

# Scaling edges

A pragmatic pathway to transformation

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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’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](http://www.deloitte.com/centerforedge).

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# Executive summary

**T**HE WORLD AS we know it is changing. Increased globalization and rapid advancements in technology, collectively referred to as the Big Shift, are profoundly altering our economy and creating new market opportunities for the firms that can understand and anticipate their impact.<sup>1</sup> Companies such as PopCap and Amazon have grown rapidly by identifying two

**In order to thrive in a post–Big Shift world, today’s companies must move from innovating at a product and service level (that is, flooding the market with new, marginally improved products) to innovating at an *institutional* level.**

such market opportunities, social gaming and e-books, that just a decade ago were all but nonexistent. While some firms have benefited handsomely, these same fundamental shifts have exposed other companies to significant performance pressures. Look no

further than the rise of Amazon and concurrent fall of Borders as proof of the growing imperative for firms to change and adapt.

In order to thrive in a post–Big Shift world, today’s companies should consider how they move from innovating at a product and service level (that is, flooding the market with new,

marginally improved products) to innovating at an institutional level. This change requires firms to rethink even the primary objective of why they exist and drastically change their management mindset; in today's rapidly changing landscape, a focus on scale efficiencies is not enough. Though transformative change is required, it is admittedly far from a simple task.

Our report *Pragmatic Pathways* provided a framework for executives seeking to embark on this difficult but necessary transformation. This article introduces and breaks down the three prongs of the framework, while the "Key design principles" section offers a deeper look at the rationale behind each. First, by focusing on edges rather than the core of a company, change agents can better identify projects that align with Big Shift forces and therefore are most likely to achieve significant and sustainable returns. Second, by leveraging external resources rather than internal support to scale, these edges can circumvent the scrutiny and organizational resistance with which change initiatives are typically met. Finally, by accelerating learning rather than focusing solely on short-term outcomes, edges can become conduits of transformation, helping the companies of today achieve institutional innovation and tap into the opportunities of tomorrow.

The background features a series of overlapping, thin white circles and lines of varying sizes, creating a complex, abstract pattern that resembles a network or a series of orbits. The circles are centered around the main text area, with some overlapping the text itself. The overall effect is a sense of dynamic movement and interconnectedness.

# Scaling edges to unleash the potential of the core

# The opportunity

IN 2005, DUBBING someone a “gamer” was not an epithet to be taken lightly. At the time, the video game market consisted almost entirely of hardcore players who purchased costly consoles or desktop programs and invested a great deal of time and money into the hobby. Today, it is not uncommon to find a 40-year-old housewife who plays games every day via Facebook, and thanks to the advent of social and mobile gaming, the market landscape looks very different.

The rise of social gaming, an estimated US\$4 billion market expected to grow to over US\$11 billion by 2016,<sup>2</sup> may appear to some as a fluke change in consumer preferences. However, a closer look reveals more foundational forces at work. The market was made viable by the emergence and spread of new digital platforms, namely social media and mobile applications, which gave companies access to a new set of customers and allowed for a completely new form of gaming to emerge.

In the video game market, it was not a major player but, rather, a number of smaller companies that successfully capitalized on this lucrative market. One of those was a Seattle-based startup called PopCap Games. Founded by John Vechev, Brian Fiete, and Jason Kapalka, PopCap aimed to bring great games to anywhere customers were gathering. And in the spirit of this philosophy, Vechev and his team continually quested for new ways to solve the 80 percent problem: If 15 percent of the population are hardcore gamers, and another 5 percent play social games, how do we reach the remaining 80 percent of the population who aren't playing games

at all? In 2005, while competitors fought over the same hardcore gamers (the 15 percent), PopCap began exploring ways to gain access to the elusive

**Market opportunities are appearing more rapidly than ever and present large upside potential—if you know where to look.**

80 percent. By leveraging two adjacent platforms, Apple and Facebook, the small firm bested many of its larger competitors and solved the issue of discoverability for an entirely new brand of gamers.

But what lessons can a Fortune 500 executive take away from the success story of a startup? These market opportunities are appearing more rapidly than ever and present large upside potential—if you know where to look. Social gaming is just one example of new, “edge” markets being created from deep shifts reverberating throughout the economy. Driven by globalization and rapid advancements in digital technology, we collectively refer to these changes as the Big Shift, and closely measure and quantify their effects in our annual report, *The Shift Index*.<sup>3</sup> While we see these shifts at work every day, from the rapid growth rates of internet adoption to increased consumer power, many large companies have not yet capitalized on the market opportunities these shifts create.

These opportunities are by no means limited to tech-centric industries. In health care, for example, social media adoption has given rise to new patient-driven health models such as quantified self-tracking, which are increasingly

## **AN EDGE DEFINED**

### *What is an “edge,” and what makes this type of opportunity unique?*

There are several factors that separate an edge from other types of growth opportunities. While new market opportunities may arise from many catalysts (changing consumer preferences, product innovation, etc.), edges are a byproduct of the Big Shift and therefore exhibit a strong correlation to the fundamental shifts, driven by globalization and rapid advancements in digital technology.

This correlation with fundamental shifts may reveal itself only in the long run. In the short term, a second key characteristic of an edge is that it requires minimal investment to initiate. Large upfront investments place great scrutiny on traditional growth initiatives and raise latent political antibodies to change if the leadership team is uncomfortable with the initiative. In order to further minimize pushback from internal business units, an edge should have the ability to grow the pie, meaning it does not cannibalize existing revenue streams or pose a threat to core projects. In the long run, however, the edge must have the ability to transform the core, meaning that as the edge scales, it ultimately becomes the new core of the enterprise.

### *How does the pursuit of an edge ultimately differ from a skunkworks group?*

The transformative nature of an edge differentiates this type of opportunity from a traditional skunkworks group. While teams may begin under the radar, an edge builds momentum over time, and ultimately pursuing the edge opportunity, transforms the entire organization itself. Skunkworks groups typically maintain their covert status, seeding ideas that ultimately return to and are pursued by the core.

supplementing more traditional health services. In the automotive sector, advancements in clean-tech automotive driven by declining costs in battery technology and battery swap infrastructure are beginning to manifest in practical yet cost-effective access to non-fossil fuel vehicles. Today's large companies, ill-suited to recognizing or reacting

to these underlying changes, risk missing large market opportunities simply because they didn't know where to look. As we will see, however, the issue is not just one of opportunity; the magnitude of these changes creates an imperative for firms to change in order to survive in a post-Big Shift world.



# The imperative

IN THE SPRING of 2009, one Fortune 1,000 firm was struggling to stay afloat in the midst of a steep economic downturn and rapidly changing industry dynamics. Like other firms before it, the company's leadership sought large organizational changes to cope with these mounting pressures. "Our top priority," the CEO announced when discussing their most recent quarterly loss, "is getting our financial house in order by continuing to reduce expenses, pay down our debt, and improve cash flows." These comments were by no means earth-shattering; in the throes of an economic crisis, this sentiment was being echoed by executives at other large companies as well.

The CEO was Ron Marshall, leader of the Borders Group from 2009 to 2010. In 2005, just six years prior to its bankruptcy and liquidation, Borders was the world's second-largest book retailer, with 1,329 locations, including outposts in Asia and the United Kingdom. Industry commentators regarded Borders as a retail powerhouse, predicting its growth to spell the demise of independent bookstores everywhere. And yet between 2001 and 2008, as the internet age was redefining commerce, Borders did not invest in an online storefront. In fact, the firm adopted a strategy that included turning over its online operations to Amazon (its competitor!) in 2001, while doubling down on its brick-and-mortar retail strategy.

