renovate a surplus building for the venture. The city government of Louisville, Kentucky, was also supportive of the initiative, and within just three months, FirstBuild was a live operation.

The biggest leap, though, was still to come: How to spur ideas, refine them rapidly, and keep costs low while minimizing the effects of potential failures? The answer came in the form of crowdfunding—specifically, using the Indiegogo platform (used most often by start-ups and independent product designers) to refine ideas, test minimally viable prototypes, crowdfund production, and test consumer demand. If an idea sparked enough interest via preorders, FirstBuild would continue development and take the product to market. Any Indiegogo campaigns that failed to accumulate

enough preorders to make production viable could simply be tabled, under the rule of "go until no." The campaigns, tapping an active and growing designer and consumer community, functioned as a sandbox for rapid development and iteration—and kept down the cost of failure.

Granted, making FirstBuild's innovation portfolio open meant exposure to competition and knockoffs. To counteract this threat, FirstBuild began focusing on maximizing momentum by minimizing the time and resources needed to learn enough to move to the next milestone. Traditional, R&D-based product innovation often takes years to move from careful study, technology surveys, trend analysis, and consumer testing, but a presales First-Build product can be developed in as little as four months. In addition to Indiegogo's crowdsourcing and crowdfunding capabilities, the workgroup uses social media to gauge consumer sentiment and receptiveness to new concepts for products and features and to better understand how customers actually use the products. While on the surface this may seem intuitive, it represented a massive shift from the way many manufacturers test and bring products to market.

By shortening the product development cycle from years to months, FirstBuild has been able to raise levels of funding more typically seen at a tech start-up. For example, FirstBuild's second product launch was for the Opal Nugget Ice Maker, a \$500 device that produced the same kind of "chewable ice" found at some popular restaurant chains. The Indiegogo campaign raised \$500,000 in its first two days and \$2.7 million in its first 30 days (see figure 4)—or more than the heavily hyped virtual reality technology Oculus Rift raised on the same platform in the same timeframe.⁴ In FirstBuild's first year, crowdfunding for two products covered all of the workgroup's costs.

But not every product FirstBuild brings forth is a success. In fact, a key element of FirstBuild's bias toward action is embracing "fast failure"—members recognize that mistakes, while the enemy of efficiency, are the fuel for learning. To date, the group has generated nearly three dozen products and prototypes. Of those, two could be considered highly successful, while six have seen limited success. It takes a non-traditional mind-set to develop, test, and scrap 25 products in two years. But the nature of FirstBuild's platform requires rapid iteration, and just as impor-

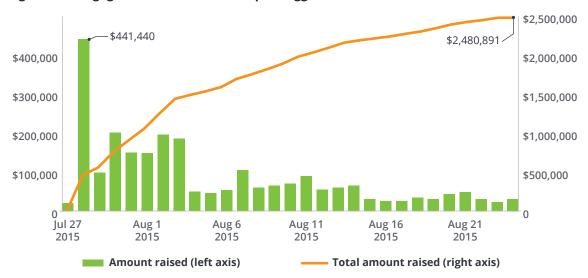


Figure 4. Indiegogo funds raised for the Opal Nugget Ice Maker

Source: Data provided by FirstBuild from Indiegogo campaign dashboard. Deloitte Insights | deloitte.com/insights

tant, the culture accepts and encourages failure from which it can learn. While members focus on speed, the utility of that speed is to get more customer input into the product before it goes into production without having the lengthy market-testing phases of traditional development.

Still, failure can be difficult to experience. First-Build's first big failure came from its design for a rapid cold-brew drip coffee maker. Cold brew, which has become widely popular, is less acidic than drip coffee, with a much higher caffeine content, but takes 18 hours to make. FirstBuild's engineers figured out a way to make high-quality cold brew in only 12 minutes, and members embraced the idea, assuming that it would outperform every other product they had launched. But to their surprise, its Prisma coffee maker's performance on Indiegogo was subpar. After failing to raise its goal of \$150,000, FirstBuild pulled the product and returned backers' money.

The cost of that failure? A mere \$40,000. How long did it take to get a sense of potential sales? Four months. Normally such an outcome might end careers. At FirstBuild, there was very little reaction or repercussion. It turned out that there had been two camps in Prisma's development: One camp argued that at \$300, the coffee maker was too expensive; the other camp disagreed. Since the \$300 advocates lost their bet, the team is regrouping on it and coming out with the \$100 coffee maker. Every member of FirstBuild was dedicated to learning from failure, and to moving forward to create an even better product in the future.

PRIORITIZE PERFORMANCE TRAJECTORY

Rather than focus on quarterly financial results and ROI, the FirstBuild workgroup needed to think

t- and long-term performance. roduct innovation, the way the oup does it, has no set quarter- or even yearly horizon; it can far faster or slower than that. embers focus on the trajectory the metrics that seem most

important to getting new products the customer wants to market while the customer wants them.

To do this, FirstBuild tracked two sets of metrics—one focused on financial results for the parent company, the other showing what members believed mattered most to the group itself. The second set showcased data, including how fast the FirstBuild community was growing, what the engagement levels were, and the quality of products under development (measured by the response to products, such as number of preorders and time to funding goal on the platform, along with social enthusiasm of buyers of the product). These were important metrics, albeit numbers without an immediate, tangible financial result tied to them.

Members have set goals around these metrics and pay attention to how they are progressing against those goals. The time-to-market metric, in particular, gets attention in part because it is trackable and in part because frustration with slowness helped inspire the workgroup in the first place. Over the past three years, though, as the group has reduced time to market, members have developed a better sense of how to track metrics that matter to developing better products and developing with consumers. The community's size, engagement, and the number of products and prototypes released are important indicators that get past simply tallying the revenues from the group's successful products. They sacrifice some short-term results, continuing to push boundaries with new product types and focus on reframing risks so that they can act to learn rather than play safe to avoid failure. Again, the product that members thought would be the group's most successful—the Prisma coffee maker—failed, while a product they were less sure about, a \$500 icemaker, generated more than \$2.7 million in presales. With each product, FirstBuild learns more about developing what the consumer wants.

REFLECT MORE TO LEARN FASTER

Over time, FirstBuild has continued to refine how members take an idea and transform it into a product. Initially the group's approach was, if anything, perhaps too focused on feedback, with com-

munity members asked for input at every step. Though it may sound counterintuitive, today the workgroup aims to reduce how much it communicates with the community in

favor of asking for more targeted feedback where it matters most on the product. This generates higher-quality community participation and gives the workgroup better input into product development.

Take one of FirstBuild's early products, a filtered water pitcher that would automatically refill in the refrigerator. The group pitched it as an add-on kit that customers could use to modify their current refrigerators—and found less enthusiasm than anticipated. Upon reflection, workgroup members realized that they had missed some obvious warning signs from the crowd. As Venkatakrishnan put it, "We made one big mistake: We assumed that everyone who was part of our community had a passion for appliances, just as people do for cars. In reality, we couldn't have been more wrong. People don't just wake up and say, What can I do to my refrigerator today?" The silver lining is that the group shared the design with the core of GE Appliances, which worked to embed the pitcher as a standard feature in new refrigerators; as a standard fridge feature, customers loved it.5

Today, instead of soliciting its crowdfunding community for feedback at every step, FirstBuild relies more on its own in-house expertise, then institutes spot checks with the community to see which ideas and refinements resonate most. It uses crowdfunding platforms to get a different view into the market appetite for a given product.

While the group's overall approach has been successful, members are constantly learning and reflecting on what works best in how they respond to market dynamics. With the first few crowdfunding efforts, within a week or so of shipping a product, consumers would begin posting on social media about it: pictures, videos, how they were using it. Members found this experience of being so close to the consumer and getting such direct, immediate feedback totally new—in traditional product devel-

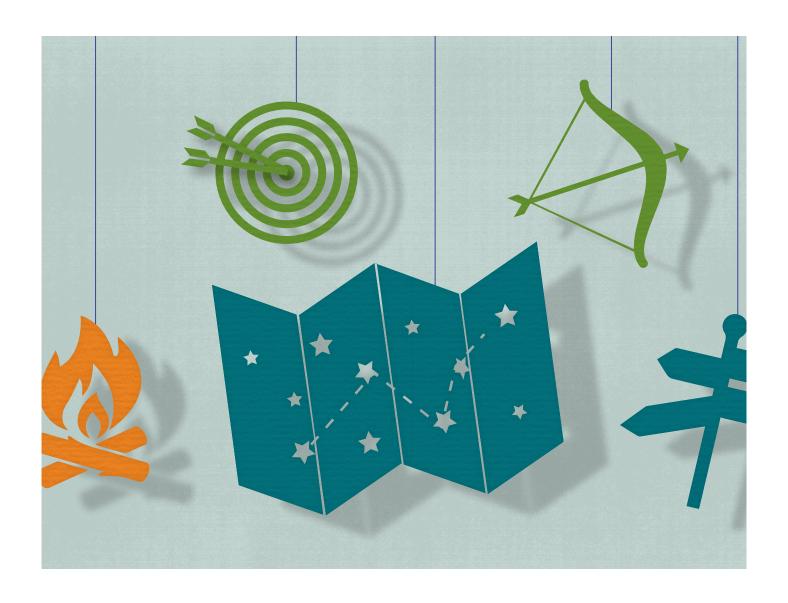
opment, the end user was many links removed up the value chain. From that point on, members tracked community engagement, including the number of YouTube and Twitter followers, since social media engagement seemed key for market validation.

Members also continually reflect on ways to engage the crowd and garner new product ideas. To date, FirstBuild has sourced more than 1,400 ideas from consumers. It is currently equipped to work on between 12 and 15 full product releases per year—less than 1 percent of the ideas that members generate. Over time, the workgroup has learned more about what could gain traction in the marketplace and which ideas might have a longer runway than others. For example, with this experience and others, members saw a pattern: It was easier and more successful to introduce an entirely new type of product to the market than to modify or evolve something that already exists.

An expanding role

Above all, the members of FirstBuild recognize that developing new products in a new way often hinges on working in new ways, deciding to approach the relationship with the consumer as less transactional, more collaborative. With a new appreciation for the role the public can play in shaping ideas and providing timely, targeted feedback, GE Appliances now aims to expand market-facing development on a wider scale, creating a new crowd-sourcing platform called Giddy ("in honor of the elation of invention") for products developed by the larger enterprise.

One realization FirstBuild members had was that, with the group focused on appliances, the skill sets and ideas from their community were limited. The current plan: Take the community of more than 20,000 people who are currently part of FirstBuild's efforts and expand it to 100,000 from many different industries—from medical devices to software to engines—who could "solve any kind of problem," bringing corporate crowdfunding to the mainstream and serving as a platform for broad product creation.



Southwest Airlines: Baker workgroup

Reducing disruption and delay to accelerate performance

OUTHWEST Airlines (SWA), based in Dallas, operates more than 4,100 flights daily to more than 100 destinations. As the nation's largest carrier in terms of originating domestic passengers boarded, SWA operates a point-to-point network with a fleet consisting entirely of 737s. SWA prides itself on quick turns at the gate from time of arrival to time of departure, and it constantly seeks to improve how it makes decisions that affect the network (for example, to delay or cancel flights, slow down traffic, or close an airport) when the unexpected happens, dramatically increasing on-time performance and transporting more customers to where they need to be, when they need to be there.

Seemingly essential to Southwest's overall success is its nerve center, the Network Operations Control (NOC). NOC is home to two workgroups whose methods and behind-the-scenes innovations many credit for greatly improving the experience of those who fly Southwest—and for giving a sustained boost to the airline's performance. The Baker workgroup is one. The other is the Field Tech workgroup, a specialized unit of aircraft mechanics who fix what no one else can.

The workgroup: Baker

The Baker workgroup is made up of dispatch superintendents and software developers focused on improving decision-making around unanticipated operational and weather-related events. This workgroup meets our key criteria for a frontline workgroup:

- Size: Baker is composed of four supervisors of dispatch (SoDs), three main software engineers, and two software engineers in support.
- Sustained involvement: The software engineer members of Baker are fully dedicated resources. The workgroup's four SoDs carry out their regular duties while spending a majority of their time with Baker, developing a tool to support decision-making as well as devising and testing new approaches for handling unanticipated disruptions to the Southwest network.
- Integrated effort: The ongoing design, development, and enhancements to the decision-making tool require the group's integrated and collective effort. Much of members' work is interdependent—in particular the analysis and interpretation of trade-offs and impact that feed back into the tool.

Supervisors of dispatch "manage the business operations of the airline" through network decisions. SoDs are the people who balance overall flight flow—canceling flights, shutting down airports, swapping aircraft. In determining how best to get customers home on time, they take into account everything from customer and crew needs to weather to runway arrangement and maintenance. They touch all parts of operations and work closely

Figure 1. Inside NOC





Left: Inside Southwest's Network Operations Control (NOC)—a secure facility located outside Dallas, which manages the airline's operations 24/7 across the world. Right: Screens in NOC.

Source: Southwest Airlines (I), Russ Basset Consoles (r).

Deloitte Insights | deloitte.com/insights

with the dispatchers, who are the people on the ground responsible, with the pilots, for the safety of the flight.

When Southwest was a small regional airline with a handful of planes and routes, operations were comparatively simple. But with rapid growth, the established process of dispatching and modifying flight plans, and cascading through the other parts of operations (for example, crew scheduling), became complex and time-consuming—developing just one solution for a particular flight path could take hours. As one SoD described the network: Not only were there more planes—there was a lot more momentum, and no one was able to stop on a dime and redirect, a response that had worked well when the airline was small.

A group of SoDs charged with increasing Southwest's on-time performance (OTP) took it upon themselves to build a tool to make their jobs easier and more effective and to devise new ways to make complex network and routing choices. They named themselves *Baker* in honor of a late colleague, Mike Baker, who was passionately committed to improving the airline's routing system.

When the workgroup first formed, its primary focus was on developing a tool that could accelerate SoDs' ability to address major disruptions more effectively for both passengers and crew. After creat-

ing a preliminary version, Baker members split their time between further developing and refining the tool, managing the actual network operations using the tool, and using the results as a basis for reflecting on and refining their collective approach to making trade-offs in large, network events. The humans in the network still must weigh the trade-offs and make the decisions, but the tool can give them visibility into the implications of their decisions. By being intimately involved in the development and use of the tool as well as in real-life, real-time decision-making, the workgroup members have a firsthand perspective on where the program successfully accelerated performance—and where it needed improvement.

The results: On-time performance leap and better outcomes

Thanks perhaps to the workgroup's efforts to rethink how Southwest handles unanticipated disruptions, the Baker group seems to have helped the airline boost on-time performance (OTP) during extreme winter storms by more than 200 percent, while canceling fewer flights.

This data highlights the airline's performance in severe weather disruptions—defined as major

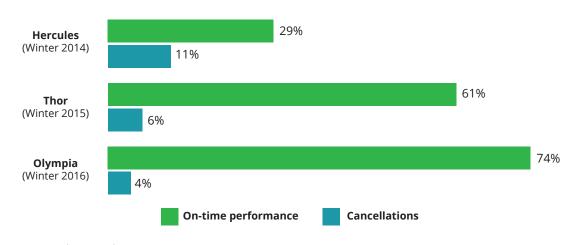


Figure 2. Southwest winter storm performance, 2014-16

Source: Southwest Airlines.

Deloitte Insights | deloitte.com/insights

storms affecting three or more major cities for an extended duration. To measure its efficacy, Southwest looked at performance across three winters over the course of the Baker group's activities. Winter storm Hercules occurred in 2014, prior to the Baker workgroup shifting to emphasize more proactive decisions; Thor hit in 2015, after the SoDs had adopted a proactive stance and had implemented several of the workgroup's changes, such as not defaulting to operate all possible flights; and Olympia, in 2016, followed further refinement of the Baker group's solutions and implementation of the Baker tool.²

Since its formation in 2015, the workgroup has not only improved the airline's performance during adverse weather conditions—it has helped improve OTP for *all* Southwest flights by 2.11 percent. This is a significant jump given that airlines normally measure improvement in OTP in tenths of a percentage point. And while many airlines have gamed their OTP numbers by canceling flights, Southwest canceled 900 *fewer* flights than it had prior to Baker over a similar period of time.³

In addition, the total number of customers delayed by two or more hours decreased by 95 percent over two years once the workgroup's solutions were fully implemented in 2016.4 And when a flight did have to be canceled, the workgroup's efforts allowed Southwest to give passengers more advanced warning. Prior to the workgroup's formation, SWA passengers regularly received cancellation alerts two hours or less before departure time. By the end of 2016, passengers were receiving such notifications up to 10 hours in advance,5 averting many situations in which passengers arrive at the airport only to learn their flights have been canceled. The more lead time Southwest could offer passengers, the greater the likelihood the airline could seat them on new flights. As a result, the itinerary completionthe rate at which passengers that reach their intended destination—has improved dramatically as well.

OTP, cancellation rate, and passenger itinerary completion are the three measures of success that matter most to these frontline workers. They believe that an impact there could generate both greater customer satisfaction and lower operational costs across the airline, directly affecting both revenue and margins. In addition, the proactive, faster, and more-informed decision-making enabled by the Baker workgroup's solutions have reduced turnover. As one SoD said, "With three hurricanes in a month, in the past that would have been all hands on deck, 24/7, for weeks to repair the system and get passengers home. With the tool and our approach, it's a whole different job."

Practices in play

The Baker workgroup uses five intersecting practices: Commit to a shared outcome, Reflect more to learn faster, Maximize the potential for friction, Prioritize performance, and Frame a powerful question.



COMMIT TO A SHARED OUTCOME

The Baker workgroup formed around the shared desire to create a tool that would help the SoDs improve on-time performance while also making their jobs easier.

Dealing with disruptions such as snow and strong winds had required highly manual work and hours of c dination. Not only had it been diffict see the impact of a certain set of deal

til things were already in motion-separating skill

from luck after the fact was challenging. As the group gained momentum on the tool, the shared outcome shifted: It was less about the tool itself and more about an ongoing commitment to improving itinerary completion, canceling fewer flights, and having more flights arrive on time. This commitment aligns with Southwest's long-standing commitment to being passenger-friendly. The workgroup believed that if it could have a significant impact in those two areas, it would improve the experience for both passengers and crew. Having the dispatchers spearhead the creation of the software tool they themselves would use ensured that the outcome sought by developers and users was shared, too.

REFLECT MORE TO LEARN FASTER

One important practice that the Baker group brought to network operations was that it celebrated exceptions. Until the workgroup was convened,

> exception handling remained a sort of "shadow activity" within the organization—every SoD had her own way of dealing with network disruptions. Even more frustrating: Disruptions and ad hoc solutions

often went unacknowledged because they seemed to provide evidence that the processes in place weren't working.

As operations expanded and the frequency of disruptions increased, group members had no choice but to confront these exceptions. However, Baker went beyond confronting them—it aimed to adopt a new mind-set about treating disruptions as an important part of the business and changing the culture of the organization to one of making these disruptions and the impact of decisions transparent so that members could learn from them. For instance, with winter storm event Thor, Southwest had moved toward being more proactive, but it still took the airline a painfully long time to execute the decision to shut down an airport and reroute those flights. For Olympia, the Baker group had learned the cost of delayed action and was able to make

rerouting and cancellation decisions much faster; not only did it affect passengers less negatively—it affected all operations less negatively, with less pain for employees. The Baker group celebrated such exceptions, seeing them as opportunities and embracing each chance to get better at handling situations members couldn't fully anticipate.

The workgroup also promoted a more proactive approach to managing the network, requiring a new level of pre-reflection to anticipate the effects on multiple parts of the system. This included bringing in perspectives from outside the workgroup, including those of dispatchers and crew schedulers, to capture the collective experience from previous events, especially for large disruptions.

Measuring the effects of exception handling had been incredibly challenging, but Baker's tool allowed Southwest to identify patterns, establish trends, and recognize anomalies far more quickly. The tool enabled the workgroup to reflect on the trade-offs before taking action; it also provided new transparency, across the entire network, feeding reflection and discussion with hard numbers, both in the moment and after an event. There are so many different ways to dissect a solution that, even with the tool, there's rarely a right or wrong answer, but it has allowed SoDs to focus their energy on looking at the trade-offs rather than on manually playing out the decisions in spreadsheets.

For the workgroup members, being both creators and users of their own tool paid extra dividends. They constantly sought feedback from their colleagues-indeed, their colleagues sought them out to give feedback—and the faster they implemented features and enhancements, the better their own work lives became. Discussing the feedback on the tool and prioritizing tool enhancements and fixes have actually served as a vehicle for the workgroup to reflect more broadly on the trade-offs and how to weigh certain variables. The tool revealed some things that members didn't understand previously for instance, that cancellations might be less damaging than delays or that they should focus more on "canceling the right flights" rather than just avoiding cancellations. These types of revelations opened the

door to revisiting other assumptions they all made about the network.

Where previously SoDs made many decisions on gut instinct and had little way of evaluating the quality of their decisions, the tool provided a rich data input that changed their ability, as individuals and as a group, to reflect on the trade-offs they made. One learning that came from this reflection was that following gut instinct often led to suboptimal decisions.

MAXIMIZE POTENTIAL FOR FRICTION

When it came to recruiting members, the workcoun prioritized passion over skill. Not all SoDs
r to embrace change, but Baker members seemed to have a deep passion to
mprove the way things worked—and
y sought out others with the same
-set. A key driver of the group's sucs ability to catalyze and amplify the
each of its members.

Importantly, the SoDs who formed the workgroup also recruited members from beyond their own departments, bringing in software developers who could challenge and guide the work as core members. They also continued to leverage the connections they had with all of the operational groups in their traditional SoD roles to bring in needed skills and perspectives as they debated trade-offs and alternatives and developed the tool.

Typically, tools such as the one the Baker group was developing might be built in isolation by a technology department, then rolled out to users who would love it or hate it; the developers would never see it in action or talk with users about their reactions to the tool. What feedback developers get is often limited to short, one-way written comments. By bringing together the diverse perspectives of SoDs and developers, shoulder to shoulder in a room with live feedback from their SoD peers, the Baker group heightened the friction that could help create a better tool. They could all also see what worked and what didn't in the moment, bolstered by trust and a shared understanding of each other's

jobs. For example, one day the Federal Aviation Administration ordered a noise-restricted approach path for an airport in the Midwest (a request SoDs were accustomed to addressing). Instead of following the traditional, multistep procedure, the SoDs in the Baker group wheeled their chairs over to the software engineers and together created the new approach in a span of a few *hours*.

