How does a firm reliably innovate time and again? Choosing those approaches that play to your company’s strengths can be the difference between success and failure.

Crafting an Innovation Strategy

By Dev Patnaik and Colleen Murray

A hunger for internal growth has made innovation a critical mandate for top executives. As a result, many companies have turned to an emerging group of innovation methodologies. Still highly varied in approach and reliability, these toolsets fuse right- and left-brain thinking, often drawing upon methods from anthropological research, industrial design and business planning. The idea is that if companies discover unmet customer needs, they can then develop clever and compelling new offerings to help drive growth. Indeed, many of these approaches do seem to yield repeatable results. Yet most of their successes involve an individual product or project. Promising though they might be, it’s unclear how these tightly focused approaches can satisfy the growth needs of a large company.

Consider, for example, the mandate set by Jeffrey Immelt, CEO of General Electric. In 2004, Immelt launched an initiative to make GE a global leader in growth and innovation. In doing so, GE aimed to increase its organic growth rate to 8% from a historic average of 6%. The scale of that challenge becomes clearer when you consider that GE is a $160 billion company. An 8% organic growth rate for GE would amount to generating $13 billion in the first year alone – equivalent to creating a brand the size of Nike every year. Put in terms of another popular innovation, GE aimed to create the equivalent of what was at the time four new iPod businesses every year. Clearly, turning GE into an innovation leader is no easy task. Moreover, it points to the real challenge for business leaders looking to drive new growth on an ongoing basis. Sponsoring one, two, or even several innovation projects probably won’t satisfy the appetite of a large company. The problem is just too big. What’s needed is a systemic approach to identifying and developing new opportunities that can be scaled across a large organization.

A new crop of executives have emerged in the corporate world to meet this mandate for innovation. Many firms have appointed Directors of Design, VPs of Innovation, SVPs of New Business Development and CMOs, tasking them all with one mission: Make innovation happen for the company. Show us how we can be more like Apple or Nike. Help us unlock our great ideas. Such directions from the top don’t always mean the same
thing. Some CEOs want to see more wacky creativity. Some want ways to stay a bit ahead of the curve, coming up with a slightly better solution to the latest problem. And others want to radically disrupt their industries.

For anyone on the front line of delivering innovation for a company, it’s imperative to define what innovation means in general, understand how it applies to your organization and put together an action plan for how to facilitate innovation within the company. As part of our innovation strategy work for clients, we’ve had the opportunity to examine many of America’s leading companies firsthand. This includes both direct audits of our client companies as well as benchmarking of competitors. We have conducted both formal interviews and casual conversations with a broad sample of business leaders directly responsible for innovation in fields that represent the full spectrum of industries. Finally, we have drawn on the extensive documentation of innovation methods and practices published over the last several decades to get a full survey of the landscape. Through this process, clear patterns have emerged, both for success and for failure. Understanding these patterns can help a firm to avoid common mistakes that companies make, and craft an innovation strategy that has an increased likelihood of success.

Common Mistakes When Trying To Spark Innovation

There’s an increasing amount of literature concerning innovation in both the general press and mainstream business journals. Many of these pieces focus on the need to account for different types of innovation. They remind us that innovation isn’t just about products, and that firms need to consider innovation in services, supply chains, business processes and channels. They’ve been asked to consider something more ephemeral called experience innovation. As interesting as these typologies are, they’re of limited utility to business leaders, if only because they describe the various possible outcomes of innovation work without suggesting how to practically get there. Without more actionable advice, too many companies proceed to make the same mistakes when trying to spark innovation.

1. Over-reliance on pilot initiatives.
   "We’ll be more innovative if we have more brainstorming sessions."
   In an attempt to take action quickly, some companies initiate projects that focus on a single product idea or a promising near-term opportunity. Alternatively, they latch on to a single technique, such as ethnographies or brainstorming. Invariably, these initiatives work brilliantly in some situations and fail in others. Moreover, many companies eventually find that the scale of impact required is too massive to depend on a single approach.

2. Unhealthy fascination with unique charismatic examples.
   "Steve Jobs is so cool…we need to be more like him."
   It’s difficult to have a discussion on innovation without invoking the names of charismatic visionaries like Steve Jobs or Richard Branson. Apple and Virgin, along with Nike, Starbucks and other media darlings, certainly make for great storytelling. Unfortunately, they also serve as lousy models for the rest of us. Such cases too often depend on a kind of business leader that is, for better or worse, nonexistent in most companies. If you work for Steve Jobs, innovation seems like a fait accompli. If you don’t, the only useful lesson seems to be to quit your job and go work for Apple. Either way, there’s no assurance of an approach or methodology that can be generalized to other situations or that is likely to outlive the charismatic visionary in question.

3. Misapplication of other companies’ approaches.
   "P&G is using a Connect and Develop strategy, so we should, too."
   It can be more enlightening but equally dangerous to emulate the approaches of other companies. Of late, Procter & Gamble has received much attention for its “Connect and Develop” strategy, whereby the company reaches out to promising entrepreneurs, scientists, and consumers in the hopes of mainstreaming the ideas that they present. IBM has received similar praise for its
experiments with “Open Innovation.” Such strategies are far more useful than those that rely on charismatic individuals. At the same time, these approaches work because they’re tailored to the conditions of the companies in question. “Connect and Develop” is a wonderful strategy for P&G, because of who P&G is, the categories that P&G plays in, and the structural systems and DNA of the company. But just because something is good for P&G doesn’t mean it will be good for the rest of us. The mechanical application of inappropriate methods has led to the failure of more than one innovation program.