While the Big Shift affords firms great opportunities, as the spread of mobile and social platforms did for PopCap, it can also threaten the survival of existing firms that fail to grasp its urgency and magnitude. This is not meant as an indictment of a single firm or even a single industry—rather, the disconcerting reality is that declining performance

is occurring throughout the entire economy. In our annual *Shift Index*, we analyzed firm performance through return on assets (ROA) for all US public companies over the past 45 years. Our findings indicated that ROA for all public firms has experienced sustained deterioration, with a 75 percent decline between 1965 and 2010.<sup>4</sup>

**While the Big Shift affords firms great opportunities, it can also threaten the survival of existing firms that fail to grasp its urgency and magnitude.**

Many executives and board members acknowledge that profitability and performance are eroding—how could they not? And yet most ailing firms take one of two avenues to alleviate these concerns: aggressively cut costs or develop new products and services to raise revenue. While these are conventional strategies, we argue that both are offering diminishing returns for firms. As shown in *The Shift Index*, cost-cutting and layoffs can provide firms with immediate bottom-line relief. The effectiveness of these cuts, however, usually diminishes as firms push harder and harder on their existing resources with minimal gains. Meanwhile, increasing revenues through product or service innovation is also becoming more difficult. In the US economy, competitive intensity has more than doubled since 1965, and brand disloyalty is on the rise.<sup>5</sup> As product life cycles compress and customers grow increasingly fickle in their purchasing patterns, firms that innovate solely by flooding the market with new products are at risk.



The implications of Borders' history are much greater than the familiar tale of Death by Internet Age. Borders is an early manifestation of the dangers that firms may face if they do not enact the transformative restructuring required

to compete in a post-Big Shift world. This is a lesson that eventually even Borders learned; in May 2010, the company embraced its industry's foundational shifts and released its own e-reader, the Kobo. But it was too little, too late.

## THE CHALLENGE

Successfully capturing opportunities in a post-Big Shift world requires more than cutting costs or introducing new, marginally differentiated products and services. Success requires an organization to let go of its current playbook and rethink the way it sees the world and its role in the broader business environment. Executives need to change the lens through which they view their firm in order to start spotting edges that can gain momentum and ultimately transform their organization.

**What is the primary purpose of an organization?** Large organizations have traditionally existed to maximize scale and scope efficiencies. However, with the availability of disruptive technologies such as cloud computing and big data analytics, small companies have the ability to perform tasks that were previously limited to organizations with scale advantage. As the playing field levels with regard to scale, companies should serve more as orchestrators for passionate employees to connect and learn from one another. Companies can benefit from the performance improvement of their employees, but only if these passionate employees want to congregate in corporations.

**How do companies create value?** Most firms organize themselves to accumulate, defend, and monetize stocks of knowledge. In the past, if an organization knew something valuable and restricted access to this knowledge, it possessed a competitive advantage. However, in a world changing at an increasingly rapid pace, the half-life of these stocks of knowledge is depleting at an equally rapid pace. The company of tomorrow needs to, therefore, focus not on stocks of knowledge, but rather flows of knowledge. It's no longer about "what you know," but rather, "what relationships you have" and "what you can learn from these relationships."

**How do companies mobilize resources?** Large companies traditionally followed a push approach for resource allocation, predicting customer needs through detailed forecasts and using these forecasts to mobilize resources. In contrast, a pull model is focused less on predicting and more on responding quickly to customer needs and wants. By building out platforms to swiftly meet these needs, the company can draw out resources when and where they are needed. Pull gives organizations the ability to act more effectively based on insight, avoiding misallocation and incorrect assumptions.

Changing the mindset of large organizations with respect to the aforementioned questions is a key challenge in better equipping firms to compete in a post-Big Shift world. But changing mindsets is just the beginning. Achieving institutional innovation requires a refocusing from scale efficiencies to talent leverage, from hoarding stocks of knowledge to tapping into flows of knowledge, and ultimately from a push mentality to a pull mentality.<sup>6</sup> When executives think of these huge changes and begin to conceive of the implications for their organizational structure, systems, and culture, a great wall of organizational resistance is likely to form. So how can organizations get around this wall to achieve the change described?

# The Great Wall

RESISTANCE TO CHANGE is an age-old phenomenon that goes back to some of the largest organizations in history. Qin Shi Huang, the first emperor to unify China in 221 BCE, viewed philosophies and academia from outside of the Qin kingdom as threats. Intellectuals frequently challenged his authority, and in an effort to preserve the core and maintain control, Qin ordered the burning of all books unrelated to his reign and executed more than a thousand scholars who dared to question him.

**Large companies that attempt to enact major change fail more often than not; in fact, only an estimated one-third of major change efforts accomplish the goal they originally set out to achieve.**

While core defense mechanisms in today's corporate environment may be somewhat more civil than those in the Qin dynasty, the "great wall" of organizational resistance to change still remains. Large companies that attempt to enact major change fail more often than not; in fact, only an estimated one-third of major change efforts accomplish the goal they originally set out to achieve in today's corporate environment.<sup>7</sup>

The approach most corporate executives take in enacting large-scale change stems from a commonly held but misguided notion that big change requires big bets. This mindset often leads them to tackle the core of the company head-on, which only serves to reinforce the very resistance they hope to avoid. This direct approach may occur for a variety of reasons. Executives may feel that tackling the core head-on demonstrates commit-

ment to stakeholders and market analysts or that a grand overhaul is the only way to accomplish change when the core of the company is too bureaucratic, slow, or ingrained in its old ways. While the courage of these executives is admirable, this approach can lead to some harsh realities:

- **Changing the core has an uncertain return.** A company's core business is what they know best, and making significant changes to this core can be a risky endeavor for most firms. The project's failure may irrevocably alter the company's core operations. Even if a change agent within the firm strongly believes in the returns, other leaders unable to see past the uncertainty may push back, creating a cycle of resistance that can weaken or kill an initiative.
- **Changing the core requires a great deal of resources.** An overhaul of an organization's core operations requires a large upfront investment and a willingness to accept substantial losses while the company reorganizes and refocuses. Even if an organization has sufficient resources for the project, such a large reallocation will threaten the status quo and usually raise institutional antibodies within the core stakeholders. As the performance pressures continue to mount on firms and executives, summoning the resources to enact change within the core becomes only more difficult.
- **Changing the core requires a great deal of time.** The high risk and uncertain reward of

significant change initiatives often lead to substantial resistance. The leadership teams' natural inclination against change can take two forms: active or passive-aggressive resistance. Passive-aggressive resistance can be equally distracting and time-intensive to combat and can create the illusion of progress, in which stakeholders "agree" during meetings but fail to take action after or, worse yet, work against the effort in the background.

These three factors can derail change initiatives and create unforeseen political and financial impacts within an organization. In the face of such factors, how can executives in large companies enact major change? As we will describe, each of these three issues can be avoided by following a "pragmatic pathway" to change, which can minimize resistance from the core and create the greatest odds for institutional innovation.

# The solution

SO FAR, WE have outlined the opportunity, imperatives, and challenges to change for large organizations. Simply put, many firms may need to enact major change and transform their mindset in order to survive and prosper in tomorrow's world. What is heartening is that the same technological shifts that make change imperative are also making large-scale change more viable. Disruptive technologies—including social media, cloud computing, mobility, and big data analytics—are new tools that companies can use to reduce the investment for and increase the impact

**Getting around the great wall of organizational resistance requires financial and political pragmatism and, more importantly, a shift in mindset regarding how and where transformation opportunities should be pursued.**

of major change initiatives. Firms can leverage these new platforms not only as marketing tools but also in the development and testing of new, noncore initiatives, making these projects less likely to draw fire from the core and more likely to succeed.

