Winning in Digital Innovation: Turning Scale and Legacy into Strengths

Many corporations struggle to match the agility of companies born during the Internet age. Even though size and an established position can be weaknesses, they can also create an advantage.
Innovation: The New Competitive Advantage

Scale and efficiency used to be the driving forces for industry leaders, but in the digital age, success depends on being able to innovate with technology and new business models. With developments such as artificial intelligence (AI), 3-D printing, and the Internet of Things causing waves of disruption, adapting requires far more than learning to use technology.

Speed and unpredictability are the defining features of the digital world, which introduces a fundamental shift in the nature of business and what constitutes success. In this paper, we explore how established corporations can take advantage of their legacy and scale and learn from companies that are innovating at the speed of digital.

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Why Disruption Matters

Over the past few years, disruptive forces have hit industry after industry. Travel has been disrupted by Priceline, Expedia, TripAdvisor, and Airbnb, transportation by Uber, and retail by Amazon and Alibaba. For established businesses, the most disruptive threats tend to come from outside traditional competition. New companies not only spot opportunities to create value that many incumbents fail to see, they also tend to operate with different business models. In fact, it’s no longer about having a level playing field. The disruptors are playing an entirely new game.

Google is a master of this new game, converting an array of industries into advertising revenue. Amazon is another serial disruptor with its Amazon Prime now in a two-horse race with Netflix—undermining the model of traditional broadcast industries.

Even those that have not yet been significantly impacted by these forces are not safe. Over the next five years, 40 percent of companies will face some form of digital disruption, according to Forbes magazine. Artificial intelligence is beginning to attack knowledge-based industries previously seen as safe from disruption, thanks in large part to companies such as Google and Amazon offering “AI on tap.”

For global commerce, the potential impact is enormous. The past decade is replete with the corpses of once-great companies such as Blockbuster, Kodak, Nokia, and Borders, and many established corporations are struggling to keep up with the rapid pace of innovation and change (see figure 1 on page 2).
According to our research, digitalization is the number one disruptor expected to shape industries, with 72 percent of executives believing the full digital impact will unfold over the next five years.¹

For large companies, the problem is how to respond since turning around quickly is a herculean effort that can involve tens of thousands of employees, legacy processes, assets, and systems. These incumbents operate using established business models that shareholders have no wish to put at risk, made more challenging by activist investors that are keen to strip companies back to the core for short-term value creation, even if this condemns the company to oblivion in the long term. It is no surprise that the history of innovation in large companies is so disappointing (see figure 2 on page 3).

Nevertheless, established companies can overcome the challenges of the digital revolution. Venerable corporations such as Procter & Gamble, General Electric, IBM, and the BBC have proven it is possible to stay ahead by embracing an end-to-end transformation.

Lessons from the Leaders

So what do these incumbents do to set themselves apart? Drawing lessons from companies that have forestalled disruption—learning to innovate as fast as those seeking to disrupt

¹ For more, see Reaching Your Digital Full Potential at www.atkearney.com.
Despite their best efforts, many companies fail to benefit from their innovation programs

Success rates of corporate innovation programs

- Only 21% of those with formal innovation programs say they deliver a competitive advantage
- Just 18% of US, UK, and French companies are getting a competitive advantage from their innovation strategies
- Innovation models in global companies across diverse sectors fail between 70% and 90% of the time
- Mature companies attempting to enter new businesses fail as often as 99% of the time
- Only 9% of corporate intrapreneur programs are successful

Figure 2

them—provides valuable insights for all businesses, big and small. To find out how they did it, we looked at a range of established companies that are leaders in rapid innovation. These companies embrace seven principles that offer valuable lessons for adapting to the digital age (see sidebar: Seven Lessons for Innovating at the Speed of Digital on page 15).

Lesson 1: Create a strategy for a digital world

The starting point for transformation is realizing that innovation is not optional, nor is it an add-on. Technologies have redefined the ways people communicate and interact, and this new reality must be at the core of all business strategies.

Companies that have adapted have embraced the new dynamics, developing big ideas that allow them to reset and motivate the whole organization behind a shared, meaningful vision for success. They have shifted from developing a separate digital strategy to including digital in all aspects of their business model (see figure 3 on page 4).