PRIORTIZE PERFORMANCE TRAJECTORY

The Baker workgroup needed to optimize the

network's performance based multiple factors. When it came choosing which factors to prioriti trade-offs abounded. Members p oritized a trajectory of continuou improvement of the key metrics that represented what was most

important to their business: satisfying customers.

As a starting point, members acknowledged that they no longer really knew, in the larger system, how some of their daily trade-offs worked. That was the genesis of the tool, but practically it meant that they would inevitably make mistakes on the way to understanding the interdependencies and making the best decisions for the business. It also acknowledged that they would inevitably suboptimize certain parts of the system or certain metrics, in service of driving improved overall performance. The difference now was that they would have more data to compare trade-offs—and a tool that actually let them test out different solutions.

For example, consider an inbound plane that has just triggered an unexpected maintenance issue. If Southwest delays the next flight to fix the issue, it would result in 260 missed connections for individual customers and cause the crew to time-out one leg sooner, leaving them at different airports than they were scheduled to fly out of on their next shift. If the airline proactively cancels the flight—and the rest of those on that plane's itinerary—and rebooked passengers on other flights, it would create 20-minute delays for 3,000 customers, but everyone would make it to their destinations. Which

decision produces the least bad outcome? Should SWA cancel a flight with five hours' notice, or use those five hours to try to increase the odds of giving customers what they expected? One thing the Baker group has learned is that the airline now has so many flights connecting throughout the system that sometimes canceling a handful of flights actually displaces fewer passengers than running a flight late.

This web of trade-offs was one that dispatch superintendents had navigated for years, but most of those trade-offs weren't explicit or couldn't be known with certainty. Previously, the airline had defaulted to letting all flights run. Canceling a fully booked flight just wasn't done because SoDs assumed that canceling would clearly have the most negative impact on customers and the system. And given the complexity, just propagating a cancellation through dispatch, customer service, and crew schedules was overwhelming. Now, the Baker group has seen how making proactive cancellations or reroutings can have a positive impact not just on getting customers to their destinations but on other operating metrics as well.

The workgroup, and the tool, made more visible the implied trade-offs and the implications of their actions across the airline. Now SoDs could track how one cancellation's effects cascaded across the network, affecting passenger connections, crew, and even scheduled maintenance. Previously, dispatchers would rely on gut instinct to make such calls, but they couldn't inform their instincts with data. The Baker group changed that. Today, every Southwest dispatcher decision still has its trade-offs, but now all involved know what the trade-offs are. SoDs also have more informed discussions with other departments, especially in major weather events, where they can focus on the impact for the most important performance metrics for the network rather than for each department.

The workgroup also prioritized trajectory in the development of the tool itself, making trade-offs in the use of resources to focus on what would help the group make an impact faster on the metrics of ontime performance and flight cancellations. Rather than build a sleek interface that could impress up-

per management, they built a tool aimed at helping SoDs in the field. Baker members continuously prioritize development of changes that SoDs believe will improve their ability to run the network and have an impact on the metrics that matter to keep moving performance up the curve. At the same time, they've recognized that part of improving the airline's performance is getting everyone to use the tool. While it hasn't displaced the overall performance objective, Baker now prioritizes enhancements to the tool that can make it simpler and easier to use-plenty of defaults and a cleaner interface—so that all of the SoDs are using it more often, not just during complex weather disruptions. This has had an impact on the trajectory of adoption: Each new enhancement gets someone excited, often someone who wasn't previously. According to group members, adoption of the tool rose 200 percent after one recent release.

FRAME A MORE POWERFUL QUESTION

This group was formed when a few SoDs asked themselves a question their colleague has five years earlier: How can we use tech to see the impact of our decisions and better ones?

It came from the recognition that worked for a regional airline—relying or instinct, prior experience, and manucalculations and updates, operating all possible flights—was insufficient for a

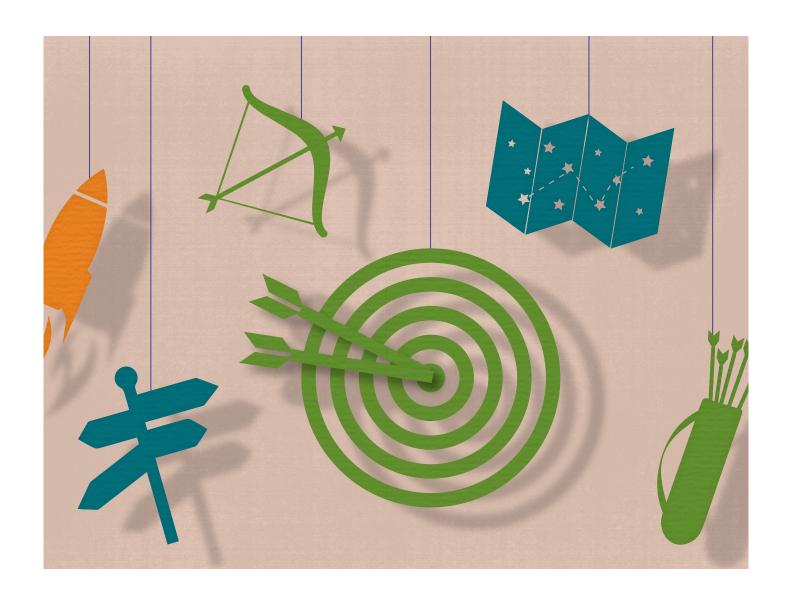
major carrier. Southwest had added more planes, routes, crews, and stations, but the way in which dispatchers approached network disruption hadn't caught up. Meanwhile, they were working harder than ever.

An SoD colleague, the late Mike Baker, had asked a similar question—he was just a little ahead of his time. He was convinced that there had to be a better way to leverage the dispatchers' years of experience, to learn from their past decisions, and make smarter routing decisions in the future. But without access to real-time data for decision analytics, the tool he envisioned was never operationalized.

Fast-forward five years. Now with access to abundant system-wide data, the powerful question for the SoDs was: How could they honor Mike Baker's legacy to make smarter routing choices and make a complicated job a whole lot easier? They formed a workgroup committed to addressing the very question that he had posed and named it in his honor. *Baker* is now mentioned hundreds of times a day throughout the organization, and his passion for championing smarter routing decisions will live

on throughout the next generation of SoDs. As one group member said, "When I first heard this idea, I thought it was science fiction—there was no way we could capture all of our knowledge, experience, and day-to-day decisions in a tool and put hard numbers to them and make us all better. Now we're on the brink of completely changing the game for airline network operations. As we make progress, it opens our eyes to what is possible."

Getting better, faster



Red Cross Regional Disaster Unit

A regional disaster response unit ups its game to help more people in need Getting better, faster

HE American Red Cross aims to provide disaster relief and emergency assistance to those in need. For over 135 years, the organization has been "helping neighbors down the street, across the country, and around the world." Operating a network of more than 600 chapters, the Red Cross relies on large numbers of volunteers to support its humanitarian relief efforts.

Since 2012, the Red Cross nationally has shifted from relying almost entirely on paid staff to managing a network of local volunteers with local chapters. In some regions, such as Central/Southern Illinois, this shift began earlier, in 2008, in part due to the influx of experienced volunteers who had joined the organization's efforts in the weeks and months following Hurricane Katrina in 2005 and who wanted to continue their relationship with the Red Cross. The organization credits this shift with helping the organization provide more effective assistance to more people, faster, and with amplifying its positive impact in the communities it serves.

The Red Cross's Regional Disaster Team (RDT)² of Central/Southern Illinois has redesigned its responses to a range of events, from multifamily fires and tornadoes to flooding events. It has also been a leader in developing and leveraging its volunteer network to support disaster response. Across everchanging circumstances, this workgroup has consistently helped more and more people per Red Cross employee across more events each year.³

The workgroup: Regional Disaster Team of Central/Southern Illinois

Local chapters and disaster units are often the most public face of the Red Cross, both for event response and recruiting and training volunteers. The RDT oversees a broad network of volunteers in Illinois, northeastern Missouri, and southeastern Iowa. The workgroup's primary responsibility is to respond to events within its geographic region, although staff and volunteers are frequently called to assist wherever help is needed, across the country

and throughout the world. Most recently, the organization deployed the workgroup to Florida and Puerto Rico following hurricanes Harvey and Irma.

The RDT meets our criteria for a workgroup:5

- **Size:** The RDT is made up of 10 staff members: four at the regional level and six assigned to specific chapters.
- Sustained involvement: Staff members are assigned to the RDT full time, filling roles that change depending on whether they are in-response or between responses. In a disaster response—what they refer to as "gray sky"—their job is to respond to the event. When not deployed, members are in standby, "blue sky" mode preparing for the next regional response. Members may spend some part of their time deployed apart from the workgroup to major responses in other regions, both to assist where there is a need and to develop additional skills.
- Integrated effort: During disaster response events, RDT members are working together, making decisions and carrying out activities that are interdependent and could not be accomplished individually. In between response events, although they are not all physically co-located, the members work together on preparedness as well as refining or developing their approaches, and training and developing volunteers and other resources.

This workgroup leads the delivery of the Red Cross' Disaster Cycle Services in the region, including preparedness, response, and recovery programs to 78 counties in a region of more than 3 million people. The incident types to which the group responds are diverse: tornadoes, floods, earthquakes, house fires (both single and multifamily), manmade disasters, and acts of terrorism. Over time, the scope of its work has only expanded, with every year outpacing the prior one in terms of both number of responses and number of people helped.

In the aftermath of a disaster, the RDT aims to be an essential, indispensable resource for those affected, and workgroup members tend to pride themselves on being there to answer the call. The organization provides (in order of priority) shelter, food, financial assistance, and information—reconnecting people who have been separated in disasters. It considers its efforts complete when a sense of normalcy has been reestablished—even if "normal" has been forever changed by the disaster.

No matter what type of disaster drives an RDT response, the group is committed to addressing basic human needs and helping as many people as possible, as quickly as possible. That means maximizing its impact with its available resources, in large part by first offering urgent short-term services, then linking people with ongoing support from other resources, institutions, and facilities that support long-term recovery.

A key aspect of the RDT's approach, and one on which members have increasingly focused over the years, involves using local volunteers, rather than by people brought in from the outside, as key members of any response effort. More and more people have volunteered over the past several years, and the RDT currently has around 800 disaster volunteers in the region. In fact, recruiting, onboarding, training, deploying, assigning, and otherwise supporting volunteers—in blue- or gray-sky situations—is a key part of the workgroup's efforts.

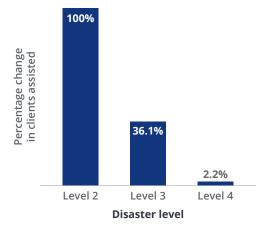
Initially, this volunteer-centric model was driven by several regional disasters combined with the fortunate legacy of having a good base of volunteers with experience from Katrina recovery efforts. Local volunteers are usually personally invested in their communities and have a solid understanding of what recovery or "normal" looks like and what a community might prioritize. On a tactical level, locals are more likely than others to know how to get around the affected area, where to get supplies, alternate routes, whom to call to get access to a church or school, and have firsthand knowledge of other resources that might be available to speed up and improve responsiveness. Over the years, the RDT has developed "career" or advancement models for volunteers so that those who want to learn and progress have opportunities for training and deployment. This has resulted in a base of volunteers with specialized skills, including some that

specialize in relief operations, that the workgroup can tap for input and assistance.

The results: Helping more people

The Red Cross categorizes every disaster-from apartment fires and winter storms to tornadoes and hurricanes—on a scale of 1 to 7, with 7 being the highest. Categorization is based on the budget required at the ground level and indicates both the complexity of the response and the resources required.6 In the Central/Southern Illinois region, the RDT has seen nothing larger than Level 5. Thanks largely to continually improving its approach both in responding to disasters and in developing capabilities in between disasters, the workgroup has been able to assist more people in need per employee, improving positive impact across all event categories—even complex Level 4 disasters. The improvement has been most notable across Level 2 events, where, thanks to the ability to deploy a broader range of volunteers, RDT was able to assist twice as many people per paid staffer in 2017 as it did in 2008.

Figure 1. RDT client impact measurements for Level 2-4 disasters, 2008-17



Source: Red Cross.

Deloitte Insights | deloitte.com/insights

What the numbers don't show clearly, though, is the quality of a response and any enduring impact that preparedness and development of local volunteers can have on a community. It isn't just about the total number of people helped-after a disaster event, the RDT is committed to helping all of the affected people faster and better, since time and elements of normalcy are key when one's life is disrupted. Regional disaster officer Alyssa Pollock says, "We're really proud that during this time as we've served more and more people in need, in more events, really leaning on our wonderful volunteers, that we believe we've been able to do this without diminishing the quality of our response." Although the group lacks sufficient data to measure it, the RDT is concerned with minimizing the "time to peak service" as a proxy for not reaching those most in need but being on the ground and reaching everyone affected.

Practices in play

In its work, the Red Cross's Regional Disaster Unit of Central/Southern Illinois uses six key, intersecting practices: Commit to a shared outcome, Maximize the potential for friction, Bias toward action, Seek new contexts, Prioritize performance, and Reflect more to learn faster.



COMMIT TO A SHARED OUTCOME

As an organization with a century-old history of responding to disasters,7 the Re committed to a shared outcomehelping people recover in the most effective way possible. One thing that's changed in recent years across the organization, is how that is achieved. Today, instead of bring

large teams of people from outside a disaster-struck area to strive toward a single theoretical goal, the nonprofit often brings in smaller teams of experts, then leverages local volunteers whose vision of the shared outcome is likely strongly connected to the locality and community.

Perhaps there's no greater sign of this commitment to a shared outcome than the workgroup shifting its entire organizational structure to respond to different disaster types. In most cases, this means RDT members taking on a wide range of roles—often humbler than their titles may indicate-in order to more effectively serve people in need.

Commitment to a shared goal means putting a priority on achieving that outcome-even when it means stepping out of the way to let others provide a solution. For example, in large-scale disasters that require food and shelter services, the RDT might turn to a local jail or prison that already has an established infrastructure to provide meals and laundry service. Or the workgroup might look to local fish and wildlife departments to assist in sheltering pets and other animals.

One theme that RDT workgroup members highlight time and again is the importance of having great relationships with partners. Instead of reinventing the wheel, they strive to quickly and easily leverage the capabilities of others to amplify their own response efforts so that a shared outcome can be achieved as soon as possible and with a higher level of service. In a large disaster response, for example, when other response agencies are involved, the RDT might focus on providing food and shelter, while the Federal Emergency Management Agency might offer financial assistance.

MAXIMIZE POTENTIAL FOR FRICTION

It may sound counterintuitive, but in many ways, maximizes the potential for friction every disaster response. To better respond to each incident it is called to, he workgroup employs two operating dels: blue-sky and gray-sky. Transing between these modes comes with all for friction, but it seems to make the nization more effective.

In standby mode, the RDT operates on the blue-sky model, with a set organizational structure and certain titles and responsibilities. During disaster response, it shifts to gray-sky mode, reshuffling the organizational hierarchy as needed, in a modified form of an incident command system. Staff roles and responsibilities can shift dramatically: For example, a staff member who specializes in tornado response would act as incident coordinator when a tornado strikes; when responding to a flood, she might be assigned a far lower-level task, such as distributing water. Regional specialization is also a factor. Someone who led a hurricane response effort in Florida might not lead a tornado response effort in central Illinois, since the disasters demand fundamentally different types of response.

Assigning staff of varied experience to different roles for different disasters-in essence, making roles context-dependent—can increase the potential for friction by switching up the relationships between members and removing a layer of authority or expertise they might have in other aspects of the job. This discomfort can cause tensions around how to approach problems or how tasks get done, but it can also bring in more perspectives and create a well-rounded and capable team of responders who are agile in their roles and relationships and adept at supporting each other. The members seem passionate about helping those in need over time as well as in the moment. They often embrace and even seek out opportunities to deploy in different roles, including out of region, as a way to learn more and develop new skills.

At the same time, the RDT workgroup is coordinating volunteers who often find themselves in different types of roles than they are accustomed to in their day jobs. The focus on training and developing volunteers has been a powerful force for attracting a certain type of volunteer with a passion to get better and better at making an impact and eager to gain experience and leadership opportunities. These volunteers typically bring in additional perspectives and knowledge, as well as a vested interest in the community, that can increase the potential for friction as well.

BIAS TOWARD ACTION

For the RDT, achieving results can be more important than sticking to process. The waims to never let organizational processes or structures get in the way of fulfilling its mission. The RDT empowers frontlin employees and volunteers to make critical decisions in a wide range of situations. With the guidance to always try to do the right thing for clients and avoid doing anything legal or immoral, the staff is trusted to mather right call in the moment.

When it comes to emergency response, it's often impossible to get 100 percent of the information needed to make a critical decision in the timeframe available. Take too much time to make a decision, even if it's a great one, and it may be too late to make a difference. In the aftermath of any disaster, for example, efficacy typically takes precedence over efficiency. The first priority is to provide food and shelter; if people are going to starve or die for lack of those things, delivering resources in a less than ideal way is better than delivering them later in a more efficient fashion.

Knowing this, the RDT builds risk tolerance into its decision-making process. Workgroup members use the 30/70 rule to help boost their decision-making velocity: Once you have 30 to 70 percent of all the information you need to make a decision, take action. Less than 30 percent of total information is considered too little to make an informed decision,

while waiting for more than 70 percent could take too long and render any decision moot. For example, with major winter storms, the group always gets a lot of stranded travelers, but a storm event might span all 78 counties, meaning that by the time members get more accurate information, it's too late to try to get resources everywhere they are needed. Members, then, talk with state patrol and use their own experience from previous storms to pre-stage people and supplies in likely areas in advance.

Another essential practice that biases the work-group toward action is fluidity, the ability to make decisions—and to reverse them. RDT leaders and volunteers know that the majority of their decisions are flexible and reversible, should they need to change course as the situation evolves. This is especially valuable for decisions made with little information; as clarity increases with time, staff can modify and adjust responses as needed. Team members don't want anyone to feel compelled to execute just for the sake of following through on a previous commitment—once a situation, or the understanding of it, changes, staffers are expected to change their response accordingly.

For the RDT, fluidity is most required when it comes to providing shelter. For example, depending on the anticipated size and scope of a major storm approaching a region, the workgroup may preemptively open up shelters to assist those in need. Since providing a shelter requires significant time, money, and resources, if the RDT opens a shelter and sees few people using it, staffers might move people to a hotel to avoid running an expensive operation at less than 25 percent capacity. Embracing and expecting fluidity in all decisions makes it possible to provide more personalized services—and ensures that the organization's resources are used effectively.

To privilege action over inaction, RDT employs a practice called "go until no": At smaller-scale events, for example, key frontline volunteers are empowered to act on the agency's behalf to assist those in need—without requirements to consult local office leadership. For example, when there's a single-family fire in the middle of the night and the Red Cross is called to provide assistance, it's typically a volun-

teer coordinator who handles the request from start to finish, responding to the scene and providing as much assistance as necessary. Leadership at headquarters merely learns of the response the following morning, as part of a daily briefing.

This kind of volunteer autonomy isn't put in place for large-scale disasters, or even some multi-home fires, but using it for small-scale events can help the organization enhance readiness for major events instead of routinely being pulled into minor incidents that qualified volunteers can handle. As incidents become more severe and affect a much larger area, one or more staffers trained in emergency management typically come in to manage the response.

PRIORITIZE PERFORMANCE TRAJECTORY

Red Cross's commitment to providing basic human needs drives the RDT to focus on mass care, to ensure that all clients have water and are fed and

sheltered. Only after that does the gr look to provide individualized servi such as financial support or assistar with finding long-term housing. Sin larly, the workgroup has to prioritiz both who it helps and where—not easy decisions when many are suf-

fering. As a guiding principle, the RDT prioritizes assisting areas that have been hit hardest and have the greatest need, rather than just assisting the greatest number of people in need. While this may seem intuitive, it often increases the complexity of the response, since such areas may lack running water or electricity and could be completely inaccessible due to flooding or damaged infrastructure.

SEEK NEW CONTEXTS

RDT members are constantly challenged to step outside their comfort zone—be one of region or experience. However, the also recognize that when people leaved their home region, they have an opportunity to discover new ways of working and being effective. Explains regional

disaster officer Alyssa Pollock, "Every disaster I learn something, and by deploying outside the region, I've learned quite a lot. I was able to see how things could work more effectively, even during our blue-sky, steady-state operations—things I wouldn't have otherwise known existed."

In exposing themselves to multiple contexts, staffers are able to see what's worked and what hasn't in each—approaches they may not have considered in their home state, from human resources processes to team leadership styles to tactics for sheltering survivors. This exposure can help them continuously improve Red Cross operations as they move forward. Explains Pollock, "A staffer might think, 'I've seen this service delivery work really well during my response to Alabama; we should try to implement something similar in our region' or, 'I liked the way they ran their meetings and kept people really engaged—we should try to do that."

Even when seeking new contexts isn't so straightforward, it can still yield results. One of the trends with which the RDT contends is a growing number of emotional support animals, which provide comfort for clients but can create issues with shelter partners, which often lack facilities for animal care and toileting. The solution: temporary kennels that give clients access to their animals in a controlled and appropriate environment.

And even as the team continues its learning, at the RDT every disaster has its own context. This attitude is reflected in one of the workgroup's mottos: "If you've seen one disaster, you've seen one disaster." It's just one hallmark of a culture of endless and continuous learning, in which all staff and volunteers are encouraged to broaden their experiences by either volunteering to assist with operations outside of their home region or expanding their repertoire of volunteerism with other agencies. Seeking outside context tends to challenge existing points of view, build experience, and surface new ideas and innovations.

REFLECT MORE TO LEARN FASTER

feedback into practice, prioritizing

the most actionable issues.

The RDT is committed to learning, and to the continual improvement of its people and organization. One method the workgroup employs is internal after-action reviews—for each response, discussing what went well and what could have been done better. Workgroup members seek out not only staff opinions and insights but feedback from clients and partners. The goal is to put that

In a recent after-action review following an RDT deployment to a large flooding incident, for example, one important piece of feedback was that home offices found it difficult to connect with anyone at the site, especially the event coordinators. The coordinators, dealing with an overwhelming degree of chaos, had to prioritize more pressing work. Meanwhile, members of the public were asking home offices for status updates on the response, and some wanted to help in the relief effort—but the home offices had no information for them. More importantly, they were unable to pass along valuable help to the coordinators.