How should companies begin to leverage these technologies to create major change? The key, as we stated earlier, is to resist messing with core operations. Instead, firms must identify an edge

initiative on the organization's periphery that has the potential to scale through the use of disruptive technologies and, eventually, transform the core.

Imagine a large and established manufacturing firm with a set of core operations. As we discussed previously, hostility may meet efforts to significantly alter these operations, even if the changes align with technological shifts within the industry. Imagine now that this same firm made an investment in a peripheral initiative—an “edge”—that was so small it escaped political scrutiny. Imagine that the edge was given complete autonomy from traditional core practices (and resources) and instead found creative ways to leverage technology and an external network to scale. Without igniting resistance from the core, this project could have the ability to transform or even replace the core entirely if aligned with foundational changes within the industry.

Even the US Army, one of the nation's largest and most traditional institutions, has been able to transform its processes via an edge. In 2000, Army captains Nate Allen, Tony Burgess, and Pete Kilner saw the need for new ways to connect company commanders past, present, and future. In order to improve knowledge flows between these commanders, the two founded Company Command. What began as an informal forum hosted on civilian servers eventually gained momentum with army commanders and across other branches of the military, playing a significant role in transforming the way that commanders learn, as well as the military's feelings toward social media.<sup>8</sup>

An edge can be a new customer segment, geographic market, or product that has the

## A NEW PERSPECTIVE

It is hard to have a discussion on management theory today without the mention of Charles O'Reilly III and Michael Tushman's theory of the ambidextrous organization, or the collaboration between Clayton Christensen and Michael Raynor as represented in *The Innovator's Solution* and *The Innovator's Manifesto* developing some of the implications of disruptive innovation. Both theories are cornerstones in the management world. So what new insight does the *Scaling edges* framework provide to the discussion and how does it differ to the theories mentioned above?

O'Reilly and Tushman focus on helping companies to understand the organizational dynamics that hinder product innovation in a world of push—where companies focus on identifying, forecasting and planning for consumer needs and wants. In an ambidextrous world, companies should setup adjacent organizations that explore new opportunities, but ideas are ultimately brought back to the core to exploit through scale efficiencies. Christensen and Raynor, on the other hand, help companies to shape and position the right combination of a business model and a technology with the potential to disrupt markets and industries.

Our framework provides a different perspective starting with the belief that innovation as conventionally defined is unlikely to be sufficient given longer-term trends that are playing out on a global scale. Product and service life cycles are compressing in a broad range of industries as digital technology infrastructures and economic liberalization, as described in *The Shift Index*, intensify competition. Even technologies and new business models tend to be disrupted at an accelerating rate.

Scaling the edge instead focuses on innovation at an institutional level in a world of pull. To successfully capture tomorrow's opportunities, firms should consider fundamentally changing the way they function—how they manage resources and interactions with other parties. For example, rather than focusing on scale efficiencies in a push environment, an organization built around the premise of pull focuses on delivering scalable learning by deploying pull platforms designed to draw out people and resources wherever and whenever they are needed. Addressing institutional innovation will require a profound and systematic change of the firm, much deeper than the traditional theories of innovation usually envision. Yet addressing this form of institutional innovation will create the capability to drive much more sustained and successful innovation at the product, technology, and business-model level.

potential to eventually transform a company's core business. Successfully executing an edge initiative is not easy; getting around the inevitable wall of organizational resistance requires financial and political pragmatism and, more importantly, a shift in mindset regarding how, and where, transformation opportunities should be pursued. In this light, organizations will be well advised to focus on an edge opportunity to pursue held separate from their core operations. Once leaders identify this opportunity and shield it from the antibodies of the core, the edge should leverage external

networks and resources in order to overcome common obstacles to scaling. Finally, the edge must quickly iterate in order to accelerate learning and compress the time between investment and return. Pursuing an edge and creating the correct environment for the edge can help to overcome the three large issues that arise when attempting to enact major change within the core:

- **Problem:** Changing the core has an uncertain return
- **Pathway:** Focus to maximize upside potential

- **Problem:** Changing the core requires a great deal of resources
- **Pathway:** Leverage to minimize the investment required
  
- **Problem:** Changing the core requires a great deal of time
- **Pathway:** Accelerate to compress lead times

To begin, we must examine these three key levers in more detail. To gain a more exhaustive and robust understanding of how to create a pragmatic pathway to change, we refer you to the “Key design principles” section, which provides greater detail around each component of our approach.

## Focus to maximize upside potential

The first and most crucial step is to identify edges within the organization and to commit to providing the most promising edge with the right tools to thrive. Let us step back to address two crucial questions: What constitutes an edge? And how do you identify an edge within a large and diverse organization? An edge can be a new customer segment, geographic market, or product that has the potential to eventually transform a company’s core business. Most large firms are already investing in groups on the periphery of their organizations, whether these are R&D groups researching the hot, new product or a center of excellence with the mandate of predicting the future of the industry. What, then, differentiates an edge?

An edge opportunity for a company has four distinct characteristics that differentiate an edge in both the short and long term:

### SHORT-TERM

- An edge requires minimal investment to initiate.
- An edge has the ability to grow the pie.

### LONG-TERM

- An edge aligns with the long-term disruptive shifts in the market.
- An edge has the potential to ultimately become the new core and, in the process, transform the core.

Finding the right people to pursue an edge is equally important as identifying the edge itself. Edge opportunities are inherently risky and follow a less-defined trajectory than core pursuits. Identifying passionate employees is crucial to the success of any edge initiative. Not only should these individuals be engaged and excited to connect with others within and without the organization—they must be equipped to handle the inevitable ambiguity and iteration of pursuing an edge opportunity.

Connecting with passionate employees often means going outside of traditional recruiting streams. In 2009, *Wired* Editor-in-Chief Chris Anderson needed a partner to launch a company focusing on the unmanned aerial vehicles (UAV) space. Rather than recruit for advanced degrees or specific skills, Anderson looked to UAV-focused online communities to find and connect with potential candidates. Ultimately, the right man for the job was Jordi Muñoz, an untrained and untested but extremely passionate amateur who had gained prominence in online UAV communities.<sup>9</sup> Although it goes against traditional management beliefs, staffing for passion before skills is crucial for successfully handling the unique challenges faced by an edge.

## Leverage to minimize the investment required

After it has been identified, the edge must scale in order to be successful. But just like any living organism, an edge initiative cannot grow in isolation—it needs resources, capacity, and skills to thrive. An edge, by definition, receives minimal investment upfront, so the natural tendency of an edge initiative will be to look back to the core



for support and resources. This mindset, however, should be resisted. Looking toward the core for support or additional resources will only raise latent institutional antibodies or draw scrutiny from core participants.

