

The State of Open Innovation

Making the business case:

Why are organizations investing in open innovation? What is the rationale for change, and what is the evidence of the evolution?

Benchmarking the practice:

What does open innovation look like today, and how are organizations overcoming obstacles on the path to maturity?

Shaping the future:

Where do we go from here?
How will open innovation grow inside organizations and beyond?
What will it take to truly transform the way we work?

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Executive Summary

In the 20th century, organizations prioritized internal excellence, protected intellectual property, and stoked competitive rivalries. In the first decades of the 21st century, we're witnessing the emergence of a new way to win — partnership and collaboration are requisite in pursuit of new solutions to complex problems. Digitalization and globalization make it possible to tap the collective intellect of Earth's population — not just those an organization has hired — and Earth's population willingly participates.

The term “open innovation” was defined in 2003 by Henry Chesbrough in [“Open Innovation: The New Imperative for Creating and Profiting from Technology,”](#) and has been embraced by private sector, government, and nonprofit organizations in different ways and to varying degrees. Participatory design and co-creation have become table stakes for product and service design. Algorithmic prize competitions have become a viable option for solving big data problems. Open data sets are fueling new business models and public-private collaborations. And open innovation platforms have become a new intake valve for partnerships and investment.

Even for the most committed organizations, opening up is still an entirely new way of doing business. Pioneering a new competency is never easy, and there's no established playbook for open innovation. While there is no shortage of academic research on open innovation, it is still described and practiced differently by different sectors, industries, organizations, and individual teams.

Fifteen years after the publication of Chesbrough's book, **what is the state of open innovation?** Luminary Labs surveyed nearly 100 leaders responsible for open innovation to answer that question. This report offers cross-sector insights and benchmarks — from strategic goals and the rationale for investment to organizational structures and specific activities.

A few themes emerged:

- **Open innovation is more than an activity; it is a philosophy.** While some executives may still see open innovation as a budget line item or isolated activity, those responsible for open innovation believe it is dramatically changing how their organizations will compete (and win) in the years to come.
- **The elasticity of open innovation demonstrates its potential.** The survey suggests that organizations are practicing open innovation in many ways, for many reasons, and to solve a wide range of problems. We are in a moment of extensive experimentation as private sector, government, and nonprofit organizations create proof points.
- **It's still early.** While “open innovation manager” is a hot new job title and enthusiasm abounds, few organizations have dedicated open innovation teams. Many more are still determining what the competency should entail and where it should reside in the organization.
- **Open innovation can look to digital transformation as a precedent.** Open innovation threatens historical ways of working but has the potential to create enormous value. Not unlike the wave of digital transformation that is still rippling through every industry, open innovation is both a disruption and an opportunity. Early adopters are largely supported by senior leadership, and perhaps not surprisingly, the organizations that have more fully embraced digital are in a position to embrace open innovation as well.

Tapping into the truly transformative power of open innovation will require a seismic shift in the way people think and the way organizations work. As we look toward the future of open innovation, we offer suggestions to organizations for building and scaling their competencies.

Sara Holoubek
CEO, Luminary Labs

Methodology

The State of Open Innovation 2018 report is based on results of a survey conducted by Luminary Labs, a strategy and innovation consultancy.

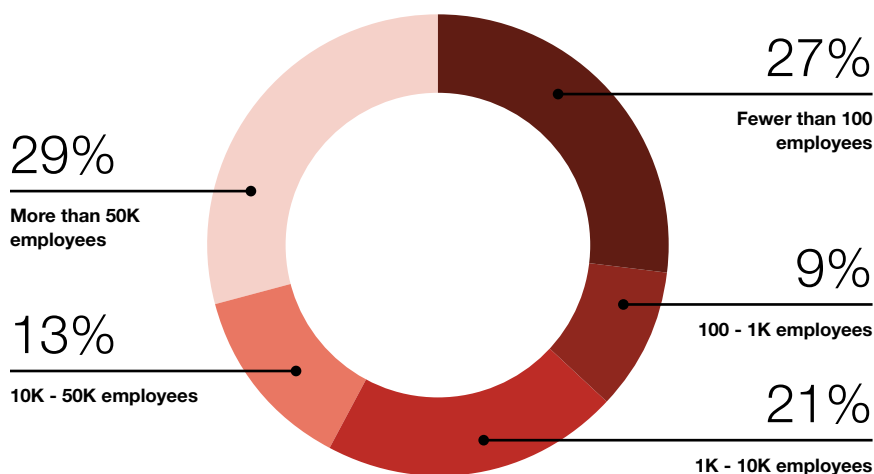
This inaugural survey was conducted online from March 28, 2018, to June 19, 2018, among individuals who self-identified as responsible for running open innovation programs in their organizations. We conducted 11 follow-up interviews with select respondents in July. Survey participants were asked about their current use of open innovation and their organizations' reasons for investing in open innovation. The survey only sought responses from organizations that are using open innovation; therefore, the report only includes viewpoints of people and organizations currently engaging in open innovation.

A total of 101 respondents completed the survey on behalf of 98 organizations across government, nonprofit, academia, and private sectors. We removed six responses from organizations that are not directly sponsoring or executing open innovation activities, resulting in 95 responses from 92 organizations. (Three companies provided responses from more than one person.)

By the numbers

The survey intentionally sought responses from organizations of different sizes, sectors, and industries.

Organization sizes



Source: Luminary Labs State of Open Innovation Survey 2018. "What size is your organization?" (n=95 total respondents) Due to rounding, percentages do not total 100%.

ACKNOWLEDGEMENTS

Thank you to the following individual respondents, who participated in follow-up interviews and are quoted throughout this report:

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[Annie Guzek](#), Vice President, Global Digital Strategy, Pfizer

[Tom Kalil](#), Chief Innovation Officer, Schmidt Futures

[Sara Monteabaro](#), Sr. Officer of Learning Community, MIT Solve

[Joshua Ness](#), Sr. Manager, Open Innovation, Verizon

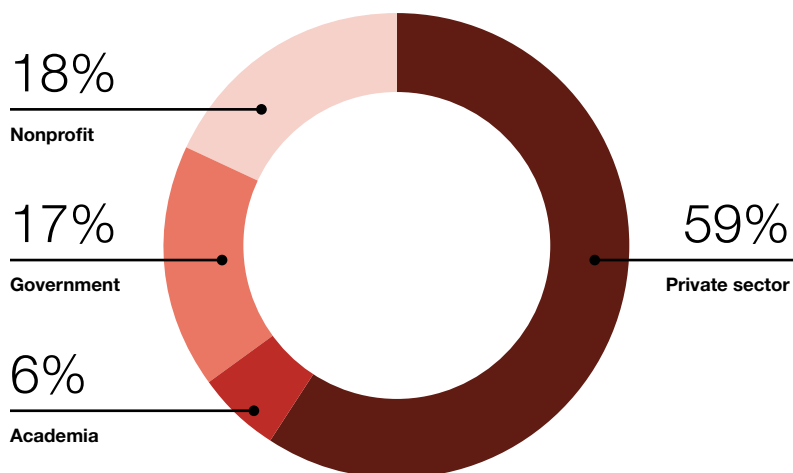
[Sandeep Patel](#), Open Innovation Manager, U.S. Department of Health & Human Services (HHS)