While there is wide recognition that digital and corporate strategies need to be unified, this is not a common practice. While more than half of executives say digital will transform their business, few say they are prepared to face the threats (see figure 4 on page 4).³

Uber highlights what can be achieved when a digital solution is applied to a sector that has not fundamentally changed for decades. Amazon also shows what is possible when digital innovation is put at the heart of the business. Since its beginnings as an online bookstore, Amazon has applied innovative thinking to a wide range of services, leading to the creation

There is a global consensus that digital and corporate strategies need to be unified

**Figure 3**

**Should digital strategy development be more incorporated into traditional strategy?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>5%</td>
</tr>
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</table>

**Why?**

- "In the future, everything will be digitized, and corporate strategy cannot be formed without it."
- "Digital strategy fully depends on corporate strategy."
- "It is an increasingly important part of the way we interact with our customers."
- "The business model, functions, and operations have highly integrated digital components."
- "Companies should be mirrored digitally."
- "Digital strategy receives more attention when it is included as part of the overall strategy."
- "All aspects of strategy development must be aligned. Therefore, they should not be created in isolation."
- "It’s the 21st century. Adapt or get eliminated."

Source: 2016 A.T. Kearney survey of 4,465 global executives

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**Figure 4**

Despite different paths along the digital journey, no industry feels truly ready

![Diagram showing different levels of preparedness and threat](image)

No industry reports as “fully prepared”

Companies should be wary of perception biases

Those companies expecting a "moderate threat" may underestimate the impact of digital; those identifying as "prepared" may be overestimating their capabilities.

1 Weighted average preparedness score (1 to 5, with 5 being "fully prepared")
2 Weighted average impact score (1 to 5, with 5 being "high impact on industry")

Source: A.T. Kearney survey of 4,465 global executives
of Amazon Web Services, an on-demand cloud computing solution that has become central to the parent company’s success.

For established companies, the issue is as much about agility as it is about technology. Procter & Gamble (P&G), founded in 1837, and General Electric, founded in 1892, prove that large, established corporations can learn to innovate at digital speed. P&G’s Connect + Develop initiative has led to 35 percent of new products originating from outside the organization, while General Electric has reduced development time by a factor of 10 by using innovation methodologies developed for digital solutions.

Lesson 2: Think big

Market leaders have bold visions and set lofty targets. When Bill Gates founded Microsoft in 1975, his vision was of a computer on every desk even though the popular image of such machines at the time was a large cabinet with whirring spools of metallic tape. Several companies offer compelling mission statements for thinking big:

- **Uber**: “Transportation as reliable as running water, everywhere for everyone.”
- **Stemcentrx**: “Our mission is to develop that cure and significantly improve survival for cancer patients.”
- **Bloom Energy**: “To make clean, reliable energy affordable for everyone in the world.”
- **Pinterest**: “Help people to discover things they love and inspire them to do those things in real life.”
- **Airbnb**: “Belong anywhere.”

This commitment to a bold vision is essential to get the organization to embrace the need for change. It also sets the context for innovation, defining not only why a company is driving innovation, but also what type of innovation it is seeking—the “search fields” for innovation. For example, when Takeda, Japan’s oldest pharmaceutical company, set out to embrace digital, it did so with a vision to become the world’s most digital pharmaceutical company and to become a “33,000-person start-up.” Within this overarching vision, the company defined the specific areas where it was seeking to lead the field.

Lesson 3: Know that transformation is a process, not an event

Just as important as aiming high is realizing that this transformation is not about having a three-year plan. The defining quality of digitalization is its continuing and exponential rate of change. Successful organizations focus on building the capability not only to respond and adapt but also to anticipate and readjust to take advantage of opportunities offered by new technologies and the changing business environment. For example, with a long history of reinvention, General Electric is aiming to transform from an industrial conglomerate into a leading software firm. CEO Jeff Immelt plans for the company to join the world’s top 10 software firms with sales of programs and services worth $15 billion as early as 2020.³

Lesson 4: Learn to experiment, and experiment to learn

Having a strategy is all very well, but strategy without execution is nothing more than a dream. The biggest challenge for many organizations is to embrace experimentation as a means of

³ “Siemens and General Electric Gear Up for the Internet of Things,” The Economist, 3 December 2016
execution. In the digital world, things move too fast to rely on linear models of innovation, and consumer research rarely leads to radical innovation as most people know what they like only when they experience it.

