



2011 Open Innovation Scorecard Survey Report:
**Best Practices, Challenges
& New Opportunities**

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About the Author

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I. Executive Summary

Open innovation has recently emerged from being a promising new industry trend to becoming a standard management discipline across many organizations. In order for companies to develop a mature open innovation process capable of demonstrable benefits, they must first be able to assess where they stand with regards to industry best practices. Ultimately, such an understanding will provide them with valuable information needed to benchmark their current open innovation capabilities, and to determine next steps for optimizing their internal programs. The NineSigma Open Innovation Scorecard Survey is an ongoing, living tool that helps organizations understand how to rate their open innovation programs in terms of open innovation best practices, while providing insights and recommendation into what it will take to effectively move forward.

The data in this report represents responses taken from the NineSigma Open Innovation Scorecard Survey, which includes responses from hundreds of organizations across a variety of industries around the globe. The aggregated results provide several key takeaways that are discussed in detail throughout the report. Identified are the key industries leading the open innovation charge, and how open innovation is becoming increasingly important to the growth strategies and goals of mid-sized business leaders. From this report, we learn that open innovation continues to grow inside consumer and industrial manufacturing companies, as well as the service industry, as a means to reduce development times and costs, enhance innovation capacity, and when implemented and embraced fully, can create a true competitive advantage.

We also learn that to be successful, organizational leaders need to have a keen understanding of the company's culture, and how they can influence key behaviors for desirable results in open innovation practice. We also see that more companies are relying less on traditional knowledge management systems and more on social media and crowdsourcing platforms to find and connect to new communities and sources of information. Equally important and discussed are the barriers to open innovation such as challenges of time, staff and budget, in addition to understanding how to manage intellectual property from both the innovation seeker and solution providers' perspectives. These are just a few of the dozens of proof points and insights that were collected from the survey data and articulated from NineSigma's unique perspective on open innovation.

II. Introduction & Background

The NineSigma Open Innovation (OI) Scorecard Survey, which served as the foundation for this report, was designed to solicit responses from open innovation practitioners in virtually all industries regarding their collaboration practices and challenges. This report serves as both a compilation and interpretation of those responses, and can be used to benchmark a company’s or industry’s collaborative innovation practices and to provide insights into the rapidly expanding world of open innovation. The survey opened in November, 2010, and although the survey is still open on the NineSigma website, the data used for this report was extracted at the time that this report was developed. The data represented in this report was generated from over 360 completed survey responses.

This report is primarily oriented towards companies, governments and non-profit organizations that are considered “seekers,” or those intending to acquire (aka in-licensing) technologies, or other IP related resources, from outside their own organization through some open innovation process. However, many “solution providers,” or those looking to sell, or out-license their capabilities, will also find this report interesting because of the clarity it provides around their prospective new market channels. To properly assess the capabilities of each respondent’s organization, it was important to first provide a framework that defines the key mechanisms of open innovation that are required for success. In 2008, NineSigma first introduced the Engage & Enable, or E2 model, which depicts the world of open innovation on two key axes (see Figure 2.1 below).

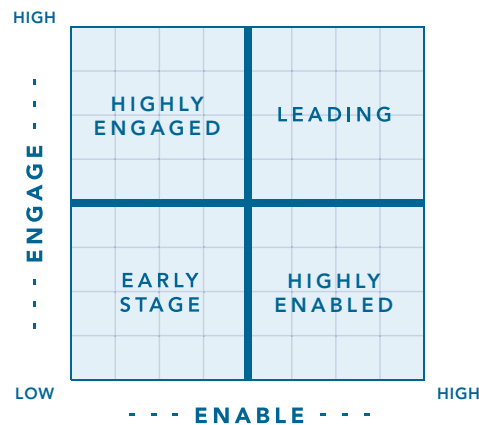


Figure 2.1 The Engage and Enable Model for Open Innovation

The lower left quadrant of this diagram represents those organizations that are at an early stage of open innovation development. The upper left quadrant represents those organizations that have been able to demonstrate success at building functional networks outside of their four walls, but have not developed the people, processes and technologies necessary to manage the incoming IP. Hence, the lower right quadrant represents the opposite, and consists of organizations that have developed the appropriate infrastructure for open innovation, but have only limited reach into the various external innovation communities. The upper right quadrant belongs to those few companies that have mastered both their ability to engage with the global innovation community, and have developed their absorptive capacity by enabling the proper infrastructure.

In order to effectively assess the results of the survey, we had to define open innovation in terms of the different domains, or layers of outreach, because of the different requirements that each level presents. Figure 2.2 below shows the three levels of outreach, starting with the core, or internal collaboration. Although this represents collaboration within the same organization, it is still to be considered open innovation. Many organizations are not equipped, either structurally or culturally, to reach outside of their own department or business unit to see what useful knowledge is available before going to the outside, where such new knowledge usually comes at a price.



Figure 2.2 Three Layers of Collaboration

The next, or middle layer, represents an organization's existing network, or ecosystem. Most companies do not engage their existing supplier relationships, asking them for new ideas or IP that could create new opportunities. If the seeker organization is a key account, many suppliers will collaborate freely, merely to retain a loyal customer. While many of the initial contact points in organizations conducting open innovation business involve the business development entity of the seller, and the purchasing department of the buyer, mutually beneficial opportunities tend to arise when an R&D to R&D dialog can take place. Universities, research laboratories and other government and non-government organizations are common sources of innovation that are often found to be frequently engaged for open innovation purposes, but rarely managed at a level that would provide an optimal outcome for the seeker. Finally, the outer layer of Figure 2.2 represents global collaboration. Global collaboration implies the ability to access new knowledge and engage in partnerships outside a company's four walls and its managed networks or ecosystems.