[Michelle Popowitz](#), Co-founder and Executive Director, UCLA Grand Challenges

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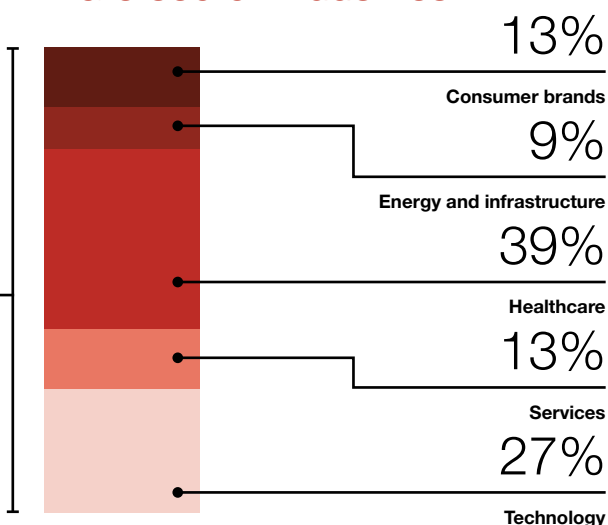
More than half of respondents work for private sector companies.

Sectors



Source: Luminary Labs State of Open Innovation Survey 2018. "Industry?" (n=95 total respondents)

Private sector industries



Source: Luminary Labs State of Open Innovation Survey 2018. "Industry?" (n=56 private sector respondents) Due to rounding, percentages do not total 100%

Sector and industry clusters:

- **Government:** federal agencies, state and city governments
- **Nonprofits** and foundations
- **Academia:** institutions of higher learning
- **Consumer brands:** consumer packaged goods, apparel, automotive
- **Energy and infrastructure:** utilities, petrochemical, engineering
- **Health:** pharmaceuticals and life sciences, health insurers and providers, health associations
- **Services:** financial, insurance, consulting, communications
- **Technology:** telecommunications, software, consumer electronics

Though the survey was not intended to represent a fully global perspective, we received responses from 18 countries. Three-quarters of respondents are located in the United States.

Making the business case

Why are organizations investing in open innovation? What is the rationale for change, and what is the evidence of the evolution?

The theory: Joy's law has gone mainstream.

Open innovation hinges on Joy's law, named for Sun Microsystems co-founder Bill Joy, and rooted in the idea that “no matter who you are, most of the smartest people work for someone else.” Many survey respondents cited this principle as a fundamental reason for investing in open innovation to achieve their organizational goals. One respondent noted, “we recognize that not everything we need can be developed by the people on staff; good ideas exist elsewhere, and we would be foolish not to pursue them.” Even more to the point, another respondent replied, “there are 7 billion people on this planet; we can't do it alone.”

The rationale: Collaboration is the new competitive edge.

Opening up is an entirely new way of working that challenges our historical understanding of competitive advantage. What was once a threat is now a bet against complacency and an opportunity to stay at the forefront. And while partnerships are not new, how we are forming them is. Open innovation has ushered in a new paradigm; we are moving from partnerships brokered behind closed doors to public calls for engagement.

Organizations have many reasons to practice open innovation; respondents most frequently cited speed, efficiency, agility, diversity of thought, impact, and greater engagement as advantages of opening up. Respondents noted that open innovation is most successful when it supports an existing business problem with a clear goal and scope.

The U.S. Department of Health & Human Services, for example, is applying open innovation — in combination with other initiatives — to address a complex public health crisis. A recent codeathon asked hundreds of programmers and data scientists “to develop data-driven solutions to combat the opioid epidemic” in support of the department's broader five-point strategy.

“There are many more people outside of your organization than inside of it. You are much more likely to get a one-in-100 idea if you have 100 people working on a problem than if you have one person working on it.”

**TOM KALIL,
SCHMIDT FUTURES**

“No one person nor organization is going to solve the world's most pressing challenges alone. It must happen in partnership.”

**SARA MONTEBARO,
MIT SOLVE**

“Cooperation is the new competition. We don't have the answers. We — and any corporate — need to think differently about how do we partner, how do we create ecosystems, for the sake of the consumer.”

**EUGENE BORUKHOVICH,
BAYER**

“With the opioid crisis, which is one of the big issues at HHS and for our country, we're doing a lot of open innovation to address pieces of it — hackathons, challenges, public health data crowdsourcing activities. That gives me a signal that [open innovation] is becoming a little more mainstream within HHS, because we're using it to tackle our biggest priorities.”

**SANDEEP PATEL,
HHS**

The evolution:

Open innovation is becoming more than just a set of activities — it's a philosophy.

While some organizations view open innovation as a set of activities (e.g., a prize competition or a series of hackathons), others view it as a philosophy (an entirely new way of doing business). Along this spectrum, organizations with developing competencies are still seeking proof points to demonstrate and socialize the value of open innovation. One respondent shared that it is still a struggle to secure “consistent funding and support, versus ebbs and flows and one-offs.” But when open innovation is a top-down mandate and organizations are given greater freedom to experiment, a transformative philosophy emerges.

The analogy:

The shift toward open innovation has parallels with digital transformation.

With the rise of internet adoption and the increasingly global economy, people and ideas are becoming more and more connected. [Britain and France sponsored grand challenges in the 18th century](#), but the modern practice of open innovation has been accelerated by digital transformation — and is experiencing some of the growing pains that incumbent organizations encountered as they raced to become digital.

Open innovation is spurring an entirely new way of doing business, and we can examine the past to understand what the future may hold. We see many similarities with digital transformation:

- **Lack of a definitive playbook.** There are no established organizational, investment, or reporting models.
- **Lack of a precise vernacular.** We have not yet developed a nuanced vocabulary for clearly articulating the complexity of an emerging practice.
- **Rethinking organizational structures.** Sequestering expertise on a single team can lead to territorial arguments. Leading organizations are beginning to use centers of excellence to create standards and help the broader organization build its capacity.
- **Extensive experimentation and emerging expertise.** Individuals and small teams are leading pilots and experiments, stretching in new ways. A limited number of people in each organization develop expertise, then help their colleagues get up to speed.

“We now have a more broad mission of how we introduce innovation within government, but also how we incentivize innovative approaches, solutions, and products in the community through community engagement.”

ANNIA ALEMAN,
CITY OF PITTSBURGH

“When you identify a pain point which you cannot overcome alone, involving a partner who lives outside your own walls usually brings a set of possibilities that you miss internally. That partner can also help ensure you don't lower the bar to meet the needs of today, at the expense of developing what is required for tomorrow.”

ANNIE GUZEK,
PFIZER

- **Selling the idea within organizations.** The champions are still busy educating and socializing the concept within their organizations — and proving that open innovation is not a “shiny object” or waste of resources.
- **Paving the way with executive sponsorship.** Change can be faster and smoother when an early experiment secures executive sponsorship.
- **Adding — not replacing — tools in the toolkit.** There are no silver bullets. Building the competency will require an appetite for experimentation and a willingness to accept that some attempts will completely miss the mark.

