The Innovation / Culture Connection

Creating an environment where bright ideas can thrive.

EXECUTIVE SUMMARY

Why do some **innovation programs** succeed while others fail? Often, the failures are a result of a **lack of alignment between the innovation program and the corporate culture.** You can begin to align your culture with your innovation program by analyzing the culture — examining its values, behaviors, workplace climate, resources, processes, and rewards to see how well they support innovation. This process may also illuminate the barriers that currently **impede innovation,** including fear of failure, fear of disruption, time limits on innovation, a lack of incentives, or a lack of executive support.

With a clear understanding of the cultural challenges, you can begin to gauge your organization's **innovation maturity level** by conducting an assessment of your current proficiency for innovation and identifying potential gaps, strengths, and weaknesses. This establishes the basis for developing a plan to either effect cultural change or innovate more effectively within current cultural constraints.

For your innovation program to be successful, you'll want to choose an innovation approach that pairs well with your organization and its objectives.

The options to consider include:

» **Closed Innovation,** which follows the traditional R&D model

» **Open Innovation,** which expands the innovation community to encompass both internal and external sources

» **Fail Fast,** which both stimulates and controls the innovation process by imposing funding and/or timing constraints

You may also benefit from the **support of IT tools,** including innovation management tools, collaboration software, social media, and gamification.

Many organizations are advised to track the progress of their **innovation programs** by capturing both objective and subjective measures of success, while others choose to engage innovation partners to help them develop and implement their ideas.

About NTT DATA

NTT DATA is your Innovation Partner anywhere around the world, with operations in approximately 40 countries. NTT DATA emphasizes long-term commitment and combines global reach and local intimacy to provide premier professional services, from consulting, application services, business process and IT outsourcing to cloud-based solutions.

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TABLE OF CONTENTS

TABLE OF FIGURES

Remove the Barriers to Growth

No matter what business you're in, innovation is the fuel of growth. It is the key to achieving competitive advantage, increased market share, revenue growth, and greater profitability. However it is also elusive. Many organizations, particularly larger ones, find it challenging to achieve and sustain innovation.

In response to this challenge, many companies seek to build a "culture of innovation" — a sustainable, shared commitment to the active pursuit of new ideas and continuous improvement as part of daily work life. To jump-start the initiative, many organizations launch innovation programs, achieving varying degrees of success. One major reason why some innovation programs fail is that organizations often do not factor in cultural considerations.

This white paper explores the impact of culture on innovation and how organizations can better align their corporate cultures and innovation programs to achieve long-term sustainability.
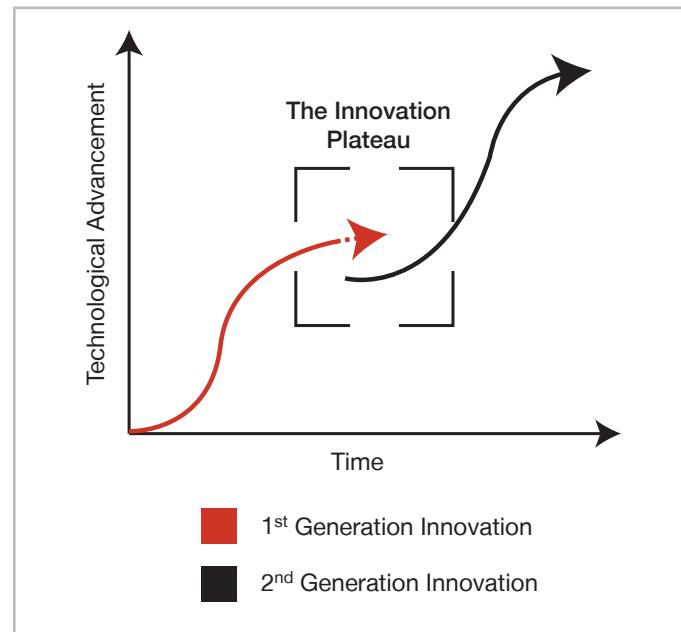
Address the Innovation Challenge

Most new companies are born of innovation. Someone finds a new or better way to solve a problem or fulfill a need and starts a company to deliver it. With a tightly knit team collaborating closely, innovation flourishes initially.