Experimentation is an unnatural process for many companies as it requires a willingness to embrace failure. However, the process of trial and error is in our nature. When we were children, for example, experimentation was how we learned to walk, ride a bike, and communicate. Start-ups channel our spirit of curiosity to create radical new ideas. In the same way, larger established companies can take an important step toward a digital transformation by relearning how to experiment. Fortunately, a few concepts can help:

**Embrace the minimum viable product.** In his seminal book on digital innovation, *The Lean Startup*, Eric Ries introduced a powerful but widely misunderstood concept of a minimal viable product (MVP). An MVP is not a fully working product but the minimum activity needed to learn something. For example, if you want to know if consumers like the idea of a product, you do not always need to make it. A much cheaper alternative is to create a video of what it would look like and ask people, “If this product existed, would you buy it?” So an MVP is used to test a hypothesis (see figure 5 on page 7).

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Start-ups channel our spirit of curiosity to create radical new ideas. Established firms can take **an important step toward a digital transformation by relearning how to experiment.**

**Reframe failure as learning.** An unsuccessful MVP is not a failure; it is a valuable piece of information. The concept of failure as learning is not new; it is the basis of scientific development, where proof of a null hypothesis is as valuable as a successful outcome. Companies need to embrace this truth within their cultures. But be clear about what you are testing, and learn from it. If something does not work but you do not learn anything, then that is indeed failure.

**Know the importance of discipline.** Successful experimentation requires discipline, and without exception, leading digital innovators have invested in structured processes for experimental innovation. Many of these are based on *The Lean Startup*, which, while developed for the computer coding industry, has proven equally powerful when applied more widely (see sidebar on page 8: Working with *The Lean Startup*). General Electric, for instance, uses its own version of *The Lean Startup* to build heavy industrial goods.

Yet the art of experimentation needs to encompass much more than the innovation process. The way decisions are made, finances are managed, and employees are rewarded can all accelerate or stifle innovation. In regulated industries such as healthcare and finance, an overly conservative approach to regulatory risk can slow innovation to a crawl. Processes need to become digital innovation-friendly, which is often the most painful part of all the changes that need to be made.

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Innovative organizations also develop capabilities quickly, ensuring that ideas can be scaled up efficiently. At the same time, they use stage-gated funding to quickly change or kill projects that are not going anywhere, providing the flexibility to experiment but controlling the cost of failure.

This concept of pivoting is central to digital innovation. A pivot happens when the assumptions about which a new service are based on prove to be untrue, but by reimagining the service with a different objective, the idea can move forward. Uber, Facebook, and Airbnb are good examples of how technology that originally had a different objective can grow into worldwide phenomena.

Uber’s approach also illustrates the need for continuous experimentation. The company began in San Francisco before being rolled out to New York, then Paris and London. Now operating in more than 550 cities around the world, Uber uses the same test-and-scale approach for all new services. For example, the car-sharing service UberPOOL was launched in San Francisco and underwent several iterations before being rolled out globally, and UberEATS, a restaurant delivery service, was launched in Toronto before expanding to the United States.

**Lesson 5: Commit to innovation**

Innovation is a core feature of the new operating model. In the same way that digital needs to be at the core of strategy, so the ability to innovate at the speed of digital needs to become a central part of the organization’s operating model. In other words, the willingness to experiment needs to extend to the company’s structure. Successful innovators are not afraid to try radical ways of organizing.
Working with the Lean Startup

Lack of a tailored management process leads companies to develop products and services “under conditions of extreme uncertainty, to abandon all process,” says Eric Ries, entrepreneur and co-founder of the IMVU social network. His Lean Startup methodology proposes three principles for creating and managing innovation:

- Entrepreneurship should be viewed as a management process.
- Success depends on developing a clear hypothesis with a disciplined approach to validation.
- Innovation accounting is essential, including measuring progress, setting up milestones, and prioritizing work.

The challenge for many larger companies is to adapt Lean Startup for their products and markets. An emphasis on rapid and iterative build–design cycles means Lean Startup is highly effective for industries that can test rough-and-ready versions of products with minimal consequences. It works well for products and services early in the development cycle, where product complexity is likely to be lower and the product has not yet moved to prototype.