Rather than going back to the core for support, an edge must look outside the organization by joining an external ecosystem. Ecosystems help an edge improve on both sides of the performance equation. By looking outside, an edge can leverage the assets of others, which lowers the denominator of ROA. At the outset, an edge should focus simply on growing or joining a transactional ecosystem. As we discuss later, these ecosystems can evolve over time to become more dynamic and relation-based, which creates even greater benefits for participants.<sup>10</sup>

Ecosystems are easier to join and grow than ever before thanks to the advent of disruptive technologies. The story of Team WikiSpeed, a dispersed group which collaborates to build high-performing and extremely fuel-efficient cars, illustrates social software's potential to connect individuals and grow ecosystems.<sup>11</sup> What started as a one-man operation (WikiSpeed began when founder Joe Justice entered an X Prize contest offering a huge cash prize to whichever team could first build a 100 mile-per-gallon, road-legal vehicle) blossomed into a robust ecosystem of 44 team members across four countries in a matter of months. How did this happen? Justice used his blog and other social software tools to connect with individuals who were extremely passionate about the project but may be able to commit only a few hours a week. Collectively, the team has been able to produce extraordinary results, with their current prototype receiving an estimated 104 mpg.

Once an ecosystem has been formed, technologies such as cloud computing can amplify its performance and facilitate collaboration on even the most complex or data-intensive problems. TradeCard,

for example, is a global supply chain network that connects buyers, suppliers, and their service providers to optimize supply chain operations via the cloud. Intended participant benefits of TradeCard are the increased transparency and collaboration created by this network.<sup>12</sup>

Edges should take full advantage of these resources to amplify the performance of their ecosystems. Looking for opportunities to connect with partners, adjacent players, or even competitors can help the edge prosper while minimizing the investment, and therefore resistance, of the core.

## Accelerate to compress lead times

During his time as chief scientist at Xerox PARC, John Seely Brown oversaw countless secret initiatives. Almost all of these came with code names, but the pseudonym of one particular project was especially deliberate: Project Whitewater. When pressed by another executive on why he was so adamant about the name, Brown explained that he did not want to lose sight of or be demoralized by the frequent course changes that would accompany such a risky venture, even one with an end destination in mind. Furthermore, he didn't want to be criticized or even shut down as the team changed course.<sup>13</sup>

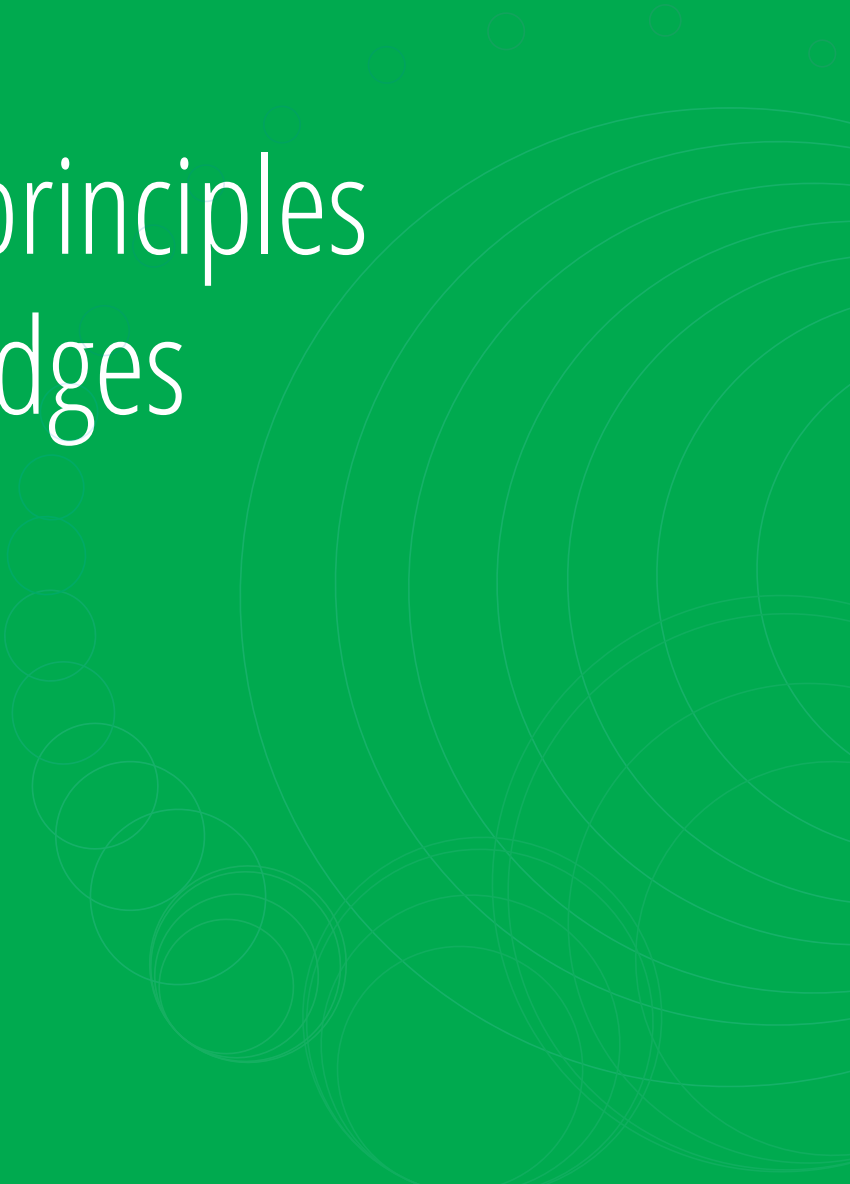
Although the end goal may be clear, any initiative pursued outside of the core of an organization will require frequent iterations and course corrections. The key to scaling a great idea into a successful edge hinges on the team's ability to learn quickly from these iterations and use them to fuel performance improvement. In order to do this, it is crucial that the edge iterates in rapid (six to 12 months) cycles as compared to the lengthier time horizons (two to three years) that most firms use, which allow initiatives to stay the course for far too long before being reevaluated or rerouted.

Rather than waiting until an idea is fully baked, edges should test concepts early in the development cycle. The edge should engage its external ecosystems, other edges, and customers to rapidly gather feedback and act on this feedback to accelerate its own learning. When working within their

ecosystem, it is important that edges move away from one-off or one-sided transactions toward ongoing, trust-based relationships with other collaborators. This environment can help advance the performance of all members and can make for better, more fruitful interactions.

Deploying an edge model will not be an easy undertaking for today's organizations. An edge-core mentality requires core leadership to detach themselves from promising initiatives and edge leadership to be scrappy and resourceful—despite being attached to a deep-pocketed organization. To successfully choose an edge, firms must first develop a deep understanding of the forces at work in the economy and how these will play out in their own industry, which can be a challenge for organizations used to benchmarking solely against their own peers. We believe, however, that the framework described (and elaborated upon in the subsequent “Key design principles” section) can help firms start to build useful habits, both habits of thoughts and habits of action, which can move them down their own pragmatic pathway to change.

# Key design principles for scaling edges



# Summary of key design principles

**A**CHIEVING INNOVATION AT the institutional level is no trivial task. Executives that attempt large-scale, internal change and transformation often face a great wall of resistance. The framework we describe provides executives in large companies with a pragmatic approach for exacting major change via the pursuit of edge opportunities.