The following sections of this report discuss the results of the survey. Section II will discuss the overall adoption rates of open innovation across industry sectors. Sections III, IV and V will discuss the results of the survey, as they pertain to the internal, network and global innovation layers respectively, as described above. Finally, in Section VI, we will discuss the current trends within the realm of open innovation, along with new opportunities that can dramatically enhance an organization's ability to achieve leading-edge open innovation results.

III. Industry Adoption of Open Innovation

The chart in Figure 3.1 below represents the distribution of responses to the open innovation survey, by industry sector.

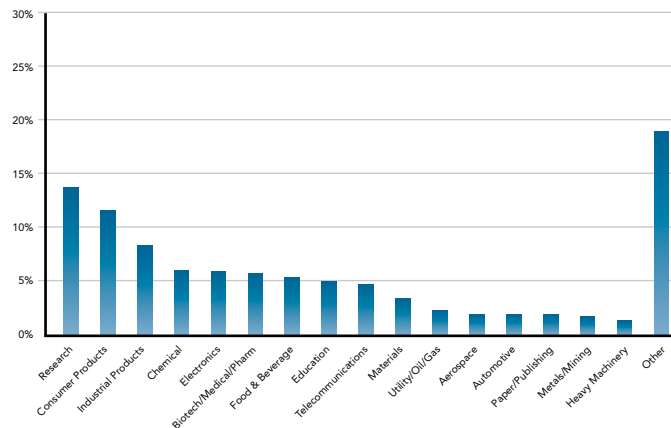


Figure 3.1 Distribution of Respondents by Industry

As you can see on the far left and right of the distribution chart above, there are two industry segments that seem somewhat dominant. The “Research” category on the left consists mainly of research labs and university departments that practice open innovation mainly as an out-licensing function. In other words, these are typically solution providers who seek to sell or license their technology. Occasionally, such organizations will seek outside technologies to augment their work, although this is more of an exception than the norm. The “Other” category on the far right of the chart consists of a combination of individual consultants, consulting firms, entrepreneurs, and various companies from the services sector—most of which were in the early stage of open innovation adoption. This was an interesting finding in this year’s survey, as more mid-sized and smaller organizations are participating on both ends of open innovation (i.e., seeker and solution provider).

One survey question asked participants to describe the status of their company, by choosing one of four responses:

1. In the early stages of OI rollout and adoption
2. Re-launching an OI program
3. Optimizing an ongoing OI program
4. Not involved in OI

Not surprisingly, the “optimizing” category was led by the consumer products industry, where 22.4% of respondents reported that their organizations were optimizing an ongoing OI program. The “optimizing” category was dominated by large companies reporting revenues of greater than \$10 Billion (US), where 42.9% of respondents indicated that they are optimizing an ongoing OI program. Non-profit organizations are beginning to show signs of OI acceptance, where 58.3% reported to be in the early stages of OI adoption.

The comparative pie charts in Figure 3.2 below show a significant difference between companies that use a third-party intermediary firm for open innovation, and those that do not. In the chart on the left (those not using an OI intermediary) 34% of respondents indicated that collaboration takes place within and across all business units and divisions, where those that do use an intermediary reported 44% in the same category. The next highest category has shown that 34% of non intermediary users indicate that collaboration takes place in some business units vs. 38% in companies using intermediaries. It is, however, uncertain as to whether intermediary engagement is the cause or effect of this difference.

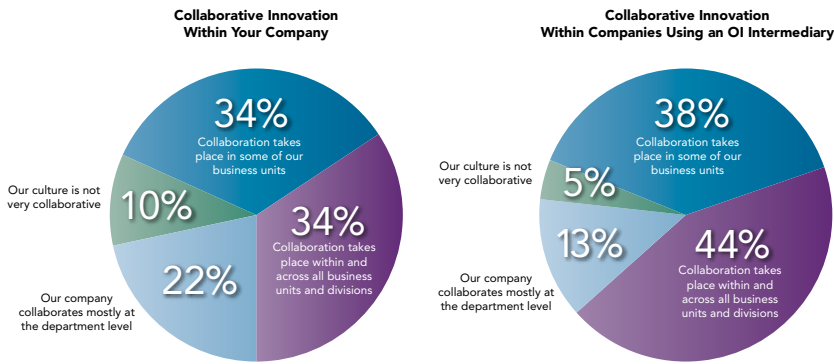
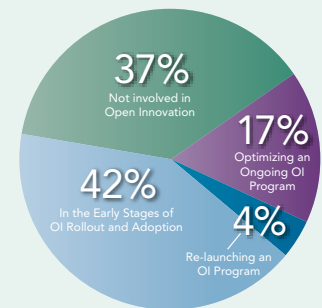


Figure 3.2 Status of Open Innovation Adoption

Open Innovation and the Middle Market Company

Of all the companies surveyed, Middle Market companies appear to be increasingly embracing open innovation. Middle Market companies, defined as companies with revenues of \$250M - \$1B, are turning to external innovation as a means to achieving reduced product development times and costs, as well as enhanced innovation capacity. We know of many Middle Market companies who are quickly catching up with their larger peers and developing collaborative innovation programs that improve their ability to capture and utilize knowledge and innovation across the 3 layers of collaboration. With the accelerating adoption of OI among Middle Market companies, it is not surprising that their survey findings closely followed the total trend of companies taking the survey. An area where the Middle Market response diverged, however, was in the resources available to access the global innovation community. Here Middle Market companies indicated a much lower utilization of resources such as consortiums, external websites, and intermediaries, although their use of corporate tech scouts was similar to that of the total population.