By contrast, organizations with complex products or in mature development stages face greater challenges. In particular, industries that carry high operational risk, such as nuclear power and jet engines, or that are heavily regulated, such as pharmaceuticals and financial services, will have to adapt the methodology since it is less feasible to have rough-and-ready products in the market. Industries based on products that are systemically complex or with large number of components, such as precision engineering, are also likely to find some aspects of Lean Startup less feasible as development moves beyond basic prototypes, although the principles of defining and testing hypotheses through minimum viable products hold good. The good news is that innovators such as General Electric and P&G show how Lean Startup can work in large companies—and well outside the context of coding consumer apps for which it was developed.

Innovators manage a portfolio of ideas. A common trend is toward the 70–20–10 model of incremental, adjacent, and radical change (see figure 6 on page 9). Although the experimentation process is similar, the organizational challenges are different. Many companies run multiple operating models in parallel to experiment with new structures.

**Incremental change.** When the aim is to improve the way the company does business, the challenge is to engage the organization and ensure implementation so projects tend to be run and sponsored within the existing business. GE’s FastWorks, for example, is based on Lean Startup. The operating model deploys a staged investment approach for early, rapid revision of initiatives and promotes “transaction learning experiments” in which teams “make a little and sell a little,” gathering feedback from customers. Portfolio optimization tools help managers nurture the best ideas and identify and terminate the least promising. This type of innovation is often intensely local. Even though Uber uses the same concept around the world, its implementation varies by country based on a series of experiments about what works in each environment.

**Adjacent innovation.** Focused on doing business in new ways, more separation is required from the day-to-day business. Common models such as accelerators and “skunkworks”—where teams work in unconventional and unstructured ways—are often combined with an internal venture capital model.

General Electric works in this way with its FirstBuild micro-factory. Located on the campus of the University of Louisville in Kentucky, the facility is linked into a global community that enables internal teams and external partners to rapidly co-create new home appliances using the
FastWorks methodology. Teams experiment with appliances until they reach scale, building up to 1,000 units and then moving on to full-scale production when demand exceeds 1,000.

In a similar vein, the Capital One Labs initiative sits outside the main businesses, operating like a start-up accelerator within the broader company but maintaining close links with the core to ideate and incubate adjacent digital products and services. Meanwhile, P&G has created an organizational and funding mechanism that specializes in high-risk, high-reward ideas. Seed money is provided to projects with potential to create major disruptive innovations. Because the fund is separate from individual business units, it can focus on innovations that span the organization.

Radical change. Accelerators and venture capital are popular methods of injecting radical new ideas. Reinventing the business requires original thinking and suspending the normal rules of business. These ideas are almost always developed in separate organizational vehicles. Joint ventures with nontraditional partners are common, with the aim that a clash of perspectives will create breakthrough ideas. However, standalone digital innovation units that operate in a protected environment often fail to lead to sustainable innovation.

One of the world’s most consistently innovative companies, 3M has created customer innovation centers (CICs) that showcase 3M inventions and products while serving as collaborative spaces for co-development with customers. Typically, each CIC has three areas: a presentation area of

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**Figure 6**
The 70–20–10 model helps balance near-term focus and future opportunities

<table>
<thead>
<tr>
<th>Portfolio time horizons</th>
<th>Optimal portfolio allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Horizon 1</strong></td>
<td><strong>Horizon 2</strong></td>
</tr>
<tr>
<td><strong>Time frame</strong></td>
<td>- Short-term (1-3 years)</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>- Core business</td>
</tr>
<tr>
<td><strong>Strategic focus</strong></td>
<td>- Exploit and optimize existing business</td>
</tr>
</tbody>
</table>

- HBR research shows firms allocating about 70% of innovation funds to incremental innovation, 20% to adjacent innovation, and 10% to breakthrough initiatives outperform their peers, realizing a private equity premium of 10 to 20% as this provides a balance across near-term focus and future opportunities (with some differentiation across industries, competitive positions, and firm’s stage of development).

- Google strives for a 70-20-10 balance, and Larry Page credited the 10% of resources that are dedicated to transformational efforts with all the company’s truly new offerings.