FIGURE 1  
Key design principles and levers

			Design principles	
			Start	Organize
			How do you start?	How do you mobilize the right resources and participants?
Lever	Focus	Maximize upside	<p>► <b>Focus on edges, and not the core</b></p> <ul style="list-style-type: none"> <li>Identify an edge based on four key characteristics:                             <ul style="list-style-type: none"> <li>Four key characteristics:                                     <ul style="list-style-type: none"> <li><i>Short-term:</i> <ul style="list-style-type: none"> <li>An edge requires minimal investment to initiate</li> <li>An edge has the ability to grow the pie</li> </ul> </li> <li><i>Long-term:</i> <ul style="list-style-type: none"> <li>An edge aligns with the long-term disruptive shifts in the market</li> <li>An edge has the potential to transform the core</li> </ul> </li> </ul> </li> <li>Select an edge by:                             <ul style="list-style-type: none"> <li>Looking internally at existing initiatives that are on the edge</li> <li>Scanning the broader marketplace for edge ideas</li> <li>Avoiding large scale acquisitions</li> </ul> </li> </ul> </li></ul>	<p>► <b>Staff for passion before skills</b></p> <ul style="list-style-type: none"> <li>Identify the right “change agent” sponsor at the executive level who demonstrates courage and conviction for change</li> <li>Create room for edge movement with minimal core obstruction</li> <li>Staff the edge with passionate participants and ensure sufficient mass to generate and sustain momentum. Edge participants should:                             <ul style="list-style-type: none"> <li>Be naturally risk-seeking</li> <li>Have a questing and connecting disposition</li> <li>Be comfortable with failure and restarts</li> </ul> </li> </ul>
	Leverage	Minimize investment required	<p>► <b>Look externally, not internally</b></p> <ul style="list-style-type: none"> <li>Identify edge obstacles to scale:                             <ul style="list-style-type: none"> <li>Lack of capacity</li> <li>Lack of expertise</li> <li>Lack of resources</li> <li>Conflict with core incentives</li> </ul> </li> <li>Create or select an “edge type” external ecosystem to address obstacles based on three key characteristics:                             <ul style="list-style-type: none"> <li>Level of engagement</li> <li>Scope of interaction</li> <li>Benefits to participants</li> </ul> </li> </ul>	<p>► <b>Starve the edge</b></p> <ul style="list-style-type: none"> <li>Force edge self-sufficiency to look externally for support by minimizing core resources dedicated to the edge (VC approach)                             <ul style="list-style-type: none"> <li>Limit financial resources</li> <li>Set interim milestones</li> </ul> </li> <li>Empower edge team to engage external participants or ecosystems</li> <li>Create incentives to engage external participants to increase their frequency of interaction</li> </ul>
	Accelerate	Compress lead times	<p>► <b>Learn faster to move faster</b></p> <ul style="list-style-type: none"> <li>Iterate in 6–12 month windows, not in 2–3 year cycles</li> <li>Determine the minimum level of effort required to test the edge</li> <li>Engage ecosystems, edge participants, and customers to rapidly gather feedback</li> </ul>	<p>► <b>Reflect more to move faster</b></p> <ul style="list-style-type: none"> <li>Stage edge initiatives to facilitate fast, iterative cycles</li> <li>Anticipate, encourage, and catalyze vertical and horizontal cascades to further test and progress edge thinking</li> <li>Establish feedback loops with external ecosystem to drive rapid and continuous improvement</li> </ul>

Source: Deloitte analysis.

Here we explore the three key levers of the framework (*focus, leverage, and accelerate*) in greater detail. The framework is further broken down into 12 key design principles to provide greater context and guidance on how to successfully achieve change through the pursuit of an edge (figure 1).

Amplify	Perform
How do you use disruptive technologies to grow?	How do you measure success to drive improvement?
<p>▶ <b>Break dependency on core IT</b></p> <ul style="list-style-type: none"> <li>• Harness new and disruptive technologies that do not require support from the core and amplify your ability to grow without minimal investment                             <ul style="list-style-type: none"> <li>– Cloud computing</li> <li>– Big data analytics</li> <li>– Social software</li> </ul> </li> <li>• Utilize social software and other networking platforms to broaden your view of potential edges</li> <li>• Channel social software tools to seek out and identify additional passionate participants to staff edge</li> </ul>	<p>▶ <b>Embrace double standards</b></p> <ul style="list-style-type: none"> <li>• Develop metrics to monitor edge performance in the short-term (6–12 months) and progress toward long-term vision.</li> <li>• Develop distinct metrics that are meaningful to the core</li> </ul>
<p>▶ <b>Mobilize the passionate outside the firm</b></p> <ul style="list-style-type: none"> <li>• Utilize low-cost disruptive technologies to facilitate coordination with and mobilize other edges and rapidly expand the number of participants that interact with the ecosystem</li> <li>• Apply social software tools to access additional expertise and participants</li> </ul>	<p>▶ <b>Measure the progress of the ecosystem</b></p> <ul style="list-style-type: none"> <li>• Evaluate external ecosystem capabilities to overcome obstacle to scale                             <ul style="list-style-type: none"> <li>– Network involvement</li> <li>– Technology usage</li> <li>– Performance levels</li> <li>– Costs to achieve</li> </ul> </li> </ul>
<p>▶ <b>Move from dating to relationships</b></p> <ul style="list-style-type: none"> <li>• Create shared platforms and tools to shift ecosystem interactions from transactional to relational</li> <li>• Utilize disruptive approaches to encourage collaboration among ecosystem participants                             <ul style="list-style-type: none"> <li>– Reputation mechanisms</li> <li>– Big data analysis</li> <li>– Shared space</li> <li>– Gamification</li> <li>– Employee dashboards</li> </ul> </li> </ul>	<p>▶ <b>Focus on trajectory, not position</b></p> <ul style="list-style-type: none"> <li>• Assess participant learning and evaluate rate of performance improvement within the ecosystem                             <ul style="list-style-type: none"> <li>– Collaborative problem-solving</li> <li>– Improvements to capabilities of all participants (partners and edge participants)</li> </ul> </li> </ul>

# Focus

## Maximize upside potential

WHEN COMPANIES SPEAK of pursuing growth, most are speaking of product- or service-level innovations produced in the core of their organization. Introducing new products or improving existing services may offer companies short-term gains; however, we believe

**An edge requires a very different set of capabilities from current operations and has the potential to transform the core business entirely.**

this strategy alone will not yield sustainable returns in the long run. As reported in the 2011 *Shift Index*, competitive intensity has more than doubled since 1965, and brand disloyalty is on the rise. Given these conditions, companies cannot simply rely on tweaking core products to create sustainable growth.

Instead, companies should focus on edges that have the potential to scale aggressively. An edge

can be a new product, customer, or market opportunity but must be aligned with the underlying forces at work in a given industry. Distinct from a new core product or service offering, an edge requires a very different set of capabilities from current operations and has the

potential to transform the core business entirely. In recent times, many of these edge opportunities have emerged as the result of disruptive technologies

(social software, cloud computing, mobility, and big data analytics) and from expanding into new geographies. Rather than pursuing the marginal returns of product innovation, firms should focus on committing to an edge as a means to achieving institutional innovation. Edges have the potential to drive significant, sustainable returns and, if chosen correctly, should eventually assume the role of the core, transforming the structure of the institution.

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### How do you start?

#### ► *Focus on edges, not the core.*

In order to begin searching for edges, companies must have a rigorous definition of what an edge is. To differentiate whether an opportunity constitutes an edge, leadership should consider an edge's key characteristics:

#### SHORT TERM

##### **An edge has the ability to grow the pie.**

During the early growth stages, it is important that the core does not feel threatened by an edge. In

particular, if the core believes the edge is cannibalizing revenues, then it will fight back and prevent the edge from growth. In the short term, then, it behooves the edge to create revenues that do not create a zero-sum game mentality by challenging the core's business.

##### **An edge requires minimal investment to**

**initiate.** When an initiative has high growth potential, it seems logical to invest significant

resources and dollars into it. However, if an edge requires substantive investment, it will likely raise red flags and institutional antibodies to change from within the core. An edge is intrinsically different from the sort of project with which the core is comfortable, and this DNA incompatibility tends to heighten scrutiny and oversight of resources allocated to the edge. By contrast, if the edge requires only a small investment, it can remain relatively undetected and can likely operate and grow without significant intervention from the core.