OI Status of Middle Market Companies (\$250M-\$1B in Revenues)

IV. Internal Collaboration

The internal innovation measures in this segment are intended to assess a company’s internal collaboration capabilities. Replies to specific questions were used to measure a respondent’s ability to collaborate within and across all departments and business units of the company. As indicated earlier, this is the foundation of collaboration within any organization. Companies showing weak OI indicators at this level are likely to have issues collaborating at the Network and Global levels.

Figure 4.1 below shows the distribution of responses in relation to the Engage & Enable model discussed in the Introduction of this report. 62% of all survey respondents indicated that they are highly engaged in collaborative innovation activities within and across various departments and business units. However, only 4% of these respondents indicated that they were adequately enabled with an appropriate infrastructure conducive to sustainable and uniform knowledge adoption. Only 6% of respondents indicated that they were on the Leading end of internal collaboration, which would imply balanced strengths in both the Engage and Enable categories.

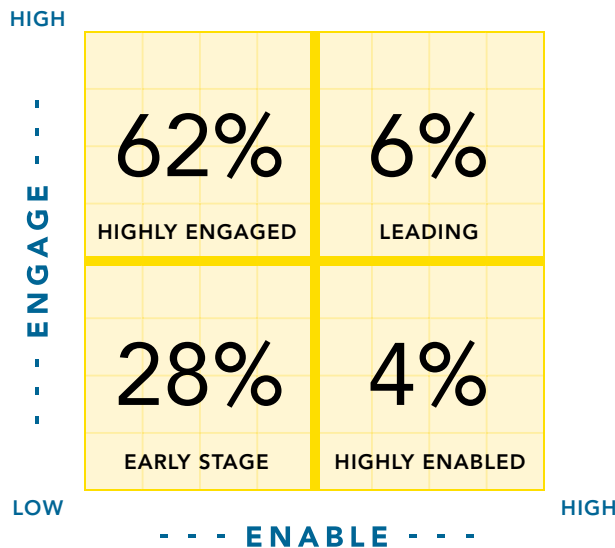


Figure 4.1 Internal Collaboration Results

Fast Figures

- Lack of tools and know-how is the second leading challenge to collaborating internally on innovation
- Less than 5% of respondents indicated that the benefits of OI were not clear and therefore not a challenge of engaging in collaborative innovation

Describe a challenge your company faces in collaborating internally on innovation.

“At the beginning - [there were a] lot of ideas that could be converted to innovative projects; Then - only a few ideas were converted...No products were launched with those few projects and now [only a] few ideas show up; and still no ideas have been converted into a successful project.”

Representative comment from an R&D Manager Consumer Products Company, Brazil

Experience has shown that collaborative innovation—even within an organization’s four walls—yields the best results when the right balance of tools and process are in place. The larger and more complex an organization, the more important these enablers become. Figure 4.2 below outlines the results to survey questions pertaining to key enablers of internal collaboration.

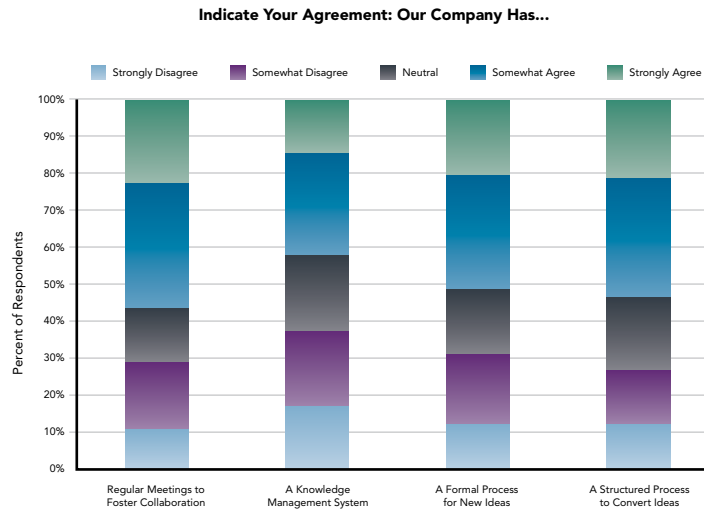


Figure 4.2 Internal Collaboration: Tools & Practices

Regular, periodic meetings intended to bring together people from different areas of the organization to foster collaboration are the leading enabler for collaborative innovation within most companies. While organizational lines are typically drawn to segment and manage core functions and competencies, cross-functional meetings can be used to transcend organizational boundaries, and inspire new thinking by cross-pollinating new thoughts and ideas among those homogeneous entities.

Knowledge management systems have been used for years to capture and manage various types of institutional knowledge, ranging from structured data to tacit knowledge. While these systems have proven quite effective at capturing knowledge, they tend to become burdensome over time, as stored knowledge becomes obsolete and categories become increasingly complex. Knowledge management systems require regular management of taxonomies and periodic purging of obsolete data. In most large companies, this requires a full-time position. Regular use of knowledge management systems has been on the decline in most companies, as social media platforms continue to advance (see Section VI for further details on social media in open innovation).

Social media tools are being accepted as a means of unstructured communication within many companies. They foster the emergence of informal groups and group discussions across the organization, and are beginning to be used as a means of obtaining fast, relevant information. Users are beginning to rely more on these systems than company knowledge management systems, because users know that they will be more likely to receive current information before it is entered into the knowledge management system. As social media systems become a norm in overall society, users feel much more comfortable navigating these systems than their institutionalized knowledge management repositories. Crowdsourcing platforms like Chaordix or Spigit are being adopted for internal and external ideation campaigns, where companies post rewards for new ideas, and allow the participants to self-select the winners of leading ideas. While social media has only become a social norm in the past few years, it will likely continue to evolve as a means of communicating and capturing new ideas and knowledge across organizational bounds.