But with success comes growth — more people, more processes, more complexity — and the daily imperative to serve existing customer needs rather than anticipating new or future opportunities. As explained

in Clayton Christensen's book, *The Innovator's Dilemma*, it becomes harder to keep the spark of innovation driving an organization forward as it grows.

Unless leaders take steps to keep innovation alive, major advances give way to incremental improvements that eventually taper off and reach a plateau.

Figure 1: The Innovation Plateau

All technology innovation reaches a plateau at which incremental gains diminish and a new wave of innovation must begin to advance technology and stimulate growth. Recognizing where your company is on this journey is key to choosing the appropriate innovation approach.

As people focus more on tasks than ideas, the culture changes — unless leaders take steps to keep innovation alive.

> Corporate culture is the set of assumptions, beliefs, practices, formal and informal rules, and attitudes about how a company operates. Corporate culture evolves over time, and is both formal and informal. Corporate culture often shifts over time as well. Young entrepreneurial firms and startups have a culture that thrives on risk, speed, and change. Growth is paramount. Older, established firms have a culture more typically based on rules, hierarchy, and achievement of predictable milestones.[1]
>
> – Jeffrey Phillips
> *Innovation Expert*

While there are many other factors that influence innovation — including labor, capital, government regulation, and national culture — corporate culture is key. According to a research report in the *Journal of Marketing*[2], corporate culture may be more important than any of those factors in explaining innovation in firms across nations. This is because, unlike those other factors, corporate culture is deeply ingrained, not readily transportable from one company to another, and not easily accessible. Corporate cultures influence people's behavior greatly, and once a corporate culture has shifted away from innovation, it becomes difficult to bring culture and innovation back into alignment.

However, it's not impossible to keep innovation alive. Some large companies, such as Amazon, IBM, Apple, and General Electric, have been able to reinvent themselves over and over again. What are they doing that other companies are not?

Professors Jay Rao and Joseph Weintraub of Babson College provide some clues. In a recent article published in *MIT Sloan Business Review*, they identify the following building blocks of a culture of innovation:

» **Values.** Does the organization prove that it values innovation by making it a priority and investing in it?

» **Behaviors.** Do people in the organization take action in the cause of innovation, such as cutting through red tape and going above and beyond the norm to see a project through?

» **Climate.** Does the tenor of workplace life cultivate engagement and collaboration and encourage risk-taking?

» **Resources.** Are people, systems, and projects available for and devoted to innovation?

» **Processes.** Is there an established workflow for developing, reviewing, and shepherding innovation?

» **Success.** Is successful innovation recognized and rewarded?[3]

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[1] Innovate on Purpose (blog), Jeffrey Phillips, August 3, 2011, http://innovateonpurpose.blogspot.com/2011/08/what-is-culture-of-innovation-anyway.html

[2] "Radical Innovation Across Nations: The Preeminance of Corporate Culture," Gerard J. Tellis, Jaideep C. Prabhu, Rajesh K. Chandy, Journal of Marketing, vol. 73, August 2009, American Marketing Association

[3] "How Innovative Is Your Company's Culture?," Jay Rao and Joseph Weintraub, MIT Sloan Management Review, Spring 2013, http://sloanreview.mit.edu/article/how-innovative-is-your-companys-culture/

If your answer to all of these questions is something less than an unqualified "yes," there is work to be done. These building blocks need to be in place for innovation to become a permanent part of the corporate culture.

Building a sustainable culture of innovation does not come easily. It requires daily effort, focus, and process flexibility so that people have opportunities to do things in new and different ways. But when all of these ingredients are working together, innovation becomes a natural, sustainable part of your corporate DNA.

Key Takeaways

» Success and growth can stifle innovation

» Corporate culture has a powerful impact on innovation

» Organizations can change their cultures to better support innovation

Is Cultural Change Necessary?

If your company does not have a culture of innovation, you can build one. This may require a significant change to the way employees are used to thinking, working, and communicating. For some organizations, the challenges and potential upheaval of pursuing cultural change may seem too daunting, risky, or disruptive. Is it absolutely necessary to becoming a more innovative organization?

Strictly speaking, no. An organization can raise its innovation output enough to burnish its reputation and generate new revenue through more traditional means, such as a dedicated R&D team or a "skunkworks" project. However, if the goal is to transform or reinvent a company, more comprehensive cultural change is necessary.