4. Descent into a cycle of self-recrimination. “Our people just aren’t creative enough.”
Looking to external sources of inspiration can sometimes have further unintended consequences if the firm decides that they can never measure up to the level of outside exemplars. It’s not unusual for innovation planning teams to benchmark other companies only to come away feeling that their own problems are insurmountable.

5. Resignation to superficial changes. “Let’s just paint the walls purple.”
Perhaps most depressing of all are companies that turn away from significant structural improvement in favor of cosmetic changes. After benchmarking several Silicon Valley companies, one firm noticed that many companies had yellow and purple walls. The team went back to their offices and painted the walls yellow and purple, thinking that this might actually make them more innovative. While paint color does affect behavior, and there’s something important to be said for the effect of environment, such initiatives alone usually aren’t enough to fundamentally change the behaviors of an organization.

Play to Your Strengths

How then does a company become more innovative? The short answer is to play to your strengths. Look at what you actually do well in the world and see how those examples can be extended. Decrease your reliance on external benchmarking and case studies alone. Instead, identify those projects, meetings or even moments when individuals or teams within the organization were at their most innovative. And do more of that.

The concept of playing to your strengths goes back to the fact that companies are ultimately groups of individual people. As any great manager, coach or teacher understands, individuals are far more likely to improve when coaching focuses on what’s going well and encourages more of that. Comparisons to other people often produce dismal results, especially when the metrics of success are ambiguous. Anyone seeking tangible evidence of this need only go home tonight to one’s spouse, talk fondly about a co-worker’s behavior and suggest that their spouse act more like that. Concern for the general safety of the reader insists that we recommend this tack remain theoretical. People, individually or as a group, simply don’t respond well to getting told that they should stop acting like themselves and start acting like someone else. And yet, as obvious as this mistake is on a human scale, it’s a mistake that companies commit all the time. Seeking to improve their firms’ capacity to innovate, otherwise savvy executives will too often look to examples of other companies that they can emulate. Though intended to inspire, such methods ultimately do more to demoralize employees than anything else.

In fact, people are much more easily persuaded to change when they are reminded of key moments of strength. Researchers at Case Western University discovered this principle on an organizational scale in the 1980s. David Cooperrider and Suresh Srivastva developed a model for organizational change called Appreciative Inquiry. The model suggests that, rather than trying to fix those things that are bad or wrong with your organization, it’s better to look internally to see what a company is already doing well, and then figure out how to replicate that success. When business leaders devote their energies to figuring out ways to promote and amplify what already works at their companies, their approaches to change and innovation hold a substantially higher chance of success.
The notion of playing to your strengths has profound implications for crafting an innovation strategy. For example, Apple, Dell and IBM have been innovation leaders in computing, yet each has pursued a very different approach to achieving that success.

Of course, an emphasis on playing to your strengths doesn’t mean that nothing should change. Current business models may no longer be relevant. Old assets may need to be sold off and new ones acquired. Increasing a firm’s capacity to innovate may require the development of entirely new competencies. Where, then, does a company’s strength’s reside? The answer is in its culture.

Cultures of Innovation

Recent studies of innovation have focused on the need for improved methods, processes, and metrics to help an organization foster innovation. And while these factors are important, they cannot succeed without considering a company’s inherent organizational culture. Culture sets the environment, tone and code of behavior that enable teams to do their best work. Existing organizational cultures influence what people consider important: which problems to solve, which accomplishments to reward, and which ideas to adopt. Culture dictates how people in a firm frame a problem, and even how they decide which strategies reflect the best possible ways forward. For innovation in particular, culture plays a critical role. As Andrew Hargadon showed in his book How Breakthroughs Happen, innovation is an inherently social process that can depend as much or more on helping the right groups to connect as it does on coming up with truly revolutionary ideas in a lab late at night. It makes sense, then, that a company that values short-term action tends not to focus on long-term issues, or that companies that value novelty will challenge itself to create new things, while companies that prize efficiency avoid any new solution that reinvents the wheel. The nature of personal relationships and practices in a company deeply influence what people actually work on.

The key to playing to an organization’s strengths, then, lies in its culture. Moreover, the cultural habits that an organization emphasizes in turn have a profound effect on the kind of innovations that firm creates. Some innovations depend on technological invention. Others on market insight. Still others on the creative combination of disparate business ideas. Even as different companies display different cultures, so then do these different cultures lend themselves to different kinds of innovation.

Different Cultures to Achieve Different Objectives

It’s well-known that most companies need to nurture a culture of creativity if they want to foster growth and innovation. But creativity is only one part of the equation. Indeed, depending on the kind of innovation you want to achieve, other traits may be equally, if not more, important. Creativity will likely need to be coupled with customer understanding, implementation and continuous improvement. When do each of these factors come into primacy? That depends on the particular type of innovation you seek to foster.

Research conducted in the 1990s by Amy Edmondson at Harvard Business School focused on how institutions learn. She found that people’s behaviors differed according to the kinds of cultures and environments in which they operated. Based on that work, we have developed the following framework to illustrate how different cultures of innovation achieve their different ends. Organizations vary in two important ways that affect the kinds of innovations that they create: how they manage knowledge, and how they manage objectives. Some organizations place a priority on creating new knowledge, while others prioritize the effective use of existing knowledge. That is to say, some cultures glorify the “new new thing,” while others are suspicious of ever “reinventing the wheel.” At the same time, some companies define objectives in very explicit ways at the start of any initiative, while others keep such goals relatively fuzzy and allow objectives to emerge over time. That is to say, some cultures place a great importance on beginning with the end in
mind, while others insist that they'll know what they're looking for when they find it. Taken together, these variables suggest four very different types of organizations, ones that place a firm-wide emphasis on invention, execution, application and exploration, respectively.