The language: Defining open innovation

Early feedback on our survey design revealed inconsistent sets of terms used to describe open innovation activities and ideas. (For example, crowdsourcing is generally considered an overarching term, but for some organizations it means a very specific type of program.) To make the survey accessible to a wide range of organizations, we used expansive language. In survey communications, “open innovation” was broadly described as “any number of activities, such as crowdsourcing, prize competitions/challenges, hackathons, data jams, open science, and more” but was not limited to a specific definition or set of activities.

Many survey participants acknowledged that “open innovation” is not yet well-defined and the language to describe the practice varies by sector, industry, organization, and even from one team or individual to the next.

The lack of established vernacular is an indicator of an emerging practice. While many respondents are thinking about open innovation broadly — as a new way of working — some view open innovation more narrowly — as working with startups or working with open data. And some don’t identify with the term “open innovation” in general, even when they are responsible for programs like crowdsourcing or hackathons.

“People who are advocates for open innovation also need to be careful not to oversell it. It’s a tool in the toolkit — not the answer to everything. Giving people an understanding of when and under what circumstances open innovation is most likely to be successful is important for establishing credibility. Don’t be that person who has a hammer and is looking for some nails to hit!”

**TOM KALIL,
SCHMIDT FUTURES**

“Academic faculty have found value in open innovation as a way to approach their disciplines with new questions and new perspectives.”

**MICHELLE POPOWITZ,
UCLA**

“Open Innovation for us is both a mechanism and a philosophy, and the goal is to make collaborative problem solving so ubiquitous that it’s no longer simply a mechanism.”

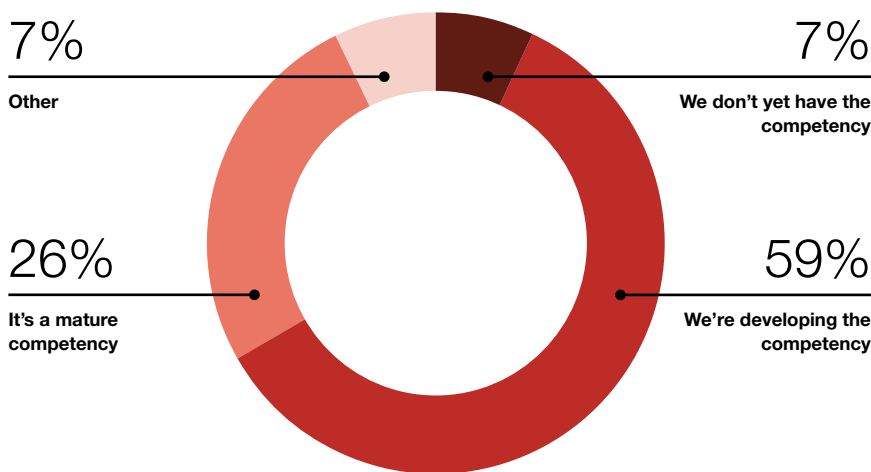
**SANDEEP PATEL,
HHS**

The signal: Open innovation competencies are on a path to maturity.

When we asked about the current state of open innovation competencies in their organizations, the majority of survey respondents said they are “still developing.” Not unlike the early days of digital, organizations are experimenting and optimizing as they establish frameworks and structures for opening up.

One-quarter (26%) of respondents already report having a “mature” competency, and we expect that number to grow significantly in the years to come. The 59% of organizations that are developing their competencies are likely to eventually self-identify as “mature” — but the speed at which this will happen is difficult to predict.

Nearly 6 in 10 respondents are still developing an open innovation competency



Respondents who selected “other” provided a range of explanations; several indicated that competency was uneven across their organization.

Source: Luminary Labs State of Open Innovation Survey 2018. “What is the current state of the open innovation competency in your organization?” (n=95 total respondents) Due to rounding, percentages do not total 100%.

“When I think about what it takes to mature, I think that you have many pockets of excellence within an organization. I think we’re still in the process of developing more of those and focusing on specific practices.”

**ROSANA ARDILA,
MOZILLA**

“I think it’s a mature competency when it’s no longer a thing — when we don’t have to separate it out and call it something specific. As long as we have to do that, I think it’s still in the developing phase.”

**SANDEEP PATEL,
HHS**

Benchmarking the practice

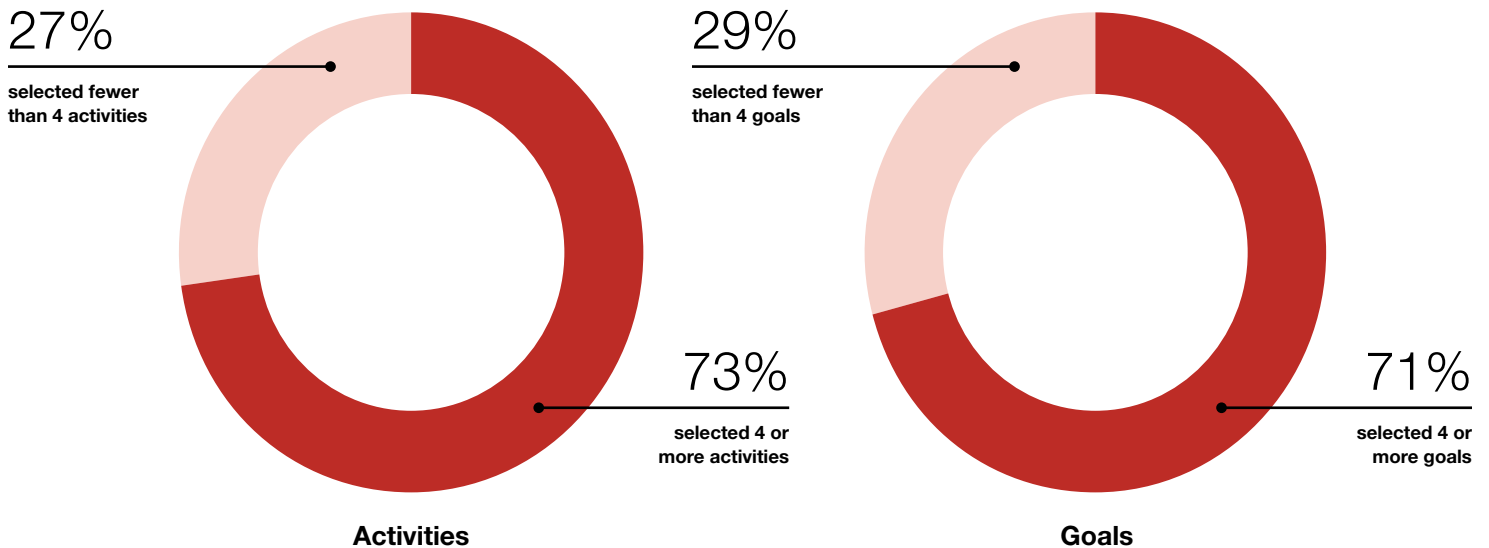
What does open innovation look like today, and how are organizations overcoming obstacles on the path to maturity?