## LONG TERM

**An edge aligns with long-term disruptive shifts in the marketplace.** “Disruptive market forces” are the underlying changes at work within a given industry. These forces include technological innovation, changing customer needs, and changes to public policy. While different for every industry, these forces are creating change at an increasingly rapid rate and have drastically altered the economics of many industries. Companies that fail to understand these forces may fall victim, while those that invest in opportunities aligned with these forces stand to benefit. By definition, an edge must align with these forces if it is to scale in the long term and ultimately transform the structure of the organization. In this context, the *zoom out/zoom in* approach to strategy that we have developed can provide a powerful way to

understand the longer-term forces driving change as well as promising edges today that have the potential to rapidly scale.<sup>14</sup>

**And an edge has the potential to transform the core.** An edge requires new organizational practices and capabilities from the core. As the edge scales, a “new core” will supersede the old with distinct practices and capabilities to maximize the upside potential of the edge.

These considerations can help a company understand what to look for in an edge. The next step, however, is to help a company determine where to look. This selection process begins internally. A company should start by reviewing existing initiatives piloted internally and determining whether they have potential based on the five edge criteria. There may already be business units or individuals within the organization that are testing new ideas that fit the edge criteria.

If there is a shortage of edge ideas internally, a company may then look externally for additional opportunities. If a company relies on external input, it should consider the scale of any acquisition, keeping in mind that large investments can raise significant antibodies within the core. This approach goes against the third principle of starting with a small investment.

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## How do you mobilize the right resources and participants?

### ► *Staff for passion before skills.*

Traditional core projects are staffed based on who has the right skills and experience for the job. On the edge, however, the team may be faced with ambiguity or challenges that test these traditional staffing requirements. Employees that are passionate about the edge or opportunity are more likely to be excited by and successfully tackle the

unique challenges that come with working on the project. It is important that when staffing the edge, leadership staff first for passion before looking for a specific skill set.

In addition to finding the correct team, it is important to have a senior sponsor at the executive

level. This leader will serve as a change agent within the firm and must have the courage and conviction to challenge status quos and the desire to fundamentally alter the future of the organization.

Collectively, this team must be composed of passionate individuals who are seeking new challenges and have a desire to learn. There are a few characteristics of passionate workers that can help distinguish them:

- **Questing disposition.** Workers with a questing disposition continually seek out new challenges to test and advance their capabilities. They need continuing stimulation. But it is stimulation of a certain type—the kind that comes from going beyond one’s comfort zone, addressing new challenges, engaging in creative problem-solving, and developing new skills to make progress in a challenging environment.
- **Connecting disposition.** A connecting disposition seeks to connect with others and form deep, trust-based relationships. For a passionate person, this is about continually reaching out to find people who share their passion or who might have some insights that can be helpful in pursuing their passion. It is ultimately about a desire to learn from each other and to get better faster by working together.
- **Comfort with failure and restart.** Edge opportunities venture into areas of unknown or untapped growth. This pursuit requires a “whitewater” mentality—a willingness to accept that the short-term direction for the edge will frequently change along the way as the opportunity is explored and tested in the marketplace. Workers with a history of taking risks, dealing with ambiguity, and being comfortable with failure are a good fit for an edge.

### ▶ *A new breed of leadership*

When *Wired* Editor-in-Chief Chris Anderson had to find a president for his fledgling unmanned aerial vehicle business, commonly referred to as UAVs or drones, it was not a litany of Stanford degrees but an online video of a helicopter operated by Wii controller that moved Jordi Muñoz’s résumé to the top of the stack. Relatively untrained (Muñoz attended one year of University in Mexico before moving to San Diego with his wife) and completely untested in the world of business, it was Muñoz’s passion for drones and prominence in amateur drone communities that won him the job.

In 2009, Anderson and Muñoz cofounded 3D Robotics, a robot manufacturing company with factories in San Diego and Bangkok. In short order, the firm had grown to 11 staffers, and in March 2011, revenues topped US\$160,000, up from US\$5,000 the first month. Still a small player in the space, 3D Robotics is generating buzz among large clients. 3D Robotics is able to innovate so quickly in large part because of its rich participation in knowledge flows, including a 15,000-member community of enthusiasts at DIY drones centered on the open-source coding to operate UAVs.<sup>15</sup>

Though Muñoz did not have the traditional credentials to lead such a fast-growing venture, his passion for the work and access to rich flows of information made him the strongest candidate. This passion has carried over into his tenure at 3D Robotics. He and Anderson share a vision of a world where drones are household entities: “Our approach,” he said in one interview, “is the personal computer.”<sup>16</sup> To achieve this, Muñoz has retained the questing and connecting dispositions that helped cultivate his boyhood fascination into deep expertise.



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## How do you use disruptive technologies to grow?

### ▶ *Break dependency on core IT.*

Using core IT systems or shared services creates additional dependencies to the core, which can cause unintended consequences such as greater scrutiny and oversight. To combat this, edges can harness technologies outside of those offered by the core. Specifically, new disruptive technologies such as cloud computing, social software, and big data analytics are often more economical than core resources and evade the clasp of the core.

In nascent stages, there are several important applications of these tools. First, disruptive technologies—in particular, social software—are useful means to identify and connect with

passionate people in and outside of the firm. These people may engage with the edge informally or contribute their free time to help the edge develop.

Once leaders have identified an ecosystem, tools such as data analytics and cloud computing are useful for breaking up and tackling problems that may have previously been too complex to leverage external support on. These technologies can not only be effective—they are often inexpensive and easy to use. Price/performance advancements and increased competition in these markets have made these tools even more viable.

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## How do you measure success to drive improvement?

### ▶ *Embrace double standards.*

Measuring the performance of an edge is important both to evaluate its own success and also to justify its existence to core detractors. In order to accomplish these missions, the team should focus on three sets of metrics:

- **Short-term metrics.** It is important to establish short-term milestones by which to measure progress in the market. For example, short-term milestones could measure aspects such as market penetration (for example, user base) or participant activity (for example, use of disruptive platforms). These metrics should be easily measured and closely aligned with the long-term objectives of the edge.
- **Long-term metrics.** These should measure aspects such as growth trajectory and correlation with fundamental industry shifts. Though perhaps more difficult to measure, these metrics help to provide a more holistic view of performance.
- **Metrics that matter to the core.** While an edge initially avoids confrontation with the core, it is valuable to keep some measures of how it may support core operations. These metrics could consist of financial or operating metrics important to the core and measure the edge's role in that performance. By tracking metrics that matter to the core (calls deflected from customer support centers, for example), an edge can better justify its existence within the larger organization.

► ***SDN measures up for SAP***

In 1996, Germany's SAP AG had more than 9,000 of its enterprise software systems installed at companies worldwide. As the number of applications grew, however, it became increasingly difficult to search for information and communicate across systems. To overcome this challenge, SAP developed an application called NetWeaver, which layered its existing enterprise applications on top of each other, enabling the applications to “communicate” more easily.<sup>17</sup>

When SAP's product development team began selling NetWeaver, it became apparent that its value in part depended on having a network of individuals that engaged with NetWeaver on an ongoing basis. SAP launched the SAP Developer Network (SDN) in 2005, which served as a platform for forums, wikis, videos, and blogs to enable developers to share knowledge about platforms and SAP products.<sup>18</sup>

Since SDN's success was so closely linked to NetWeaver's, it was imperative that leadership choose the correct metrics by which to evaluate SDN's impact. Leadership began looking at items such as collaboration activity, membership, forum posts, and average response time to questions on the forum. It was clear, by the average response time of 17 minutes and that 85 percent of all discussions were closed, that SDN had an impact within the community.