With crowdsourcing, or any other means of internal collaborative ideation, a process is required to capture new thoughts and ideas, and prioritize and convert them into new innovation initiatives. Unfortunately, if this does not exist, then this is where more ideas will die. Without a process for formally recognizing, ranking and selecting ideas to be submitted into the innovation pipeline, they are likely to remain just ideas, unless someone is willing to champion the idea through to realization. A well-designed process significantly increases an organization's level of innovation productivity, and ensures that the right levels of sponsorship, resource allocation and budget are made available.

Example of Internal Collaboration:

AkzoNobel, a Global 500 leader in coatings and specialty chemicals, developed a company-wide AkzoNobel Networked Innovation (ANNI) program in 2009 to help drive strategic innovation across its 18 business units. Innovation leaders at the company wanted to better leverage existing knowledge and capabilities, both within and outside the company.

Every company has its challenges to internal collaboration. We have captured the most frequently occurring challenges, which are displayed in Figure 4.3 below.

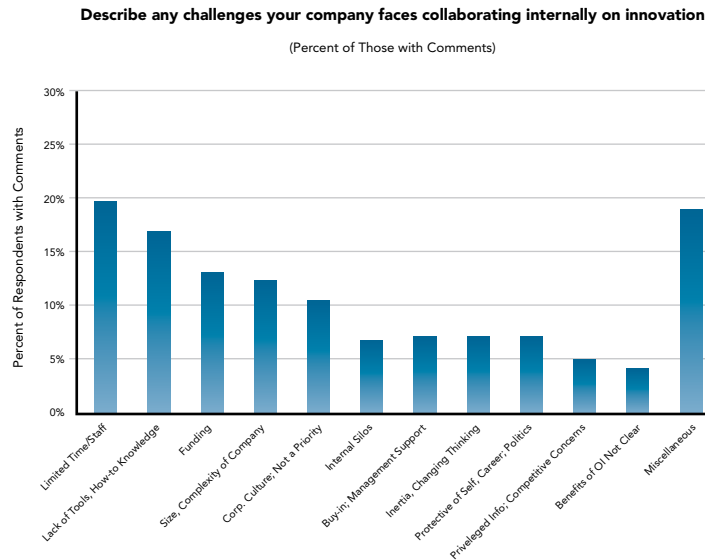


Figure 4.3 Challenges to Internal Collaboration

Our survey results show a clear indication of impediments to internal collaboration. With the recent economic decline and resulting budget cuts, it does not come as a surprise that some of the most frequently identified challenges to internal collaboration is the lack of time, staff and budget. With recent advances in open innovation knowledge and service options, it is more of a surprise that the lack of tools and know-how is the second leading challenge for most companies. A great number of books, articles, seminars and training programs have been introduced in the last 10 years that support the development of new internal OI programs. Service providers are offering an increasing number of new collaboration services, including the development of new processes and facility reconfigurations designed to stimulate and foster collaboration.

A company’s size and complexity, as well as culture and organizational silos were identified as other leading challenges to internal collaboration. A simple pilot process can be established to enable cross-enterprise collaboration and to evaluate what works and what doesn’t work within the organization’s culture. Once the appropriate system is designed, it can be rolled out to other organizational entities. If a company truly wants to be collaborative, there shouldn’t be any obstacle so great as to keep them from achieving their goal. With the right mix of performance metrics and commitment at both the executive and execution levels, any company should be able to demonstrate significant improvements in internal collaboration at little cost.

V. Network (Ecosystem) Collaboration

The Network Collaboration segment of the assessment was used to measure collaboration performance of respondents as it pertains to their close-in networks, often referred to as “ecosystems.” Network collaboration refers to the company’s ability to engage with known partners for new sources of ideas, inspirations and intellectual property. Figure 5.1 below shows the survey results for network collaboration.

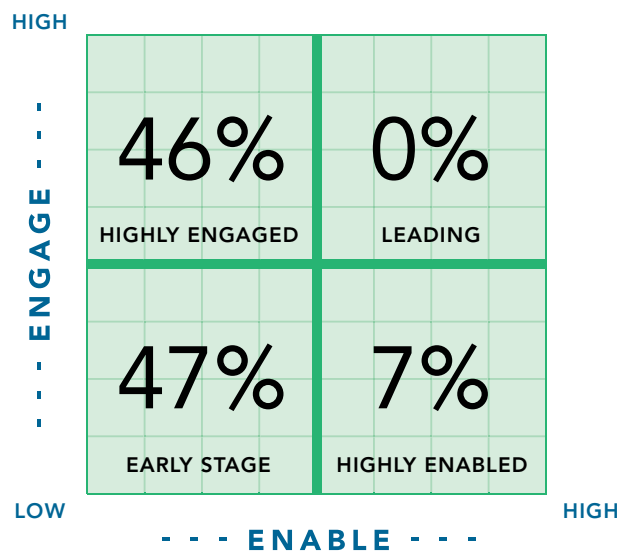


Figure 5.1 Network Collaboration Results

It is not surprising that the further a company reaches from its own internal resources, the lower the engagement level will be. The survey results indicate that 46% of respondents demonstrated a high level of engagement within their external networks vs. their engagement with internal resources. What is surprising is that the number of respondents falling into the “Highly Enabled” category is actually higher than the same category for internal innovation (7% vs. 4%). One reason for this result is that more companies are focusing on the external resources for knowledge acquisition than for internal resources. Although the number of companies falling into the “Leading” category is shown as 0%, there was actually one company that obtained this ranking. Hence the 0% outcome was the result of statistical rounding. The number of companies identified as “Early Stage” (47%) was also lower than expected, given the fact that Network Collaboration can be considered low-hanging fruit for many companies.