The elasticity of open innovation:

Open innovation shows potential to address a range of needs.

We found that survey respondents are using a number of different activities to accomplish a number of different goals. This suggests experimentation and elasticity: open innovation is flexible enough to stretch across a range of strategies and tactics to solve different types of business problems in different ways. Open innovation can help a consumer products company crowdsource new toothpaste flavors, or help NASA design systems to support human life on Mars — or anything in between.

Organizations are using multiple activities to accomplish multiple goals



Source: Luminary Labs State of Open Innovation Survey 2018. “Has your organization sponsored or executed any of the following open innovation activities?” and “Which of the following goals, if any, has your organization sought to achieve through open innovation?” (n=95 total respondents selecting one or more items from a list of options)

The expectations:

Benchmarking tactical goals.

We asked about the tactical goals organizations seek to achieve through open innovation, and the average respondent selected more than four goals. More than three-quarters (79%) of respondents said a goal of open innovation is stimulating the development of viable solutions or products. More than two-thirds named stimulating concept generation (69%) or identifying potential partners, investments, or acquisitions (67%) as a goal.

Open innovation is used to stimulate development of viable solutions and products

Stimulate the development of viable solutions or products


 79%

Stimulate concept generation


 69%

Identify potential partners, investments, or acquisitions


 67%

Position my organization as an innovator


 62%

Understand a market or landscape


 56%

Identify potential new talent


 32%

Support a path to deployment or scale proven solutions


 8%

Other and not sure


 10%

Source: Luminary Labs State of Open Innovation Survey 2018. "Which of the following goals, if any, has your organization sought to achieve through open innovation?" (n=95 total respondents selecting one or more items from a list of options)

The execution: Benchmarking open innovation activities.

The average respondent also said they were sponsoring or executing more than four types of open innovation activities. Co-creation and participatory design are common activities across sectors and industries, and have become so deeply ingrained that some don't even see them as "open innovation" anymore. The mainstream popularity of design thinking — which champions co-creation and participatory design — has made the idea of opening up an easier sell inside organizations.

Internal crowdsourcing is popular among large companies — and if you have tens of thousands of employees, it certainly makes sense to draw on their front-line insights. Regardless of organization size, all (100%) of the consumer brands and energy and infrastructure organizations surveyed reported using internal crowdsourcing, along with more than three-quarters (77%) of health companies.

Though internal and external open innovation activities are used across sectors, government respondents are more likely to use external activities that provide opportunities to engage with the public on issues of critical importance. More than eight in 10 (81%) said they have used external crowdsourcing, prize competitions, and hackathons.

Co-creation and participatory design are the most common activities across sectors and industries

Co-creation or participatory design



External prize competition



Internal crowdsourcing



Hackathon, codeathon, or data jam



External crowdsourcing



Internal prize competition



Open data or open research initiative



Other



Source: Luminary Labs State of Open Innovation Survey 2018. "Has your organization sponsored or executed any of the following open innovation activities?" (n=95 total respondents selecting one or more items from a list of options)

While designing the survey, we spoke with experts who used different terms to describe open innovation activities. For example, some might say "prize competition" or "public prize," while a different organization might use the term "open innovation challenge" to describe the same activity. Some might consider a "hackathon" a "challenge" or "crowdsourcing," while others consider it to be both — or neither. There are also different types of competitions and challenges — ideas, prototypes, algorithmic. For simplicity, we chose broad terms to categorize basic types of open innovation activities.

Several respondents who selected "other" mentioned accelerators and incubators as open innovation activities. Since these programs are not always "open," we didn't include them in our list of options.

The incentives:

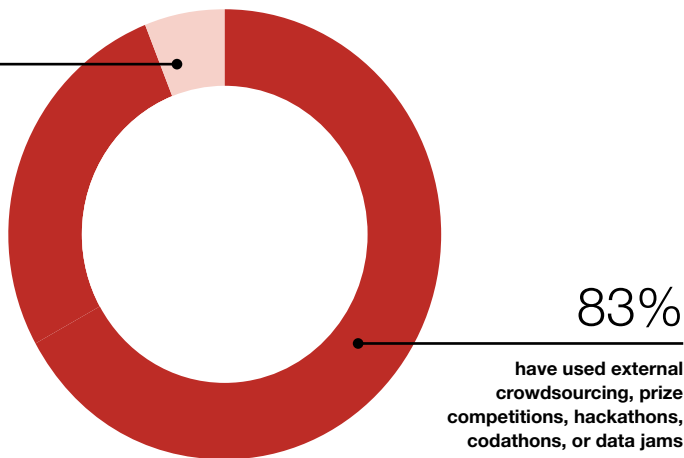
Giving innovators a reason — and respect — for participating.

More than eight in 10 respondents (83%) have sponsored or executed external prize competitions, hackathons, codathons, or data jams.

More than 8 in 10 respondents have sponsored or executed public-facing competitions

17%

have not used external crowdsourcing, prize competitions, hackathons, codathons, or data jams



Source: Luminary Labs State of Open Innovation Survey 2018. “Has your organization sponsored or executed any of the following open innovation activities?” (n=95 total respondents selecting one or more items from a list of options)

When you’re asking the world to do your work, incentives are key. Prizes must be commensurate with effort and demonstrate respect to solvers who may sacrifice other priorities — from seeking investment or joining an accelerator to missing vacations or birthdays — when they decide to engage in open innovation.

In addition to monetary and non-monetary resources, innovators often find value in feedback, guidance, and the opportunity to develop relationships.

A common framework for competition incentives, inspired by the U.S. Prize Authority, identifies at least four core solver motivations that have evolved over time:

- **Good** — belief in the pursuit of the outcome; impact as intrinsic motivation
- **Gold** — monetary reward or gaining resources
- **Guts** — internal self-validation; proving the ability to solve a problem
- **Glory** — self-aggrandizement; external validation

Survey respondents acknowledged the need to address different motivations — both monetary and non-monetary — and offer a range of incentives to innovators who participate in external prize competitions.

“Open innovation, if it’s not done correctly, could be disastrous for the folks you’re asking for help from. We have plenty of time and resources to ask the external community of innovators and suppliers all the questions we want. ... These innovators are very young startup companies, and time is money. ... Give [innovators] true feedback on their solutions.”

DAVE GUIGA,
ASTRAZENECA

“When working with startups we ask ourselves, ‘Can we build relationships that let founders get to know us, let us get to know them, and make sure we have shared values?’ [We’re] hoping this will lead to better partnership or acquisition opportunities down the road.”

ASHLEE ADAMS,
NESTLÉ USA

“We’ve been very transparent in the challenges we’ve put out. Even the feedback to the startups — we divide and conquer the hundreds and hundreds of applications and we give critical feedback. ... If we can make the startups successful, that will impact, ultimately, our end customers. We connect the startups to other ‘competitors,’ VCs, because their success is our way of living and our motto. ... We are, from the get-go, startup-friendly.”