As you weigh your options, keep in mind that changing the culture will not guarantee that innovation will take hold and thrive — or that the innovations your organization develops will be viable, commercially feasible, or remunerative. However, changing your corporate culture to better align with innovation will increase your chances of creating a sustainable innovation program that survives even after leadership and sponsorship change.

Key Takeaways

» It is possible to spur innovation without major cultural change

» However, more sustainable innovation requires more comprehensive cultural change

Recognize the Cultural Challenges

To achieve a vibrant, sustainable innovation program, you first need to understand the correlation between organizational culture and the impact it can have on the success of your program. It is conceivable that your culture is broadly supportive of innovation, but thwarted by certain stumbling blocks. These common cultural challenges include:

» **Fear of failure.** Innovation programs do not come with guarantees. Organizations that do not understand this reality may perceive innovation projects that do not progress to production or commercialization as failures that contribute little or no value to the company. When innovation projects become associated with such negative connotations, people may become less willing to participate in future projects.

Organizations need to embrace failure in the context of the innovations they pursue. Even ideas that cannot be successfully commercialized can have value. They can evolve into new and better ideas. And even if they do not, organizations can learn from them. When organizations accept that going through the innovation process is just as valuable as the subset of ideas that progress further through the innovation lifecycle, they can overcome the fear of failure. This can foster enhanced creativity, which motivates ongoing participation in the program.

» **Fear of disruption.** Innovation is often disruptive. It can disrupt the deployment of resources, the funding of other activities, and processes and plans. In environments where maintaining the operational status quo is valued above all else, disruption is a problem. An innovation program cannot realize its full potential as long as there is a cultural unwillingness to disrupt the organization to support innovation projects and the innovations that result from them.

For example, the original vision for Amazon Web Services (AWS) was to provide a standardized computing infrastructure for the online retailer and its partners. The big innovation — selling virtual servers as a service to corporations — was totally disruptive to Amazon's established business of selling retail products to consumers. Nevertheless, Amazon's leaders were willing to accommodate the disruption of AWS, which grew into a $6 billion business in just its first six years.

» **Time limits on innovation.** Organizations cannot expect staff to participate in innovation activities in their spare time or on a rigid schedule. This can slow down the progress significantly and negatively affect motivation.

Companies such as Google have addressed this problem by creating "20 percent time." This policy encourages employees to spend 20 percent of their time working on a company-related passion project of their own choosing or creation. At Google, this policy led to the development of many successful new products, such as Google News, Gmail, and AdSense, which now produces approximately a quarter of Google's revenue.

» **Thinking that everyone wants to innovate.** Innovation is not for everyone, and it is not its own reward. Organizations cannot expect people to be self-motivated to participate in innovation activities. People need to be motivated to contribute and rewarded for their efforts.

For example, a public sector organization set out to revamp its intranet and wanted as many employees as possible to contribute to its design. By making it an unfiltered enterprise-wide competition with cash prizes, the organization got 50% of employees to participate.

» **Isolated innovation.** Innovation programs cannot operate in a vacuum or without executive sponsors. Executive support is necessary to keep innovation focused and strategically on course, to motivate participants, and to remove barriers.

The experience of one Canadian company proves the point. The organization's CIO was determined to make innovation a key focus and hired an innovation leader as a direct report to guide the effort. With the CIO's strong support, the innovation leader worked tirelessly to engage all executives and publicize the program among employees. Because there was high-level sponsorship, openness, and inclusiveness, the program thrived.
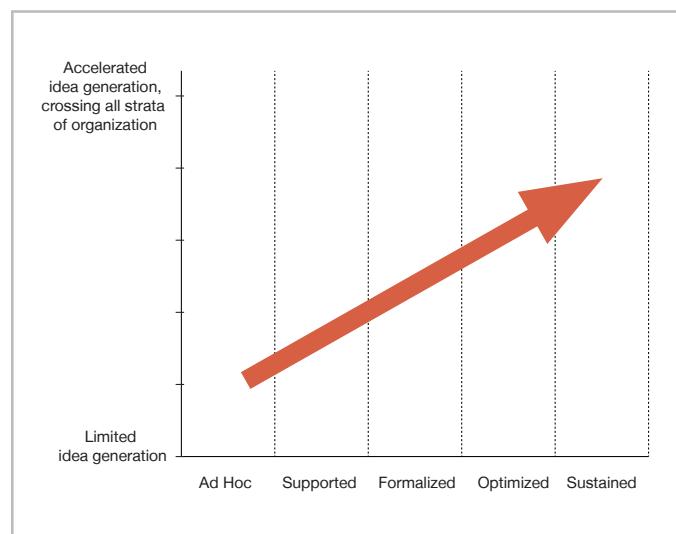
Key Takeaways