Different cultures are built to suit different objectives. The cultural habits you emphasize will affect the kind of innovations that you create.

**Invent Cultures**

Organizations that have a culture of invention are the sorts of places that we most often associate with being innovative. Working within defined boundaries, they’re often tasked with creating new knowledge. As Stanford Engineering Professor James Adams once characterized, such firms are populated with folks who when asked to design a toaster will invent fifty new ways to heat bread. Invent cultures are on a constant quest for the novel and different, and often appear in engineering labs, advertising agencies and design firms. Companies like Apple, Nike and 3M fall into this camp, as does the notable product development firm, IDEO. Invariably, Invent cultures prize novelty far above metrics like effectiveness or efficiency.

Invent cultures innovate by answering questions that begin, “How can we create a cooler or better shoe or computer or advertisement?” Such organizations thrive on competitive play, and often have cultures that look like teenage boys on the playground. As you might expect, classic brainstorming techniques were born out of Invent cultures, as play helps to drive such sessions. Invariably, one person will come up with an idea, spurring others in the room to try and produce an even better idea.
For example, Nike’s shoe designers compete to win the coveted “Shoe Dog Award.” This internal award showcases what they judge to be the best designs in different categories, such as “Best Kids Shoe” or “Best Active Life” shoe. Prominently displayed in the lobby and constantly changing, it’s a way for top designers to showcase their work and keep up the spirit of competitive play.

Invent companies work to offer adequate time and resources for individuals to experiment, as well as the apparatus to accurately evaluate the risks and opportunities of a large number of projects. Successful Invent cultures display a tremendous amount of slack and support, working to make sure that everyone has the tools that they need and the freedom to work as and when they like. By contrast, attempts to over-regiment the system can obstruct this type of work and kill the kind of play that’s necessary to create new ideas.

Successful Invent teams...

Create a culture of “competitive play” where innovation begins as an attempt to respond to the challenge of an idea, co-worker, or competition.

Tend to be somewhat aggressive, where participants need to speak loudly to get their ideas heard.

Find ways to keep Competitive Play from turning into copying. What’s more important is the impetus that gets teams thinking, innovating and building off of one another’s ideas.

Execute Cultures

Execute organizations have very clear objectives at the beginning of a process, and draw upon existing knowledge to meet those objectives. Often resembling a well-run factory, such cultures tend to prize efficiency and work to eliminate errors from the system. Not surprisingly, such an environment can be found in companies like General Electric, FedEx, Toyota and Wal-Mart. These cultures tend to prize reliability and integrity: they urge individuals within the organization to say what they’ll do, do it, and then show that they did it. Like any cultural trait, this commitment to reliability manifests in even small ways. For instance, employees at GE tend to demonstrate a relatively high level of punctuality. Conference calls that are scheduled for 10 a.m. will invariably have everyone on the line by 9:59. The meeting will often continue until 10:55, when a computerized voice will interject to inform participants that the call is scheduled to end in five minutes. At exactly 11 a.m., the computer shuts off the call. While such a rigid system might seem draconian in other companies, it works well at GE, if only because people prize efficiency and clarity of task.

Execute cultures focus on trying to make what they’re already doing better over time. For instance, while FedEx’s initial idea for overnight shipping constitutes a huge innovation in itself, most of the organization’s attention focuses on getting incrementally better every year as new technologies emerge to better track and deliver packages. Similarly, Toyota’s production system for manufacturing automobiles and Wal-Mart’s system of cross-docking have allowed these companies to achieve unparalleled efficiencies over time.

Execute cultures seek efficiency, embrace a hierarchal structure and clearly delineate roles, responsibilities, and accountability. Execute strategies for innovation are based on developing standards, defining and optimizing processes, establishing clear guidelines, training their employees, and holding them accountable for success. As a result, these organizations have high control over the quality of their products and services. These cultures avoid reinventing the wheel every time that they have a problem. Instead, they build on what already works.

Successful Execute teams...

Create a culture of reliability and integrity based on the efficiency and success of the entire organization.

Make individual roles and responsibilities explicit by clearly defining handoff points. Keep deviation from the established protocol to a minimum.
Apply Cultures
Like Execute companies, Apply cultures use existing knowledge, but they do so in pursuit of outcomes that can seem relatively unclear at the beginning. They may be asked to implement an existing idea in a new area. For example, teams that are asked to implement a new process, such as Six Sigma, are often Apply cultures. Such teams are working with an established set of methodologies, but the implemented system may look very different depending on the environment.

In this way, Apply cultures innovate by rolling out a pre-existing idea to a new area. Virgin didn’t invent airlines, but the company successfully innovated travel by taking the old idea of an airline and applying the essential Virgin brand attributes to it. Starbucks took something that had been around for a long time, coffee – or more specifically, the European-style espresso bar – and turned it into something uniquely American. The company rolled this model out across the entire country and now the world. Even a company like Disney has a particular “Disney” approach to storytelling that gets applied to everything from Cinderella to Snow White to Tarzan. If you were to hear that Disney is about to come out with a new King Kong movie, it would be quite easy to imagine exactly what the film would be like. King Kong’s mom would die in the first act, there would be a lot of anthropomorphic weeping, and at some point Elton John would break out into life-affirming song. The application of existing ideas is very much Disney’s approach to innovation, and it’s been quite successful for them.