Sources: Innovationfixer.com, Managing Your Innovation Portfolio (Nagji and Tuff), company interviews; A.T. Kearney analysis
discovery to spark curiosity and build anticipation, a main innovation space to embrace play and physical interaction while allowing immersive brand interaction, and a collaborative space to foster open dialogue and design around customer needs. Although each CIC has identical 3M values, brand pillars, and technology platforms, each site is culturally adapted for its location. Going beyond large corporate customers, CICs also provide access to and collaboration with small and medium-sized enterprises and start-ups.

The radical operating model is an area in which digital innovation is likely to bring more changes. Over time, we expect to see companies evolving to a more all-encompassing approach to innovation, allowing even more original models.

Accelerators and venture capital are popular methods of injecting radical new ideas. **Reinventing the business requires original thinking and suspending the normal rules of business.**

Valve, a privately run developer of video games, may point the way. The company claims its unconventional management structure helps it to develop more profits per employee than Google, and a survey of 2,200 game developers listed Valve as the company they most want to work for. Valve’s employee handbook states: “This company is yours to steer. ... You have the power to green-light projects.” Teams often form and reform with leaders elected by consensus, retaining authority only for the life of a project. Employees are encouraged to start their own projects in which they are responsible for making a go–no-go decision and for hiring new personnel. Valve says resource allocation is optimized because the most interesting projects garner the most attention.

These are great examples of how companies have organized to innovate. However, each company will need to craft its own approach, depending on the life cycle and the industry, the specific challenges it faces, and its culture. There is no one right way of doing it, although there is much to be learned from others’ successes and failures.

**Lesson 6: Teach the organization to experiment**

Foster employee ideas. A common complaint is that employees resist change and do not think outside the box. Leading digital innovators have a different view and get different results. The reality is that good ideas are abundant in every organization and are almost unlimited if companies can expand their horizons outside their organization and industry. The challenge is to capture and achieve the best ideas.

Organizational structures—not employees’ lack of imagination—often hamper original thinking, with slow and cumbersome processes and disincentives to improve. Labels such as creative director, for example, are unlikely to foster innovation; rather, they can discourage creativity among the rest of the organization. Innovative companies know that a good idea can come from anywhere, and anybody can be an innovator if they are suitably trained and empowered.
Successful digital innovators put people at the heart of the approach and tend to share several core values:

**Make connections.** People need to be connected so they can work together. Online support communities in companies such as Bosch and IBM link innovation champions and intrapreneurs. 3M fosters a culture of innovation that allows it to sustain long-term internal value creation. Cross-pollination of ideas is encouraged, with technical staff regarded as part of not only labs or business divisions but also the global technical community. Employees are encouraged to move across boundaries, and most senior managers have worked in at least five different areas of the company. A network of informal mentors facilitates the transfer of knowledge and helps perpetuate the culture. One way to harness the value of relationships and networks is to use A.T. Kearney’s Connectional Intelligence.5 This approach can dramatically improve an organization’s ability to marshal resources and knowledge quickly to influence change, solve complex challenges, streamline operations, and develop leaders.

**Provide resources.** Leading organizations have resources to encourage people to develop their innovation skills. General Electric and Pfizer offer training and coaching in experimentation methods and digital technologies, while Siemens and Google offer contingent and non-contingent cash funding for innovation. Adobe and Heineken ensure their people have access to tools, templates, and platforms to help ideation and experimentation. Adobe Kickbox offers $1,000 along with innovation tools to help validate ideas. Managers cannot veto an employee’s request for a Kickbox, and employees are under no deadline pressure to present results.

**Understand that people need time.** Perhaps the most valuable resource is time. Digital innovators recognize that the route to innovation is to allow people freedom and space to develop ideas. As early as 1948, 3M formalized what is calls “bootlegging.” Employees can dedicate 15 percent of their work time to their own ideas, with full access to technical facilities to experiment.

**... and recognition.** Recognition encourages experimenters to act as role models. However, financial rewards should be used with caution as experimentation needs to be seen as an essential and beneficial learning experience rather than simply a route to a short-term pay-off. Employee suggestion schemes often fail because they ask staff to offer ideas for other people to implement. Successful digital innovators look for people with ideas that they are passionate about, then they empower those people to see the ideas through themselves.

Extrinsic incentives can be linked to compensation structures or introduced as idea-specific contingent reward schemes. Samsung employees are financially rewarded for submitting patents on the company’s behalf, while Westin Hotels uses exotic trips as a reward.