In its after-action review, RDT leaders decided that in all future operations, the group would institute a chief-of-staff role; the chief would deploy to the disaster area with the relief operations director, serving as liaison with both home office operations and the coordinator. Less pressing issues could be addressed when conditions allowed. Implementing feedback from after-action reviews in such ways also puts into practice the idea that every team member has a voice and can enhance the effectiveness of the whole organization.

For the RDT, reflection doesn't happen solely after an event. Preparation and response plans for potential problems—"pre-mortems"—allow the group to provide support as quickly as possible in case of actual disasters. In August 2017, for example, tens of thousands of people traveled to southern Illinois

to view a solar eclipse. In the weeks leading up to the event, RDT leaders pre-planned for how a mass influx into the region could affect the group's operations and ability to respond should a natural disaster or other large incident occur. On a smaller scale, it also addressed the potential impact on its ability to find shelter for survivors of fire damage, given that local hotels were oversold. The RDT asked local shelters, such as churches and schools, to be ready to assist. Though all went smoothly, the preparations likely helped, both in the moment and in terms of ongoing learning. The workgroup can translate much of this into how it plans for stranded travelers, stands up shelters, and moves staff around in future major storm events.

At a national level, the Red Cross is also constantly gathering feedback and using reflection to support learning. For example, after multiregion disasters (such as the hurricanes and wildfires in fall 2017), the national headquarters has an independent team conduct detailed interviews with volunteers and employees who served in leadership roles during that response. They also use partner and client surveys with open-ended questions to gather

feedback from other stakeholders and distribute electronic surveys to every volunteer and employee who worked on the response. In the after-action reviews conducted after major responses, most of the conversation is qualitative in nature. Priorities for follow-up and action items are generated from these conversations and used to drive program improvements and improve internal coordination. The conversations and feedback are documented and discussed to improve services and internal coordination on the next response.

Looking at trends in its disaster response history, including both metrics and survey responses, the RDT found that every year has outpaced the year before, in terms of both number of responses and people helped. This information supports plans to enhance organizational readiness in areas including setting realistic expectations with partners so they know when and where food and shelter services are likely to be needed, ensuring the provision of needed training and accurate deployment of disaster experts, and modernizing technological infrastructure to better interact with clients via mobile devices.

Getting better, faster



The sparks & honey Culture briefing workgroup

Embracing a diverse world to sense and make sense of cultural signals

Getting better, faster

EW York-based sparks & honey (s&h) is a bigthinking cultural consultancy that aims to tackle global challenges using social and data sciences. Founded on the belief that humans alone cannot accomplish this mission, s&h has built an active learning system, called Q™, that brings together people and machines to make sense of the world in real time. The firm's *culture briefing* workgroup delivers the daily briefing at the heart of the s&h cultural intelligence system, helping to make sense of thousands of data points in near real time. The cultural insights generated by the briefings helped the consultancy achieve 70 percent annual revenue growth between 2014 and 2016 as the workgroup improved how s&h senses and makes sense of signals.¹

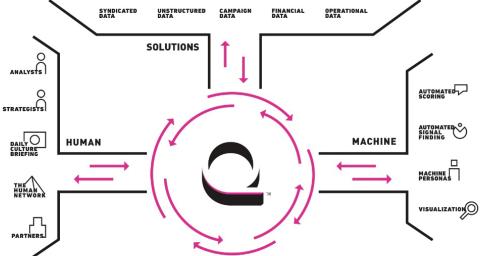
The firm looks to identify, name, and categorize shifts across culture before they become mainstream trends, then aims to help clients understand and shape them using a trend taxonomy. Broadly, sparks & honey takes the world as unstructured data, a mix of fast culture and slow culture: everything from a tweet, new semantics, viral video, to new

policy, academic research, patents filed, start-ups established, and VC deal flows. Through its daily report, the *culture briefing* workgroup gives structure to the data by tagging individual items ("signals") to the trend taxonomy and by applying scoring methodologies as they monitor trends over time.

The consultancy's "culture newsroom" operates 24/7, 365 days a year. The firm draws on a wide variety of thought leaders and cultural observers around the world² and applies a combination of proprietary methodologies, tools (see figure 1), algorithms, and human insights to provide cultural intelligence, data analytics, and strategies to a diverse range of organizations and brands. Organizations from McDonald's to DARPA³ work with the consultancy to uncover and act on these cultural shifts.⁴

"We translate culture into real-time opportunities for brands," says CEO Terry Young. "Some of those things are growing at a very fast velocity, and some of those things you should be aware of if you are going to continue to shape your organization two to three years out." 5

Figure 1. The daily culture briefing is central to the active learning system's human component



The Q[™] learning system works by: 1) making change visible through systematic identification; 2) scoring and tracking culture; 3) accelerating responsiveness to signals; 4) evolving faster to be more effective; 5) enabling, through the daily culture briefing, real-time knowledge creation, system calibration, and scalable collaboration.

Source: sparks & honey.

Deloitte Insights | deloitte.com/insights

Figure 2. The daily s&h culture briefing



Source: sparks & honey.

Deloitte Insights | deloitte.com/insights

With a mission to "open minds and create possibilities in the now, next and future for brands," s&h aims to be a filter for, and presenter of, ideas that influence and shape culture. Commenting on the consultancy's 2015 report on the emergence of a new language to describe the gender spectrum, for example, *The Advocate* noted that "within its marketing recommendations lies a thought bomb of radicalism that could truly change society." Other reports on mainstreaming marijuana, the influence of Gen X in middle age, and similar shifts reflect the firm's scope and ambition.

The workgroup: Culture briefing

At the heart of the firm's business, the culture briefing workgroup brings the consultancy's cultural intelligence to life and keeps client teams up to date on cultural trends. This group meets our criteria for a workgroup:

• **Size:** The core group includes seven members, including two co-briefers, two data scientists, a moderator, a human network connector who tags signals to specific advisers for more research or context, and an illustrator who creates visualizations of the workgroup's daily output.⁷

- Sustained involvement: Workgroup members spend the majority of each workday working together to curate, present, and analyze the signals discussed in the daily briefing.
- Integrated effort: Using the firm's bespoke active learning system, Q™, members mine trend data, devise research, monitor defined "signals," and curate the cultural briefing event for the entire s&h organization (located in New York, Los Angeles, San Francisco, and Chicago) as well as the global scouts and guests, including clients, who are attending live or watching the live stream. The group acts collaboratively in doing most of the work of selecting signals, pulling the presentation together, and analyzing briefing insights.

Each day, members comb through the database of "cultural signals"—anything from "a tweet, song, or meme that's spreading fast, to popular news articles, research papers and patent files, to changes in public policy or emerging tech"8—to review additions made in the past 24–48 hours, then choose around 30 items to present at that day's company-wide briefing. These signals—which can range from trends in consumption of insect protein to early signs of the "premiumization of air" and

Braille on clothing to a story about how dogs could be considered practice babies—are selected based on several factors. For example, does a particular signal have high energy? Does it help establish a pattern based on other, recently discussed signals? Does it introduce a new concept from the fringe of culture? Does it introduce or affirm a cultural tension (the coexistence of opposite trends)?

Not only does the workgroup curate signals—it seeks to present those signals in an engaging way that provokes broad and productive responses from participants beyond the workgroup. Members decide how to present the day's signals to be succinct yet evocative; visuals are often just as impactful as the language, often featuring images taken directly from the source data. The goal of both is to engage the minds of the broader consultancy, the global network of culture scouts and advisers, and any guests who have come to unpack cultural signals through discussion.

The consultancy relies on the noon briefing to fuel its client work. By exposing participants to ideas, data sources, and interests they might otherwise miss, the briefing helps counter personal or institutional biases. The format "allows us to extend our analysis across categories, time and space, to take multiple sources of unstructured data, immediately add structure, and then use real-time and cross-discipline discussions to quickly develop insights and identify patterns," says COO Paul Butler. "The briefing is also a forum to examine and monitor cultural tensions, a key methodology

in our process. We observe that opposing trends can manifest and move simultaneously in culture." The format is a way for the consultants to come together to identify and unpack various tensions. They then work with clients to identify how, when, and where they may lean into one or another side of a cultural tension.

In this case study, we consider practices at two levels: within the briefing workgroup itself and among the 50-plus participants in the daily briefing session. Because the larger s&h organization both relies on the output of the daily briefing and also participates in it, while the briefing workgroup creates the daily briefing and also participates in it, some practices are used both within the workgroup (in developing and preparing for the daily briefing) and in the briefing itself. Although we are primarily interested in what happens within the workgroup itself, in this case, it isn't always a clear distinction—and some practices are more visible in the context of the one-hour briefing even though the workgroup also uses them to do its work.

The results

As a workgroup output, *insights* may seem pretty nebulous. But the quality, timeliness, depth, breadth, and cultural relevance of those insights provided to clients—accompanied by thought leadership, analysis and strategies—are what generates revenue for the organization. The daily culture briefing—both through the insights it generates and the way it trains

CONNECTIONS PER SIGNAL

Given that the daily culture briefing is part of a larger intelligence system at s&h, the workgroup tracks the relationship, importance, and relevance between the signals discussed in the briefing and other parts of the system. For example, does a particular signal connect with other trends? Is it relevant to the work of our advisory board members or other parts of the human network? This metric helps the workgroup assess whether the briefings are effectively expanding the participants' thinking to better understand human behavior and values in a broader context and inform near-term campaigns and long-term strategies. The average number and diversity of connections made between topics are continuously tracked to maintain what the group feels to be the right balance between quantity and quality for optimal performance—ideally three to five connections per signal discussed during the briefing while still covering a breadth of signals.

the algorithms and the staff to recognize patterns and identify trends—is a key driver of s&h's ability to deliver the type of work that its clients value. The consultancy has enjoyed 70 percent year-over-year increases in revenue for the past three years, and leaders credit effective daily briefings for consultants' ability to deliver differentiated insights that drive that revenue growth. Over time, the culture briefing workgroup has developed a metric—connections per signal—that members feel has proven to be a useful indicator of briefing effectiveness.

The workgroup is core to the organization's strategy because better briefings lead to more expansive and impactful insights for clients. In a successful briefing, the group might raise comparisons of global markets as indicators of shifts in consumer behavior and human values and look for other indicators of how those shifts might affect businesses and brands across categories. For example, when the automated sensing system added a signal about a difference in luxury watch sales in the United States and China, it led to tracking a broader trend in perceptions of luxury that were beginning to diverge in the two countries.

Practices in play



The culture briefing workgroup exemplifies six intersecting practices: *Commit to a shared outcome, Seek new contexts, Maximize potential for friction, Cultivate friction, Eliminate unproductive friction, and Reflect more to learn faster.*

COMMIT TO A SHARED OUTCOME

The workgroup members seek to create an engaging, provocative, and productive briefing each

day to make sense of the latest culture mined from across the spectra of life, the Internet, and a human network of contributors from around the globe. The noon briefings gather the entire staff for an hour each Typically, the pace is fast, the discussions of the latest culture mined to the spectra of the



deceptively disciplined, and the topics covered can range from funny to serious, trivial to earthshaking. The briefing serves as a space for the consultancy as a whole to sense (and make sense of) a wide range of seemingly disparate trends, but it is also a laboratory of sorts, a place where interesting ideas and innovation can emerge.

The culture briefings are considered central to what sparks & honey offers to clients, and as many clients attend the briefings, it can sometimes be difficult to separate the outcomes—the insights, content, and actions—from the practices that generate the insights. The workgroup's practices are designed to get better and better at effectively surfacing cultural signals that can be used to make predictions and generate actionable insights and strategies.

Part of the group's commitment to an engaging, effective, and productive briefing is to get through all of the signals they have chosen to highlight in the one-hour session. In addition to maintaining a certain volume of signals, they also consider their impact on the outcome as a combination of factors:

Discovery of new: Have we exposed and stretched ourselves and our clients to new ideas that can lead us on a path of transformation?

Discussion and discovery of the fringe: We believe that what is happening on the edge of culture

is relevant and may be where the future of a business or category may go.

SEEK NEW CONTEXTS

All of the s&h staff, as well as the extended global network of advisers and scouts who move through a variety of contexts, are constantly logging and tagging cultural signals into the proprietary database that is part of Q^{TM} , as they encounter them.

It personas—across a spectrum rs, races, political views, ethnicirests, employment, education, age, Id composition, and geographies—items to provide additional lenses on culture. The briefing workgroup I the material that has been logged in the database as an emerging trend signal each day, curating it for the

daily briefing. While the group has no set goal for the number of cultural signals to tag each day, the group is continuously seeking to include and analyze signals drawn from a range of contexts to stay connected to the edges of cultural change, and to help understand and validate trends.

For example, the workgroup might deliberately choose to highlight a story about a Midwestern drone facility, connecting it to ways in which the urban airspace is changing. The group, sometimes with clients, will conduct culture treks-live explorations of cultural experiences and events—as a way to share and gather intelligence. In another example of seeking context, the co-briefers attended a DJ school in New York to learn about curation and presentation from professional DJs. The workgroup recognized the unique demands of the briefing format, balancing an open discussion in a forum that requires structure and order to be effective, and saw direct parallels between that and working as a DJ-threading together individual, seemingly unrelated elements into a coherent whole within a fixed amount of time; managing the energy of a diverse crowd of knowns and unknowns; presentation and performative aspects; and a need to maintain and achieve a certain cadence to make an impact.

For work that is highly conceptual, there's also a crucial hands-on component. Tracking and observing trends from behind a screen, it turns out, is often insufficient. When one client wanted to know more about camel milk consumption, the briefing workgroup spent time drinking it, going deeper into context, and getting their own unvarnished truth, since—members agreed—blogs and Instagram pictures could not convey the unique experience of drinking the milk. Members also looked at the different kinds of "milk" that have trended in the United States and in other cultures over the years, how long each trend lasted, and which milks found a lasting foothold in the marketplace.

MAXIMIZE POTENTIAL FOR FRICTION

While the core roles in the briefing workgroup are relatively stable, others are purposefully rotated Two to three staffers, each represe ferent s&h client, join as adjunct n bers of the workgroup for a few day a time. These rotating members f the client teams bring new energ skill sets, and perspectives-alon with a client-specific lens—that c the way the workgroup curates, interprets, and presents signals, as well as how it prepares for and facilitates the briefing. The rotating members inject some discomfort and new friction into the group's daily work. This can lead to new approaches to selecting the signals or new ways of grouping and presenting them to elicit different responses. For example, a rotating member who represented a beauty client team might know that the client is particularly interested in trends in the 60-plus market and challenge the group to consider longevity in selecting signals. The core members provide a level of continuity, but the rotating members challenge them to avoid the routine with fresh ideas and new client issues.

For the actual daily briefing, the workgroup convenes a diverse array of participants—including global scouts, advisers, clients, and other interested members of the public—as part of s&h's "open consultancy" concept. The group has even begun livestreaming some of its daily briefings on Facebook, further expanding the range of participants, although it is still experimenting with how best to interact with an open, online audience. The open consultancy has a deliberate business purpose: inspiring productive debate and meaningful discourse with each other and the outside world. By inviting a collection of outsiders into the briefing discussion, the workgroup increases the potential for disagreement and divergent perspectives and new ways of interpreting the signals. Importantly, this can increase the number and depth of the links members can make between signals, since unexpected input may well surface hidden connections, adding real depth and value to insights.

CULTIVATE FRICTION

In each daily session, the workgroup brings in someone from outside the workgroup to serve as co-briefer. The rotation lets others in the organiza-

kgroup to get fresh perspectives on the kgroup to get fresh perspectives on the esentation. For example, one co-brief, a self-described introvert, challenged bias toward fast, energetic, nonstop changes by introducing deliberate eriods of silence. Now the workgroup uilds silence into work sessions and

briefings to encourage people to focus on what's being said more than on preparing to speak. Structuring silence—building it into the approach—has had the effect of making the interactions less about personal reactions and more about signals and ideas. It has helped shift the briefings away from presentations by people immersed in trends and toward soliciting insights and responses to those trends.

Finally, the workgroup makes it a rule to change the rules regularly—hosting experimental briefings that use new approaches and mediums of exchange on the first Friday of each month. By shaking up the routine, these experiments are designed to force participants out of their comfort zone, which tends to create friction for the group

and also for the organization. The members pay attention to whether the friction surfaces insights in new or more meaningful ways or leads to more effective or productive briefings. For example, in one briefing, they used the theme "think like a criminal" as an experiment, with the goal to develop insights beyond norms of "acceptable" (or legal) behavior and values, as a way to stretch the group's thinking to develop new innovations for security and privacy, new content mash-ups, or other future product ideas. That experiment stuck, and members now regularly use that theme as a framework to challenge preconceived notions or to innovate.

Another example is the workgroup's introduction of *special edition briefings*, designed to shake up the dynamic and to bring more outside perspectives into the briefing environment. In these sessions, the group invites external experts from a specific vertical, rather than s&h staffers, to discuss signals and trends. These sessions take on a slightly different personality, since guests are less primed to respond to implicit cues and the accepted practices of the daily briefings.

It is one thing to convene diverse participants, another to draw out those participants' divergent perspectives and challenges. One way members do this is to encourage participation from a scout or a guest (given that most of the guests are invited by someone within s&h who knows something of their background) when they feel someone may have a different point of view on an issue. The workgroup introduced the role of a moderator in briefings, in part to prompt and stimulate dialogue around the table, between all participants. The moderator's role was to introduce questions, not back to the co-briefers but to other workgroup members, or directly to guests with knowledge or experience of a topic. That small shift helped reorient the room and achieve a more roundtable-style discussion.

For all that s&h embraces diversity, there are common biases still at play—for instance, all of the workgroup members reside in New York. Rather than fight these constraints, the group defines them in a methodical way, under the theory that exposure and analysis can reduce associated blind spots. All

members make explicit their own areas of interest and exposure and try to be transparent about the way these influence their attention and lenses. Each person is expected to add a unique perceptual flair. The workgroup uses the briefing as a tool to continuously expose and explore its own blind spots, and to break its own algorithms to support a broader exploration and engagement in culture. Acknowledging the inevitable biases in an open and nonjudgmental way makes it possible in the daily briefings to complement and counterbalance the perceptions of employees with external participants known to have contrasting backgrounds and biases.

ELIMINATE UNPRODUCTIVE FRICTION

It's easy for the line between thought-provoking experience and frustrating conflict to blur. For an organization that derives so much value from leaging perspectives from across a erse human network, managing the unproductive friction that arises is crucial. Interpersonal conflict, haming, judgment, and lack of rect can quickly change the environment, making workgroup members less willing to offer, or challenge, divergent ideas or perspectives.

Outside of the briefings, in signal selection, the group tends to favor creating space for more possible perspectives in the briefing by including a particular signal if a member feels strongly about it rather than debate its inclusion. The results in terms of comments, connections, and client tags for that signal can be evaluated afterward and inform signal selection for the next briefing. This builds trust within the workgroup because members all agree to the objective evaluation of the chosen signals in the after-action reflection. Objective data and a common methodology and language for how they categorize and evaluate signals-baked into s&h's active learning system—helps to dispel potentially unproductive friction that can come from differences of opinion about whether a particular signal is interesting enough for the briefing.

To help mitigate and dispel any potentially unproductive interactions that could drain energy and trust, the briefing workgroup encourages a vocabulary that is more constructive than confrontational, with phrasing drawn from tested nonviolent communication strategies, designed to help all parties and perspectives get heard. For example:

- "I see where you're coming from, though I think it's also interesting to consider..."
- "Yes, that makes sense. I want to build on that thought..."
- "To provide a converse perspective . . . "

In the daily briefing, unproductive frictionsuch as shaming or judgment-can make participants feel unsafe or unwelcome and less willing to participate openly. The constructive vocabulary has become even more important in the briefings. For example, in a discussion of a signal about an app to help professionals decide whether they should speak up in a meeting, two participants firmly disagreed about whether it was a positive indicator of the trend in "powerful women." A third participant broke the polarizing dynamic by expanding the discussion, saying, "I see where you're both coming from, though I'd like to also consider it through the lens of culture . . . " This opened the discussion back up so that members could look for additional connections and interpretations rather than getting stuck in a standoff.

The workgroup also tries to reduce unproductive friction by encouraging the use of nonverbal cues that indicate approval or disagreement, and by allowing quiet one-on-one side conversations so that participants can surface reactions in the moment without interrupting the group as a whole.

It's no accident that the daily briefing is scheduled at noon, a time when many feel their energy flagging. Many participants find the event so thought-provoking that it provides an energy boost that can carry them through the rest of the afternoon. Notably, the workgroup facilitators work to create "a comfort level with being uncomfortable," as director of human networks Annalie Killian puts it, in the belief that wrestling with new ideas requires some level of discomfort.

REFLECT MORE TO LEARN FASTER

In between planning and hosting the daily briefings, workgroup members take time to reflect on the briefings as well as on how effectively the consultance is deriving insights from the briefings.

> They also reflect on any new thinking they have about where signals fit within the consultancy's cultural taxonomy. Every week, they review the week-over-week changes

in the briefings and ask key questions: Did we get the most out of our discussion of any new trend or previously uncovered trend? Has a particular key trend changed in ways that are meaningful?

The occasional livestreamed briefings, recorded and made available on social media, have given the workgroup much more information to reflect on and use to tweak and recalibrate. The recordings have been particularly useful input for presenters to replay and review their own performance, compare to tracking metrics, and self-correct to improve the speed, clarity, and set-up of dialogue per signal, as well as how they manage and moderate the conversations. They also get additional perspective on the level of engagement and participation on the signals that might not be apparent while in the midst of running the briefing. The workgroup takes as input the usual metrics of online audience engagement and activity and is experimenting with getting the online audience to provide input and validate or score signals discussed during the live briefings.

In the daily briefings, the aim is to cover as much ground as possible, while unpacking as many unexpected and uncommon insights as possible along the way. Given this challenge, the workgroup has developed two metrics to track as leading indicators to the number and diversity of connections made over the course of a briefing, which is the key indicator of briefing effectiveness. The group is constantly assessing the balance between these two metrics:

Comments per signal. The workgroup uses the number of comments made when a signal is being discussed to assess whether members are going too deep, which prevents the briefing from covering other valuable signals or, conversely, not getting beneath the surface, which prevents identifying patterns or uncovering new ideas. The number of comments also indicates whether participants found the signal provocative, which is related to how much depth and nuance there was to unpack—and how much potential value that signal might offer to clients. Clients will likely derive less value from signals or insights that are straightforward or superficial.