Organizations that are good at application constantly develop new ways to roll out and implement ideas. Rather than seeking competition or reliability, Apply cultures prioritize engaging with people to ensure that their ideas are implemented. More than anything else, these cultures prize a sense of buy-in. Successful Apply cultures realize that they shouldn’t over-engineer the system. They don’t want to impose overly strict methods and processes that tell people exactly what to do at every step. Instead, they know that they need to react quickly to what’s going on and modify along the way.

Successful Apply teams...
Seek consensus and input in the quest to discover the best way to get a job done.
Encourage people to contribute ideas, improve methods and challenge the status quo.
Avoid overly managed or rigid processes and systems.

Explore Cultures
Finally, some cultures thrive in situations where they must create new knowledge, despite the fact that the overall objectives may be initially unclear. Such folks are often on the hook for solving large, ambiguous and complex problems. Their end goals are often unclear, as are the means to get there. Less common in mainstream business organizations, such Explore cultures place a primacy on learning above all else. Google, Pixar and Cirque du Soleil all display a very different kind of organizational culture compared to more traditional firms that is in some cases more akin to academia. As one employee described it, Google is “Stanford with stock options.” Pixar, unlike the rest of parent company Disney, is an Explore culture. They don’t have the same kind of singular approach. And at the same time, they don’t prize the kind of novelty for novelty’s sake that we see at a place like Apple. In fact, the great thing about Pixar is that it constantly comes up with new objectives for its own people even as they come up with the means to get there. Pixar’s people create computer systems that they use to tell new stories while also thinking about which new stories they could really tell. It’s only when they discover that they have a better way to animate water that one of their directors gets inspired to come up with a new way to tell a story about fish, which became the revolutionary film “Finding Nemo.” It’s this kind of back-and-forth questioning of the beginning and the end of the story while also discovering the means of production in the process that puts Pixar squarely into the Explore box.
New Business Teams within larger organizations are fairly widespread instances of what we term Explore cultures. These teams are typically charged with figuring out potential new areas for growth for an organization.

Thankfully, these cultures have a few characteristics that help them thrive under such a difficult mandate. They prize constant learning, discovering new technology and knowledge as they go. In addition, they use extreme amounts of collaboration to build on each other’s ideas. Both these tactics help teams uncover directions and figure out where they need to go in the long-term. In terms of distributing their learning and insights, Explore teams often add to and draw from a shared pool of knowledge. Where an Invent culture is being asked to create new answers, Explore cultures are invariably trying to identify new questions.

Cirque du Soleil operates along similar lines. But unlike Disney, Cirque du Soleil isn’t doing this by taking its brand and applying the same magic to each performance. Each production is different in its own right, drawing on collective group activity to create an interesting alchemy of technology, visuals and music. The founder and CEO, Guy Laliberte, has spent more than two decades building the infrastructure to constantly reinvent the company, take risks and turn athletes into artists.

As we can see from examining the cultures of Pixar and Cirque du Soleil, Explore groups are constant learners. They avoid assuming the final outcome of a project in the beginning. They know that they don’t know where they will find themselves, and they are comfortable living with this ambiguity. Their strategy for success revolves around continual discovery and variation. Keep in mind that because one of the primary goals of these teams is to figure out what the correct outcome ought to be, assuming the end of a project will destroy an Explore culture. Also, Explorers are challenged in workplaces that cause individuals to pre-filter their thoughts and creative ideas.

Successful Explore teams...
Rely on Psychological Safety, or a person’s perception of the personal consequences of taking risk, to build group cultures of shared ideas.
Encourage individuals to ask questions of anyone on the team, experiment with methods and processes, and become comfortable with expressing their opinions to anyone in the team hierarchy.
Avoid creating fear in the workplace that may cause individuals to filter their thoughts and creative ideas.

Mapping Companies to a Single Culture
Comparing the mandates of these different cultures shows that the factors that make one kind of culture great are exactly the things that will destroy another. In a very strong Execute culture, Stephen Covey’s “Seven Habits of Highly Effective People” are at play – where individuals are exhorted to begin with the end in mind. But in an Explore culture, beginning with the end in mind is a great way to ensure a poor outcome. After all, if we knew what the end should look like, we wouldn’t need to explore. Similarly, slack and support are critical for an Invent culture, but can damage productivity and disrupt the systems of an Execute culture.

Most companies tend to have one predominant culture of innovation. That said, any discussion that equates a particular culture to a particular company must acknowledge that most firms aren’t entirely homogeneous. Indeed, while most firms have a single cultural bias that is predominant throughout the organization, enclaves will invariably exist. That’s a good thing. Even the most freewheeling Invent culture needs an enclave of rigorously Execute types, if only to keep the lights on. While it’s true that every company needs to explore new businesses, apply what they know to new objectives, invent new versions of existing products and execute at a high level, one culture still tends to set the tone in a given company. Companies occasionally find that they have one primary culture that dominates most of the firm and a second “beta culture” that resides in parts. GE, for example,
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has a strong culture of execution. At the same time, it’s able to maintain a smaller culture of invention that’s centered in its global research center. Yet even when GE invents new technological solutions, it does so in a way that’s very execution-focused.

A culture of innovation shouldn’t be confused with a process for innovation. Indeed, many innovative cultures offer very little in the way of formal processes. Conversely, each of the cultures shouldn’t be confused with phases of innovation or product development. Explore cultures bring refined work to market all the time, and rigorously Execute companies invent innovative solutions all the time.

Having thus mapped organizations to a particular type of innovation culture, it begs the question as to whether one type of firm is better suited to innovate. In fact, we’ve been able to identify companies that exemplify innovative practices in every category. They differ greatly from each other in how they choose to innovate. GE doesn’t spend a whole lot of time on open-ended exploration. Disney doesn’t foster a great deal of technical invention. But they remain similar in their commitment to playing to their strengths.