EUGENE BORUKHOVICH,
BAYER

Respondents are offering a range of incentives to external prize competition participants

Access to mentorship / expertise



Visibility



Access to piloting opportunities



Cash award



Access to third-party feedback or objective evaluation



In-kind donation of services



Commercial contract or advance commitment



In-kind donation of equipment



None



Other and not sure



Source: Luminary Labs State of Open Innovation Survey 2018. "Which of the following incentives, if any, have you offered as part of an external prize competition, hackathon, codeathon, or data jam?" (n=95 total respondents selecting one or more items from a list of options) "Visibility" was described as "press release, media placement, demo day, public recognition, or opportunity to pitch investor or partner audience" and "Access to feedback or evaluation" was described as "Access to third-party feedback or objective evaluation (from a jury or technical leaderboard)."

The future of incentives: Tom Kalil on Advance Market Commitments and milestone payments.

Tom Kalil, chief innovation officer at Schmidt Futures and the former deputy director for technology and innovation at the White House, has long been a proponent of Advance Market Commitments. We asked Tom about AMCs — perhaps the ultimate prize for solvers who want to commercialize their solutions after a challenge — and milestone payments.

How would you like to see public, private, and nonprofit sectors collaborating?

“Advance Market Commitments are purchase orders for products that don’t exist yet, and they can play an important role in accelerating the development of innovations that have a high social return but a low private return. A good example is vaccines for diseases of the poor.

Pharmaceutical companies find it difficult to justify to their shareholders making large investments in R&D and manufacturing for vaccines for poor people.

To solve this problem, five countries and the Gates Foundation pledged to purchase a vaccine for pneumococcal diseases. This motivated GSK and Pfizer to develop and manufacture the vaccine — and this AMC is projected to save the lives of 7 million children in low-income developing countries over the next 20 years.

I think AMCs could be used not only in global health, but in other areas as well, such as K-12 education, workforce development, and promoting economic and social mobility.

This would require:

- Creating a cadre of people who know how to design AMCs.
- Identifying other areas where AMCs are likely to be effective, and trying it out.
- Increasing the capacity of governments to use AMCs.

Currently, governments are used to making financial commitments that are contingent on failure. For example, the federal government has made \$2.6 trillion in loan guarantees. In this instance, the government is providing a guarantee that if an individual or company goes bankrupt — the government will repay the loan.

So governments are used to making financial commitments that are contingent on failure, but are just beginning to experiment with making commitments that are contingent on success — such as incentive prizes, Advance Market Commitments, and ‘pay for success’ contracts. I’d like to see this change over time.”

What about milestone payments?

“I believe that the open innovation community should be experimenting more with milestone payments. In many instances, individuals, teams, and entrepreneurs won’t have the financial resources to solve a large, complex problem. The sponsor of a challenge might be able to address this by breaking a problem into intermediate milestones, and providing payments for each one. NASA did this to accelerate the development of rockets capable of delivering cargo (and ultimately astronauts) to the International Space Station, and it has been a huge success.”

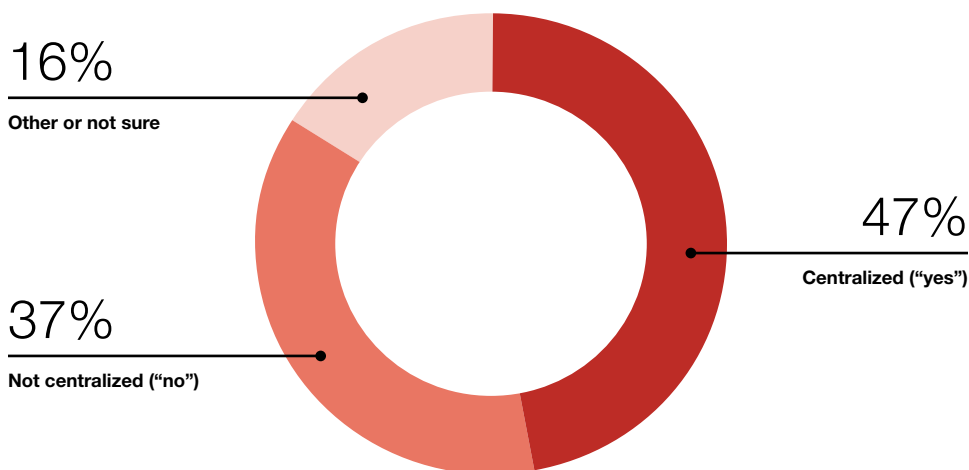
The structure:

Benchmarking the structure of open innovation inside organizations.

Organizations are structuring open innovation efforts in different ways. We see organizations experimenting with different models — from centers of excellence to specialists embedded in business units. To decide on the right structure, executives should consider their organization’s innovation goals and internal culture.

As with other cross-cutting functions, respondents are testing both centralized and distributed models for their open innovation resources. Nearly half (47%) of respondents centralize their open innovation efforts, and more than one-third (37%) are decentralized.

Nearly half of respondents centralize their open innovation efforts



Source: Luminary Labs State of Open Innovation Survey 2018. "Are your organization's open innovation efforts centralized?" (n=95 total respondents)

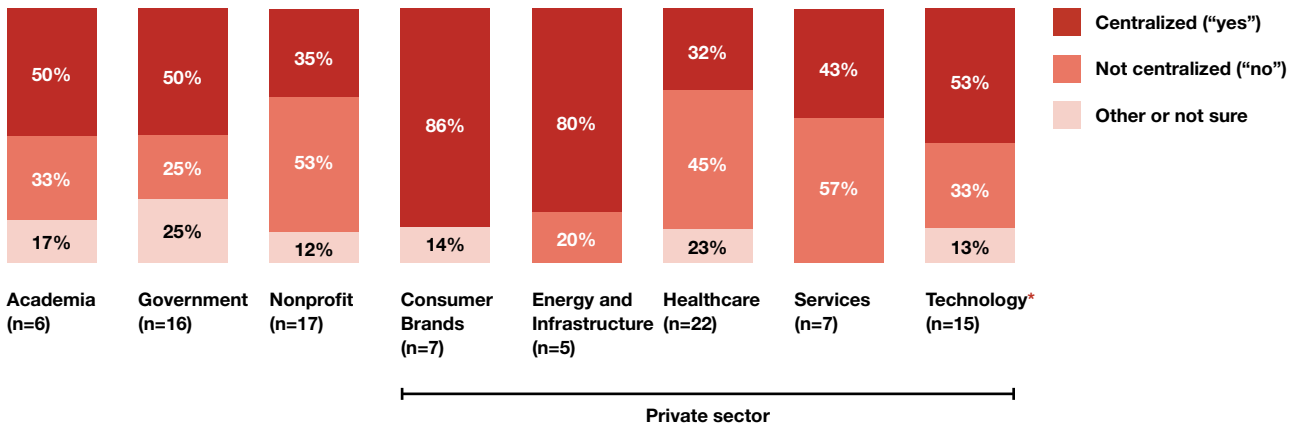
Respondents who selected "other" provided various explanations. Some organizations described a hybrid approach, with both centralized teams and program managers embedded throughout the enterprise. One respondent said, "we have a team focused on open innovation, however, we feel it should be part of everyone's job."