Time spent per signal. The average time participants spend discussing any one signal is another indicator that helps the workgroup balance breadth and depth in the briefings.

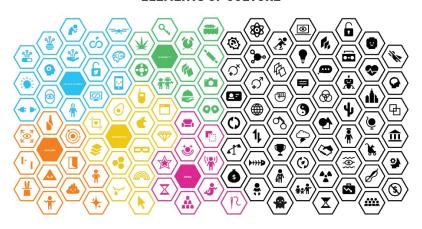
As a result of reflecting on the metrics and discussing specific briefings, the workgroup has developed practices designed to make the briefings more engaging and productive. For example, over the course of a briefing, each cultural signal under discussion is paired with another into "builds" that move the conversation forward. The group has found that two to three signals per build help to maintain optimum momentum.

Beyond discussion of individual signals, the workgroup spends time making connections between and among signals to identify emerging cultural intersections. Pattern recognition involves using five meta-categories—technology and science, humanity, ideology, aesthetics, and media—as well as tracking how trends evolve over time. Members wishing to work with insights arising from a briefing write them on sticky notes, then cluster them next to other signals with which they may identify a connection. If a pattern becomes stronger and its clusters grow large enough, it is defined as an "element of culture" (see figure 3).

All of these predictions are augmented and amplified by a set of constantly refined algorithms, which together indicate the impact of any given trend by measuring the interaction of three factors: *energy*, *prediction*, and *reach*. Energy is a measure

Figure 3. sparks & honey uses a taxonomy of trends called the Elements of Culture™ to organize signals; all trends fall into five major categories

ELEMENTS OF CULTURE



Source: sparks & honey.

Deloitte Insights | deloitte.com/insights

of how fast a particular signal is moving through the culture. Prediction is an estimation of how long the trend in which that signal is embodied may remain relevant and/or evolve over time. Reach is a measure of how many people the trend is currently affecting, or is forecast to affect over time.

The combination of these three measures defines and shapes where a signal sits in the s&h trend taxonomy—and helps define the related trend as micro, macro, or mega. The consultancy's proprietary scoring methodology determines whether a trend moves from micro to macro, or from macro to mega, where reach, persistence, and energy define the classification. One example is the rise of yoga pants as mainstream fashion. What first emerged, beyond yoga, as easy attire for active moms eventually appeared as products from luxury fashion designers; in one briefing, s&h accurately predicted that this popularity across many levels would lead to a decline in denim jeans purchases the following year.

The measurement process also provides an opportunity to isolate and compare dimensions of each trend to determine, for example, if one is on the verge of combining with another. Micro trends typically have higher energy, while macro ones have greater prediction and reach.

Getting better, faster



Royal Caribbean Cruises Ltd.'s Newbuilding & Innovation workgroup

Designing and building new possibilities

Getting better, faster

OYAL Caribbean Cruises Ltd. (RCL) is a global cruise vacation company that owns and operates three brands—Royal Caribbean International, Celebrity Cruises, and Azamara Club Cruises—and has ownership in three others: TUI Cruises, Pullmantur, and SkySea Cruises. These brands operate a combined total of 49 ships, with an additional 12 on order. They operate diverse itineraries that call on more than 535 destinations on all seven continents.¹

RCL's success hinges on ships that are essentially floating cities. At 1,187 feet long (164 feet longer than the Eiffel Tower is tall), the flagship *Harmony of the Seas* boasts 23 pools, 18 decks, and a "Central Park" planted with 10,000 plants and 50 trees.² Built with more than 9 million parts that require over 150,000 individual assembly tasks, such a ship at RCL can progress from CAD design to a revenue-generating vessel in only three years.

Building typically begins when a ship's design is only 30 percent complete. Aside from a few key structural elements, such as steel columns, every part of an RCL ship can be modified well into the build. From space-maximization techniques to guest traffic flow patterns, every detail is tested using 3D modeling, virtual reality (VR), and physical models until the final ship takes shape. Designing and building in tandem allows designers and engineers to collaborate intensely, pushing the boundaries of what is possible in ship design—with the ultimate goal of creating the best possible cruise experience for guests.

The workgroup: Newbuilding & Innovation

RCL's Newbuilding & Innovation workgroup—led by executive VP Harri Kulovaara, and composed of architectural designers, architects, naval architects, technical experts, financial specialists, and program and project managers—is tasked with pushing the edge in ship design as RCL expands its fleet. It strives to create ships that set new industry standards and help define the RCL experience for the next three decades of customers.³

Newbuilding & Innovation meets our key criteria for a frontline workgroup:

- Size: For the recent Project Edge,⁴ the group (excluding the leadership team) had 12 RCL employees, five design consultants, and brought in members from 12 major architecture/design firms.
- Sustained involvement: The 12 core members are fully dedicated to the workgroup. All internal and external design consultants and architects are considered key extensions of the group. Consultants are contracted for 100 percent of their time, and external architecture/design representatives spend 60–75 percent of their time on the project.
- Integrated effort: The magnitude of the project, short timelines, and concurrent design and build approach requires a collaborative effort.
 All elements of the ship must work together and

Figure 1. The workgroup on site





Left: View of interior balconies and Central Park on Symphony of the Seas, under construction. Right: Workgroup members experience potential new features in the VR cave.

Source: Royal Caribbean Cruises Ltd.

Deloitte Insights | deloitte.com/insights

are interdependent, shaped, and refined collectively to achieve cutting-edge design and innovations. The final output is a product of the entire workgroup. The group leverages the functional diversity of its members to work closely with a vast extended network to bring in a broad array of perspectives from across the value chain.

The Newbuilding & Innovation workgroup focuses every day on pushing the envelope of what's possible when it comes to new ship design. Members look for innovative offerings that they can embed into their guest experience, largely in the form of structural design elements that would take their ships to the next level. For example, for the newest ship, the Celebrity *Edge*, the group developed the Magic Carpet, a "floating" café/bar that moves guests along the exterior of the ship without having to take elevators or walk across the ship.

The ships and their features are generally an important driver of guest satisfaction, and RCL's leaders regard the Newbuilding & Innovation workgroup as key to the company's future.

66 It's about having the same vision—being able to look around the room and say that together we're going to build the most innovative and guest-centric ship that the world's ever seen.

—Harri Kulovaara,executive VP of maritime

The results: Guest accolades for innovative design

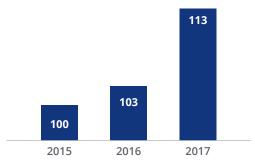
The workgroup tends to live up to its name, generating ship design that the industry has recognized as striking and innovative. Travel industry reviewers have given RCL numerous awards,⁵ and its revenues have grown consistently for the past three

years. "There's an intense amount of emphasis on guest satisfaction that is attributed to design, even if subconsciously," explains Diane Stratton, Newbuilding director of architectural design.

Members have also successfully pushed boundaries with the ships they design. For example, through their innovations, the ships have gotten larger, as measured by gross register tonnage and the number of staterooms. In 2016, the 227,000-ton *Harmony of the Seas* was the largest cruise ship ever launched—47 percent bigger than the largest ship a decade earlier.⁶ (The slightly larger *Symphony of the Seas* is scheduled to take its maiden voyage in March 2018.⁷)

The company's guest satisfaction measurements are at an all-time high. Its net promoter score—a measure of customer willingness to recommend the brand—has showed accelerating improvement, increasing by 3 percent from 2015 to 2016 and by 11 percent from 2016 to 2017 (see figure 2).8 RCL's focus on overall guest experience also seems to have paid off in positive feedback. In 2017, guests rated their overall experience an average score of 87.4 out of a possible 100. Over the past three years, this guest rating has trended upward, showing double the rate of improvement from 2016 to 2017 as from 2015 to 2016 (see figure 3).9

Figure 2. Customer recommendations on the rise



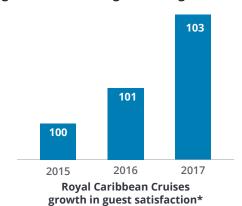
Royal Caribbean Cruises growth in net promoter score (NPS)*

*NPS was first indexed to 2015 to highlight the year-over-year trajectory of NPF improvement.

Source: Royal Caribbean.

Deloitte Insights | deloitte.com/insights

Figure 3. Guest ratings are rising



*Overall vacation experience score was indexed to 2015 to highlight year-over-year trajectory

Source: Royal Caribbean.

Deloitte Insights | deloitte.com/insights

Practices in play

The Newbuilding & Innovation workgroup uses five intersecting practices: *Commit to a shared outcome, Seek new contexts, Maximize potential for friction, Cultivate friction,* and *Bias toward action.*



COMMIT TO A SHARED OUTCOME

The Newbuilding & Innovation workgroup is committed to what RCL VP Kevin Douglas calls "operating on the edge of what's possible." Practically, that translates into a shared commitment to create the best possible experience for guests and cre through innovative ship design. 'o' shared outcome guides every decising group makes and helps to frame its actions.



Unlike a hotel, where travelers might begin and end their day, a cruise ship is both where guests stay and where they vacation (when they're not at a port of call). In this context, every aspect of the ship—the transition from one space to another, the transformation of spaces, and the available experiences and activities—can mean the difference between a guest who feels confined and bored and one who feels free and delighted.

While the commitment to leading-edge ships and providing the best possible experience for guests and crew manifests across the organization, the Newbuilding & Innovation workgroup's shared commitment is to innovative design as a means of dramatically improving that experience. The workgroup names projects for the ships they're building

to help maintain that focus and constantly remind themselves of the shared outcome.

MAXIMIZE POTENTIAL FOR FRICTION

oup attracts, and actively recruits, a ticular type of RCL employee: "dreamers who are also drivers." Passion and growth mind-set are qualities they because members need to challenge and collectively push boundaries to ovation in ship design.

ooking for candidates who want to grow and develop with us," Kulovaara says. "To work in an environment where they'll be challenged to take things to the next level, where there's an opportunity for their voices to be heard."

To help push members' thinking, the workgroup also looks outside, aiming to bring in outside perspectives from others along the value chain, such as shipyard builders, as well as others at the forefront of fields not directly connected to the cruise industry, such as the airline industry, performing arts, culinary, casinos, or beyond. Members have learned that outside partners with whom they engage also need to have an orientation toward being challenged and learning from others. The approach creates a virtuous cycle, with partners seeking out RCL because they're excited to learn new things and work together to develop them into realities. Meanwhile, engaging with external perspectives tends to help the entire workgroup learn faster. Partnering with industry leaders, designers, and consultants in various geographical locations and time zones across the world can pose challenges, but the group credits combining these talents and skills as core to their evolution and success.

SEEK NEW CONTEXTS

Newbuilding & Innovation workgroup members are constantly expanding their influences to gather inspiration for new ship designs. They spend a significant amount of time in new and stimulating environments, both within and outside the cruise industry. They also bring in designers a of design backgrounds, as well as further trend forecasters, who challenge more think their assumptions and expanses of the possible. Another key a this relentless pursuit of new control brand-oriented sessions in which members, including executives, are in to take part in think tanks organin-depth discussions and problem-solving.

For inspiration on assembly practices, for example, group members have turned to engineers in the auto industry. For cabin design inspiration, they've tapped the work of airline designers who deal with even more confined spaces—and developed a set of intriguingly curved stateroom interiors inspired by how airlines design premium cabins.

The workgroup also explores new contexts in its own environment, reorganizing workspaces to encourage cross-pollination among project managers, designers, and financial analysts. The result is increased collaboration and new avenues for interaction outside functional roles. Last, the group seeks "outside contexts" on its own doorstep: Whenever a ship is dry-docked for repairs or upgrades, a delegation from the workgroup lives aboard the ship 24/7, so members can experience all changes firsthand.

CULTIVATE FRICTION

To avoid replicating the status quo and to create the best possible experience for guests and crew, the Newbuilding & Innovation workgroup overtly

encourages openness and honesty, for et one from the group leader to summer in terns. To create a feeling of safety, members take the approach during ideation that no idea is a bad one. They marry this with open dialogue about the ideas and with a culture and expectation of actively engaging with and challenging ideas.

Sometimes even the oddest suggestions inspire others to look at the problems in a different manner, ultimately leading the workgroup to a solution. Members are encouraged to express disagreement early and often, but the focus remains on the design and the guest experience, not on the individual.

Given the group's many tight deadlines and global operations (not to mention multiple time zones, cultural differences, and vacation schedules), it's an ongoing challenge to simultaneously give everyone a voice, ensure alignment, and discourage work from being done piecemeal. One tool for addressing these issues and generating productive friction is to hold charrettes-intense periods of collaborative design rooted in the culture of architecture. In a charrette, all workgroup members gather in a conference room at headquarters until they've made sufficient progress. These sessions can last upward of two weeks, although the group has found three to four days to be the optimal duration to balance efficacy, creativity, innovation, and collaboration. The all-hands meetings and design sessions are intense but productive. The first day actually begins with some confusion as creative minds come together and friction starts to develop. The second day is generally when the momentum in the brainstorming and problem-solving process gets into gear as more perspectives come out and members really begin to build on each other's thinking. The final day is when the great ideas start to take shape and solutions become clear.

Workgroup members report that bringing everyone together in this way increases transparency, boosts collaboration, and heightens members' sense of ownership, while giving everyone a sense of the larger project landscape. In a charrette, every participant has greater visibility into what's been done, where the issues are, and where things are headed. Being in the same room also makes it easier to have candid conversations, voice disagreements, and challenge each other's ideas.

VP Kevin Douglas explains, "We got more done in those two weeks, working shoulder to shoulder, than we could have possibly completed in two months from afar." Hosting several such gatherings each year has helped increase the group's productivity, removed silos, and supported collaborative, interdependent efforts rather than isolated work.

For workgroup members, charrettes have become an increasingly important means of taking ship design to the next level. They aren't always fun—in fact, they're often exhausting—but everyone involved agrees that they generate a friction that allows participants to push the edge productively.

BIAS TOWARD ACTION

The Newbuilding & Innovation workgroup has created a culture of action in numerous we start building a ship as soon as 30 perce of the total design is complete. Indee there's no such thing as a 100 percent nalized blueprint; Members are constant improvising and experimenting. The cocurrent-design approach, in contrast to the sequential, multiyear process of tradition shipbuilding, is designed to ensure that the guests of the resulting ship would get

experience the latest innovations and technologies, not the best thinking from four years ago.

Group members go into each project acknowledging that the industry is dynamic and that things tend to change based on the competition, economic environment, and customer value trends—whether it's a newly available high-tech material or a designer's great idea that leads them to scrap an already-built component. Members treat these developments as opportunities and monitor them closely with the brands and shipyards to attain reliable and accurate information for vessel forecast, capitalization, and finance. The group budgets for significant changes to materialize. As Kelly Gonzalez, VP of design, explains, "This bestows permission to experiment, exploring new directions at any point in the processalways in the interest of the ship and the customer." Although trial and experimentation are encouraged in order to deliver the best guest experience, the teams follow a rigorous risk-assessment process by conducting chief engineer and design reviews as well as consulting with third-party specialists.

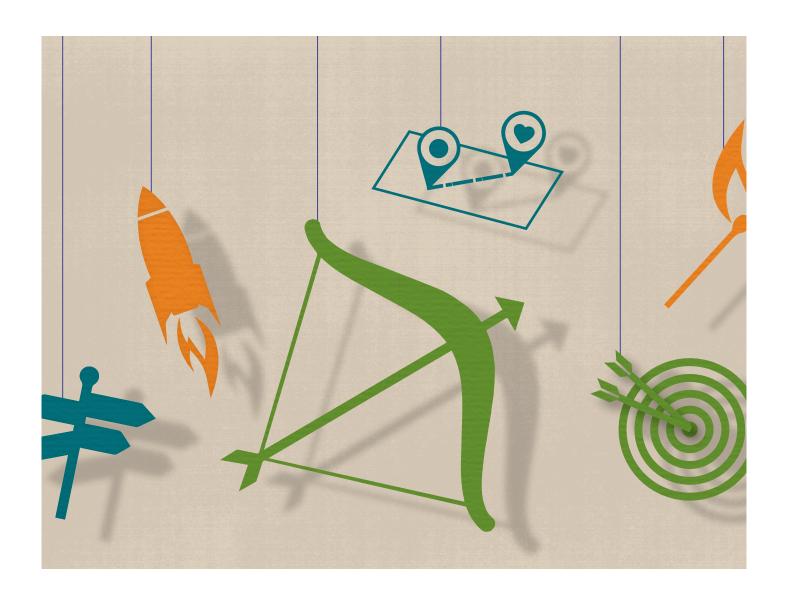
Throughout the process, the workgroup trusts and empowers both designers and builders to act

in the best interest of the shared outcome in order to prevent delays caused by seeking unnecessary approvals. On such a massive and complex project, there are many ways things can go awry. Within the group, however, members encourage a culture of being open and transparent about how activities are progressing. There's no shame in admitting something isn't working, then asking for help or convening members to consider how to approach a problem differently as well as whether the failure holds useful learning for other aspects of the project. Communication and the commitment to a shared outcome of groundbreaking design and maximizing guest experience, as well as a shortened time frame, can help group members seize opportunities using sound judgment and overcome any tendency to hide or minimize experiments that don't work as expected.11

The workgroup has found multiple ways to maximize action and risk-taking while minimizing the risks normally associated with rapid action. Extensive use of computer modeling and virtual reality supports simulation of thousands of solutions in only a few hours; VR also supports firsthand experience of the effect of individual design choices on a ship's overall look and feel. The resulting radical reduction of time and resources can allow members to identify risks much earlier in the process and avoid overcommitment to sunk costs on experiments. The ability to maximize action while minimizing risks has been key for the workgroup's efforts to design innovative and sophisticated ships that can host thousands of guests' memorable vacations.

Royal Caribbean Cruises Ltd.'s Newbuilding & Innovation workgroup

Getting better, faster



Southwest Airlines: Field Tech workgroup

Fixing the problems no one else can to keep an airline flying high

Getting better, faster

OUTHWEST Airlines (SWA), based in Dallas, operates more than 4,100 flights daily to more than 100 destinations. The nation's largest carrier in terms of originating domestic passengers boarded, SWA prides itself on quick turns at the gate from the time of arrival to time of departure. The Field Techs, an elite group of technicians, take on the toughest mechanical challenges, fixing aircraft and getting them back in the air to keep more flights, and customers, on schedule.¹

Essential to Southwest's overall success is its nerve center, the Network Operations Control (NOC). It's home to two workgroups whose methods and behind-the-scenes innovations seem to have greatly improved the experience of those who fly Southwest—and given a sustained boost to the airline's performance. As a complement to the Baker workgroup, which aims to improve decision-making around unanticipated operational and weather-related events, the Field Tech workgroup is a specialized unit of aircraft mechanics. Members try to fix what no one else can—and manage to keep nearly the entire Southwest fleet ready for takeoff at all times.

The workgroup: Field Techs

The workgroup is tasked with identifying and resolving mechanical, electrical, and other issues

that no other maintenance unit can fix, including problems no one can recall seeing before. The Field Techs repair planes after mechanics in maintenance units have failed to fix them after three attempts.

- Size: The Field Tech workgroup comprises 14 employees working at 10 airports, or nodes, in Southwest's network.
- Sustained involvement: Field Techs are assigned to the workgroup full time. They spend their days fixing issues on aircraft and leveraging the resources of local maintenance crews, as well as working with other Field Techs to help troubleshoot and resolve issues on planes at other sites.
- Integrated effort: Although its members are geographically distributed and there may be only one Field Tech physically with any given plane, they are often in contact with each other throughout the day. Around 25 percent of the aircraft the workgroup touches each day require the Field Techs to work collaboratively, and often interdependently, to develop solutions to new and challenging problems. Much of this is done using audio and video chat, as well as logs, allowing members to build upon each other's skills, insights, and ideas to get planes back in service.

Think about this: Every single issue the Field Tech workgroup faces is an exception to the rule.

Figure 1. On the ground in Dallas





Members of the Center for the Edge team (Andrew de Maar and Ryan Gatti) on a midnight shift with Dallas Field Tech Mike Perna.

Source: Southwest Airlines.

Deloitte Insights | deloitte.com/insights

Its success in resolving such issues, and preventing their recurrence, is key to getting disabled aircraft back into service as quickly and safely as possible. Thanks in part to members' distribution across time zones, the workgroup operates 24/7. In an eighthour shift, a single technician might work on 12 different planes, both at his node and remotely.

While Southwest's fleet consists of only one type of aircraft, the Boeing 737, each jet has its quirks. A plane's personality is determined by factors including age, the environments in which it's flown (harsh winters in Chicago, scorching heat in Phoenix), and how particular pilots fly it (former military pilots prefer to take off at higher speeds). Like a doctor who knows her patients, a Field Tech knows his planes. Even Boeing will occasionally tap the workgroup's expertise when facing an unfamiliar problem with a 737, knowing the breadth and depth of members' experience.

Every day, the Field Techs show up to work with a clear sense of purpose: fixing the seemingly unfixable, and keeping the fleet ready for takeoff. "I won't say there's nothing that we can't solve," says Field Tech John Strickland, "but we've got a pretty good shot that we'll be able to fix it. Knock on wood: We've never flown a plane into somewhere we haven't been able to get it out."

The results: Increased aircraft uptime

The drive for continuous improvement is part of Southwest's culture. The Field Tech workgroup members are doing better over time; they know it because they track key metrics, including the number of aircraft out of service for unscheduled maintenance and the fleet's daily on-time performance. These metrics give the Field Techs a genuine picture of the fleet's status and allow the workgroup to direct resources appropriately.

If a plane has three recurring defects in 15 days, its status is changed to "on alert." Too many aircraft on alert hampers Southwest's ability to operate its network at full capacity.

Field Tech's goal is to keep under 7 percent of the Southwest fleet on alert. Over the past decade, the workgroup has reduced that number from 8 percent to just over 3 percent (see figure 2). And it wasn't a result of adding more people—during that span of time, the number of defects each technician encountered also went down. This suggests that technicians are becoming steadily more effective at fixing issues, ensuring they don't reoccur, and reducing the overall defect rate by addressing issues proactively.