While important to SDN leadership, these metrics did not easily translate to show impact on SAP's core operations. To address this, SDN leaders also tracked metrics significant to the broader organization. For example, SDN demonstrated it could improve SAP's traditional customer service needs, decreasing the number of troubleshooting complaints to service centers. Tracking these metrics helped demonstrate the success of SDN and the NetWeaver platform to project and executive leadership.

# Leverage

## Minimize investment required

ONCE AN EDGE has been identified and initial resources allocated, the inevitable question arises: Now what? When looking to kick off and grow, edges will run against resource constraints; the team may lack necessary skills in certain areas or lack the assets necessary to achieve scale on their own. The traditional mentality to “put more in in order to get more out” may tempt the edge to look toward the core for support—after all, what is the benefit of being attached to a large firm if not to receive funding and resources? This, however, can jeopardize an

edge’s autonomy and, again, raise institutional antibodies.

An edge should constantly be seeking opportunities to leverage established external resources and infrastructures to grow. Relentlessly pursuing leveraged growth models by tapping into resources and skills outside of the core minimizes investment from the core—and, hence, antibodies. This strategy can also help a team focus its time and resources on the most important areas.

### How do you start?

#### ► *Look externally, not internally.*

It is often inefficient for edges to leverage the shared services of the core. In most firms, the incentives for shared services are structured such that core projects with large and predictable returns receive priority. Further, edges usually incur a portion of the cost of shared services, which may be disproportionately high compared to the support actually received.

Instead of looking to the core, it’s usually more effective for an edge to leverage external resources and ecosystem for support. This form of external leverage can be more economical and help the edge avoid the political pressures imposed by using core resources. Thanks to disruptive technologies, leveraging external support is an even more viable solution. Cloud-based platforms, in particular, are useful to coordinate large ecosystems and facilitate communication between participants.

#### ► *InnoCentive: The community that’s cleaning up corporate challenges*

In 2008, consumer-goods giant Procter and Gamble (P&G) wanted to create a specialized dishwashing detergent that would indicate when the right amount of soap had been added to a sink full of dirty dishes. Researchers and developers within the organization were stumped by the challenge, and, unsure of how to proceed, decided to look externally for support.

P&G posted the innovation challenge with the help of InnoCentive, a small startup based in Waltham, Massachusetts. Using InnoCentive’s network platform, P&G described the problem and offered >

► **InnoCentive: The community that's cleaning up corporate challenges (cont.)**

US\$30,000 to the individual who could come up with a solution. Soon, thanks to InnoCentive's network of experts, P&G had its answer. Italian chemist Giorgia Sgarretta successfully pioneered a dye that met P&G's needs in her home laboratory. Sgarretta walked away with her "prize" of US\$30,000, and P&G had resolved its innovation challenge.<sup>19</sup>

InnoCentive started in 1998, when Alph Bingham and Aaron Schacht, then scientists at pharmaceutical giant Eli Lilly, were brainstorming how the growth of the internet would affect business. In 2001, Eli Lilly launched InnoCentive with seed funding, and since then, the site has posted more than 1,300 challenges across 40 disciplines to its solver community.

While the company's mission has stayed consistent over the years, the operating model has evolved to allow for increased interactions between community participants. Initially, the majority of interactions were centrally coordinated, using singular, transactional challenges. But InnoCentive has increasingly worked to create new offerings, including eRFP systems and Team Project Rooms, to encourage collaboration. These improvements have allowed for more relationship-based, dynamic ecosystems to form. Rather than transact on one-off challenges, it is not uncommon for participants to collaborate repeatedly, forming virtual teams that learn together and develop in the long run. By encouraging these deeper relationships, InnoCentive has evolved into a dynamic solver community of 250,000 individuals from 200 countries.<sup>20</sup>

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## How do you mobilize the right resources and participants?

► **Starve the edge.**

To "starve the edge" is to provide the edge with less while simultaneously asking more from it. While this may seem counterintuitive, it forces the edge to become self-sufficient and adopt the scrappy, resourceful mindset so crucial to success in an unknown marketplace. This model is similar to how venture capital firms fund startups, as investors make small, targeted investments while maintaining high expectations for performance. There are two key principles for successfully starving an edge:

- **Limit financial resources.** Limiting financial resources forces the edge to leverage the least expensive resources it can, be they internal or external. Second, being deprived of

funding will help focus efforts on those items that provide the greatest bang for the buck. Finally, this action sets a precedent that the edge must prove itself with results before returning for additional funding.

- **Set interim milestones.** Having limited resources makes interim goals all the more important. Edges must have frequent checkpoints and adopt an agile methodology, changing course quickly rather than sinking more money into a problem. These interim milestones create further incentive for the edge team to succeed while minimizing their expenditures.

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## How do you use disruptive technologies to grow?

### ▶ *Mobilize the passionate outside the firm.*

There are many benefits to connecting with passionate individuals outside of the firm. As discussed previously, passionate individuals are excited by challenge and more likely to draw upon relevant experience to derive an innovative solution. Connecting with passionate people, however, can be challenging when they are outside of the organization. Today's technologies remove much of the friction that made it difficult to search for and collaborate with these passionate outsiders.

Social software is a powerful tool for quickly canvassing a diverse group and connecting with other passionate people to participate in the ecosystem. Similarly, technologies such as cloud computing allow for a much broader scope of participation and the sharing of much more complex problems.

#### ▶ *App-relief: Masses help clean the Gulf Coast oil spill*

On April 20, 2010, the explosion of the Deepwater Horizon caused the largest marine oil spill in history, releasing up to 4.9 million barrels of oil and causing economic and ecological distress in the Gulf Coast region. In the wake of this tragic event, oil seeped into fishing grounds, waterways, marshes, and beaches, and a vast cleanup effort began.

Government agencies and civic organizations scrambled to deploy resources effectively across a vast spill zone. Agencies used hotlines and other outlets to report spill activity, but these methods were inaccurate and required a high level of effort for a citizen to file a report. Dissatisfied with its current means to track spill activity, the government needed to mobilize external support to fast-track its efforts. The solution: Tap into the power of crowdsourcing.

The government used smartphone applications, such as SpillMap, to track the spill by enabling citizens to tag locations and submit content-rich incident reports with text, photos, and videos. This geo-aware and open-source application tapped into users' mobile activity, allowing users to tag incidents in seconds, without logging in or waiting on hold. With more than 15,000 posts, SpillMap (and the corresponding website, [spillmap.org](http://spillmap.org)) made real-time conditions publicly available to government agencies, civic organizations, and other interested parties.

Not only did the volume of incidents reported on SpillMap exceed the volume reported on many hotlines—the geo-specific and image-rich posts often provided greater value, helping volunteer organizations prioritize and deploy resources and allowing users all over the country to receive updates in real time. The success of SpillMap is just one example of how organizations can rapidly expand the number of participants in an ecosystem and get better results.