"There's not one right way to do anything. But what's most important to understand is that decisions you make about how you structure things, or what structure you're in, definitely influence the output."

MICHELLE POPOWITZ,
UCLA

In the private sector, consumer brands, technology companies, and energy and infrastructure companies are more likely to be centralized. Health companies and nonprofit organizations are more likely to be decentralized; government is evenly divided between centralized and other structures (including decentralized).

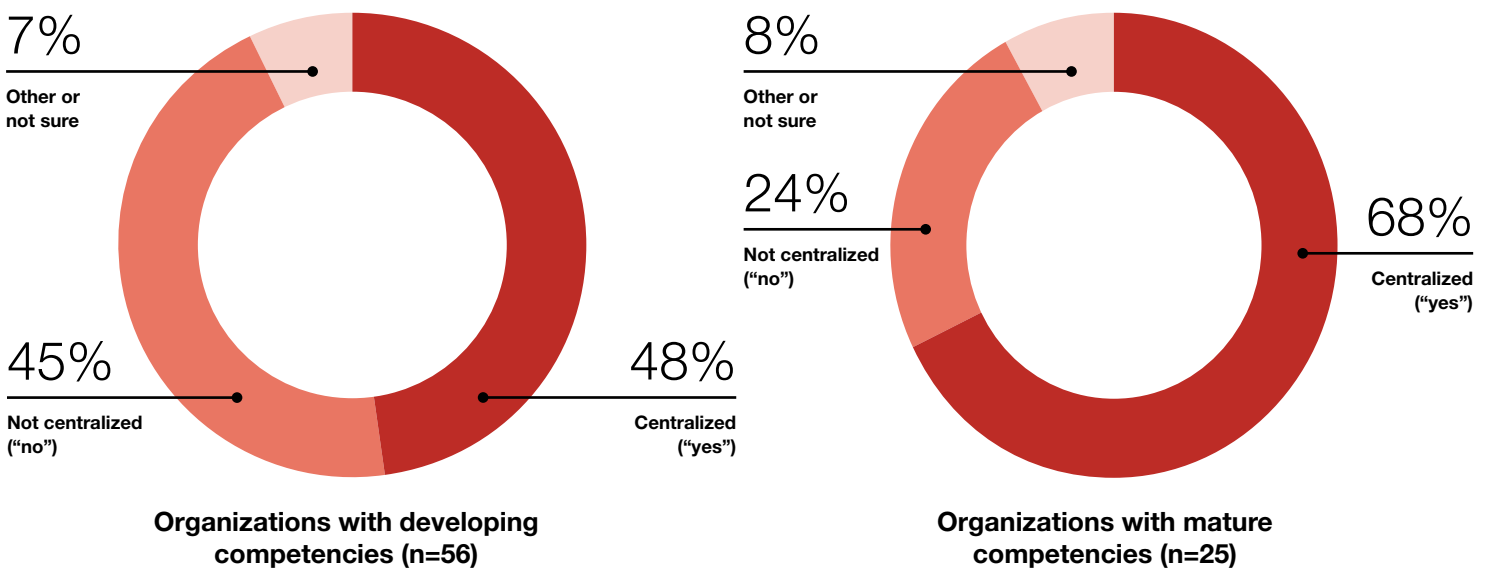
How organizations in different industries structure their open innovation efforts



Source: Luminary Labs State of Open Innovation Survey 2018. "Are your organization's open innovation efforts centralized?" (n=95 total respondents) *Due to rounding, percentages do not total 100%.

Organizations with developing competencies are evenly split between centralized (48%) and decentralized (45%) structures. Organizations with mature competencies, however, skew toward centralized structures (68%).

Organizations with mature competencies are more likely to centralize their efforts



Source: Luminary Labs State of Open Innovation Survey 2018. "What is the current state of the open innovation competency in your organization?" and "Are your organization's open innovation efforts centralized?"

The responsibility: Benchmarking open innovation roles and job titles.

In our early research, we identified dozens of executives with “open innovation” in their titles. We even saw hierarchies — from “open innovation manager” to “open innovation lead” to “head of open innovation.”

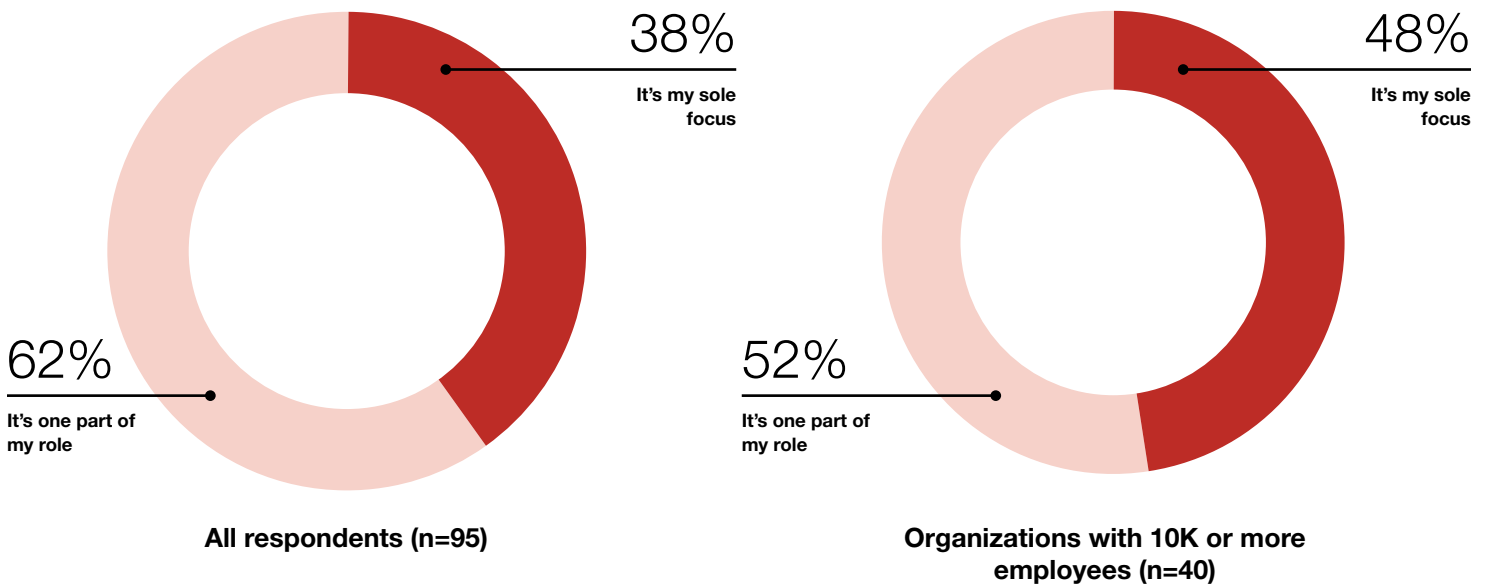
Nearly one-third (32%) of respondents have the word “innovation” in their job title; 8% include the phrase “open innovation” specifically.