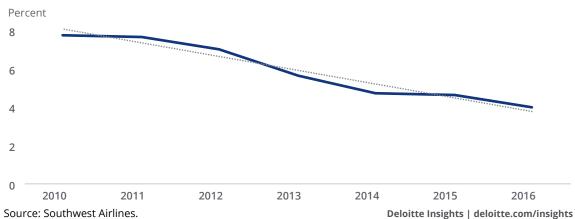


Figure 2. Southwest aircraft on alert, 2010–16

0.05
0.04
0.03
0.02
0.01
0.00
2010
2011
2012
2013
2014
2015
2016

Alerts per aircraft per Field Tech

Figure 3. Improvement in reducing alerts

Source: Southwest Airlines; Deloitte analysis.

Deloitte Insights | deloitte.com/insights

Practices in play

Southwest's Field Tech workgroup uses six intersecting practices: Commit to a shared outcome, Frame a powerful question, Prioritize performance, Maximize the potential for friction, Eliminate unproductive friction, and Seek new contexts.



COMMIT TO A SHARED OUTCOME

The Field Tech workgroup is committed to keeping the airline's fleet operational, with a goal of "nearly 100 percent." Their commitment is palpable, embodied in friendly competition over who can fix

the planes that are hardest to fix. Across the workgroup, each Field Tech appears to welcome the opportunity to get his hands of plane that has stumped one of hi leagues. All the while, they're focus



larger outcome—getting Southwest's planes back in the air.

Their commitment also seems evident in the way members work collectively via audio and video chat to resolve issues across the network. It is common for technicians from other nodes to pitch in. Explains supervisor Brandon Beard, "It's a high-stakes role where everyone expects the best from you."

Over time, workgroup members have learned to play to each other's strengths, creating an environment in which each can give his best in service of a shared outcome, and finding opportunities for others to succeed. For example, when members saw that a technician in Chicago enjoyed working on pneumatic problems, they sent him planes with such problems.

FRAME A MORE POWERFUL QUESTION

In the quest to be better than the day before, the Field Tech workgroup tends to ask questions in search of answers that might give members an edge in keeping more planes operational. Southwest keeps a running list of its major causes of alerts, unscheduled aircraft maintenance, and downtime. The Field Techs took a hard look at he list and asked: What if we could take the number-one issue here and push it out of the top 10? It was a bold question.

This particular maintenance issue had sat atop the leaderboard for years, with one figuring out a way to prevent or proely identify it. It had become accepted as a loing business, accounting for millions of dollars in lost revenue every year.

The Field Tech workgroup rallied around this question. "We wanted to do it, even though no one outside the group thought it could be done," Beard says, "because of the huge potential for impact." The workgroup seems to thrive on taking things to the next level. With this goal in their sights, the Field Techs put their collective experience to solving the issue. The question crystallized their goal and set into motion a series of initiatives that prioritized performance toward that goal.

PRIORITIZE PERFORMANCE TRAIECTORY

Even as the Field Tech workgroup agreed to focus on pushing the number-one delay driver off

, members remained committed to reping Southwest's fleet nearly 100 creent operational. To do so, the oup had to focus on events across to time horizons, tracking immediate lay indicators while observing longrm trajectory, tuning efforts on both

scales simultaneously.

To succeed in these goals, the workgroup first had to figure out what data to track that could be a relevant indicator of the problem. They had a lot of data to work within the aircraft health monitoring system, but no single metric had proven to be a reliable leading indicator of this type of failure. They had to take all of the raw data points, each meaningless on its own, and combine them in different ways until they could see what was different when the failure occurred. Once they identified these ex-

ceptions to the norm, they could build a flag around it to trigger an alert. The flags in Southwest's aircraft health monitoring system alert line mechanics to pull a plane for maintenance before an issue occurs (and before passengers board). With the flag in place, the number-one delay driver occurred less and less often—and gave up its chart-topping position. Still, Field Tech continued to refine its system, creating new flags and revising existing ones while watching the impact on the delay list. In the end, members identified 14 flags for all of the components that contributed to that issue.

Ultimately, the Field Tech workgroup didn't just accomplish something no one thought was possible—it changed the nature of aircraft maintenance at Southwest. The new approach created annual savings estimated at \$3.2 million by eliminating thousands of hours of unscheduled maintenance and repairs.² Reducing unexpected maintenance and repairs can create real value for passengers, crew, and operations staff as well.

Now the workgroup has turned its focus to the new number-one delay driver, with a goal of driving that out of the top 10 as well.

The Field Tech group also pays attention to individuals' performance trajectories. Part of reducing delay drivers requires enabling the maintenance crews to address issues before aircraft go on alert. The members can't be successful without the help of line maintenance mechanics at the airport. The group's "Teach me, watch me, watch me teach someone else" approach takes a long-term view, placing group (and maintenance crew) capabilities and effectiveness over the short-term efficiency of just getting a task done. As members pick up new skills, they share those capabilities and lessons learned with other members and, in parallel, the line maintenance crews. After that, line maintenance personnel are given as many opportunities as possible to develop and show hands-on mastery, with a more experienced Field Tech group member watching over them.

Eventually, the crew members are expected to teach others recently learned skills. In each of these types of learning encounters, the Field Tech group members involved are comparing notes, sharing observations, and possibly tinkering with how the task is completed or the problem is solved. This accelerates the workgroup's learning even as the regular opportunities to teach each other, and the line maintenance crews themselves, also accelerate individual Field Tech members' learning. Members value what they see as an opportunity to learn and gain experience faster: "Working as a Field Tech for two years can produce an experience level that it might take 10 years to attain otherwise," Beard says.

MAXIMIZE POTENTIAL FOR FRICTION

Field Techs work at the edge of what's possible.

"Many of the problems we see are not in the manual.

have to think outside the box to help solve the issue," says member Mike Perna. "We fix the unfixable." But it's xactly such "unfixable issues" that e up the group's everyday workload. sues it faces are so varied that memder it important for the group to incrude mechanics with a wide variety of expertise, experience, and approaches.

The workgroup doesn't look for technicians who fit a set mold or profile—quite the opposite. Laughs Beard, "If you had a cookie cutter, it certainly wouldn't apply." No two technicians are the same: Workgroup members vary in working styles, personality, professional background (some are former military; others have worked for other airlines in varying capacities), and more. So what do they look for? Hard work, creativity, stubbornness. A love of challenges. A commitment to getting the job done, by any means necessary. And, Beard says, the mechanics who thrive in the group are those "who get frustrated when they can't do as good a job as they'd like to because they don't have this or that tool—one perk of being a part of Field Tech is access to whatever tools you need."

Hiring for fit within the workgroup, and Southwest's culture in general, is an important part of how the workgroup keeps unproductive friction to a minimum. In addition to staffing for passion and growth mind-set, Field Tech looks for existing employees known by their peers as people who can get it done no matter how challenging or complex the issue—those with a real passion for fixing airplanes, who also embraced a team-first mentality. In short, members have tried to create a rock-star work-group versus a group of all-stars. Explains Beard, "You can give someone the technical skills, but you can't make them a good person, or someone hungry to take things to the next level. We're looking for someone with a fire inside them, pushing to be better every day."

Given the breadth of personality and diverse experience across the group, members aren't strangers to occasional friction, especially given the pressure under which they often work. However, at the end of the day, shared goals and a focus on outcomes mean that everyone should be aligned around bringing aircraft back into service.

ELIMINATE UNPRODUCTIVE FRICTION

Not only is each technician unique, so is each node; the workplace culture at each culture of its region. The workgrathat the fit between a Field Tech personal style and the culture at the airport is a crucial element in avoiding unproductive friction. A

lot of thought is given to matching group member and location. "There's no one set way of operating," Beard says. "Every region is a little bit different. The same Field Tech who's highly effective in Baltimore might not be as effective in Phoenix."

Here's where airport culture comes into play: Some airports are very hierarchical, with line mechanics serving strictly executional roles. At such nodes, Field Techs need to carefully structure tasks assigned to line mechanics. At other airports, where line mechanics are encouraged to be proactive and solve problems as they see fit, tasks don't need to be spelled out. Workgroup members appreciate and value different styles of leadership from different individuals and nodes; they don't see one style as necessarily better than the other, just different.

Regardless of the location, the Field Tech group tends to hire new members from within—not just within Southwest but within the line maintenance crew at a specific airport. (A mechanic from Chicago, for example, would be unlikely to be moved to Dallas.) In the world of aircraft maintenance, relationships are paramount; you have to trust the person working next to you. Field Tech tends to promote people who have built up trusted relationships at a given airport.

Going from line mechanic to Field Tech is also a major promotion with a monumental increase in responsibilities, so how the workgroup and the airline support new members is important. "A maintenance tech is responsible for only what he does—no more, no less—but a Field Tech is responsible for themselves and everyone else," Beard says. He believes that if the workgroup supports any new member correctly, "we could make you a leader, so long as you had the technical chops and the right work ethic and the respect of your peers."

The "Teach me, watch me, watch me teach someone else" approach members use to teach skills and spread tacit knowledge seems to create an environment for building trust and embracing humility and vulnerability, one hands-on experience at a time. For example, when a veteran member walks a new co-worker through a "flap lockout" situation in which a plane is grounded, the two work side by side in an intense effort to troubleshoot 25 parts and get them working in unison again. Working directly on an aircraft, with a specific and shared goal of fixing the problem, focuses the members on what is important and downplays any unproductive interpersonal conflict. By the time the two emerge, having fixed the underlying flap asymmetry, the shared experience of working together (as a we, not a me) to get a plane back in service can create a deeper relationship and trust between them.

In addition, the workgroup often hires technicians in pairs—perhaps a main hire and a trusted partner who can fill out the necessary skill sets and already knows what makes the other tick. This practice can help avoid tensions by ensuring the workgroup is bringing on established trust-based

relationships along with specific skills. At the same time, they look for duos and trios that are willing to challenge each other, often having such a deep trust in their working relationship that they can have friction around the work and push each other to better answers and improved techniques.

Just as important as the composition of the workgroup as a whole can be creating an environment where members are willing to be open and honest about issues with which they are struggling. In looking for yet more ways to reduce the top delay driver, workgroup leaders observed a striking pattern: Members often painted a rosy picture of the situation at their home airports, no matter how understaffed or overworked they actually were. It turned out they feared that highlighting operational underperformance would be seen as a sign of weakness, negatively affecting personal performance reviews.

The resulting lack of transparency had effects beyond anything personal. More seriously, it prevented the workgroup from identifying technicians and nodes that needed help—and from prioritizing the right set of resources to make a difference. Realizing this, the Field Techs consciously shifted their focus from efficiency to learning, putting both vulnerability and humility at the forefront. The workgroup's leaders sought out those who had put up great numbers—but only through Herculean daily effort. They set a new tone, letting group members know they wouldn't be penalized for having a "bad" scorecard. In fact, transparency would be rewarded, as it would ensure that the right resources went to the right areas.

SEEK NEW CONTEXTS

To help them be more effective, Field Techs are encouraged to go out and learn from experts across the field of avionics—and beyond. So long as the course or training seems likely to make the technician a more well-rounded professional, Southwest generally encourages him to pursue it. For example, if a Field Tech wants to take a class on the effects of aircraft hydraulics on aerodynamics, it's

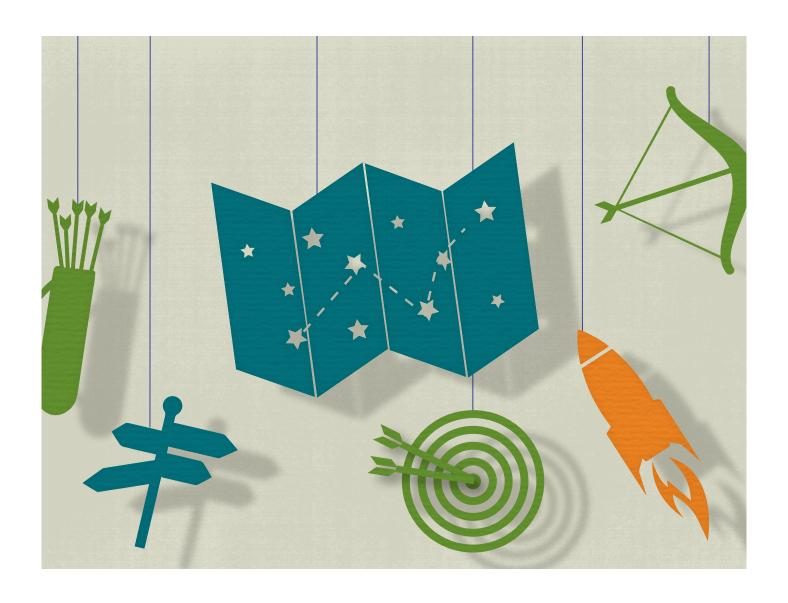
typically approved—no questions asked. "We'll let them go where their passion and energy take them, rather than manage their time," Beard explains.

Field Techs are also encouraged to attend trainings in other industries. For example, Southwest's

et of planes will incorporate fiber-optic ology. Technicians will have to solve ted issues—and even before that time, 're proactively learning from the estabd experts in fiber optics, attending some same classes to which a leading telecomations company sends its technicians and learning from them about how they use the technology and challenges they encounter.

The workgroup extends cross-industry curiosity further, continuously seeking out and adapting tools from other industries. For example, technicians have taken the thermal imaging cameras used in firefighting and adapted them for use in aircraft maintenance. Where testing a temperature sensor on a plane once required wrapping every duct in tape, firing up the engines, and checking each duct for melted tape, technicians can now spot bad seals simply by looking at heat signatures as they walk around a plane.

Getting better, faster



League of Legends: Team SoloMid

Rigorous metrics-based experimentation

Getting better, faster

N the growing \$900+ million e-sports market, multiplayer online game League of Legends is a frontrunner, with an estimated 100 million active players each month. Team SoloMid is considered one of North America's top professional teams and has competed at the highest levels globally for six years while improving its win rate in competitive matches.

League of Legends (LoL) is a team-oriented multiplayer online battle arena developed by Los Angeles-based Riot Games. Played in discrete matches, two teams of five players battle each other with the goal of destroying the opposing team's nexus (home base). Each match is complex and volatile: In-game conditions evolve rapidly, and destroying the nexus requires a collective effort. While players can compete in pickup games on randomized teams assembled by an algorithm, or draw from an in-game friend list to self-organize into match-specific teams, professional teams have emerged, which conduct tryouts, hold practices, and compete together on a sustained basis for team ranking and championships.

Far from a fringe, in 2016 e-sports—typically defined to include any organized multiplayer video game competitions, often involving professional gamers²—generated an estimated \$905 million in revenues globally (see figure 1),³ and has an estimated global audience of 1.4 billion fans.⁴

Riot Games organizes regional tournaments called League Championship Series and holds an annual World Championship with teams from North America, Europe, and Asia. In 2014, 27 million viewers watched the LoL finals online, more than doubling three years later to 60 million viewers for the 2017 final (see figure 2). What's more, a high percentage of viewers play none of the top esports games, a sign that these games are poised to become spectator sports in their own right.

Reflecting this growing popularity, about 30 colleges now offer e-sports scholarships, some up to \$25,000 a year,7 with schools such as Columbia, the University of Utah, and the University of California, Irvine fielding varsity e-sports teams.

Figure 1. Revenues generated indicate that e-sports is a growing, global phenomenon

WORLDWIDE ESPORTS REVENUES BY REGION, 2016E



Source: SuperData Research, "Home," accessed February 17, 2018.

Deloitte Insights | deloitte.com/insights

The workgroup: Team SoloMid

Founded in 2009 and widely considered one of North America's top e-sports teams, Team SoloMid (TSM) is a group of gamers dedicated to improving their already-high League of Legends performance. While members of Team SoloMid obviously refer to themselves as a *team*, and we will refer to TSM as such, it fits our criteria for a workgroup and has deliberately focused on improving its performance over time:

- Size: The TSM workgroup includes five active players, two substitute players, two coaches, and a general manager.⁸
- Sustained involvement: Members of TSM spend the majority of their time together engaged in practice, strategy sessions, or playing the game and experimenting with playing styles.
- Integrated effort: The team can win games only through an interdependent, collaborative effort.

The team competes with approximately 170 other professional teams in at least three tournaments each year⁹ and since 2011 has won five tournaments in the North American League of Legends Championship Series, and has appeared in every final as well as the World Championship every year.

The group's performance has led to a number of major sponsorships.

Figure 2. Estimated viewership of major sporting events

2017 viewers

NFL Super Bowl 2017	111,900,000
LoL World Championships	60,000,000
NBA Finals Game 5	30,800,000
BCS National Champtionship (football)	28,443,000
MLB World Series (highest game)	28,240,000
NCAA Basketball National Champtionship	22,998,000
NBA Finals Game 5	30,800,000

Source: Deloitte analysis.

Deloitte Insights | deloitte.com/insights

Although the game is virtual, TSM co-locates to practice and play, with the workgroup living together in one house and spending most of their time together, practicing, discussing strategy, or playing the game. During play, participants need to be knowledgeable, insightful, and able to call the shots themselves so the coach and support staff can focus on the team's social development rather than trying to control what players do. The coach's role is to form the foundation for the team's aspirations, amplify individual players' strengths, and act as a sounding board to help the team maintain composure under stressful conditions.¹⁰

The results

In the competitive LoL landscape, winning matches matters—and not only winning a series of matches but competing at the highest levels in major tournaments, where the level of competition

THE GAME

Before a match, each player selects a *champion*, or character to play as, typically based on a planned match strategy. Each of the more than 100 available champions possesses unique skills, tools, and characteristics, which Riot Games periodically updates through game patches to introduce new champions or tinker with existing champions' abilities. These updates' effects are unpredictable and can range from the powers of existing champions being "nerfed" (reduced) or "buffed" (enhanced), affecting both how the champion needs to be played and how teammates need to play to accommodate or exploit the changed character.

With no instruction or formal training offered, LoL players learn in the field of play and co-construct guides as they go. As a result, players draw on their experiences and stories to constantly create new knowledge and update reference materials on wikis, blogs, and discussion forums such as Reddit. The updates force players and teams to rethink strategy. As one player who competes under the name Voyboy put it, "It's a race to innovate. The best teams are the ones that are constantly evolving along with the game." 11

is high and the environment is challenging. Since the 2011 inception of the championship series, TSM has been the only team to qualify for every North American League of Legends Championship Series. This consistency in performing at the highest level is reflected by the team's overall winning rate during major events. Since 2011, TSM has improved its winning rate from 56 percent (across a total of nine games) to 70 percent in 2016 (across a total of 96 games) over the course of a six-year period. This resulted in the team winning the series each year since 2012. While TSM has participated in more tournaments and competed in more matches, facing more and more highly skilled opponents, it has continued to win.

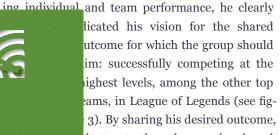
Practices in play

Team SoloMid uses six key, intersecting practices: Commit to a shared outcome, Maximize potential for friction, Prioritize performance trajectory, Reflect more to learn faster, Follow a bias toward action, and Seek new contexts.



COMMIT TO A SHARED OUTCOME

When Andy "Reginald" Dinh expressed the desire to form a sustained team dedicated to improv-



a similar desire and could be committed to it. As the group formed, they refined their shared understanding of what that outcome meant—for example, "competing at the highest levels" might be interpreted to mean to win games, to win tournaments, to qualify for a specific set of tournaments, to gain a sponsorship, to make a certain amount of money, and/or to achieve certain individual ratings. TSM has evolved to focus on winning the LoL World Championship. The intense practice schedule and

co-location demands ongoing commitment from the individuals who join.

MAXIMIZE POTENTIAL FOR FRICTION

Wikis, discussion forums, and blogs surround

League of Legends. These are generally ed by passionate players—and fansto discuss match experiences and sk knowledge on game techniques. ¹⁴ T types of forums tend to attract other who are passionate and want to lear more about the game. Many of the ticipants seek collaboration and collaboration are generally passionated and passionate and passionate and passionated and

and they seem comfortable looking outside their own team to connect with other competitors as they strive to improve their own capabilities.

TSM was formed on a community website called Solomid.net. Many regard the website as producing some of the best game guides¹⁵; it typically attracts passionate players who want to leverage and cocreate new game knowledge to improve their game play. Drawn from this pool of players, all of the original TSM members were already well-established gamers playing at a high level.

TSM was originally called All or Nothing before rebranding to Team SoloMid. Team founder Andy Dinh solicited group members with the aim of recruiting those who were especially passionate about improving their play. Figure 3 shows his original posting to seek volunteers; in it, he states clearly: "Our goal is to improve and to constantly develop strategies. The purpose of this clan is to constantly increase the skill level of the upper-level play." In soliciting volunteers, he seems to leave open the option of turning down anyone who lacks the passion or mind-set necessary to pursue accelerating performance improvement.¹⁶

PRIORITIZE PERFORMANCE TRAJECTORY

In League of Legends, a few metrics are used across teams to measure the performance of teams or individuals, while many teams choose or develop other metrics based on what factors they believe are most relevant to driving success in the game. One of the widely used metrics, Kills/Deaths/Assists ratio (KDA), is a lagging measure on an individual

and team level. This ratio can be broken down and compared across games by player and by teams, and analyzed over time o uncover whether changes should be nade to the team. There are also many netrics, such as kill participation and reep score, that are team-focused and

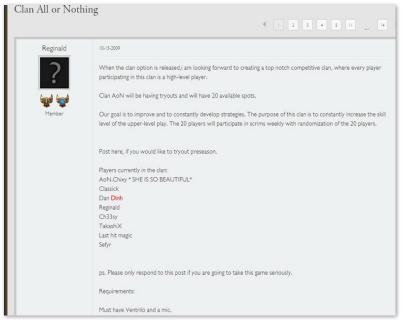
are leading indicators of a game's final outcome.¹⁷ For TSM, the group metrics take priority over individual metrics, and that involves trade-offs, such as needing members to take on support roles that don't necessarily generate high kills but may have high assists to optimize the group KDA and win more games.

Similarly, with the guidance of the coaches, the group also makes trade-offs for the long term at the expense of short-term wins, especially when updates to the game or attributes of a champion make certain strategies less effective. For example, if a certain character no longer has the attributes to work

optimally with the rest of the team, members must decide whether that one player will master a new character, other players will take on new characters, or they will all adopt a new strategy built around those diminished or enhanced attributes. Typically, any character, role, or strategy change results in some performance decline during a period of steep learning. In each case, the members prioritize the group performance over time rather than individual performance or performance in the moment.