Fast Figures

- 46% of respondents were Highly Engaged in Existing Network Collaboration compared to 62% who were Highly Engaged internally

Q: Describe a challenge your company faces in collaborating with existing innovation network partners

A: *“Interests often diverge in focus and timeline. A University may be more concerned with publications and wide studies; a Corporation may be more focused on the here and now.”*

Representative comment from a Business Unit Executive
Industrial Products Company, U.S.

A: *“Managing our collective existing external network is a challenge. You need to know your internal resources before you can leverage their external networks.”*

Representative comment from an OI Director
Consumer Goods Company, The Netherlands

Most companies have potential collaboration partners, whether they realize that they can be utilized for open innovation purposes or not. Our survey results indicated that the most common partnerships for innovation collaboration were universities, suppliers and customers (typically business-to-business customers, including retailers). Other network partner types include government and regulatory agencies (see Figure 5.2 below). These types of partnerships are most common in life science companies, and other organizations subject to stringent regulatory constraints. Innovative companies manage to turn such agencies from a threat to a collaboration partnership, soliciting their inputs early in the development process to ensure there are little or no surprises during clinical trials, or other regulatory test phases.

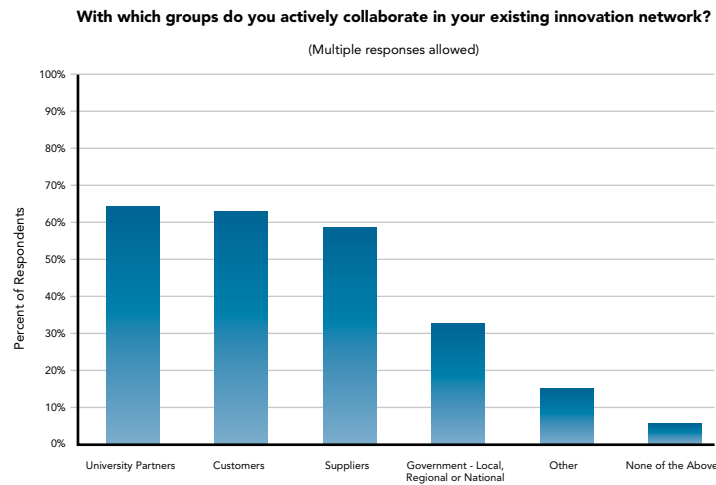


Figure 5.2 Network Collaboration Partners

Universities are often relied on for early stage research and intellectual property needed to enable the commercialization of a new product. Western universities are most often unwilling to sell their intellectual property outright. In earlier days of open innovation, this became a stumbling block for most solution seekers, who would look to universities in other parts of the world that would be willing to sell their IP. Recently, technology transfer offices in Western universities have developed savvy new licensing arrangements that include exclusivity clauses, allowing the licensee to gain competitive advantage in the initial years of product deployment.

Suppliers and B-to-B customers are unobvious collaboration partners for many solution seekers. However, these network members are often willing to work with the company for several reasons. For example, suppliers may view the invitation to collaborate as a means of ensuring healthy customer relationships. Customers often view such an invitation as a way to improve the products and services that they will be receiving through the flow of the supply chain. It is not uncommon that a company seeking a technology solution distributes a global request for proposal (RFP), only to find a suitable partner that was already a part of their supply chain.

Chances are, suppliers will continue to innovate their own products and services, and they are often looking for companies with whom they can pilot their new goods, test different solutions, or even co-develop new IP.

Figure 5.3 shows the results of the survey pertaining to respondents' abilities to manage network partnerships outside their organizations.

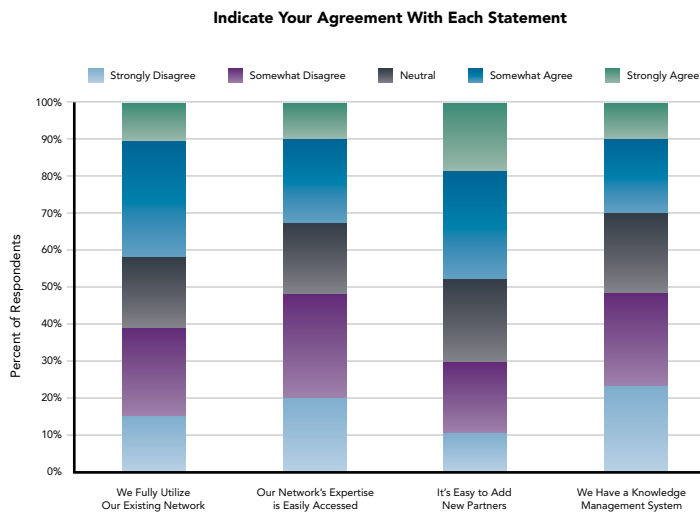


Figure 5.3 Network Collaboration: Tools & Processes

The management of existing networks continues to be a mainstay for many organizations seeking collaboration externally. However, many companies find it challenging to activate network partners. Challenges can range from not knowing how to engage them to not knowing which partners to engage for specific knowledge gaps. Although these are legitimate concerns for some companies, there are simple solutions to solving them. Starting with very basic knowledge management and extending this to outside partners, a company can quickly determine who may have the new knowledge they are seeking. If the seeker is looking for something novel, and does not know where to go for the information, they can issue a request for information (RFI) to all of their network partners to determine who would be able to provide them with what they need. Simple vetting could eventually lead to non disclosure agreements, and eventually new agreements.

Example of Network Collaboration:

A Fortune 500 food company was connected with a Fortune 100 materials supplier who had a novel adhesives solution for a seal on a packaged food item. Request for Proposals brought the two groups together for the first time although the two companies had a longstanding supplier relationship.

Describe a challenge your company faces in collaborating with existing innovation network partners

“Accessing and leveraging compartmentalized relationships on an as needed basis—we typically have to ask a handful of people before finding the right contact and the full story... As with Internal, we struggle to prioritize opportunities with external collaborators.”