However, there is plenty of evidence that self-motivators respond well to intrinsic incentives such as awards ceremonies, public recognition, and meetings with company leaders. Zappos provides a voting mechanism for employees to be recognized by their peers and rewards good deeds with Zollars, which can be used for cinema tickets and Zappos merchandise. Intuit has a “failure award” for teams with unsuccessful ideas that result in valuable learning. Klick, a leading digital agency, uses a system of Super Kudos in which employees can publicly recognize the contribution of their peers.

Of course, giving people autonomy and recognition does not mean granting employees a license to do anything they want or to spend as much as they like on pet projects. Most leading

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5 For more, see Delivering Breakthrough Results with Connectional Intelligence at www.atkearney.com.
innovators outline specific business challenges they want their employees to address, driven by the “big vision” we discussed above. Google, for instance, has been trying to instill more discipline in the way its “moonshot,” or radical innovation, projects are managed. The company introduced its Alphabet corporate structure and brought in a financially disciplined chief financial officer. The trick is to balance freedom and space for thinking with direction and financial discipline.

Successful digital innovators look for people with ideas they are passionate about then empower those people to see the ideas through themselves.

Lesson 7: Bring the outside in

Leading digital innovators know they have to bring the outside in. They must be prepared to collaborate not only internally but externally to create partnerships that foster original thinking. They must embrace various cultures, business models, and perspectives and combine them with their own assets, capabilities, and insights to bring breakthrough ideas to market.

With a host of practical and cultural barriers to overcome, this is not easy to do. Large companies tend to struggle to cooperate with small start-ups, which operate on a different timeline and have technologies that are not scalable or secure enough to be deployed. Collaborating with other large companies raises issues of intellectual capital ownership and competitive threats.

When considering collaborative partnerships, a whole range of factors must be taken into account, the most crucial of which are whether the parties share a common vision and whether they are operating on the same timeline. If these are not in place, all other considerations of asset ownership, profitability and risk sharing, governance, and operating structures are irrelevant.

Multiple models of collaboration can be considered, depending on the goal. Four approaches are popular:

Open idea platforms. Perhaps the simplest way to engage with the outside world is to invite others to help solve a problem. A variety of options are available, with crowdfunding platforms becoming more popular. Once companies get over the idea that publicizing problems poses a competitive threat, this is an easy way to get started.

Internet companies such as Google have been leaders in inviting their customers to help them innovate, while food companies have found success with ideas from suppliers and customers. The 2014 Walkers Crisps “Do Us a Flavour” competition, for example, invited people to come up with a new chip flavor, with the winning entry (pulled pork in sticky barbecue sauce) netting a prize of £1 million.

Coca-Cola’s Freestyle machine, launched to the joy of fizzy drink fans everywhere, allows users to mix and match drink flavors. But data from the machines also helps fine-tune inventory
planning and gives Coca-Cola unique insights into customer preferences and flavor ideas. At the beginning of 2017, the company released two new flavors—Sprite Cherry and Sprite Cherry Zero—which were among the most popular mixes.6 The Freestyle experience has been expanded with an app that connects users to a community of flavor-mixers to share ideas.

P&G’s open innovation initiative and platform has resulted in thousands of new product launches, including the Olay Regenerist anti-aging line, Swiffer Dusters, and the Crest SpinBrush. P&G sought ideas that had already had some success and would benefit from its capabilities. The company focused the search by looking at areas such as consumer needs and product adjacencies and made use of proprietary networks of technology entrepreneurs as well as open networks such as NineSigma and InnoCentive.

Pharmaceuticals has also embraced open innovation. Johnson & Johnson’s JLABS allows emerging companies to use the company’s facilities to “transform the scientific discoveries of today into the breakthrough healthcare products of tomorrow.” With six sites across the United States, JLABS has a no-strings-attached policy in which “there is no first look, no first right of refusal, and no equity assigned to Johnson & Johnson.” Eli Lilly’s Open Innovation Drug Discovery initiative enables scientists to submit compounds for experimental evaluation with a view to further collaborative work.