The TSM coaches set goals for the team during each tournament, one of those being to win the tournament, and track improvement against these over time. Winning tournaments is a binary metric that isn't helpful to the players understanding how to improve their trajectory. More useful TSM-specific metrics that the coaches and players have developed include those focused on individual abilities, team synergies, and mental fortitude. This last measures team and individual resiliency and helps players stay focused. TSM believes that other teams overlook and undervalue this metric, since a team with high mental strength can stay focused

Figure 3. The initial blog posting in which Andy "Reginald" Dinh sought volunteers to form Team SoloMid



Source: TSM.

Deloitte Insights | deloitte.com/insights

at volatile times or more effectively shift focus on priorities during intensive games. Certain players are extremely adaptive and respond to change well; other players that have proven invaluable are more resistant to change. Instead of prioritizing efficiency and choosing only highly adaptive players, TSM believes it needs to prioritize learning to increase its long-term effectiveness.¹⁸

In an effort to sustain performance improvement, TSM regularly evaluates and evolves specific metrics to stay relevant as updates shift the strategies. For example, the team did not initially value player assists, but, as competition intensified and certain champion skills amplified others, assists became a key aspect of performance. By focusing attention on metrics that mattered, TSM became better at responding to losses and maintaining consistency across matches.

REFLECT MORE TO LEARN FASTER

For teams to be effective within the game's environment, players should maintain composure and understand how and when to act in support of the team as a whole, adapting their own strategy and

actions to better pursue team objectives. This improvisational skill is typically built on the player's tacit knowledge of the game and how the team functions. For example, the player should know all

of his own champion's strengths and weaknesses as well as the nuances of how his teammates tend to use their champions' attributes in different situations to have a feel for how best to quickly deploy his character in support of the team. This typically involves reading the situation in real time and noticing—and correctly interpreting the intent of—his teammates' moves in the battle.

In order to achieve that in-game composure, one common practice for many TSM players is to review their performance data after each match and reflect on the scenarios that just happened in the game. There are certain kinds of performance

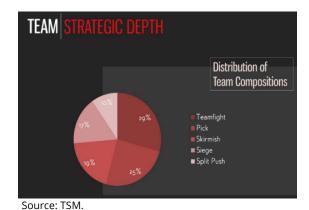
knowledge that can be built up only over time, after each game, by players looking back and reflecting. In the past, players would externally record the games, but in 2016, League of Legends developed a new feature to let players record their own games. Looking back at in-game performance afterward can help players reflect in a different way, showing them pieces of information they may not have noticed or collected while in the moment. For example, a player in the "jungler" role may have chosen his path assuming a specific ward placement, but upon review, he might notice that his opposing jungler placed wards in a way suggesting that he should have taken a different path.

Players often watch replays of both their practices and tournaments. As a group, they also watch competing teams, especially before they are about to play that team, to potentially learn how others respond to a particular skirmish, timing when to engage in action so that tactics can be best suited to the team's style. Postmortem reviews, as a team, can help each player make sense of his actions within the context of his teammates' actions and thought processes. This can help players become more aware of when to engage, when to support a teammate in taking down a turret, and how best to use the champion's skill set during "clutch times." These abilities that can make them more effective members of the group, though less tangible and not captured in metrics, are often gained through tacit experience. (See figure 4.)

Although the game does not provide personalized dashboards, TSM has created external dashboards, both personal and team-wide, that help monitor performance over time (see figure 5). The team aims to have these dashboards capture as much data as possible, with analysis breaking down what it all means. After every TSM match and team review session, each player meets with the coach to deep dive into the specific detail analysis of the game, and set personalized learning goals.²⁰

In addition to reviewing KDA ratio, coach Parth Naidu created a system that evaluates both team and individual performances in a more systemic approach to improvement. One of the criteria, Strategic Depth, reflects how well the team can adapt to game environment changes by devising alternative team compositions. Analysis can further break down Strategic Depth to help individual players better understand their game play.

Figure 4. The game doesn't track specific types of game play such as Teamfight, Pick, and Skirmish, but TSM believes these metrics matter to the outcome and has hired data analysts to track them for both their own players and opponents

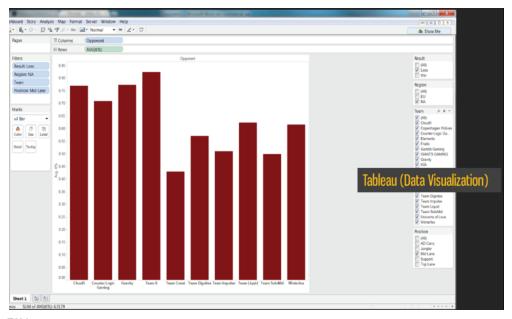


Deloitte Insights | deloitte.com/insights

SEEK NEW CONTEXTS

Replays of other team matches can be particularly useful for understanding how use a champion's ability in a particular Websites such as YouTube and Twit created more resources for scouting tentially finding a performance edge supporting staff often tracks gam different regions, especially tho Korean and Chinese teams.21 The draw inspiration from those reg look for new tactics, champion picks, piay styles, or strategic shifts that can be applied to TSM's competitive scene. This has helped the team to uncover other possible ways of play and make more informed decisions. Many regard Solomid. net—the community website on which TSM players share game knowledge—as one of the best sources of guides,22 a good indicator that TSM is continuously evolving its play.

Figure 5. A snapshot of a TSM dashboard, illustrating how game data can be used to highlight how specific tactics can affect game outcomes



Source: TSM.

Deloitte Insights | deloitte.com/insights

BIAS TOWARD ACTION

What leads to success is typically not just a new winning strategy or stellar team chemistry. There often other, less observable, aspects: h player's choice of champion shapes the m's in-game strategies, including its apach to item builds, lane designations, and d placement, all of which need to happen mlessly together to increase the chance of ning. Instead of mimicking another team, elying exclusively on empirical data, TSM ers with these variables in order to understand relationships and interdependencies that determine how things really work for the team in a game. By maximizing the decision-making velocity and avoiding the risk of inaction, the team is continuously iterating and testing new approaches. Coach Naidu creates tailored practice routines that connect learning objectives, such as how to more effectively take down the "first baron," for each team member based on that member's performance metrics and conduct practice games with equally matched opponents. These practice rounds allow room to treat decisions as reversible and to experiment in a space of limited consequences where players can take dif-

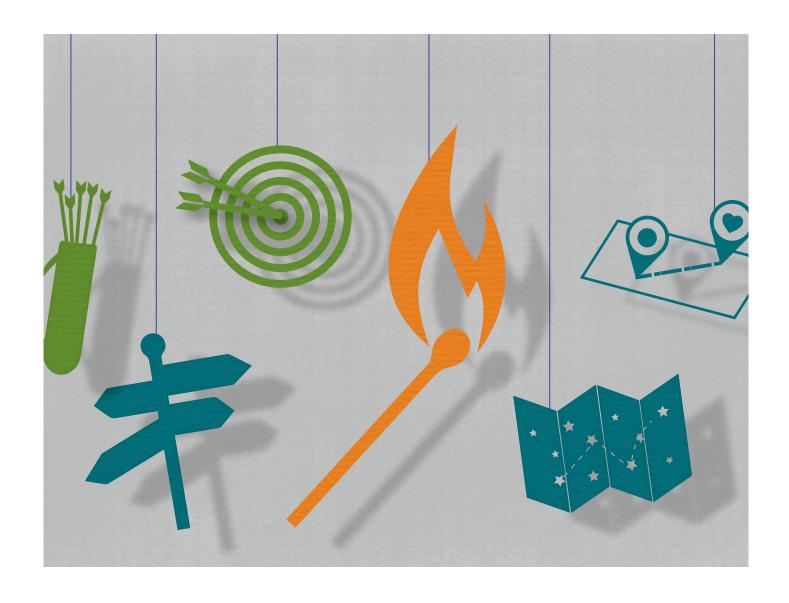
Practice games are experiments in which players typically pick and test out different champions.

ferent risks or try something new.

To master a champion's skill sets, players must gain tacit knowledge through more consistent usage during games with the team. Frequent feedback, from game data or other team members, can help a player understand how those skill sets can have an impact on the final outcome. For example, team member Søren "Bjergsen" Bjerg is known for playing new champions that are not currently viable at the competitive level. One time, he decided to select an uncommon champion called Ryze as his go-to pick inspired by another team's playbook. However, Ryze's abilities can be particularly complex-to fully realize this champion's potential requires his teammates to follow his lead.23 It takes a great deal of coordination, and because the team unanimously put their faith behind him and showed support, Bjergsen was able to showcase how this uncommon champion can make an impact in TSM's games.24

Over time, experienced players can become adept at leveraging the resources available in and around LoL to learn new ways of play, experiment in game, and adapt faster to stay competitive and relevant. They typically like to seek out new challenges and do not view the unanticipated game patches as a threat to their existing way of playing. They tend to welcome the unexpected as an opportunity to innovate, tinker, experiment, and in the process learn even more.²⁵

Getting better, faster



US Joint Special Operations Task Force: Al Qaeda in Iraq

Adopting new approaches to fight an unconventional enemy

Getting better, faster

HE US Joint Special Operations Task Force brings together some of the nation's most elite soldiers, strategists, and analysts from every branch of the armed forces along with the civilian agencies that support them. In 2004, this group, then led by Gen. Stanley McChrystal, was tasked with defeating Al Qaeda in Iraq (AQI), an enemy fundamentally different from anything US forces had seen before.¹

Created in 1980, Joint Special Operations Command (JSOC) has played an active role in every major US military conflict. The command specializes in directing covert and extremely challenging missions, including the capture of high-value targets, extracting vital US assets from conflict zones, and engaging in direct action on extremely short notice. To achieve this, JSOC establishes Task Forces (JSOTFs) in regions of strategic importance.

Following the 9/11 attacks and the 2003 American invasion of Iraq, a JSOTF was activated to mitigate the growing threat of Al Qaeda in Iraq. As McChrystal describes in his book Team of Teams, AQI seemed different from other enemies US forces had encountered. Rather than an army, AQI appeared to be a network of independent insurgents fast, fluid, and mobile, without what US analysts considered standard operating procedures or organizational hierarchies. Enabled and amplified by mobile technologies such as smartphones, satellite telecom, and the ever-evolving spectrum of digital communication channels, from online video game chat rooms to time-limited instant messaging platforms, AQI fighters seemed to be constantly changing their locations and altering their patterns. And they were tough and resilient despite being poorly trained and resourced.

Notwithstanding advantages of resources and training, initially the Task Force struggled to gain ground.² The tried-and-true operational model—extensive planning, training over multiple simulations, executing the mission, collecting intelligence and shipping it out for analysis, and waiting for analysis that could be used in the theater of operations—was far too slow to be effective. By the time intelligence was sent back, analyzed, and acted

upon, the situation had changed, making it too late to respond; the process could not effectively deal with the volatile environment.³

To regain the initiative against an enemy operating as a dynamic network of independent insurgents, McChrystal reasoned, JSOTF-AQI had to drastically change its approach. The Task Force needed to become a network itself and empower those on the front lines to make decisions and act on fresh intelligence. JSOC would transform itself into a flat and fast operation, a "team of teams."

The workgroups: Joint Special Operations Task Force assigned to Al Qaeda in Iraq (JSOTF-AQI)

The JSOTF–AQI can be thought of as a pool of Special Forces and intelligence analysts. Drawn from this pool, ad-hoc workgroups were formed to address specific threats or opportunities, typically executing counterterrorism raids.

- Size: The workgroups varied in size, from as few as three people to more than 20, depending on the mission or raid they were formed to address.⁴ The pool from which they were drawn—JSOTF-AQI—included members from a wide variety of backgrounds, including special operators drawn from the Navy SEALS, Army Rangers, Army Delta Forces and Green Berets, Air Force Special Tactics Squadron, Special Operations Air Regiment, and Marine Special Ops Command, as well as intelligence analysts from the CIA, FBI, NSA, and DIA.
- Sustained involvement: Although any given workgroup might convene from a few days to a few months to address opportunities and threats as they arose in the region, the highly trained special operations forces and intelligence analysts who comprised those workgroups were fully assigned to the broader pool of JSOTF-AQI.
- Integrated effort: One of the most significant differences for JSOTF-AQI was the recognition that this enemy required a truly integrated effort,

both within workgroups carrying out a raid as well as at the pool level, rather than the traditional method of handoffs and functional silos that went along with the hierarchical structure of the larger military organization. Specialists and analysts had to be shoulder-to-shoulder with operators in the field, physically or through technology, to provide those operators with up-to-date information and to exploit and analyze any information captured in the raid as quickly as possible. Planning for raids and acting on additional information also required the integrated effort of operators and analysts working interdependently.

The results: More raids, higher-quality intelligence

As the operation evolved, the mission became less about achieving singular combat victories and more about achieving victories that could yield further actionable intelligence, in a theater where the shelf life of information was very short.

When McChrystal assumed command of the JSOTF in 2003, the group was conducting between 10 and 18 raids per month in Iraq. Three years later, in 2006, it was running an average of 10 raids per night—a 17-fold increase, with only minimal increases in personnel and funding. The more recent raids were also more successful, as measured by the percentage of targets located and significant improvements in the quality of the intelligence gathered. With its mission accuracy increasing, JSOTF began making a significant dent in AQI's operations in the region.

Collectively, performance for the JSOTF pool also accelerated as a result of intelligence being distributed across the chain of command and acted upon, far more quickly—leaders would create new missions mere hours before they were executed, based on just-gathered intelligence. These improvements were in large part driven by bringing analysts closer to the action, including allowing them to go on raids or watching raids via live video.

Practices in play

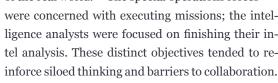
As JSOTF changed its approach, it exemplified six practices: Commit to a shared outcome, Frame a powerful question, Reflect more to learn faster, Maximize potential for friction, Eliminate unproductive friction, and Bias toward action.



COMMIT TO A SHARED OUTCOME

Early on, JSOTF leadership realized that members were pursuing very different objectives. McChrystal writes, "To each unit, the piece of the

war that really mattered was the piece inside their box on the org chart; they were fighting their own fights in their own silos. The specialization that allowed for breathtaking efficiency becar a liability in the face of the unpredicta of the real world."⁵ The special operations



The group needed to be able to respond more effectively to an enemy that had become increasingly nimble and more distributed. In order to have a Task Force that could cycle rapidly between collecting intelligence, analyzing it, and acting on it, members would have to be more aligned on what they were trying to achieve, a larger goal

that transcended narrow, specialty-based metrics or tactical objectives related to a given operation. In place of the silos and old "hourglass" structure, with field operatives collecting large amounts of potentially valuable intelligence and far-away analysts receiving and interpreting the information and recommending action, McChrystal envisioned a flattened, multi-noded organization.⁶

The challenge was to reduce competition between priorities with an approach that served a unified goal. And that goal was ambitious: not just to regain the initiative but to transform JSOC's culture into one that could find a way to defeat a new, more complex kind of enemy. And to do that, the workgroup had to commit to a shared outcome of defeating this enemy by turning more intelligence into better actions, faster.

FRAME A MORE POWERFUL QUESTION

On paper, the confrontation between AQI and the Task Force should have been no contest. US

ces had long excelled in the most rigorus training for special warfare operators; JSOTF could tap into an impressive array of firepower, armored vehicles, stealth surveillance technology, and more. Meanwhile, QI relied on improvised explosive devices, pane tanks, and expired ammunition. Yet increasingly winning.

force members had to ask themselves how they could defeat an enemy that was using technology as a command structure in ways they had never confronted before. As McChrystal framed it, "If we were the best of the best, why were [AQI's] attacks not disappearing, but in fact increasing?"

This powerful question challenged the Task Force to fundamentally reconsider its approach, rather than just improve the execution of the traditional approach. More questions followed: What if transparency were radically increased across JSOC? What if frontline soldiers made command decisions? What if analysts and soldiers worked side by side? What if they used technology in new ways?

These questions led to the realization that, in order to fight a networked enemy, JSOTF-AQI had to become a network itself. The leadership resolved to dissolve the established process and protocol in the name of making a more effective fighting force. Better information needed to move across the command more quickly, with both soldiers and analysts given more degrees of freedom to act.

REFLECT MORE TO LEARN FASTER

To successfully fight AQI, JSOC needed to learn at a rate that kept up with the ter rorist group's communications, and with the pace of change on the bat tlefield. That meant dramatically in creasing how quickly it could process information from intelligence.⁸

The Task Force's limiting factor resided in its organizational DNA. Members were outstanding at leveraging 20th-century tactics and strategy that were of little use on the 21st-century battlefield.9 As McChrystal described the state of operations in Iraq, "In the time it took us to move a plan from creation to approval, the battlefield for which the plan had been devised would have changed. . . . We could not predict when the enemy would strike, and we could not respond fast enough when they did. . . . The amount of nonlinear change that once took months to play out can now happen in the time that it takes to type 140 characters." As a result, members had to unlearn a great deal of what they knew.

Leaders resolved to restructure from the ground up, continually seeking and incorporating feedback in order to make critical information more widely available and decentralize decision-making authority. Addressing the division between intelligence and operations staff, JSOTF leadership stressed interagency collaboration. Together, operators and intelligence analysts were tasked with mapping intelligence gathering to "pattern of life analyses," designed to pinpoint small but important changes in their targets' activities, in real time.

One of the biggest changes leaders made was broadening the circle of intelligence briefings. As they

brought more people into the briefings, soldiers began making more informed decisions in operations, analysts sent more of the "right" information up the food chain quicker than ever before, and the command was more able to focus on the highest-impact issues. As access to intelligence expanded, it became apparent that many of the barriers to information-sharing that had been put in place to reduce "noise" had actually had the effect of obscuring the context many required to understand how and where they fit into the broader effort. As the success rates of missions improved, leaders opened up the briefings to a larger number and broader range of participants.

MAXIMIZE POTENTIAL FOR FRICTION

As an entity that brings together units from different branches of the military as well as the civilies that support them, JSOC had huge otential for friction—both positive and negative. This potential was further insified in JSOTF—AQI, which used techns including daily live video briefings to and the number of people working on a lem. The Task Force attracted a range of professionals, from highly trained special operators such the Navy SEALS, the Army Rangers, the Army Delta Forces and Green Berets, the Air Force Special Tactics Squadron, the Special Operations Air Regi-

ment, and the Marine Special Ops Command to in-

telligence analysts from the CIA, FBI, NSA, and DIA.

These highly specialized groups often had competing organizational priorities. Special operators were focused on mission execution and capturing targets, while intelligence analysts were focused on feeding analysis back to headquarters. For example, when Special Forces would raid a location but not find their designated target, from their viewpoint the mission was a failure. Intelligence analysts, though, might view the raid as an incredible opportunity to gather intelligence and peek inside an otherwise opaque AQI network. Rather than try to reduce friction, JSOC created workgroups that brought together these divergent priorities and perspectives, including both analysts and operators,

so they could reinforce and learn from each other. That meant moving analysts (who typically worked from JSOC command in Washington) to Iraq, where they could live, work, and better understand the needs of those on the ground. And it worked: Working shoulder to shoulder, operators and analysts each learned what the other needed to succeed.

Leaders further increased the potential for friction by increasing the transparency of the operation and sharing daily intelligence briefings not only with the Task Force but with the entire global JSOC network via live video feed. Over time, the audience for these live briefings extended beyond JSOC to include any soldier forward-deployed, as well as officers and analysts at the Pentagon; eventually, there were several thousand daily participants.11 The increased transparency was designed to maximize the opportunity for friction to occur by dissolving organizational barriers and creating more opportunity for more people to ask questions, provide suggestions, and offer challenges in relation to operations that they previously would have never known about. Some of this friction occurred on the call itself, but much of it continued in parallel chat rooms that were set up during the briefings as well as offline in between briefings. A key part of maximizing potential for friction is creating environments in which the friction can surface.

One byproduct of this increased transparency: Failures were more visible. As a result, the Task Force leadership was able to demonstrate that failures could be acceptable, as long as they weren't due to negligence. This led to greater accountability. It shifted the group's culture to one in which failure became a more accepted part of the process of acting on intelligence more swiftly. Rather than being punished for honest failures, soldiers were encouraged to problem-solve and take initiative, and to learn from mistakes.

ELIMINATE UNPRODUCTIVE FRICTION

To take advantage of the potential for productive friction, unproductive fiction was minimized through specific practices. For example, given the wide range of thousands of professionals participating—with competing agendas, diverging expectations and ex-

ences, and varying levels of understandand expertise—daily briefings could easily turn unproductive or get bogged lown before completing the full agenda. he risk of inaction was high: letting valu-

able intelligence die on the vine. To succeed, the Task Force needed to harness the diversity in the room while mitigating the unproductive elements accompanying that transparency.

To address these issues, the Task Force limited the amount of time each presenter was given to four minutes—including discussion. Presenters then aimed to complete a briefing in only 30 to 60 seconds, allowing the rest of the time for discussion. Time limits forced briefers to focus on the most important points, providing only the most salient and succinct information to the group. They also inspired richer discussion, with the time restriction acting as a forcing mechanism and members moderating themselves to ensure that what needed to be heard *was* heard. By starting with a broad set of topics and allowing individuals to go deeper afterward, the Task Force could get the necessary context and information.

Eliminating unproductive friction in this way allowed productive friction to flourish—such as when a briefing turned into a healthy debate between two agencies that had studied the same piece of evidence but reached drastically different conclusions. Under extreme time compression, briefings became learning conversations—and created a space for forging a common language, with specialists supplementing each other's findings to discover better ways forward.

BIAS TOWARD ACTION

Obviously, the armed forces are organized around taking action—being *in the action* is a term for combat. When it came to JSOTF–AQI's mission, the question that emerged was how to transform a culture of action into a bias toward the right *kind* of action—and boosting the volume of effective small actions performed daily.¹² How to maximize

momentum and improvisation while making strong, ethical decisions?

The hierarchy of the command often mea a long series of high-level approvals before a action could be taken, causing too much time be lost. McChrystal explains that he "was conected to almost every decision of consequen This was great for establishing holistic awaness, but it also created a nightmare of paperwork and approvals.... [O]ur priority should be reaching the best possible decision that could be made *in a time frame that allowed it to be relevant.*"13

In Iraq, "The risks of acting too slowly were higher than the risks of letting competent people make judgment calls." In order to be more dynamic and adaptive, the Task Force reframed risk, pushing decision-making authority down to the front lines. A rule of thumb soon emerged: Group members should "go until no," so long as their actions supported the fight against AQI's insurgency and were not immoral or illegal. With major decisions such as airstrikes, McChrystal established guidelines but told Task Force members that they were ultimately responsible to make each call, and that he would support their actions.