» Even companies open to innovation can see their efforts limited by common challenges

» These challenges include fear of failure, fear of disruption, putting time limits on innovation, not incentivizing and rewarding innovation, and inadequate executive support

» You can adopt strategies and tactics to mitigate each of these challenges

Determine Your Innovation Maturity Level

The first step toward launching an innovation program is to gain a better understanding of your organization's innovation maturity level; that is, how your team's current skills and behaviors match up against the demands of innovation. This will help you determine the size and scope of the challenge and identify key innovation leaders and contributors.

Figure 2: Innovation Maturity

An organization's innovation maturity level can range from an environment in which innovation occurs on an ad hoc, reactive basis among a small team to one in which innovation is endemic, sustained, and incorporates many internal and external participants. When you know your organization's innovation maturity level, you can better gauge the effort required to drive innovation forward.

One of the many ways to determine an organization's innovation maturity level is by taking the Innovation Management Maturity Assessment (IMMA), a free online tool available from the Center for Innovation Management Studies at the Poole College of Management at North Carolina State University (http://cims.ncsu.edu/tools-assessments/im-maturity/).

The IMMA enables you to rate your organization's innovation performance across five core competencies and five management dimensions, "providing insight into your current proficiency for creating new, differentiated products and services,"[4] as well as identifying potential gaps, strengths, and weaknesses.

When you have assessed your organization's innovation maturity level, you will have a clearer idea of what it will take to effect the cultural change necessary to launching an effective innovation program.

Key Takeaways

» Before embarking on any innovation program, determine your organization's innovation maturity level — its proficiency for creating new ideas

» There are free assessment tools available for this purpose

» Once you identify gaps, strengths, and weaknesses, you will be able to target and prioritize efforts

Consider Innovation Approaches

Developing a strong innovation team with proper leadership and executive support is a prerequisite for any successful innovation program. It is equally vital to decide which type of innovation approach is best suited to your organization and its unique circumstances and goals.

Among the many approaches to innovation, the following are worthy of consideration:

Three Common Approaches to Innovation

Closed Innovation

Closed Innovation is the traditional model. As the name suggests, it is built around a discrete internal team, usually confined to members of the Research and Development organization. This model stresses control and self-reliance and focuses the ideation and development of innovations among an elite group.

Advantages	Disadvantages
• Works well within traditional organizations and business processes • Provides a degree of focus that can streamline innovation projects, particularly those that are pursuing incremental improvements • May require less technology support for workflow, management, and communication	• Generally less hospitable to contributions from other internal and external sources • May rely excessively on the core team's capabilities • May limit contributions from other stakeholders valuable to the ideation and development of more radical innovations

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[4] Poole College of Management at North Carolina State University: http://cims.ncsu.edu/tools-assessments/im-maturity/