Rather than trying to create a culture of innovation, the most successful firms create innovations that leverage their culture.

**Eight General Strategies for Innovation**

An approach to innovation that plays to a company’s strengths rather than simply emulating others has an increased likelihood of success. That said, understanding a company’s cultural strengths doesn’t point to the specific

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**Companies display different innovation cultures.**

*Most large companies have a little bit of everything residing inside them. Still, one culture tends to predominate.*

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Objectives are Fixed at Onset

Objectives Emerge Over Time

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activities that will drive innovation. Knowing what kind of culture you are doesn’t tell you what you should do. Fortunately, a broad survey of different companies and the techniques that they use suggest that there aren’t an infinite number of ways to innovate. Our research indicates eight basic strategies that different companies use to launch innovations. Each culture lends itself to two of these approaches.

For instance, methods that actively encourage individuals to go out and try things, helping them search for the distinct and different include Concept Development and Workbench Venturism. These are Invent strategies. Execute methods, which encourage individuals to promote maximum efficiency and outplay the competition, include Competitive Response and Incremental Improvement. Methods that discover new and exciting uses for existing knowledge include Systemic Deployment and Captured Serendipity in the Apply space. Finally, Explore methods, which seek to discover new opportunities and define new problems, include Institutional Research and Needs Identification. The multiplicity of innovation initiatives that corporations launch can be bewildering. Yet, all of them fit within one of these general strategies.

Invent Strategy: Concept Development
Innovation can emerge through intensive explorations of a particular topic. This often looks like teams who remove themselves from the daily activity of work for a defined period of time to brainstorm and ideate on what might be possible. Such Concept Development has people go to the metaphorical garage to see what neat things they can create to fulfill a clear objective.
When most of us think about innovation, Concept Development approaches are what usually come to mind. Lockheed set the standard for this sort of strategy. During World War II, the company set up its first Skunkworks program at the Burbank Airport. The goal was to support the war effort by coming up with as many new and interesting ideas for airplane technology as they could. Later skunkworks developed a number of revolutionary aircraft, including the U2 spy plane and the first stealth fighter. In every case, Lockheed engineers were provided the necessary slack and support to invent against a relatively clear set of performance objectives.

Palo Alto product development firm IDEO’s Deep Dive practices a more contemporary approach to Concept Development. As shown in a 1999 episode of ABC’s Nightline, Ted Koppel challenged the company to reinvent the shopping cart in a week. The firm’s designers and engineers used the Deep Dive methodology to prototype the single concept of the shopping cart from multiple standpoints. The sleek, flexible shopping cart with removable baskets that emerged is quite distinct from existing carts, but its essential purpose is identical to the products it replaces, a hallmark of Invent innovation.

Companies that rely on Concept Development as a strategy for innovation draw on many individual tactics to meet their mandate. These efforts range from setting up a rapid prototyping program to immersion sessions with experts all the way up to the formation of an advanced concepts lab.

Invent Strategy: Workbench Venturism
By contrast, the second Invent strategy for innovation, Workbench Venturism, draws from the philosophy that managers should have their groups work on what its people are interested in. In fact, we have found that providing incentives to individuals to try new things actively engenders innovation. Many technology firms encourage individuals to tinker, all the while monitoring the results. Organizations using this approach start many projects, and then monitor them closely, killing off all but the most promising.

This strategy was piloted by Hewlett-Packard. Originally a spin-off from technology giant HP, Agilent Technologies is now a premier measurement company advancing electronics, communications, life sciences and chemical analysis. The company’s leaders realize that projects that go to completion are quite expensive, but the investment required to start a new project is relatively low. In response, Agilent seeks to start as many projects as it can and then either fix or quickly kill off those projects that run into trouble.

But Workbench Venturism doesn’t just apply to technology companies. McDonald’s has run experiments throughout its history, relying on local franchisees to try out new recipes. The company nationalizes those menu items that have the greatest local success. The classic example is the development of the Egg McMuffin. It was created by a particular McDonald’s restaurant to drive more traffic during breakfast time using existing capital equipment and training. The sandwich was such a success that McDonald’s picked it up and rolled it out throughout the rest of the organization. By observing each of the different franchise initiatives and funding the ones that are most successful, McDonald’s is able to create a pipeline for innovation.

Individual tactics within Workbench Venturism include setting up excellence awards or giving people allotments of free time to explore their own ideas. Some companies run 100-day experiments, where an employee with an interesting idea gets 100 days to experiment with an idea. If the organization is pleased with the experiment’s progress, the concept gets refined into a market offering. Other companies set up internal venture funds that provide time and money to internal groups that bring new ideas to the table and request time away to refine the idea.

Execute Strategy: Competitive Response
In Execute cultures, innovation can begin as an attempt to answer the actions of a competitor. While more of a reactive stance, such an approach is typical of a “fast follower” organization that observes the innovations of others, then emulates and improves on what it
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Though some classify this strategy as copying, the resulting innovations can look nothing like the offerings that inspired them. The essential quality of this strategy is that the impetus to innovate must come from the actions of a competitor.

The success of the Swatch Group in the 1980s is a great example of a company employing Competitive Response to innovate. The Swiss company’s watches became fashion icons of the Reagan years, but Swatch originally created its stylish, low-cost plastic watches as a defensive response to inroads that Japanese manufacturers had made in the watch industry. Traditional Swiss watch manufacturers SSIH and ASUAG, each formed in the early 1930s, merged in 1983 after seeing their traditional markets erode. CEO Nicholas Hayek realized that the combined group didn’t have the low-cost labor systems in place to compete with the Japanese products on price unless they created a low-cost product of their own that could still command a market premium – the "second watch," or Swatch. Swatch combined an attention to fashion design with the Japanese-proven concept that inexpensive yet reliable quartz watches could reach a wider market than traditional mechanical offerings. In doing so, the Swatch Group created an entirely different approach to watch-making that has left a lasting impact on the market, and the company is the largest watch-maker in the world.