When it came to sharing intelligence, the Task Force adopted another new mind-set: assuming that information needed to be shared—and shared quickly. As soon as a raid was completed, soldiers would photograph every scrap of potential intelligence and immediately send the data to the imagery analysts, linguists, and subject matter experts.¹⁵ Much of the analyzed intelligence was promptly shared via the daily briefings, which invited additional viewpoints and ultimately led to greater mission success rates. More information was processed, validated, and acted upon far more quickly. Pairing operators and analysts within the Task Force seemed to have another benefit here, forging deeper, more direct relationships that allowed JSOC to significantly ramp up its pace and number of operations, from approximately 10 a month to nearly 300-many simultaneous. JSOC leadership, meanwhile, took on a new, less hands-on role, becoming "eyes on, hands off," with little need to intervene in day-to-day operations.

Getting better, faster

Endnotes

Beyond process

- 1. More discussion of the Big Shift, including metrics that describe these trends and their impact over the past five decades, can be found in John Hagel, John Seely Brown, Maggie Wooll, and Andrew de Maar, *The paradox of flows:* Can hope flow from fear?, Deloitte University Press, December 13, 2016.
- 2. John Hagel, John Seely Brown, Tamara Samoylova, and Michael Lui, *From exponential technologies to exponential innovation*, Deloitte University Press, October 4, 2013.
- 3. Hagel et al., *The paradox of flows*.
- 4. Some of the areas where barriers are being reduced or even eliminated as a result of platforms, policy, and social changes include design, production, marketing, and distribution, as well as financing, customer service, and learning. For a deeper discussion of the barriers to entry and how the Big Shift is affecting them, see John Hagel, John Seely Brown, Tamara Samoylova, and Duleesha Kulasooriya, *The hero's journey through the landscape of the future*, Deloitte University Press, July 24, 2014.
- 5. Hagel et al., The paradox of flows.
- 6. Ibid.
- 7. Innosight, "Executive briefing winter 2012: Creative destruction whips through corporate America," accessed September 7, 2013.
- 8. Our use of the term workgroup hews most closely to Jon R. Katzenbach and Douglas K. Smith's definition of team from "The discipline of teams," *Harvard Business Review*, July/August 2005. In the categorization of teams in that same article, we are concerned with those teams that make or do things—manufacturing, operations, or marketing groups.
- 9. John Seely Brown and Paul Duguid, "Balancing act: How to capture knowledge without killing it," *Harvard Business Review*, May/June 2000.
- 10. As discussed in greater detail in John Seely Brown and Paul Duguid, "Practice vs. process: The tension that won't go away," *Knowledge Directions* (spring 2000), there is an ongoing and unresolved tension in any organization between how knowledge is generated, through practice, and how it is implemented or propagated, generally through process. Large organizations do not need to resolve this tension but to become comfortable with the play between the practice and process.
- 11. Part 2 is scheduled to publish on January 31, 2018.
- 12. Brown and Duguid, "Balancing act."
- 13. Jeff Bezos, "2016 annual letter to the shareholders," Amazon, April 12, 2017.
- 14. Marc Gunther, "3M's innovation revival," Fortune, September 24, 2010.
- 15. Brian Hindo, "At 3M, a struggle between efficiency and creativity," Bloomberg Businessweek, June 11, 2007.
- 16. John Seely Brown, Paul Duguid, and David Weinberger, *The Social Life of Information*, updated edition (Cambridge, Mass.: Harvard Business Review Press, 2017), p. 27.
- 17. Andrew de Maar and Ryan Gatti, telephone interview with Steph Korey, co-founder and CEO, Away Travel, July 13, 2017.

Beyond process (cont.)

- 18. Nancy Duarte uses this "sailing into the wind" metaphor in her 2010 book *Resonate* to illustrate how presenters can deliberately plan for and harness their audience's resistance to letting go of old beliefs and behaviors and adopting new ones as a powerful force to move them on their journey. We believe this is an apt metaphor for friction in workgroups as well.
- 19. For more information about the *metrics that matter* framework, see John Hagel, John Seely Brown, Christopher Gong, Stacey Wang, and Travis Lehman, *Pragmatic pathways: New approaches to organizational change*, Deloitte University Press, March 4, 2013, or John Hagel, John Seely Brown, Duleesha Kulasooriya, and Aliza Marks, *Metrics that matter: Social software for business performance*, Deloitte University Press, January 1, 2012.

Moving from best to better and better

- 1. John Hagel, John Seely Brown, Maggie Wooll, and Andrew de Maar, *The paradox of flows: Can hope flow from fear?*, Deloitte University Press, December 13, 2016. The Shift Index shows that over the past five decades, there has been a sustained, non-secular decline in ROA for the US economy. The rate at which companies lose the leadership position in an industry is known as the topple rate and is tracked as part of the Impact Index.
- 2. John Hagel, John Seely Brown, Andrew de Maar, and Maggie Wooll, *Beyond process: How to get better, faster as "exceptions" become the rule*, Deloitte University Press, November 13, 2017.
- 3. John Seely Brown and Paul Duguid, "Balancing act: How to capture knowledge without killing it," *Harvard Business Review*, May-June 2000.
- 4. John Seely Brown and Paul Duguid, *The Social Life of Information* (Cambridge, Mass.: Harvard Business School, 2002), p. 101.
- 5. As discussed in greater detail in John Seely Brown and Paul Duguid, "Practice vs. process: The tension that won't go away," *Knowledge Directions*, spring 2000, there is an ongoing and unresolved tension in any organization between how knowledge is generated, through practice, and how it is implemented or propagated, generally through process. Large organizations need not to resolve this tension but, rather, to become comfortable with the play between the practice and process.
- 6. Hagel et al., Beyond process.

Frame a more powerful question

- 1. Warren Berger, "The power of 'why?' and 'what if?'," New York Times, July 2, 2016.
- 2. Douglas Stone and Sheila Heen, *Thanks for the Feedback: The Science and Art of Receiving Feedback Well* (New York: Viking, 2014).
- Andrew de Maar and Maggie Wooll, interview with Brandon Beard and John Strickland, Southwest Airlines, October 27, 2017.
- 4. Adam Morgan and Mark Barden, *A Beautiful Constraint: How to Transform Your Limitations into Advantages, and Why It's Everyone's Business* (Hoboken, N.J.: John Wiley & Sons, 2015), p. 36.
- 5. Ibid., p. 59.

Seek new contexts

- 1. Adam Morgan and Mark Barden, A Beautiful Constraint: How to Transform Your Limitations into Advantages, and Why It's Everyone's Business (Hoboken, N.J.: John Wiley, 2015), p. 36.
- 2. Mary Tripsas and Giovanni Gavetti, "Capabilities, cognition, and inertia: Evidence from digital imaging," *Strategic Management Journal* 21 (2000), pp. 1,147–61.
- 3. John Hagel, John Seely Brown, and Tamara Samoylova, *Work environment redesign: Accelerating talent development and performance improvement*, Deloitte University Press, June 3, 2013.
- 4. Ellen Langer, "Mindfulness in the age of complexity," Harvard Business Review, March 2014.
- 5. Ronald Heifetz, Alexander Grashow, and Martin Linsky, *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World* (Boston: Harvard Business Press, 2009), p. 34.
- 6. Gillian Tett, *The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers* (New York: Simon & Schuster, 2015), pp. 178–80.
- 7. Karl E. Weick, Sensemaking in Organizations (Thousand Oaks, Calif.: SAGE, 1995), p. 38.
- 8. John Seely Brown and John Hagel, "Creation nets: Getting the most from open innovation," *McKinsey Quarterly*, May 2006.
- 9. To learn more about FirstBuild, see GE Appliances, "GE's FirstBuild celebrates breakout first year," July 28, 2015. Based on interviews with FirstBuild co-founder Venkat Venkatakrishnan and Local Motors co-founder John B. Rogers.
- 10. Dan Roam, The Back of the Napkin: Solving Problems and Selling Ideas with Pictures (New York: Portfolio, 2009), p. 64.
- 11. For more about the AEIOU framework used in ethnographic research, see EthnoHub, "AEIOU framework," accessed December 18, 2017.
- 12. Tom Austin, "Watchlist: Continuing changes in the nature of work, 2010–2020," Gartner, March 30, 2010, p. 5.
- 13. Marian Petre and André van der Hoek, *Software Design Decoded: 66 Ways Experts Think* (Cambridge, Mass.: MIT Press, 2016), p. 15.

Cultivate friction

- 1. Kevin Crowston et al., "Perceived discontinuities and continuities in transdisciplinary scientific working groups," *Science of the Total Environment* 534 (2015), pp. 159–72.
- 2. Instructional Design.org, "Cognitive dissonance (Leon Festinger)," 2015.
- 3. Dave Gray, Liminal Thinking: Create the Change You Want by Changing the Way You Think (Brooklyn, N.Y.: Two Waves, 2016), p. 15.
- 4. Douglas Stone, Bruce Patton, and Sheila Heen, *Difficult Conversations: How to Discuss What Matters Most* (New York: Penguin, 2000), p. 33.
- 5. John Hagel III and John Seely Brown, "Productive friction: How difficult business partnerships can accelerate innovation," *Harvard Business Review*, February 2005.
- 6. Carol Kinsey Goman, "The art and science of mirroring," Forbes, May 31, 2011.
- 7. Joint Special Operations Command. See the full case study based on Stanley McChrystal's 2015 book *Team of Teams: New Rules of Engagement for a Complex World*.
- 8. Nancy Duarte, Resonate: Present Visual Stories That Transform Audiences (Hoboken, N.J.: John Wiley, 2010).
- 9. We use challenge as both verb (to dispute, to question, to call someone to engage) and noun (a call to participate or engage, a call to prove or justify).
- 10. The "ladder of inference" was put forth by psychologist Chris Argyris in 1970 and further developed by Peter Senge in his 1990 book *The Fifth Discipline: The Art and Practice of the Learning Organization*. The model describes the unseen thought processes that come between taking in facts and ultimately acting or responding.
- 11. Stone, Patton, and Heen, Difficult Conversations, p. 37.
- 12. From the Johari Window framework. There are four quadrants: On one axis is "known to self" and "not known to self"; on the other axis is "known to others" and "not known to others." By making what we believe we know visible to others, we can gain insight into what we don't know, whether because someone else does know it or whether by bringing the unknowns to light, the group can collectively create knowing around something none individually knew prior. See Gray, *Liminal Thinking*, p. 62.
- 13. The daily culture briefing is developed and hosted by the Briefing Workgroup and attended by most of the agency as well as outside participants. Read more about the sparks & honey briefing workgroup in the full case study, forthcoming in February 2018.

Commit to a shared outcome

- 1. Rawn Shah, "The leadership paradox of shared purpose," Forbes, February 16, 2015.
- 2. Ibid.
- 3. John Seely Brown and Paul Duguid, "Practice vs. process: The tension that won't go away," *Knowledge Directions*, Spring 2000, pp. 86–96.
- 4. Jill Geisler, "To build the team, build the trust, with these 8 tips," Poynter, May 10, 2012; Geisler, "What great bosses know about building trust," Poynter, February 20, 2010.
- 5. For examples of how successful companies don't change their commitment to the shared outcome, see Michael E. Raynor, *The Strategy Paradox: Why Committing to Success Leads to Failure (and What to Do About It)* (New York: Crown Business, 2007).
- 6. UJA Federation, "IsraAlD's impact in Tohoku Japan," YouTube, March 12, 2012. Andrew de Maar, Dalia Katan, and Ryan Gatti, interviews with IsraAid co-CEO Yotam Polizer and global programs director Naama Gorodischer, March 2017.
- 7. Lauren Davis, "How Pixar came up with a whole new way of showing a child's mind," Gizmodo, June 16, 2015.
- 8. Mark Bonchek, "Purpose is good. Shared purpose is better," Harvard Business Review, March 14, 2013.
- 9. John Hagel, John Seely Brown, Maggie Wooll, and Alok Ranjan, *If you love them, set them free: Why building the workforce you need for tomorrow means giving them wings to fly today,* Deloitte University Press, June 6, 2017.
- 10. For more about the power of narratives and how to create and use them, see John Hagel, "The untapped potential of corporate narratives," Edge Perspectives with John Hagel, October 7, 2013.

Bias toward action

- 1. Mary Tripsas and Giovanni Gavetti, "Capabilities, cognition, and inertia: Evidence from digital imaging," *Strategic Management Journal* 21 (2000), pp. 1,147–61.
- 2. Amy C. Edmondson, "Strategies for learning from failure," *Harvard Business Review*, April 2011. There are different types of risk-taking behaviors that are acceptable failures as differentiated from actions that are reckless and poorly thought out or ineffectively executed.
- 3. For more discussion of the value of reflection even amid action in the moment, see Donald Schon's explanation of the "present-action" concept in *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic, 1983).
- 4. Jeff Bezos's 2015 letter to Amazon shareholders. Amazon Web Services (AWS) was born from a website engineering workgroup that was originally working on improving IT infrastructure to address rapid growth. While the workgroup was exploring the option of separating applications and infrastructure, members came to realize that they could also provide the virtual machines that are commonly used as part of the infrastructure as a service, and so AWS was born. Today it accounts for over \$12 billion in annual revenue and more than \$3 billion in profit. See Brandon Butler, "The myth about how Amazon's Web service started just won't die," Network World, March 2, 2015; Julie Bort, "Amazon's massive cloud business hit over \$12 billion in revenue and \$3 billion in profit in 2016," Business Insider, February 2, 2017.
- 5. Jeff Bezos, "2016 letter to shareholders," Amazon, April 12, 2017.
- 6. Andrew de Maar and Ryan Gatti, interview with SW Field Tech workgroup, Dallas, May 1-2, 2017.
- 7. John Seely Brown and John Hagel III, "Creation nets: Getting the most from open innovation," *McKinsey Quarterly*, May 2006.
- 8. For more on FirstBuild, please see the full case study, forthcoming in February 2018.
- 9. Andrew de Maar and Dalia Katan, interviews with Royal Caribbean Cruises Ltd, June 6, 2017.
- 10. Stanley McChrystal with Tantum Collins, David Silverman, and Chris Fussell, *Team of Teams: New Rules of Engagement for a Complex World* (New York: Portfolio, 2015).
- 11. Schon, The Reflective Practitioner.
- 12. Linda Hill dubs this type of creative solution process *creative agility*, in which you need to "act rather than plan" your future. See Hill, "How to manage for collective creativity," TEDxCambridge, September 2014.
- 13. Andrew de Maar and Ryan Gatti, telephone interview with Steph Korey, co-founder and CEO, Away Travel, July 13, 2017. See Away Travel, "What we believe," accessed January 14, 2018.
- 14. Southwest Airline Baker Workgroup.
- 15. Bezos, "2015 letter to shareholders," Amazon, April 6, 2016
- 16. Marc Gunther, "3M's innovation revival," *Fortune*, September 24, 2010; Brian Hindo, "At 3M, a struggle between efficiency and creativity," *Bloomberg Businessweek*, June 10, 2007.

Prioritize performance trajectory

- 1. Jeff Bezos, "1997 letter to the shareholders," *Amazon 1997 Annual Report*. The original 1997 letter to the shareholders has been attached to all subsequent annual letters to the shareholders from Amazon as a reminder that it "remains Day 1."
- 2. Alan Deutschman, "Inside the mind of Jeff Bezos," *Fast Company*, August 1, 2004. Bezos is credited with this rule of thumb for keeping teams and workgroups sized to be effective: "Two pizzas" should be enough to feed a team or the group is too large. On these teams, the key business metric arises out of a discussion between a senior executive team and the team lead.
- 3. John Hagel, John Seely Brown, Christopher Gong, Stacey Wang, and Travis Lehman, *Pragmatic pathways: New approaches to organizational change*, Deloitte University Press, March 4, 2013.
- 4. Andrew de Maar and Dalia Katan, interview with Xavier Leclerq, senior vice president of newbuild and innovation, Royal Caribbean Cruises Ltd., June 6, 2017.
- 5. Michael J. Mauboussin, "The true measures of success," *Harvard Business Review*, October 2012. For more on the Oakland A's story, see Michael Lewis, *Moneyball: The Art of Winning an Unfair Game* (New York: W.W. Norton, 2003).
- 6. Mauboussin, "The true measures of success."
- 7. Alex Pentland, *Social Physics: How Good Ideas Spread* (New York: Penguin, 2014). Also see Scott Berinato's interview of Pentland: "Social physics can change your company (and the world)," HBR IdeaCast, April 2014.
- 8. Edward Ford, "Moneyball: How big data & analytics turned the Oakland A's into the best team in baseball," Sports Marketing Playbook, August 31, 2016.
- 9. Andrew de Maar and Abigail Sickinger, interview with Merlin Ward, director of culture systems, sparks & honey, February 15, 2017.
- 10. For more on the zoom out, zoom in approach to corporate strategy, see John Hagel, "The Big Shift in strategy, Part 1," LinkedIn, January 5, 2015.
- 11. This workgroup is committed to a shared outcome of building a ship that would be at the leading edge of design and innovation. For more on it, see the RCL case study, to be published in February 2018.
- 12. Rosabeth Moss Kanter, "Managing yourself: Zoom in, zoom out," Harvard Business Review, March 2011.

Maximize potential for friction

- 1. Peter High, "John Hagel: Scalable learning is the key differentiator for enterprises of the future," *Forbes*, July 25, 2016.
- 2. Scott E. Page, *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* (Princeton, N.J.: Princeton University Press, 2007). Page explains why diversity is fundamental to a productive workgroup in simple terms: If two collections of problem-solvers contain equal ability, but one is homogeneous and the other is diverse, the diverse group will, on average, outperform the homogeneous. He offers four "frameworks" of cognitive diversity, that is, diverse perspectives: ways of representing situations and problems; diverse interpretations: ways of categorizing or partitioning perspectives; diverse heuristics: ways of generating solutions to problems; and *diverse predictive models*: ways of inferring cause and effect.
- 3. For more on the concept of worker passion and passion of the explorer, see John Hagel, John Seely Brown, Maggie Wooll, and Alok Ranjan, *If you love them, set them free*, Deloitte University Press, June 6, 2017.
- 4. Alison Reynolds and David Lewis, "Teams solve problems faster when they're more cognitively diverse," *Harvard Business Review*, March 30, 2017. In the study of more than 100 executive groups, performance variance was not causally related to gender, ethnicity, or age.
- 5. Page, The Difference.
- 6. Reynolds and Lewis, "Teams solve problems faster when they're more cognitively diverse."
- 7. Cass R. Sunstein and Reid Hastie, "Making dumb groups smarter," Harvard Business Review, December 2014.
- 8. Andrew de Maar and Ryan Gatti, interview with Paul Butler, COO of sparks & honey, New York, February 21, 2017.
- 9. Mark S. Granovetter, "The strength of weak ties," American Journal of Sociology 78, no. 6 (1973): pp. 1,360-80.
- 10. Andrew de Maar and Maggie Wooll, interview with Alyssa Pollock, regional disaster officer, Red Cross Regional Disaster Unit Central/Southern Illinois, October 26, 2017.
- 11. Gillian Tett, *The Silo Effect: The Peril of Expertise and the Promise of Breaking Down Barriers* (New York: Simon & Schuster, 2015), p. 168.
- 12. Abigail Sickinger, interview with Google Analytics 360 team, January 17, 2017.
- 13. Page, *The Difference*. Similarly, Reynolds and Lewis reported working with a start-up biotechnology company at which a team of scientists, mixed in terms of gender, age, and ethnicity, never finished a strategic exercise task. They were all experts in the same domain, had no versatility in how to approach the task, and could not complete the assignment.
- 14. Carol S. Dweck, *Mindset: The New Psychology of Success* (New York: Random House, 2006). Stanford professor Dweck distinguishes two extremes of the mind-sets that people tend to have about their basic qualities: 1) In a fixed mind-set, "your qualities are carved in stone." Whatever skills, talents, and capabilities you have are predetermined and finite. Whatever you lack, you will continue to lack. This fixed mind-set applies not just to your own qualities but to those of others. 2) In a growth mind-set, "your basic qualities are things you can cultivate through your efforts . . . everyone can change and grow through application and experience." Qualities such as intelligence are a starting point, but success comes as a result of effort, learning, and persistence. The distinction between fixed and growth mind-sets has tremendous implications—as individuals, workgroups, and organizations—for how we address the growing pressures around us.

Maximize potential for friction (cont.)

- 15. Hagel et al., *If you love them, set them free.* Worker passion, or "passion of the explorer," is defined as exhibiting behaviors consistent with having a questing disposition, a *connecting* disposition, and a commitment to making a significant and lasting impact in a given domain. While around 13 percent of the US workforce, as measured by a 2016 survey of more than 3,000 workers, have all three attributes of passion, they are not innate and can be cultivated and developed through experiences and environment. However, today's organizations, largely designed to pursue scalable efficiency through standardization and tightly scripted processes, have little place for this form of passion and often work to limit it.
- 16. Andrew de Maar and Ryan Gatti, interview with Field Techs, Southwest Airlines, Dallas, May 1-2, 2017.
- 17. Tett, The Silo Effect, p. 182.

Eliminate unproductive friction

- 1. Suzanne M. Johnson Vickberg and Kim Christfort, "The new science of team chemistry: Pioneers, drivers, integrators, and guardians," *Harvard Business Review*, March-April 2017.
- 2. Ibid. Deloitte Business Chemistry is a system created by Deloitte that identifies four primary workstyles and related strategies for accomplishing shared goals. Each person is a composite of the four work styles, though most people's behavior and thinking are closely aligned with one or two.
- 3. Andrew de Maar and Dalia Katan, interviews with various groups from Newbuild & Innovation, Royal Caribbean Cruises Ltd., June 6, 2017.
- 4. John Hagel and John Seely Brown, "Control vs. trust: Mastering a different management approach," Deloitte, 2009.
- 5. Alex Pentland, Social Physics: How Social Networks Can Make Us Smarter (New York: Penguin, 2014), p. 78.
- 6. A series of studies conducted in the British National Health Service has shown that workgroups whose values cohere identify more strongly as a group and display greater levels of innovation. Tomas Chamorro-Premuzic and Dave Winsborough, "Personality tests can help balance a team," *Harvard Business Review*, March 19, 2015; Rebecca Mitchell et al., "Perceived value congruence and team innovation," *Journal of Occupational and Organizational Psychology* 85, no. 4 (2012): pp. 626–48.
- 7. See David Engel et al., "Reading the mind in the eyes or reading between the lines? Theory of mind predicts collective intelligence equally well online and face-to-face," *PLOS*, December 16, 2014. Google's Project Aristotle similarly found few patterns among successful teams except for encouraging distributed share of voice and exhibiting emotional and social sensitivity to other members.
- 8. Pentland, *Social Physics*, p. 90. MIT's Human Dynamics Laboratory developed a badge technology to read individual communication behavior and deployed it to 2,500 people in 21 organizations across a variety of industries in order to better understand group performance. Researchers discovered that patterns of communication were as significant as all other factors combined: individual intelligence, personality, skill, and substance of discussions.
- 9. Alex "Sandy" Pentland, "The new science of building great teams," Harvard Business Review, April 2012.
- 10. Stanley McChrystal with Tantum Collins, David Silverman, and Chris Fussell, *Team of Teams: New Rules of Engagement for a Complex World* (New York: Portfolio, 2015).
- 11. Gil LeBreton, "Umps get 1 in 3 close pitches wrong, HBO story shows," Star-Telegram, October 1, 2016.