Open Innovation

As promoted in the book of the same name by University of California Berkeley professor Henry Chesbrough, Open Innovation seeks to fuel the innovation process by tapping into both internal and external sources, including non-engineering staff, third-party partners, and customers. With Open Innovation, the process of developing new ideas is a community activity where ideas springboard easily from one to another. With the advent of enabling technologies, such as social media and product lifecycle management (PLM) systems, Open Innovation has become easier to participate in and manage.
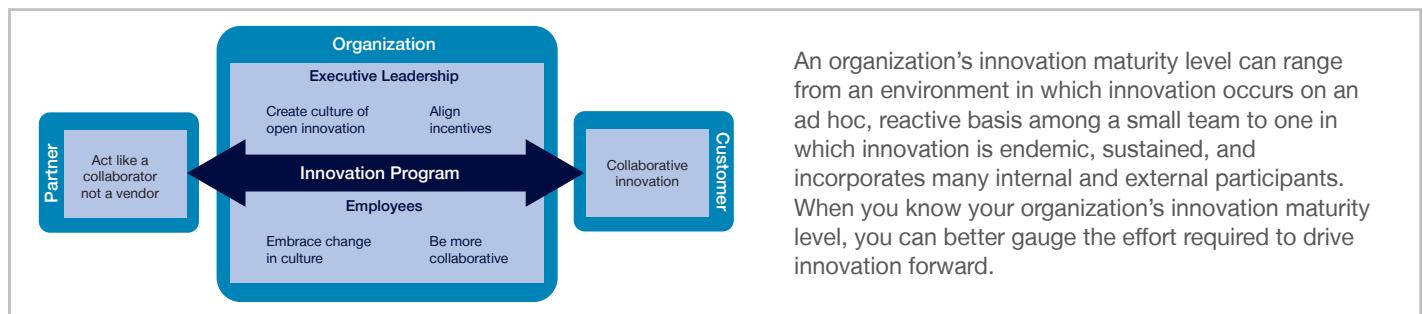
Advantages	Disadvantages
• Recognizes that a great idea can come from anywhere • Supports the fact that people closest to a product or service (customers and field sales and service teams) are among the best sources for R&D ideas • Open to third-party contributions • Strengthens connections with participating customers	• Requires organizations to provide customers and partners with access to internal systems, resources, and intellectual property. This may not mesh well with the culture of organizations that prefer to maintain stronger walls

Fail Fast

Fail-Fast Innovation is an approach that seeks to both stimulate and control the innovation process by providing constraints, usually based on a set funding amount and/or a time limit. By taking funding concerns out of the equation for a set period of time, the Fail-Fast approach can stimulate the development of many ideas quickly.

Advantages	Disadvantages
• Creates a sense of urgency and focus that can help teams stay on course and work assiduously to develop their ideas • Limited scope reduces risk of runaway spending or open-ended projects that drag on • A project that has not reached its targets within the allotted time and budget can be easily canned, freeing the organization to pursue other options	• Innovation does not always thrive in constrained environments • Limits may restrict innovation or result in rushed work, ensuring failure rather than providing adequate support

Figure 3: The Open Innovation Ecosystem

An organization's innovation maturity level can range from an environment in which innovation occurs on an ad hoc, reactive basis among a small team to one in which innovation is endemic, sustained, and incorporates many internal and external participants. When you know your organization's innovation maturity level, you can better gauge the effort required to drive innovation forward.

Support the Innovation Process with Technology

Tools are not essential to building a culture of innovation, but depending on the degree of change required, they can be key contributors to an innovation program's success and immediate impact. Among their many benefits, innovation tools help by:

» Providing structure and discipline to manage the process

» Providing transparency to all parties involved

» Ensuring continuing alignment with the business goal

» Supporting large-scale innovation processes involving many internal and external participants and stakeholders

» Maintaining data history and supporting "idea mining" for analysis and potential future use

» Making it easier to measure an innovation program's return on investment

In addition, introducing a tool can make a positive impression on staff, confirming that the organization is serious about innovation enough to invest in making it easier and more accessible. A tool can likewise encourage the adoption of cultural change by giving people the means to implement the changes that are being asked of them. Finally, for innovation programs that reach across distance and organizational walls, IT tools support and encourage easy collaboration regardless of physical location.

A properly implemented tool can help create a sustainable innovation program because it isn't reliant on a single sponsor or team of people to facilitate the process. Some of the more sophisticated tools can also help an organization analyze people's behaviors around innovation activities, identifying top innovators and strengthening the innovative culture.