Similarly, in 2005, The Spanish group Inditex, best known for their Zara chain of cheap-chic clothes, was able to leapfrog the longstanding European retail apparel leader H&M. Both retailers catered to the rapid changes of the fashion world, where quick inventory turnover is the lifeblood of success. But by bringing design in-house, keeping production runs small and tightly controlling their distribution networks, Zara was able to create a centralized infrastructure to move new designs from concept to store shelves in just two weeks. This quick turnaround remains unparalleled by any competitor. In the process, Zara created an entirely new distribution model valued by both fashion retailers and fashion mavens worldwide.

Specific tactics that fall under Competitive Response include competitive product dissections, benchmarking or even war game simulations to plot strategies contingent on a rival plotting a particular course of action. Other companies build patent-monitoring teams that have the sole task of observing which patents competitors are filing. When something new or interesting comes along, patent monitors try to figure out a way to block it off, break it or copy it, and then get to market even before the patent applicant does it for themselves.

Execute Strategy: Incremental Improvement

Execute cultures also stay competitive through continuous improvements to existing products, services or processes. This can mean introducing variations on a theme, creating aesthetic modifications, adding features or extending product lines. Incremental improvements leverage existing conditions and markets. Upon first examination, some might argue that the outcomes of Incremental Improvement aren’t really innovations. This is likely because their mindset for innovation is that it means wackiness or coolness. Since innovation is any invention that has a social or economic benefit, incremental improvements clearly fit.

One way to foster Incremental Improvement Innovation is by looking at what you’re already doing and figuring out ways to do it a little bit better. Many process improvement programs fall into this camp, including Six Sigma. Motorola first introduced the concept of Six Sigma in 1986, as a way to continually improve its business and manufacturing processes. Although many of the individual Six Sigma process tools date back to 1920s engineering and process methodologies, Motorola’s synthesis of this knowledge transformed first its own organization before moving on to the rest of the manufacturing world. Today, Six Sigma Blackbelts innovate throughout the best Execution cultures in the business world.

No one company better embodies a culture of Incremental Improvement than Toyota. Recently having passed General Motors as the world’s largest car company, Toyota’s success
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is often attributed to the methods of just-in-time productivity. But the company’s commitment to Incremental Improvement goes far beyond any single method. Eiji Toyoda and Taiichi Ohno’s pioneering concept of lean production after World War II revolutionized the way Toyota thought about mass production and the capabilities of the organization. Since then, however, many other companies have adopted these methods. Toyota stays on top because they see their Production System as a way of thinking, not a series of techniques. The Toyota Way reflects the company’s overall culture of efficiency, problem-solving and constant drive for improvement. As a result, Toyota’s growth has been methodical and incremental.

Specific tactics for cultures practicing Incremental Improvement include implementing efficiency programs and processes such as Six Sigma, Kaizen or Value Engineering. Conducting internal Innovation Audits, Past Success Audits or even setting out Suggestion Boxes can help organizations understand what works and what doesn’t about their current approach to doing business. Cross-Functional Rotations, Customer Support Monitoring and Innovator Benchmarking can also shed new light on old ways of doing things.

Apply Strategy: Systemic Deployment

Apply cultures often leverage existing knowledge to meet new goals through a Systemic Deployment strategy. When the needs and opportunities facing a company are both complex and intertwined, it’s advantageous to develop an overall vision for a future state, then call on individual projects to articulate specific pieces of that puzzle. Using this systemic approach allows the organization to manage its efforts and solve larger problems that can’t be answered by isolated products.

A good example of this is Microsoft. Surprisingly, they have originated very few technical innovations within their own walls. Rather, their talent lies in rolling new technologies into their own platforms, managing their large-scale deployment and, in turn, driving adoption. The company’s tremendous success in bundling several applications together as the Office suite is legendary in the computer industry, and this general approach shows up in all of their efforts. This even showed up during the ‘browser wars’ of the 1990s. Hard as it is to believe now, in 1995, Netscape’s Navigator dominated the market for web browsing software. Microsoft had licensed the Mosaic technology to create its own Internet Explorer, but had a lot of catching up to do against Netscape’s market and technological leadership. But within three years, Microsoft was able to capture over 90% of the browser market. How did the company do it? By bundling Internet Explorer with every copy of the Windows operating system. The product suddenly reached millions of customers for free. During this roll-out, Microsoft continued to fund feature improvements until Navigator no longer had a technological advantage. As a small company, Netscape just wasn’t able to keep up with the juggernaut platform that Microsoft built.

IBM made a similar strategic move into E-Business that provided the impetus for a host of internet-related activities. Although a late-comer to adopting web technologies, then-CEO Lou Gerstner recognized as early as 1994 that the future of the web was all about business and transactions, not mere information retrieval. Gerstner saw services as a way to bring IBM out of its slow-growth businesses like mainframes and storage systems. And although providing internet services was new to IBM, offering services was not. E-Business fit well with IBM’s existing strengths of building powerful computers and software and then providing tons of tailored services to support their customer’s business needs. Gerstner created a mandate that every product work with the web, weaving the culture of E-Services into every corridor of the company, from products to practices to marketing.