Reflect more to learn faster

- 1. Ronald Heifetz, Alexander Grashow, and Marty Linsky, *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World* (Cambridge, Mass.: Harvard Business Press, 2009).
- 2. For more information about the findings from the MIT Human Dynamics lab, see Alex Pentland, *Social Physics: How Social Networks Can Make Us Smarter* (New York: Penguin, 2014).
- 3. Douglas Stone and Sheila Heen, *Thanks for the Feedback: The Science and Art of Receiving Feedback Well* (New York: Penguin, 2015). Stone and Heen distinguish between three types of feedback for individuals: evaluating, coaching, and appreciating.
- 4. Ryan Gatti, interview with Venkat Venkatakrishnan, co-founder, GE FirstBuild, Louisville, Ky., April 18, 2017.
- 5. Wharton@Work, "After action reviews," April 2012.
- 6. Ibid.: "Called 'one of the most successful organizational learning methods yet devised,' the After Action Review (AAR) was developed by the United States Army in the 1970s to help its soldiers learn from both their mistakes and achievements. Since then, the AAR has been used by many companies for performance assessment. And yet, as *The Fifth Discipline* author Peter Senge notes, efforts to bring the practice into corporate culture most often fail because 'again and again, people reduce the living practice of AARs to a sterile technique."
- 7. Linda Hill, "How to manage for collective creativity," TedxCambridge, September 2014.
- 8. In Agile methodology, deep reflection is described as a keen focus on the effort being exerted: the *work* being done. Our research suggests that this type of deep reflection should focus on the workgroup itself—the *how* work gets done.
- 9. Jim Steele, "Structured reflection on roles and tasks improves team performance, UAH study finds," University of Alabama in Huntsville, April 8, 2013.
- 10. Douglas Stone, Bruce Patton, and Sheila Heen, *Difficult Conversations: How to Discuss What Matters Most* (New York: Viking, 1999), p. 34.
- 11. For more on JSOC, read the complete case study, publishing in February 2018.
- 12. This framing is similar to what many of our Doblin colleagues use to uncover significant patterns and relationships across observations.
- 13. Donald A. Schon, The Reflective Practitioner: How Professionals Think in Action (New York: Basic, 1984), p. 131.
- 14. Gary Klein and Barbara Fasolo, "Seeing what others don't: The remarkable ways we gain insights," London School of Economics, Department of Management public lecture, March 26, 2015.

GE FirstBuild

- 1. The group was recently acquired by the Chinese multinational Haier, whose CEO is a fan of the model that FirstBuild embodies.
- 2. This case study is based on a series of interviews and conversations with leaders at FirstBuild over the course of three-plus years, as well as data provided by GE FirstBuild. Andrew de Maar and Ryan Gatti conducted the interviews through site visits, phone, and email over the period from April to October 2017.
- 3. This comparison is useful because it highlights how this approach changes—and minimizes—the risk involved in innovation. It cannot be taken as an apples-to-apples comparison, since getting a product to market for a large manufacturer typically involves a broader market release that is more expensive.
- 4. FirstBuild's Indiegogo campaign; Oculus Rift's Kickstarter campaign.
- 5. The analogy to cars comes from the fact that the original crowdsourcing product development platform came from Local Motors, a platform that allows car enthusiasts to co-design and develop the company's cars.

Southwest Airlines: Baker workgroup

- 1. Per company-provided information. This case is based on a series of interviews, conducted on-site at Dallas Love Field as well as via telephone with leadership and members of the Field Tech group, between April and November 2017.
- 2. Steve West, senior director, "Network Operations Control," 2016.
- 3. Per company-provided analysis.
- 4. Per company data and analysis.
- 5. Per company data.

Red Cross Regional Disaster Unit

- 1. American Red Cross, "Brief description," September 27, 2012.
- 2. Within the Red Cross organization, these units are officially called *regional disaster teams*, so we will refer to this unit as the Regional Disaster Team of Southern/Central Illinois. However, the "team" fits our criteria for a workgroup, which is why it is included here.
- 3. Per the organization's assessment, based on internal data.
- 4. This case study is based primarily on interviews and data from the Regional Disaster Team of Central/Southern Illinois, particularly with regional disaster officer Alyssa Pollock. The interviews were conducted by Andrew de Maar and Ryan Gatti, over phone and email, between May and October 2017.
- 5. For a deeper discussion of what we mean by frontline workgroups and why we focus on them, please see the first report in the Deloitte Center for the Edge's Business Practice Redesign series, John Hagel et al., *Beyond process: How to get better, faster as "exceptions" become the rule*, Deloitte Insights, November 13, 2017.
- The categorization is based on the field operations budget at the ground level for a given event; it does not include the cost of readiness. The Red Cross handles budgetary requests for any field operation larger than Level
 These levels tend to correspond to the complexity of the recovery effort, although there are cases in which many people are affected in the same way such that recovery is not complex but is expensive.
- 7. American Red Cross, "Our history," accessed February 20, 2018.

The sparks & honey Culture briefing workgroup

- 1. The information in this case study comes from a series of interviews and email exchanges with key personnel at sparks & honey, including COO Paul Butler and engagement director Annalie Killian, between February and December 2017.
- 2. sparks & honey, "Our daily briefing is going live," July 6, 2017: "A signal is a manifestation of culture (fast and slow) in our daily lives. It can be anything from a tweet, song, or meme that's spreading fast, to popular news articles, research papers and patent files, to changes in public policy or emerging tech."
- 3. Lindsay Stein, "Defense Department, sparks & honey team up to fight terrorism," AdAge, February 28, 2017.
- 4. AdAge, "From McCann to Firstborn, these are the 10 agencies to watch in 2014," February 3, 2014.
- 5. Christopher Heine, "Why FOLO is the new FOMO, and 4 other hot cultural trends to know in 2016," *AdWeek*, December 30, 2015.
- 6. Cleis Abeni, "Psst . . . there's a radical notion in a new report about gender language," *Advocate*, December 14, 2015.

The sparks & honey Culture briefing workgroup (cont.)

- 7. The workgroup includes: the two co-briefers who curate signals from the s&h cultural intelligence database and lead the presentation on a daily basis; an illustrator who, in real time, is creating a graphic recording of the discussion, mapping central themes, provocations, and patterns of the conversation; two data scientists who, in real time, are tagging each signal with macro and mega trends from the consultancy's proprietary trends taxonomy; human network team members who are pushing signals, ideas, and insights from the briefing to the appropriate subject matter experts from the s&h advisory board; two or three client team leads (from cultural strategy and account management) who are tagging specific signals and folding insights from the discussion into client work streams.
- 8. sparks & honey, "Our daily briefing is going live."

Royal Caribbean Cruises Ltd.'s Newbuilding Innovation workgroup

- 1. In addition to owning and operating three global brands—Royal Caribbean International, Celebrity Cruises, and Azamara Club Cruises—RCL is a 50 percent joint venture owner of the German brand TUI Cruises, a 49 percent shareholder in the Spanish brand Pullmantur, and a minority shareholder in the Chinese brand SkySea Cruises. See Royal Caribbean, "About us," accessed February 12, 2018.
- 2. David Moye, "The world's largest cruise ship is basically its own city," Huffington Post, May 23, 2016.
- 3. The Newbuilding & Innovation workgroup works on all new ships, but the composition of the workgroup varies somewhat from ship to ship.
- 4. Project Edge is the workgroup's current effort on the newest ship under the Celebrity brand. The Celebrity *Edge* is RCL's most innovative ship to date. The group's composition and practices for Project Edge are representative of its work on other projects.
- 5. Matt Hochberg, "Royal Caribbean wins five awards at 2017 *Travel Weekly* Readers Choice Awards," Royal Caribbean blog, December 18, 2017; Carolyn Spencer Brown, "These are the best cruises in the world," *Town & Country*, October 6, 2016; *U.S. News & World Report*, "Best cruise lines 2018," accessed February 13, 2018.
- 6. Royal Caribbean, "Harmony of the Seas: By the numbers," May 12, 2016.
- 7. Royal Caribbean, "Inside look: The bold features on board Symphony of the Seas," October 12, 2017.
- 8. Per company-provided net promoter scores.
- 9. Per company-provided guest satisfaction ratings from satisfaction surveys, along with Deloitte analysis.
- 10. Of course, there are many other contributors to guest and crew experience, but ship design is a significant part of the experience and what the workgroup aims to shape.
- 11. At RCL, an in-house program management office with global representation plays an important role in providing holistic project reports, which highlight risks and link all workstreams (brand/build), and actively seeking and adapting best practices across industries.

Southwest Airlines: Field Tech workgroup

- 1. Per company-provided information. This case is based on a series of interviews, conducted on-site at Dallas-Love Field as well as via telephone with leadership and members of the Field Tech group, between April and November 2017.
- 2. Southwest Air Reliability Study, August 23, 2017.

League of Legends: Team SoloMid

- 1. League of Legends has at least 100 million monthly players, though Riot Games has released no updated figures since September 2016. Adam Newell, "How many League of Legends players are there?," Dot Esports, May 14, 2017. Overall e-sports revenues at Newzoo, 2018 global esports market report, February 2018.
- 2. HTC, "Rebirth: What is esports," YouTube, February 20, 2015.
- 3. SuperData Research, "Home," accessed February 17, 2018.
- 4. sparks & honey, "The eSports user manual," slide 7, accessed February 25, 2018.
- 5. Robert Elder, "The esports audience is escalating quickly," *Business Insider*, March 20, 2017; Xing Li, "The League of Legends Worlds final reached 60 million unique viewers," Dot Esports, November 18, 2017.
- 6. Newzoo, 2018 global esports market report.
- 7. Eben Novy-Williams, "Video gaming becomes a scholarship sport at University of Utah," Bloomberg, April 5, 2017.
- 8. The TSM organization includes other staffers who manage marketing, partnerships, translating, and other activities related to having a professional team; however, they do not work with the TSM members in the way that we've defined a workgroup. See Leaguepedia, "Team SoloMid," accessed February 19, 2018.
- 9. GosuGamers, "LoL rankings," accessed February 19, 2018.
- 10. Parth Naidu, "Competitive esports coaching," 329+, December 25, 2014.
- 11. David Segal, "Behind League of Legends, e-sports's main attraction," New York Times, October 10, 2014.
- 12. Leaguepedia, "Team SoloMid."
- 13. Ibid.
- 14. Newzoo, The global growth of esports.
- 15. Reddit, "Useful LoL websites and software," June 1, 2017.
- 16. DreXxin, "TSM's legacy: Tough decisions and championship titles," Esports Heaven, November 17, 2014.
- 17. Riot Games, "NA LCS stats," accessed February 19, 2018.
- 18. Parth Naidu, "Alliance's road to Worlds: Translating the numbers," 329+, September 21, 2014.
- 19. "The Jungle refers to any area of the map that is not a lane or part of either team's base. . . . Junglers rely on killing neutral monsters in the jungle to keep up with their laning teammates in terms of gold and experience. In a standard 5-on-5 game of League of Legends, 4 players on a team will be Laners, and 1 player will be a designated Jungler." League of Legends Wiki, "Jungling," accessed February 19, 2018.

League of Legends: Team SoloMid (cont.)

- 20. 329+, "Reflecting on summer 2016," October 26, 2016.
- 21. 329+, "Analysis in competitive League of Legends," March 6, 2015.
- 22. Reddit, "Useful LoL websites and software."
- 23. Xander Torres, "Bjergsen and TSM adjust to new dynamics," Red Bull Esports, February 8, 2017.
- 24. Ibid.
- 25. John Hagel and John Seely Brown, "How World of Warcraft promotes innovation," Bloomberg, January 15, 2009.

US Joint Special Operations Task Force: Al Qaeda in Iraq

- 1. Stanley McChrystal, Tantum Collins, David Silverman, and Chris Fussell, *Team of Teams: New Rules of Engagement for a Complex World* (New York: Portfolio/Penguin, 2015), p. 22. We applied the business practice redesign framework to the story of JSOC JSOTF-AQI as told by Gen. McChrystal. We are treating the JSOTF-AQI as a single entity to simplify our use of this example for illustrative purposes. The reality of how JSOC stands up task forces for specific national security challenges and the evolution of the JSOTF in Iraq is more complex, of course. For those interested, *Team of Teams* is a good starting point.
- 2. McChrystal et al., Team of Teams, p. 3.
- 3. Ibid., p. 81.
- 4. "A JSOTF does not have a fixed organization. . . . [A] JSOTF is normally task-organized based on mission requirements, and its organization is flexible in both size and composition." Special Operations Forces Reference Manual, 4th edition (Joint Special Operations University, 2015), pp. 2–25.
- 5. McChrystal et al., Team of Teams, p. 118.
- 6. Chris Fussell with C. W. Goodyear, *One Mission: How Leaders Build a Team of Teams*, (New York: Portfolio/Penguin, 2017), p. 58.
- 7. McChrystal et al., Team of Teams, p. 19.
- 8. Ibid., p. 84.
- 9. Ibid., p. 41.
- 10. Ibid., pp. 69-71.
- 11. McChrystal et al., Team of Teams, p. 20.
- 12. Ibid., p. 81.
- 13. Ibid., p. 209.
- 14. Ibid.
- 15. Ibid., p. 167.

About the authors

JOHN HAGEL is co-chairman of Deloitte Center for the Edge; he has nearly 35 years of experience as a management consultant, author, speaker, and entrepreneur and has helped companies improve performance by applying IT to reshape business strategies. In addition to holding significant positions at leading consulting firms and companies throughout his career, Hagel is the author of bestselling business books such as *Net Gain, Net Worth, Out of the Box, The Only Sustainable Edge*, and *The Power of Pull*. He is on LinkedIn at www.linkedin.com/in/jhagel and on Twitter @jhagel.

JOHN SEELY BROWN (JSB) is independent co-chairman of Deloitte Center for the Edge and a prolific writer, speaker, and educator. In addition to his work with the Center for the Edge, JSB is adviser to the provost and a visiting scholar at the University of Southern California. This position followed a lengthy tenure at Xerox Corp., where he was chief scientist and director of the Xerox Palo Alto Research Center. JSB has published more than 100 papers in scientific journals and authored or co-authored seven books, including *The Social Life of Information, The Only Sustainable Edge, The Power of Pull*, and *A New Culture of Learning*.

ANDREW DE MAAR is head of strategy at the Deloitte Center for the Edge where he works with senior leaders to rethink what's required for success in a more rapidly changing world by helping them to reframe their approaches to strategy, innovation, and business transformation. He has worked broadly across industries on emerging opportunities at the edge of business and technology. His writing and speaking focuses on the opportunities we all have—as individuals and institutions—to achieve more and more of our potential over time. He has an MBA from Stanford University and is on LinkedIn at www.linkedin.com/in/AndrewdeMaar.

MAGGIE WOOLI is head of eminence at Deloitte Center for the Edge; she combines her experience advising large organizations on strategy and operations with her passion for getting the stories behind the data and the data behind the stories to shape the Center's perspectives. At the Center, she explores the emerging opportunities at the intersection of people, technologies, and institutions. She is particularly interested in the impact new technologies and business practices have on talent development and learning for the future workforce and workplace. She is on LinkedIn at www.linkedin.com/in/margaretwooll.

Research team

MICHAEL DING was a research fellow at Deloitte Center for the Edge; he is passionate about seeking technology and analytics driven approaches to address challenging problems. As a senior consultant within Deloitte's Cyber Risk Services, he has assisted clients with discovering and managing information security and privacy risks across a range of industries, including technology and retail. At the Center, Ding has researched extensively on continuous improvement methodologies related to agile, DevOps from leading enterprises and scalable learning from emerging e-sports ecosystems.

RYAN GATTI was a research fellow at Deloitte Center for the Edge, focused on the intersection of strategy and innovation. He is passionate about understanding how the world is changing and, in particular, how disruption will affect fintech players, emerging markets, and broader ecosystem plays. As a consultant within Deloitte Consulting LLP's Strategy practice, Gatti has helped clients analyze competitive threats, better understand players on the periphery, enter new markets, and stand up corporate innovation units. At the Center, he focused on innovation, scouting organizations that are operating on the edge of what is possible, and establishing broader partnerships across the ecosystem.

DALIA KATAN was a research fellow at Deloitte Center for the Edge; she is a strategist and designer passionate about using design thinking to foster creativity and human connection in the workplace and to transform the work for the future. Working within Deloitte's Strategy & Operations practice, Katan has worked with consumer products and technology clients to solve problems related to brand, growth, and innovation strategy. At the Center, she focused on learnings from technology, emergency response, and hospitality industries that may help teams improve their performance over time.

ABIGAIL SICKINGER was a research fellow at Deloitte Center for the Edge, passionate about exploring how the rapid evolution of technology is making it difficult for humans to keep up and their organizations to remain relevant. At the Center, she delved into the group dynamics and decision-making that shape how practices are adopted and replicated within an organization. As a consultant within Deloitte's Strategy and Operations practice, Sickinger has helped a range of clients, from public transportation to pharmaceutical company to a youth education nonprofit plan for and take advantage of new opportunities.

Acknowledgements

We could not have developed this topic without the generous and open participation of the following individuals: Brandon Beard, Mike Perna, John Strickland, Dave Fischer, Barry Lott, Jesse Luck, Matt Hafner, Steve Hozdulick, Ryan Files, Charles Cunningham, Alan Kasher, Sonya Lacore, Jeff Hamlett, Craig Drew, Paul Butler, Merlin Ward, Annalie Killian, Terry Young, Nikelii Bennett, Irineu Romano, Adam Goldstein, Luz Luna, Hani Eid, Patricia Conway, Gray Shealy, Raimund Gschaider, Fernando Iglesia, Adam Goldstein, Harri Kulovaara, Kevin Douglas, Kelly Gonzalez, Xavier Leclercq, Joseph Miorelli, Diane Stratton, Paris Swann, Gaby Landa, Erin Barton, Jaime Lemus, Carla Makela, Zack Cangiano, Gabe Trujillo, Daniel Schneider, Eric Lewis, Kelly Watkins, Neil Shah, Sheela Subramanian, Elain Zelby, Emily Stephens, Richard Hasslacher, Michael Lopp, Julieanna Gray, Melody Khodaverdian, Anastasia Afendikova, Jamie Feeley, Jimmy Lee, Matt Schwartz, Walter Villavicencio, Venkat Venkatakrishnan, Justin Berger, Randy Reeves, J. Taylor Dawson, Naama Gorodischer, Yotam Politzer, Stanley McChrystal, Frank Kearney, Maureen LeBoeuf, Rebecca S. Halstead, James "Spider" Marks, Jen Rubio, Steph Korey, Alyssa Pollock, Lynda Hruska, George Samuels, Coran Lill, Skip Skivington, Vivian Tan, Joy Marcus, Jan Ferguson, Michael St. James, Jason Wiseman, Ariel Yoffe, Ryan Villanova, Samantha Klein, Jake Guglin, Antonia Cecio, Kiomi Sakata, Bronson Green, Carson Cland, Dennis Holden, Matthew D'Amato, Lisa Gluskin Stonestreet, Erich Stonestreet, and Sha Huang.

In addition, we are grateful to the colleagues and friends whose enthusiasm and insights helped shape this topic: Maynard Webb, Guarav Tewari, Waguih Ishak, Dick Levy, Brian Rouch, Doug Bade, Doug Gish, Andrew Blau, Cheryl Pinter-Real, Jacquie Obi, Joseph Bakal, Tom Nassim, Lynne Sterrett, John Tripp, David Kuder, David Martin, Matt David, Amy Feirn, John Henry, James O'Kane, Matthew Standart, Chad Whitman, Kusandha Hertrich, Tim Gillam, Wendy Meredith, Greg Tevis, Bill Pollard, Debbie Fox, Phil Lubik, Matt Angelo, Amy Lawson-Stopps, Stephanie Hill, Jack Wisnefske, Grant Hartanov, Peter Liu, John Gelline, Peter Robertson, Dave Zaboski, Blythe Aronowitz, Neda Shemluck, Mukesh Singhal, Paul Keck, and Duleesha Kulasooriya.

The team would also like to thank the following individuals whose support is invaluable: **Jodi Gray**, **Carrie Howell, Matthew Budman, Emily Koteff Moreano, Molly Woodworth,** and **Joanie Pearson**.

Contacts

Blythe Aronowitz

Chief of staff, Center for the Edge Deloitte Services LP +1 408 704 2483 baronowitz@deloitte.com

Wassili Bertoen

Managing director, Center for the Edge Europe Deloitte Netherlands +31 6 21272293 wbertoen@deloitte.nl

Peter Williams

Chief edge officer, Centre for the Edge Australia Tel: +61 3 9671 7629 pewilliams@deloitte.com.au



Sign up for Deloitte Insights updates at www.deloitte.com/insights.



Follow @DeloitteInsight

About Deloitte Insights

Deloitte Insights publishes original articles, reports and periodicals that provide insights for businesses, the public sector and NGOs. Our goal is to draw upon research and experience from throughout our professional services organization, and that of coauthors in academia and business, to advance the conversation on a broad spectrum of topics of interest to executives and government leaders.

Deloitte Insights is an imprint of Deloitte Development LLC.

About this publication

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or its and their affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Deloitte Touche Tohmatsu Limited, its member firms, or its and their respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

Copyright © 2019 Deloitte Development LLC. All rights reserved. Member of Deloitte Touche Tohmatsu Limited