Nearly four in 10 (38%) respondents said open innovation is their sole focus — an early indicator of growth in this space, as organizations recognize the value of dedicating talent and resources to open innovation. Respondents from larger organizations were slightly more likely to have a role entirely focused on open innovation; nearly half of respondents (48%) from organizations with more than 10,000 employees said they were solely focused on open innovation.

“It makes a difference to have someone dedicated to innovation initiatives and partnerships. For many companies, open innovation is an adjacency and in addition to someone’s full-time job. Those teams get really strained for resources and time without a dedicated person leading the effort.”

**ASHLEE ADAMS,
NESTLÉ USA**

Respondents from larger organizations are slightly more likely to have a role entirely focused on open innovation



Source: Luminary Labs State of Open Innovation Survey 2018. “What is the current state of the open innovation competency in your organization?” and “Are your organization’s open innovation efforts centralized?”

Is ‘open innovation manager’ the hot new job title?

When a company hires for a new title, it’s a signal of new priorities. Eight respondents’ titles include the phrase “open innovation.”

From chief operating officers and vice presidents to data scientists and system engineers, a wide range of positions are taking responsibility for open innovation. And for some, it’s their primary charge — respondents with highlighted titles said open innovation is their sole focus, not just one part of their role.

- CEO
- CEO
- COO
- Director
- Director
- Founder
- UX Lead
- Principal
- Educator
- Professor
- VP, Strategy
- Toxicologist
- Interim CEO
- Ambassador
- Joint Director
- Data Scientist
- Vice President
- Vice President
- Deputy Leader
- Game Changer
- Senior Director
- CMO, Oncology
- Growth Advisor
- Program Director
- VP, Data Strategy
- Principal Scientist
- Program Manager
- Program Manager
- Innovation Leader
- Executive Director
- Software Engineer
- Senior Researcher
- VP, Digital Strategy
- Innovation Director
- IT Project Manager
- Marketing Manager
- FHIR Strategy Lead
- Innovation Sourcing
- Urban Tech Director
- Director of Programs
- Head of Partnerships
- Director of Innovation
- Director of Innovation
- Co-founder and CEO
- Innovation Consultant
- Open Innovation Lead
- Senior Program Officer
- Director, Zone Learning
- Chief, Social Innovation
- Chief Innovation Officer
- Chief Commons Officer
- Open Innovation Leader
- Open Innovation Leader
- Senior System Engineer
- VP, Technical Excellence
- VP, Enterprise Innovation
- Head of Open Innovation
- Request System Manager
- Open Innovation Manager
- Open Innovation Manager
- Open Innovation Manager
- Open Innovation Manager
- Entrepreneur in Residence
- Innovation Execution Lead
- Civic Innovation Specialist
- Senior Innovation Manager
- Global Head, Digital Health
- VP, Franchise Lead - Diabetes
- Education Program Specialist
- STEAM Workshops and Camps
- Director, Commercial Innovation
- External Science and Technology
- Senior Advisor Grand Challenges
- Senior Director, Digital Innovation
- Business Development Specialist
- Behavior Change Design Director
- VP, Strategic Innovation Initiatives
- VP, Global Innovation and Nutrition
- VP, Global Head of Digital Medicine
- Senior Officer, Learning Community
- VP, Caregiving Products and Services
- Senior Fellow and Innovation Advisory
- Science and Technology Policy Analyst
- VP, Business Development and Strategy
- Executive Director for Grand Challenges
- Associate Director of Network Activation
- Chief of Civic Innovation and Technology
- Director of Civic Engagement and Strategy
- Project Manager, Knowledge and Innovation
- Business Development and Product Strategy
- External Science and Technology Program Leader
- Senior Director, Enterprise Strategy and Innovation
- Senior VP, Global Digital, Marketing, and Innovation
- Global Category Manager Digital Marketing Procurement
- Head of Innovation Governance Planning and Portfolio Management

Source: Luminary Labs State of Open Innovation Survey 2018. “Job title?” (n=95 total respondents)

The barriers: Benchmarking obstacles to open innovation.

Building a new competency isn't easy, and open innovation is no exception. Even the most experienced respondents working in organizations with mature competencies face challenges. Overcoming barriers requires a thoughtful approach to testing, learning, building a case, and deploying at scale — all while educating and socializing the new competency within the organization.

Overall, more than half (54%) of respondents said time is an obstacle, and nearly half (49%) said funding is a challenge. The problems don't go away as an organization's competency matures — more than half of mature organizations named time (52%), funding (56%), and internal goal alignment (52%) as obstacles to open innovation.

The average respondent selected more than two obstacles, and we saw overlap between the most common obstacles. For example, more than half of those who selected time also selected internal goal alignment (55%) or funding (59%), and half of those who selected funding also selected internal goal alignment (49%) or legal approval (51%).

Different sectors and industries face different types of barriers. Nearly nine in 10 (88%) public sector respondents said funding was a challenge, along with nearly half (47%) of nonprofits.

Internal goal alignment is a more common barrier in the private sector. A majority of respondents from consumer brands (86%), energy and infrastructure (80%), services (71%), and health (59%) named it as an obstacle.

Technology companies don't appear to struggle as much with goal alignment or funding, but 60% of respondents in tech said they're pressed for time.

“Major success factors include alignment at the senior leadership level and securing a long-term funding commitment, because we know that innovation doesn't happen neatly on an annual cycle.”

**ANNIE GUZEK,
PFIZER**

“We've tried to make sure there are key people in HHS leadership that are keeping up the talking points internally and sending out notices so that the rest of the department knows that this is an approach that is supported from the top — which always makes it easier.”

**SANDEEP PATEL,
HHS**

Time, funding, and alignment are pervasive challenges.

Time**Funding****Internal goal alignment****Legal approval****Intellectual property stance****Executive sponsorship****Partner identification****None****Other and not sure**

Some respondents who selected "other" provided more context or elaborated on the obstacles they selected; others suggested additional obstacles, including lack of internal talent or resources, inability to prove return on investment, and difficulty connecting with the right innovators.

Source: Luminary Labs State of Open Innovation Survey 2018. "Which of the following areas, if any, have presented obstacles to your open innovation efforts?" (n=95 total respondents selecting one or more items from a list of options)

The pro tips: Three organizations share ideas for socializing open innovation.

To be successful, open innovation requires broad organizational support. Executive buy-in is essential, but not enough; internal stakeholders at every level must understand the value of open innovation and be prepared to support programs. Interview respondents shared ideas they've used to engage colleagues:

In addition to **internal updates and newsletters**, the U.S. Department of Health and Human Services hosts **boot camps** where employees submit an idea for an open innovation project — in particular, a prize competition — and learn best practices, design principles, and how to navigate the administrative process from internal mentors who have run programs before. After workshopping their ideas for two weeks, they have an actionable plan for moving forward; outside of a boot camp, this process might take months. Two-thirds of people who have gone through a boot camp have launched a prize.

HHS Ignite is a three-month **mini-accelerator** that uses design thinking principles and customer-centric approaches to help HHS employees find and scale solutions to everyday work problems. As part of Ignite, HHS hosts an **Innovation Day**, which brings teams together to show off their work, and invites vendors and experts to share new ideas and approaches.