Representative comment from an R&D Manager Automotive Company, U.S.

In addition to the issues of partner management, our survey respondents identified several other common challenges to network collaboration. These challenges to network collaboration can be seen in Figure 5.4 below.

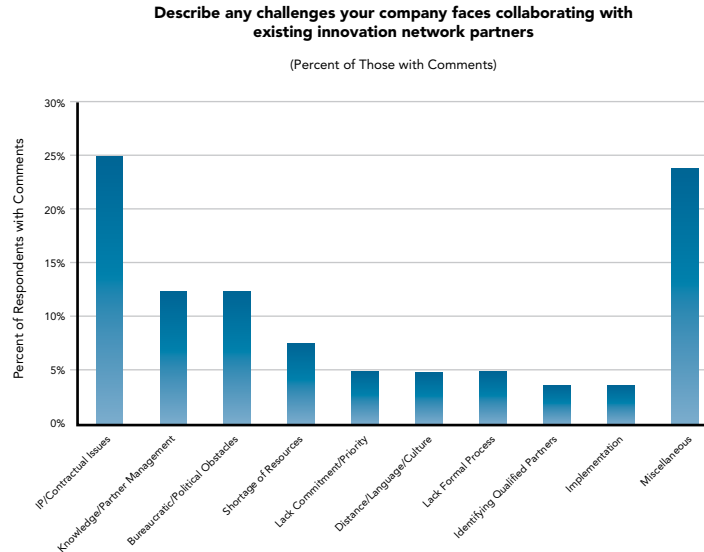


Figure 5.4 Challenges to Network Innovation

A large number of respondents chose IP contractual issues as their primary roadblock to successful network collaboration, followed by partner knowledge management and bureaucratic issues. These challenges, as well as many of the others listed, can be resolved in most cases with a dedicated open innovation function and process. Such functions require a commitment, a dedicated budget and strong executive sponsorship to champion success. Standard cross functional processes, which include R&D, purchasing, legal and other departments, can significantly accelerate the acquisition and adoption of outside knowledge.

Several respondents indicated that the bureaucratic red tape within their own companies was the reason that they could not go to the outside for new knowledge. Another interesting viewpoint provided by a respondent who is both a solution seeker and solution provider was that most seekers are looking for solutions that are plug-in ready, and most often unwilling to carry the risk of including a third party to co-create the solution. Regardless of the challenge, having a dedicated OI entity and knowledge management system can help in the functional and cultural transformation necessary to increase a company’s innovative and absorptive capacities.

VI. Global Collaboration

The Global Collaboration segment of the survey was designed to explore how companies are reaching beyond their companies and close-in networks to access information from the global innovation community. Accessing information outside a company’s managed networks can prove to be a bit more challenging without having access to various networks that would provide a portal into new sources of knowledge. Figure 6.1 below shows the survey results for Global Collaboration.

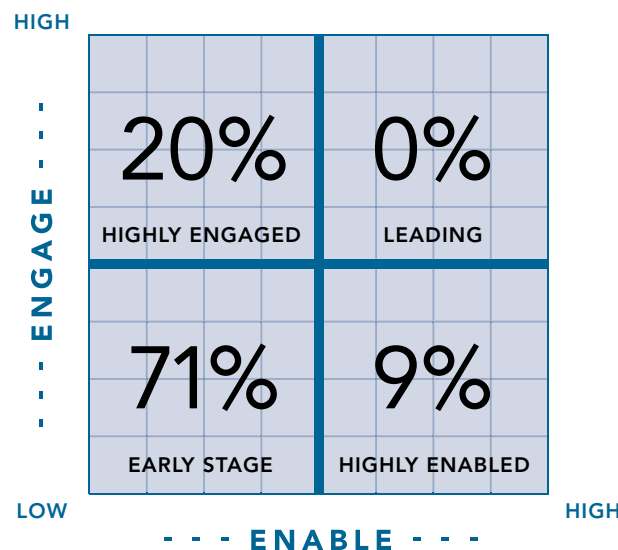


Figure 6.1 Global Collaboration Results

With open innovation becoming commonplace in most large organizations, it is surprising that no companies responding to the survey ranked in the “Leading” quadrant of our evaluation chart. Only 20% of respondents were shown to be Highly Engaged, meaning that many organizations still struggle to make new contacts outside of their managed networks. Despite the lower percentage of respondents in the “Highly Engaged” category, the number of “Highly Enabled” respondents was actually slightly higher than the results of the Network Collaboration category. This indicates that some organizations are not taking advantage of their close-in network partners as a primary source for innovation solutions, and focusing more on the integration of knowledge from outside the organization. This could be the result of companies relying primarily on intermediaries to solve innovation challenges, as some intermediaries will recommend process improvements to aid the integration of new knowledge

Fast Figures

- 70% of respondents were Early Stage in their global innovation collaboration and a statistical 0% of respondents scored in the Leading category
- Innovation intermediaries cited as the most common resource for accessing new knowledge from the global innovation community

Example of Global Collaboration:

Hallmark was seeking new technology to extend a physical communications medium into the digital world and issued a technology search to find the right partner. After evaluating a number of potential partners with novel approaches, the company selected a solution provider in Germany to further develop the technology solution. This resulted in a breakthrough new category of greeting cards that was introduced to the market in nine months after launching the project.

partners from the outside. While intermediaries can reveal and provide access to many significant new sources of knowledge and IP, a company should not exclude its internal and managed networks.