IT Tools that Support Innovation

While there is no software product that can make an organization more innovative, the following tools can help make innovation more engaging, collaborative, and manageable, particularly for Open Innovation programs:

» **Innovation Management Tools.** Solution providers have created a range of software products that support innovation by:

  » Enforcing a well-defined process with idea stage gates (Ideate-Moderate-Graduate) that support and track ideas from inception to product implementation

  » Providing "evidence-based" metrics on the ideation process

  » Tracking many ideas that cannot be easily managed without technology and generating powerful, flexible, and useful reports

  » Effectively engaging diverse participants (crowdsourcing) numbering in the hundreds or thousands

  » Creating targeted, time-based campaigns to generate ideas on specific areas of interest that align to a company's business strategy and objectives

  » Providing social rewards for engagement via reputation scoring

» Providing unique approaches to ideation utilizing gamification, such as Spigit's idea stock market

» Supporting integration with collaboration software, such as Microsoft SharePoint, Jive, Yammer, and Chatter

» Supporting sophisticated branding and communication plans, both internally and outward-facing to customers using open innovation techniques

» **Collaboration Software.** Any tool that makes it easier for diverse groups to work together can support the innovation process. Popular collaboration software products range from simple project management offerings, such as Basecamp, to more feature-rich groupware solutions, such as IBM Lotus Notes and Microsoft SharePoint.

» **Social Media.** Social media provide forums for people to interact spontaneously with each other. The immediacy of social media makes these forums key sources for gathering unfiltered feedback from customers and colleagues. Many organizations are now harnessing unstructured data from social media platforms, such as Facebook, LinkedIn, and Twitter, in the cause of innovation.

» **Gamification.** People enjoy competition and recognition, and gamification is the use of game thinking and game mechanics in non-game contexts to encourage problem-solving. According to the website innovationexcellence.com[5], spending on gamification grew from $100 million to $242 million from 2010 to 2013. Some of that investment is going to innovation programs to increase engagement. The website cites a study that "showed that the percentage of contributing

members in a community shifted, once a gamification strategy had been applied to the system. Without a gamified experience, 68% of the community was composed of contributors (as opposed to merely observers), once the gamification strategy was applied, however, the number of contributors shot up to 83%."

As far as innovation is concerned, the website mentions another study that "suggested rewarding users for submitting ideas that generate the highest level of interaction actually improves not just engagement, but idea quality by 40%."

Key Takeaways

» The use of technology tools can support and strengthen innovation programs

» These tools include innovation management software, collaboration software, social media, and gamification

Measure Your Progress

Any major initiative needs to be tracked and evaluated to ensure that it is moving forward and achieving its goals. There are several ways you can measure the tangible impact of cultural changes on your innovation program.

5 "Gamification and the Innovation Process," Jessica Day, Innovation Excellence (blog), March 4, 2013, http://www.innovationexcellence.com/blog/2013/03/04/gamification-and-the-innovation-process/

They include:

» Tracking the number of active participants in the program or the change in the number of active participants if the program is already established

» Measuring the amount of collaboration across divisions or lines of business. The ability of an innovation program to break out of operational silos is a strong indicator and can also improve innovation performance.

» The amount of engagement of participants, as measured by ideas contributed and/or enhanced by collaborative efforts

» Subjective measures such as a greater sense of accomplishment or improved motivation, which can be captured through periodic surveys

All of these metrics can be captured and tracked over time.

Key Takeaways

» To gauge their effectiveness, it is important to track the success of innovation efforts by taking periodic measurements

» Measurements include objective metrics, such as participation levels, cross-department collaboration, idea volume and activity, as well as subjective metrics, such as employee survey results

Take the Next Steps

There's much more to building a culture of innovation than can be captured in this white paper. As you develop your plans, consider the following steps:

» **Consult online resources.** Some of the top online forums for innovation include: www.innovationexcellence.com and cims.ncsu.edu

» **Engage innovation professionals.** There are many innovation consulting firms in the marketplace. Some are focused on providing strategic guidance to support innovation, while others act as innovation resources to help develop new ideas, and still others specialize in helping organizations develop their creativity so they can be more innovative. Among the innovation professionals is NTT DATA's Enterprise Architecture and Innovation Strategy organization, who are specialized at managing and upgrading existing systems and implementing new enterprise applications, supported by proven methodologies, proprietary frameworks, software tools, and accelerators to deliver higher levels of consistency, efficiency, and quality.

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Many of NTT DATA's service offerings are designed to support clients' innovation efforts, providing a proven, repeatable, process-driven approach to innovation using many of the techniques and practices described in this paper. These offerings are delivered by innovation architects and business experts with deep experience in both enterprise architecture and vertical markets.

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