Tactics that support Systemic Deployment include in-market experiments, simulated test markets or pilot lines to learn what it will take to conduct a successful full-scale roll-out. Grassroots campaigns or influencer outreach
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programs can also help to create early buy-in. Technology brokering, platforming and adjacent market development can also help organizations uncover new opportunities to apply their current capabilities.

Apply Strategy: Captured Serendipity
You never know when lightning will strike. Often, innovation is as much a matter of being in the right place at the right time as it is an element of genius. Yet despite the inherent unpredictability of such an approach, some companies have been able to induce lightning to strike again and again. Their real secret lies not just in creating the right environment for great things to happen, but in creating the infrastructure to capture and leverage good fortune when it prevails.

Viagra was originally a medicine designed to treat angina. What manufacturer Pfizer found, however, is that apart from its use as a heart medication, Viagra also had the unusual and embarrassing side effect of improving men’s blood flow a bit south of the heart, causing immediate erections. While another company might have considered this product a failure, Pfizer had the systems in place for people to look at it and say, “How can we turn that unwanted side effect into its central benefit?” As a result, the field of erectile dysfunction medication was born. The little blue pills have become cultural icons, and Pfizer realized revenues of $1 billion per year from Viagra alone very quickly upon launch. The company’s structures supporting the commercialization of accidental innovation allowed it to take advantage of what might have been a disastrous result.

Procter & Gamble practices Captured Serendipity as well as anyone. One of the company’s biggest successes in the last ten years is the Swiffer, a unique sweeping tool that combines the functions of a broom and a mop in a fun and easy way. Though understood as an American innovation, the Swiffer is actually a product that Kao of Japan had been making for ten years before P&G ever brought it to market. But the company’s overseas scouts were smart enough to recognize the genius of the Swiffer say, “Hey, this is something that would be good for the rest of the world as well.” The company then rapidly rolled it out in the United States market. How could these companies have been able to come up with these new innovations? They had established processes for Captured Serendipity. Examples of these tactics include setting up an innovation program fund or knowledge-sharing databases. Like P&G, some companies set up overseas concept scouting programs for a team to go to places like China, Germany and Japan, observe what’s going on, and find good ideas to mainstream. Similarly, groups can do trade show scouting closer to home. This involves visiting small start-ups and interesting people, buying their ideas and rolling them out.

Explore Strategy: Institutional Research
Envision people committed to the ongoing exploration of ideas. Imagine these people taking their ideas and converting them into products— the classical model for technical innovation. A lot of Ph.D.’s, even Nobel prize-winners, do this kind of open-ended exploration in their field for a living. They create the kinds of new knowledge that actually spark tangible ideas and innovations.

The corporate research institute classically embodies Institutional Research. First pioneered by Thomas Edison at General Electric, this model was widely adopted by everyone from Alcoa to Xerox Most notable among these adopters is AT&T’s Bell Labs. Founded in 1925, AT&T’s R&D arm was legendary for developing innovations that have altered society. At its peak, Bell Labs employed 20,000 people in 19 different facilities, many of whom held Ph.Ds. Seven researchers won Nobel prizes for their work at Bell Labs. Most importantly, the system was able to demonstrate results. Bell Labs generated more than 21,000 patents and developed such innovations as the transistor, the solar cell and the satellite TV. The scientists that worked there credited this success to their ability to dedicate all their time to research, collaboration with other brilliant people and not having to fight for resources or take time out to teach classes.
In these traditional hot beds of innovation, Institutional Research has fallen by the way side. Even Bell Labs is no longer what it once was at the height of the cold war. Many corporate research institutions have felt the pressure of producing short-term results and worrying more about business relevance. At the same time, we’re seeing new labs appearing in places like Google and Yahoo, built on a similar model. These companies understand that having a strong lab component is particularly useful when developing large-scale technology plans. Google Labs, for example, bills itself as a “technology playground” where the public can test out ideas “that aren’t quite ready for prime time.” Not only is Google building its own technology capabilities, but it’s using its online presence to test, learn and prototype potential new businesses. At the same time, Google Labs is able to recruit talent by offering a mix of challenging research work that can also make a big impact on the world.

Companies that conduct Institutional Research put in place activities like guest lectures, fellowship programs and sabbatical programs. These give people the kind of freedom to understand and explore where their hearts lead them. Encouraging employees to participate in conferences or publish ideas in academic or business publications also helps to build exploration into the culture of the company.

Explore Strategy: Needs Identification

Needs Identification is the last strategy we’ve identified. Discovering what people most desire can point to direct and immediately profitable solutions. Firms that employ this approach find ways to uncover people’s unmet needs and exploit them to drive innovation. The most effective Needs Identification typically involves more than simply asking customers what they need. Often it involves using an open-ended approach to gain insight into needs that people may not even realize they have. This can lead to proprietary insights about the world that can be turned into solutions that help make people’s lives better.

Multi-talented organization 3M, for example, uses a Lead User process for product development. Developed by MIT professor Eric von Hippel, the Lead User process works on the belief that breakthroughs can be discovered by identifying and learning from any individual or organization that has needs that are ahead of current market trends. These people are the true innovators, often coming up with their own work-around solutions to meet their own needs. Since, over time, more and more people are likely to have these same needs, these make-shift solutions suggest directions for future development. This insight revolutionized the way 3M conducts product development. In 1996, 3M’s Surgical Drapes Team was suffering from declining profits and little room for growth. They needed a breakthrough and their standard product development process wasn’t getting them there. The group decided to prototype the lead user process. Surgical drapes are thin, adhesive plastic films that stick to patients’ skin at the site of a surgical incision. They isolate the area being operated on and protect the patient from infection. By talking with lead users, the group realized doctors in developing countries couldn’t afford the drapes. They reframed their project goal from improving their current drape offering to finding cheaper and more effective ways to prevent infection. Now, instead of coming up with all the ideas themselves, teams have systemized the process of identifying their lead users and learning from them to come up with ideas for new products, services and business models.