When new knowledge is identified in universities, companies or other institutions within the global innovation community, acquirers have an opportunity to add them into their close-in networks or knowledge management systems, thus expanding their innovation ecosystem with each new contact made. The survey results indicate that many organizations are not taking advantage of this opportunity, and therefore, often repeating the search process externally, when a known partner could already have the solution. By continuously integrating new contacts with desirable knowledge (even if they do not have a solution for an the immediate problem at hand), a company can build a productive ecosystem of innovation partners that can contribute to future challenges.

There are several effective methods and tools that a company can use to solicit new knowledge partners from the global innovation community. Figure 6.2 shows the tools most commonly used by respondents of the survey.

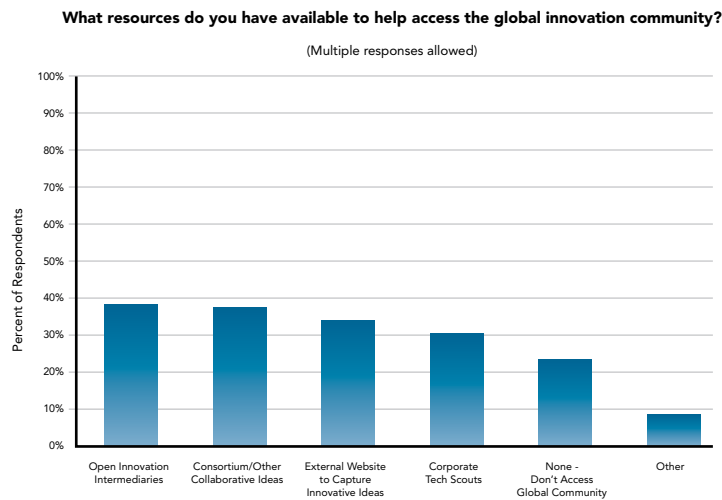


Figure 6.2 Global Collaboration: Resources & Tools

The most common resource for accessing new knowledge from the global innovation community is intermediaries. Many different types of intermediaries exist, and choosing the right one for a specific need is crucial to the outcome of the project. While most intermediaries rely on attracting potential innovators to their website to browse through posted challenges, few (like NineSigma) will actually perform a proactive global search to find the right community of potential solvers, and invite them to respond to the challenge by sending them a request for proposal (RFP).

Participation in consortia and other formalized groups that encourage organizations to collaborate on a non-competitive or pre-competitive basis are another common means of accessing outside knowledge. Such group activities can be effective for sharing insights and experiences with other companies and organizations that have similar issues. However, one of the most common complaints among consortium participants is the lack of a common goal or timely outcome. For example, many consortia are formed to address regulatory or other issues that impact a broad number of organizations. However, after they organize, bureaucracy tends to take

over, resulting in very slow or no progress at all. If consortium members can unite to quickly identify a common goal, then open innovation can be used to identify the pockets of knowledge that can be used to solve the problem, and effective action can be taken almost immediately.

Another tool that many companies and government agencies are beginning to use to engage the global innovation community is external innovation websites, or portals. Innovation portals allow a company to post their innovation needs to the outside world, publically soliciting problem solvers for specific needs. This has worked well for several early adopters of the innovation portal idea, but as the number of companies developing new portals continues to grow, innovators will likely be challenged to search all of the portals for new bidding opportunities. Similar to the dilemma that many intermediaries have today, innovators have too many choices, and finding the right one is merely situational. Another issue with innovation portals has to do with confidentiality. Many companies are reluctant to post their most pressing needs on a public portal, because of competitive issues. This problem can be resolved by using an open innovation intermediary or a savvy internal technology scouting function.

Technology scouting organizations are becoming more popular in larger companies, and are beginning to adopt a proactive search model to find outside knowledge. Technology scouting has been used by several companies to some degree for the past several decades. However, it has become more popular as search engines, web technologies and relevant online tools began to improve. Technology scouts identify the knowledge gaps within their organizations, and search their internal and external networks for potential solutions. Scouting organizations are often key buyers of intermediary services. In fact, many scouting functions use intermediaries to identify knowledge sources from around the world that are not immediately obvious or accessible to their organizations.

Once new knowledge is identified by the organization, the process for managing and integrating that knowledge begins. Figure 6.3 below shows the survey results, as they pertain to the management of outside knowledge and IP.

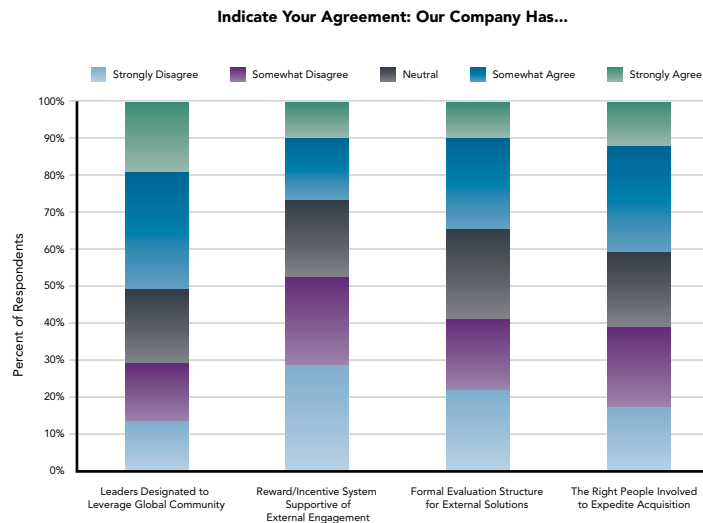


Figure 6.3 Global Collaboration: Leadership & Management

It is common for companies that maintain an active open innovation discipline to design processes to ensure the identification, selection and acquisition of new knowledge can happen in an expedient manner. Because acquisition or licensing is common with such transactions, processes should be pre-established, including active participation of legal, purchasing and other departments that would need to be involved. Waiting until the last minute to include such departments outside of R&D will almost always result in a delay. Within R&D, the appropriate structures should be implemented to ensure that all of those who will need to review the incoming technology are proactively engaged. Furthermore, budgets should be arranged before the search begins to ensure that a worthy deal is not interrupted because the organization must find the funds to close the deal. Surprisingly, many deals that were deemed high value have fallen through, because the seeker took too long in the acquisition process, resulting in the solution provider’s loss of interest.