Sandeep Patel says the HHS Office of the Chief Technology Officer is also planning **a series of department-wide convenings** for employees to gather and share open innovation successes, with the goal of finding ways to improve their work.

At AstraZeneca, Dave Guiga created “Startup U,” an **internal training program** that teaches employees how to speak the language of innovators. The course includes several chapters to define startups, investment rounds, angel investment, accelerators, venture capital, and other relevant topics.

Communication and information-sharing is ongoing at Nestlé USA, where Ashlee Adams has assembled an **internal “SWAT team”** that includes heads of research and development, supply chain, manufacturing, and marketing. The group has bi-monthly calls to share information, communicate priorities, and marshal resources. Ashlee is also planning a **“startup roadshow”** at the company's head offices to help employees who are not typically engaged with open innovation better understand the impact of the work.

Shaping the future

Where do we go from here? How will open innovation grow inside organizations and beyond? What will it take to truly transform the way we work?

The current temperature:

Early indicators point toward a growing practice.

Respondents, overall, expressed positive views, and we saw enthusiasm for open innovation at all levels of maturity. Early indicators — from job titles and internal structures to strategic foundations and thoughtful experimentation — suggest we may one day see mainstream adoption. Building an organization on openness — rather than a closed approach to R&D, marketing, and other functions — fundamentally shifts entire business models. We predict continued growth for open innovation, and our forecast hinges on the assumption that the organizations still developing their competencies will continue to do so. Organizations pilot new ways of working and evolve to new models, but we believe open innovation is here to stay. Once an organization opens up, it's difficult to go back.

The building blocks:

Identifying the internal conditions for success.

Respondent comments painted a clear picture of the internal conditions required to develop a successful and sustainable open innovation competency, and provided insight into how they are making it work. Open-ended responses and interviews yielded helpful advice for organizations that want to establish a solid foundation.

1. Start with strategy. Know your goals and connect to a current business priority. Avoid shiny-object syndrome. Define the problem and set a reasonable scope. Strategy-led wins over tactics-led efforts. Develop meaningful partnerships.

Open innovation is “always worth it, when there is a desire to learn, a defined scope, proactively aligned measures of success, and an informed and knowledgeable base of senior leader support.”

**ANNIE GUZEK,
PFIZER**

“We need fewer shiny objects and more function in the way we do open innovation. It's a long-term strategy and not a quick fix.”

**SANDEEP PATEL,
HHS**

“If you haven't really thought through your strategy, if you don't have the resources aligned for the implementation ... it doesn't land.”

**ROSANA ARDILA,
MOZILLA**

2. Test and learn. Work in pieces and celebrate incremental wins. Give thoughtful consideration to what it will take to execute. Beware the learning curve; open innovation can be both time-consuming and resource-consuming at first, just like any other initiative.

“We’re constantly changing ... year to year, we’re pivoting and changing.”

**EUGENE BORUKHOVICH,
BAYER**

“The thing that keeps us convinced that we are running an effective program is our relentless communication of incremental results. ... You’re fighting this battle for innovative ideas and concepts and validation.”

**JOSHUA NESS,
VERIZON**

3. Visibly demonstrate impact. Earn leadership support and broader organizational buy-in as you go. Showing impact and emphasizing connections to the organization’s highest priorities can help protect fledgling initiatives. Look for opportunities to prove the value of a new way of working — the point of open innovation is not always more open innovation; it is about the net impact it has on the business’ ability to achieve its goals.

“If you show impact, people get it. ... That’s when people start paying attention. ... The alignment piece is important, but having impact or solving problems for specific teams is what actually gets you a foot in the door.”

**ROSANA ARDILA,
MOZILLA**

“Have compelling examples that highlight different advantages of open innovation, like faster time to solution, only paying for success, and reaching beyond the usual suspects. ... Be familiar with the growing empirical literature on the benefits of open innovation, such as its cost-effectiveness relative to traditional approaches such as internal efforts or grants and contracts.”

**TOM KALIL,
SCHMIDT FUTURES**

“Executive support is critical for innovation initiatives to succeed. It will take time to see measurable results and success from these initiatives, so having a leadership team that understands the long-term value and encourages a test-and-learn approach has been helpful as we build our open innovation capabilities.”

**ASHLEE ADAMS,
NESTLÉ**

4. Cultivate organizational change. Tapping into the truly transformative power of open innovation — as many respondents said, “making it part of our DNA” — will require a seismic shift in the way people think and the way organizations work. This doesn’t happen overnight. Incremental successes should fuel continued advocacy and socialization inside organizations, with centers of excellence enabling widespread adoption of open innovation.

“The engagement model we’re going after is also a mindset change within the larger organization. ... There are a lot of opportunities to learn outside.”

**EUGENE BORUKHOVICH,
BAYER**

“When I say I hope in the future it’s embedded in our DNA, I mean that the first reaction we have is ‘let’s look external to our company and find the very best to help us solve our challenges.’”

**DAVE GUIGA,
ASTRAZENECA**

“We want to make the philosophy of open innovation — such as embedding broad and diverse audiences for problem solving, accelerated development, phased piloting, focus on impactful goals — a part of our organizational DNA.”

**SANDEEP PATEL,
HHS**

“I was always a believer that what we were doing was transformative. ... It was enabling us to live up to our values in a new way, and it is now part of our brand as a campus.”

**MICHELLE POPOWITZ,
UCLA**

5. Standardize and scale. Even with leadership buy-in or a top-down mandate, scaling a competency is a heavy lift. This is particularly true when the competency upends our previous understanding of how business should work. Nonetheless, respondents noted plans for standardizing their approaches and scaling open innovation.

In this regard, [NASA’s Center of Excellence for Collaborative Innovation \(CoECI\)](#) is a model effort. CoECI provides an “end-to-end service” that empowers colleagues in other federal agencies “to rapidly experiment with these new methods before standing up their own capabilities.” NASA has also been at the forefront of researching open innovation to make its efforts more effective and efficient.

A number of private sector organizations also envision developing their own infrastructures for embedding open innovation in the wider enterprise.

“We want to establish an internal group that enables everyone to use open innovation tools on a regular basis.”

**ROSANA ARDILA,
MOZILLA**

“The organization’s initial concept of open innovation was to develop partnerships in service of a more robust M&A pipeline, but our team sees the opportunity as much broader. It’s about enabling both companies to develop new capabilities and create something better together than if we were to act alone. Education and inspiration for our team is also important. How can we learn new ways of working and thinking that we can adopt to help Nestlé internally as we transform our business and bring products to market in new ways?”

**ASHLEE ADAMS,
NESTLÉ USA**

The future of open innovation: Conversations continue.

We plan to conduct this survey again to see how open innovation evolves over time, tracking trends and introducing new questions.

We’d like to hear your questions and reactions. What would you like to see in a future report? How is your own organization’s approach to open innovation evolving? Email editor@luminary-labs.com to request more information about the data in this report, participate in the next survey, or share your ideas.

Learn more about open innovation at Luminary Labs:
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