Products are not the only opportunities presented by the identification of unmet needs. As an example, Jump Associates worked with GE Advanced Materials in 2005 to create a strategy for market entry in the high-end plastic fibers market. GE’s strength had been in dealing with science and technology-centric injection molded applications, not textiles. By comparison, rival DuPont was an established competitor in both high-performance and commodity synthetic fibers. In collaboration with GE, Jump researchers entered the field to study the textile producers who use the raw materials the company planned to offer. Contrary to initial assumptions that great applications of GE’s technical innovations would be critical to the company’s market
success, we found that the people operating in the market took a uniquely artisanal approach to their work. As a result, we recommended that GE bring its customers into the development process. GE’s marketing team for the space even sends its producers holiday cards now. As a result, the company realized revenue from the new market in 2006, two years ahead of schedule, with significant growth forecast for the years to come.

In addition to lead user research and customer ethnography programs, companies pursuing a Needs Identification strategy can set up customer ethnography programs, consumer lifestyle labs or monitor different cultural trends. The insights gained from these activities can then help focus new business exploration activities.

Managing Innovation Outcomes

What to Measure and What to Manage

The diversity of possible inputs and outcomes available to an innovation leader suggests the need for some sort of dashboard. In current business parlance, such a dashboard usually refers to a management system that summarizes multiple measurements of business performance. Applying that metaphor to innovation activities can be problematic, if only because there isn’t always a clear relationship between innovation activity and expected outcome.

For instance, consider some of the ways in which companies measure innovation outputs. The simplest metric is overall revenue growth. But you can also measure things like number of projects in the new product pipeline, the success rate of new innovations, percentage revenue from recently introduced offerings, or even the relative price premium new offerings command in the marketplace. Indeed, such variables are useful for a company to track quarter by quarter over the long-term if you seek to gauge whether you’re actually getting any return on the company’s innovation activities.

Such measures make poor management systems at the tactical level. They fail to give meaningful direction about what to actually do. They’re also, however, incredibly easy for people to work around without effecting real change. For instance, teams that are evaluated on the number of projects underway are all too often prone to simply take their existing projects and divide them in half to double the number of projects on their docket. As Dartmouth College business professor Vijay Govindarajan has noted, it’s simply too easy to game the system.

Building an Innovation Dashboard

These general measures of innovation health can, however, be useful when viewed more as a windshield – a heads-up view of overall performance. The real dashboard, then, is instead a single document that lays out all the possible activities the company could follow to achieve its objectives, organized on the page by overall innovation strategy. Informed by an understanding of market conditions, competitive activity, and cultural fit, a robust innovation strategy can then initiate, measure and reward actions at the tactical level.

Mapping your current innovation activities to an Innovation Dashboard can reveal a few common trends. Invariably, large companies find themselves engaged in a wide variety of competing initiatives, often with wildly varying levels of success. Lacking a more thoughtful approach, some firms try to do every possible innovation tactic without doing any of them truly well. Others engage in a few strategies that run directly counter to their own strengths. Yet, armed with a comprehensive view of innovation activities, companies are able to engage in a more deliberate decision-making process, leveraging who they are and what they’re trying to achieve. For instance, certain initiatives may be deemed core to the organization because they’re both appropriate to the market and leverage what the company inherently tends to be good at. Other activities may need to be protected in separate hothouses away from the core business. Still others may be completely outsourced because they’re considered necessary but ultimately depend on competences that the firm is unwilling or unable to develop.
For instance, a firm might want to increase the number of projects in its new product pipeline. Recognizing that it has historically been a strong Apply culture, the company might then choose a number of Captured Serendipity activities. Such a program might include chartering a team to conduct overseas concept scouting, visiting markets around the globe, looking for regional innovations to then roll out globally. Managing that group then depends on understanding the resource required to keep the team traveling, providing them the resources to acquire new ideas, and measuring the number of new ideas that they’re able to bring forth on an ongoing basis. New project performance is part of the windshield. Overseas concept scouting is one lever to pull on the dashboard. At the same time, the company may launch other Systemic Deployment programs, and rely on external partners for Concept Development. Such a program is quite similar to Procter & Gamble’s Connect and Develop strategy. Recognizing its own strengths as an Apply culture, the firm has shifted its emphasis away from internal Concept Development.

It’s not just about growth. It’s about sustainable growth.

In today’s competitive business environment, companies face increasing pressure to innovate continuously. They don’t just want growth, they want sustainable growth. The most successful firms have recognized that their company’s organizational culture is something to be leveraged, not simply ignored or overcome. Rather than trying to create a culture of innovation, these companies create innovations within their culture. It’s that culture – that set of implicitly shared habits, practices and ideas – that serves to accelerate and amplify innovation initiatives. Moreover, these companies find that certain innovation
strategies leverage the inherent strengths of their cultures, while others simply run up against their weaknesses. When crafting an innovation strategy, understanding one’s own culture and playing to its strengths is without a doubt the most important thing that innovation leaders can do to increase the odds of success.
Further Reading


   <http://www.motorola.com/content.jsp?globalObjectId=3071-5801>


   <http://news.bbc.co.uk/1/hi/business/781765.stm>


   <http://news.com.com/Yahoo+focuses+on+research/2100-1032_3-5667086.html>