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**Hacks.** A second option for collaboration could be considered a hack—perhaps the most overused word in the digital lexicon. But when applied to innovation and transformation, it can mean simply inviting a range of external companies to compete over a short period of time to solve a problem. Bosch, for example, used a hack to jump-start its digital journey. Europe’s largest home appliances manufacturer, the company was facing excessive innovation cycles that were not prepared to catch up to the speed of digital. A.T. Kearney used its Digital Business Experience approach to create a hackathon, bringing together 40 software developers for three days to work on small projects (see sidebar: Powering Innovation with DBX on page 14). This event radically accelerated the generation of viable new products and business model ideas, which were prioritized for evaluation and market testing.

**Incubators and external accelerators.** In this option, companies act as venture capital funds for start-ups (see figure 7 on page 16). In 2016, about 160 accelerators were created: 26 by corporates, a number that indicates the appeal of the approach.7 However, one could argue that the market is saturated and that many will fail.

Companies considering starting external accelerators should be wary of vanity projects or vague objectives such as wanting to understand how start-ups work. There should be a clear objective and a certainty that an accelerator is the best way to achieve it. For example, the main aim of Barclays Accelerator is to bring new products to market and improve internal systems.

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6 “Fountain Favorite: Sprite Cherry is First National Brand Inspired by Coca-Cola Freestyle,” The Coca-Cola Company, 13 February 2017
7 Yael Hochberg of Rice University and Susan Cohen of the University of Richmond
Powering Innovation with DBX

A.T. Kearney’s Digital Business Experience (DBX) helps businesses with digital innovation by accelerating the time from idea to execution. DBX is based on our extensive experience working with companies to implement digital strategies and on careful study of the common practices adopted by digital natives such as Google, Adobe, and Amazon as well as large companies that are on the path to becoming leaders in digital innovation, such as General Electric, P&G, and Capital One.

DBX has three core components: rapid innovation and experimentation, a digital ecosystem of delivery partners, and innovator spaces to experiment and experience. At the heart of DBX is an iterative experimental process that borrows from both Lean Startup and other disciplines such as design thinking (see figure).

The process has been adapted for large companies with a focus on planning scalability from the start and uses a risk-based approach to identify issues such as regulatory compliance in a way that will control risks while not overburdening the innovation teams. This approach encompasses all activities necessary to implement a rapid digital innovation operating model, including accelerator design, adapting internal control, governance, and performance management processes. Training and capability development modules and coaching enable teams to build skills quickly.

Our digital ecosystem enables us to provide best-in-class co-creation partners, including domain experts, technology platforms, agencies, and start-ups, and a service for assembling nimble coalitions. There are several ways to experience DBX. For companies embarking on a digital journey, we organize events to allow teams to experience their digital futures. For companies ready to move into experimentation, we support the delivery of new digital concepts, demonstrating the impact of innovation and building the capabilities of teams. For those that are ready to accelerate or systematize their innovation efforts, we offer an end-to-end solution. Once DBX has been embedded in the organization, we work with project management to help administer, coach, and guide the teams.

Figure: A.T. Kearney’s Digital Business Experience helps accelerate the digital innovation process

A well-defined operating model ensures the process is embedded in the organization.

An iterative, stage-gated innovation process enables rapid and robust experimentation.

An integrated IT platform operationalizes the innovation process.

Note: DBX is Digital Business Experience.
Source: A.T. Kearney analysis
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In 2014, the bank teamed up with Techstars to launch the initiative, which focuses on specific business areas such as mobile payments, security, and biometrics. Each start-up must have a senior Barclays champion to provide mentoring and must use Barclays technology and products. As owner of the partnership, the champion is responsible for integrating successful ideas back into the company. Although Barclays provides no equity or seed funding, other investors can pitch in.

**Partnerships and joint ventures.** The obvious endpoint of collaboration is some form of permanent partnership, particularly for long-term projects, but the cost of both setup and management are high. The pharmaceutical industry is a good example of ambitious long-term joint ventures. AbbVie has teamed up with Calico, a biotechnology company in which Google is a leading investor, while Google’s Verily Life Sciences is collaborating with Sanofi to combine devices, software, and medicine in the treatment of diabetes. GlaxoSmithKline (GSK) has teamed up with Verily in bioelectronics (see sidebar: GSK’s Prescription for Collaboration). And Boehringer Ingelheim’s venture fund has enabled the company to form partnerships in biotechnology, cancer treatment, and gene therapy.

**Seven Lessons for Innovating at the Speed of Digital**

**Create a strategy for a digital world.** Think about how technology and new business models will change your world. Ask yourself: How would Google do this? What would Uber do?