## How do you measure success to drive improvement?

### ▶ *Measure progress of the ecosystem.*

Ecosystems of engaged participants are ultimately more successful than those with disconnected or passive members. Therefore, it is important to not only measure the output of an ecosystem but also track the internal activity and extent to which technologies are being leveraged to encourage collaboration and minimize costs. These indicators will likely be key to predicating an ecosystem's long-term potential. Below are two important metrics to track ecosystem performance:

- **Network involvement.** Having highly engaged participants is crucial to the success of an ecosystem. To measure this, it is important to track a network's growth rate and, more importantly, the growth rate of knowledge flows exchanged throughout the ecosystem. Over time, these interactions should evolve from one-off, transactional exchanges to repeated, trust-based relationships.
- **Technology usage.** Disruptive technologies can be used to lower the cost of maintaining an ecosystem and facilitate greater, richer interactions between members. When assessing an ecosystem's performance, it is important to track how technologies are being employed and whether there are opportunities to leverage these tools more extensively.

# Accelerate

## Compress lead times

IN CONTRAST TO many firms' two-to-three-year planning cycles, which allow initiatives to stay the course for far too long before being reevaluated or rerouted, edges should use external feedback and short, iterative cycles to quickly

improve and test products. Using an agile development methodology helps the team learn faster and, ultimately, compresses the lead time between investment and return.

### How do you start?

#### ► *Learn faster to move faster.*

The learning process needs to be redesigned in order to compress lead times. We suggest three design principles to improve performance:

**Iterate in windows of six to 12 months, not two-to-three-year cycles.** Traditional corporate projects require the creation of two-to-three-year strategic plans and detailed blueprints. This approach limits the ability to act nimbly and address market needs as they arise. Initiatives instead should employ six-to-12-month operating windows. This shortened timeline creates more opportunities to capture feedback and pivot operations to better address market needs.

**Determine the minimum level of effort to test the edge.** Companies often feel they need to wait until a product or service is perfect before testing it in the market. This approach means

collecting market feedback only after sinking significant time and money into development. By testing a product earlier in the development cycle, the team can gather much more detailed feedback at closer intervals. In turn, this feedback can be used to quickly refine or change course as needed.

### Edges should form extensive external networks in order to minimize investment.

**Engage the ecosystem to rapidly gather feedback.** As previously described, edges should form extensive external networks in order to minimize investment. These networks are also great sources of feedback since they are actively engaged in the edges' development. Gathering feedback from these sources can deepen relationships and lead to greater collaboration down the road.

## How do you mobilize the right resources and participants?

### ► *Reflect more to move faster.*

**W**HEN STRUCTURING AN initiative's roll-out, it is important to set up frequent checkpoints when feedback will be collected and incorporated. These will provide additional opportunities for reflection while allowing the edge to maintain rapid development cycles.

**Stage deployment of initiatives.** Many organizations launch initiatives as monolithic, one-off programs. This approach is extremely risky, since it means the entire program is vulnerable to market uncertainties. Instead, staging a rollout creates more opportunities to collect and incorporate feedback into subsequent iterations.

**Encourage vertical and horizontal cascades.** As an edge initiative is launched, it is likely to generate momentum within the organization,

which can manifest in both horizontal and vertical cascades. Horizontal cascades refer to different business units or divisions that replicate edge pursuits, while vertical cascades refer to different organizational levels that replicate edge pursuits. These cascades should be encouraged to quickly create buzz and generate feedback from internal parties.

**Establish feedback loops with external ecosystem to drive rapid and continuous improvement.** In addition to collecting feedback from internal cascades, formal feedback loops should be established for external ecosystem participants. Establishing frequent, formal feedback loops will ensure that learning is captured and incorporated.

### ► *Company Command grows the right way*

In 1999, Nate Allen, Tony Burgess, and Pete Kilner reflected upon their experiences as captains in the US Army. The three recalled the challenges as new Army leaders, with limited working knowledge about how to manage the 50–300 personnel within their company. Despite training at West Point Academy, they learned many essential skills on the job.

To address this problem, Allen, Burgess, and Kilner envisioned a website that would allow company commanders past and present to share knowledge, learning, and questions and develop new military leaders. The next year, they launched an online professional forum, called Company Command. The forum's story offers several insights into how an edge can maximize and capture learning. First, the founders staged an iterative approach to the site's launch. The team began by hosting Company Command externally, on civilian servers, building trust with participants that the site was not controlled by "the man." In 2002, the leaders gifted the site to the US Army. Company Command had scaled significantly, and core leadership recognized the site's value with the impending invasion of Iraq to help commanders learn and react to new types of urban warfare. In 2004, the team transitioned Company Command to the Army's secure sign-on system on Department of Defense servers, ensuring that sensitive information could be shared and making the site even more valuable for participants.

continued >



In addition to staging, the founders encouraged both horizontal and vertical cascades that resulted from the site's launch. As Company Command grew in popularity, other levels recognized the value in a shared platform. In 2001, Platoon Leader was launched as an equivalent learning portal for junior Army leaders. Simultaneously, the founders utilized their network of "point men" to roll out the launch horizontally across commanders in different arms of the military. These cascades allowed Company Command to test ideas and progress the team's thinking.

## How do you use disruptive technologies to grow?

### ► *Move from dating to relationships.*

**A**S AN ECOSYSTEM matures, the connections between participants should move from "dating" (short-term and transactional) to "relationships" (long-term and trust-based). This process can be expedited by leveraging technologies such as shared platforms, which remove friction and enable unique forms of collaboration.

There are several other tools that can further expedite relationship-building. Gamification techniques and reputation mechanisms, for example, can incentivize participants to interact more frequently and increase collective awareness of who is contributing—and who is free-riding. These mechanisms help build trust between participants, which in turn will make the ecosystem more valuable for everyone.

### ► *SpineConnect: Using trust to sell tools*

Most surgeons rely on peer feedback when selecting which medical devices to use. In 2000, Scott Capdevielle and physician Jim Youssef recognized that medical device manufacturers were failing to address this need, and as a result, were struggling to effectively communicate the benefits of new products they introduced to surgeons. To address this, in 2005, Capdevielle and Youssef founded SpineConnect, an online platform for spinal surgeons.

SpineConnect served as an online community of practice where surgeons could discuss innovative procedures and new devices from manufacturers and share case studies of their use. Ultimately, these conversations allowed medical device manufacturers to tap into expert user feedback on their products and gain an effective channel for marketing to the surgeons who use their products.

To date, SpineConnect has successfully signed on 1,400 (more than 40 percent) of certified spine surgeons in the United States, and 74 percent of these surgeons have indicated that suggestions from SpineConnect have altered their surgical plans. In addition, parent firm Syndicom has launched TraumaConnect and Arthroplasty Connect, connecting trauma surgeons and orthopedic surgeons. Syndicom's share platforms allow users to build long-term relationships and engage in trust-based interactions, which in turn create value for all participants.

## How do you measure success to drive improvement?

### ► *Focus on trajectory, not position.*

It is important not only to measure ecosystem performance at a point in time but also to track its long-term performance trajectory. In particular, it is important to track two metrics that help reveal an ecosystem's long-term trajectory:

**Collaborative problem-solving.** As an ecosystem matures, participants should begin tackling increasingly complex problems together. The level of problem complexity and the degree of collaboration between participants are indicators of the overall health of the ecosystem. If posted problems frequently go unanswered, it may be that

the ecosystem is not capable or engaged enough to tackle them.

**Improvements to participant capabilities.** If participants benefit from the ecosystem, they are more likely to help with the problems of other members as well. This reciprocity deepens relationships between participants and collectively advances the performance of the entire ecosystem. It is important to track the performance of all ecosystem participants over time; in a healthy, vibrant environment, all participants should be advancing from the collaboration.

## Endnotes

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