**Think big.** Set a bold ambition, and communicate it to your employees and customers. If you know how you are going to achieve it, it is not bold enough.

**Know that transformation is a process, not an event.** Make continuity and the exponential rate of change the defining quality of your digital transformation.

**Learn to experiment, and experiment to learn.** Embrace experimentation as a means of execution, but invest in structured processes for experimental innovation.

**Commit to innovation.** Make innovation a core purpose of your business. Set innovation metrics, and run your business by them. If processes and organizational structures get in the way, change them.

**Teach the organization to experiment.** Define a process for experimentation, and align the organization to make it happen. Great ideas can come from anywhere, and everyone can be an innovator.

**Bring the outside in.** Pursue and embrace ideas from outside your company and industry. “Not invented here” should be a sign of merit.

GSK’s Prescription for Collaboration

An excellent example of how companies can progress through various structures and approaches is the way pharmaceutical company GSK has approached bioelectronics. Bioelectronics, or electroceuticals, is a novel approach to medicine where various digital technologies are used to modify brain pathways with the potential to revolutionize a wide range of diseases. In 2013, GSK announced a multidisciplinary team to explore the field. Later that year, the company invested $50 million in a venture fund called Action Potential to invest in start-ups in bioelectronics and launched a $1 million innovation prize. In 2016, GSK announced a partnership with Google’s Verily Life Sciences. The new venture, known as Galvani, aims to invest up to $800 million to develop bioelectronic medicines.
Winning in Digital Innovation: Turning Scale and Legacy into Strengths

Companies can support start-ups through incubators and external accelerators

Figure 7

<table>
<thead>
<tr>
<th>Similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide early-stage support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Differences</th>
</tr>
</thead>
</table>

**Incubators**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Accelerators</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Incubate” disruptive ideas with the hope of building out a business model and company</td>
<td>“Accelerate” growth of an existing company</td>
</tr>
<tr>
<td>Focused on innovation</td>
<td>Focused on scaling</td>
</tr>
<tr>
<td>No specified targets other than to become successful at the right pace (could be to prepare a company for an accelerator program)</td>
<td>Goal is to do two years of business building in a few months</td>
</tr>
<tr>
<td></td>
<td>At end of accelerator program, pitch for funding with a cohort</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less structures than an accelerator, timing often greater than 1.5 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically locating a start-up in a central space with other start-ups</td>
</tr>
<tr>
<td>Can be independent or affiliated with an organization</td>
</tr>
<tr>
<td>Selection by applications of partnerships</td>
</tr>
<tr>
<td>Often non-profit and do not take equity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealab</td>
</tr>
</tbody>
</table>

Source: A.T. Kearney analysis

Time for a Transformation

From the Industrial Revolution until World War II, industries were driven by scale and efficiency. Then, quality and eliminating waste characterized the new industrial giant. In the digital age, the winners will be determined by new business models and their ability to innovate through technology.

Digital transformation means applying digital innovation to the whole business. The primary aim is to innovate at digital speed, and there has never been a stronger case for doing so. Technology is transforming every industry. Peer-to-peer communication is disrupting the travel industry, mobile platforms are challenging the taxi industry, and digitalization has revolutionized entertainment. In the coming years, AI, quantum computing, and machine learning will have an even greater impact on professional services, while 3-D printing, robotics, and automation will disrupt manufacturing. The speed of digital is increasing, and no industry is safe.
The exponential nature of disruptive change means companies need to plan for such forces long before they are fully formed, embedding digital strategy into the corporate strategy. Once a new business model has been established, there is little anyone can do other than copy it, which leaves incumbents playing catch-up.

However, established companies can win the innovation war. Although their scale and established positions can be weaknesses, they can also be strengths. Experienced companies understand how their industries work, and they have an established customer base and the ability to deploy at scale. But they will need to relearn the ability to experiment.

Authors

Jonathan Anscombe, partner, London
jonathan.anscombe@atkearney.com

Alanna Klassen Jamjoum, director, New York
alanna.klassenjamjoum@atkearney.com
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The signature of our namesake and founder, Andrew Thomas Kearney, on the cover of this document represents our pledge to live the values he instilled in our firm and uphold his commitment to ensuring “essential rightness” in all that we do.