Rewards systems are not the first thing that comes to mind when one thinks about open innovation enablers, but the proper reward system can significantly ease the integration of new knowledge. Many R&D professionals are rewarded for their ability to invent, or to be the first one to come up with a new idea. This type of reward structure actually inhibits innovation, as it limits the inflow of new ideas to the individual level. If, instead, teams were rewarded based on the ideas and knowledge that they found—regardless of the source—they would be motivated to use all possible sources to find new ideas and solutions. This has a tendency to significantly impact the culture of an organization by creating an environment conducive to openness.

Engaging the global innovation community and enabling the adoption of new knowledge from outside sources does not come without its own set of challenges. Figure 6.4 below shows the most common challenges met by organizations reaching beyond their own internal sources to find solutions.

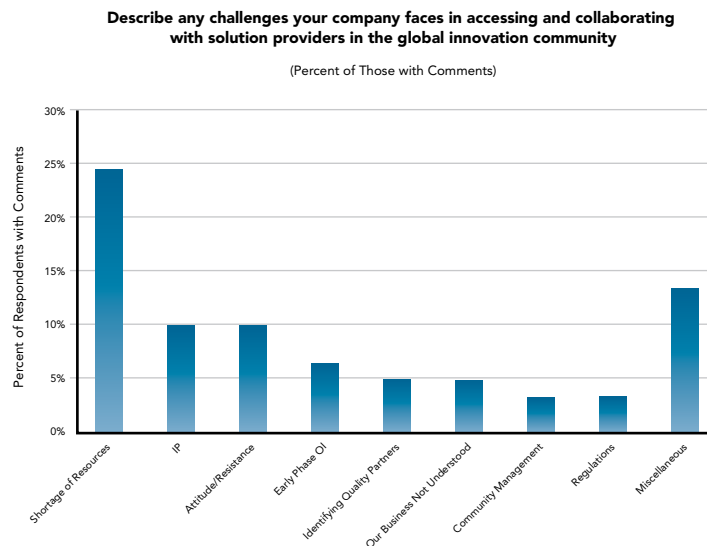


Figure 6.4 Global Collaboration Challenges

The survey results clearly indicate the shortage of internal resources to manage open innovation processes as the leading inhibitor. Companies that do not have a formal and dedicated open innovation team often have difficulties prying resources from their current jobs to focus on other activities. With the recent market decline, many R&D organizations imposed resource cuts, while expecting higher productivity levels. By not instituting a formal open innovation function, such tactical decisions to cut resources can result in strategic innovation shortcomings. Unfortunately, many of the recent R&D cuts were made without first comparing the cost savings of the cuts against the possible early-to-market opportunities and enhancements to the organization's innovative capacity that come with a well-executed open innovation program.

IP control issues are the second leading challenge in acquiring new knowledge from the outside. Many companies and universities—especially universities in the Western Hemisphere—are unwilling to sell their IP outright. Many seekers, on the other hand, are unwilling to license the new technology, as they strive to ensure competitive advantage by owning the IP outright. Many university technology transfer offices are developing creative new licensing structures that allow the seeker to maintain first-to-market advantage, which include exclusivity clauses for a negotiated period of time, or within the seeker's industry. If both seeker and solution provider can keep an open mind throughout the negotiation phase, deals can often be arranged that meet the criteria of both parties.

Cultural resistance was discussed earlier, as it pertains to reward systems for open innovation. However, other forms of cultural resistance have caused many potential deals to sour, including the inability of a solution seeker to understand, or “speak the same language” as a solution provider, who may come from a highly academic or theoretical environment. The same goes for solution providers, who are often unable to understand the business metrics and drivers of the seeker organization. There is much opportunity for further development and maturity of the open innovation industry that can begin with the simple understanding of other cultures, and the willingness to adapt for mutual success.

For those organizations that are just beginning to consider open innovation, there is a whole new frontier of potential new knowledge and inspiration. By learning which gates to open, and the right tools and resources to deploy, a company's innovation capacity can multiply by orders of magnitude, and new developments can be accelerated significantly. The most obvious place to start is with a company's own people, cultivating an environment that is deemed safe for collaboration at all levels. Once this is achieved, there are ample tools, service providers and proven best practices that can be used to design the optimal open innovation entity to fit the culture and specific needs of the organization.

VII. Observed Trends & Opportunities

In this final section of the report, we would like to offer some additional thoughts regarding trends and opportunities that we have found throughout the evaluation of the survey results, as well as some anecdotal information gained from our daily interactions with the hundreds of companies served by NineSigma. The following discussion points were found to be most significant and evident, and will hopefully help you to gain new insights towards the development of your open innovation initiative.

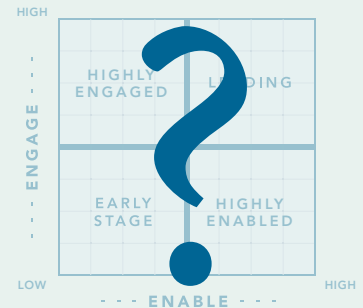
Social media and knowledge management: The optimal mix

While there is no direct evidence derived from the survey indicating that the use of knowledge management systems is on the decline, we do see an increasing number of R&D professional voicing their concerns about the inability to effectively manage internal knowledge. More and more companies, including medium sized companies, are relying on social media and crowdsourcing platforms to keep their professionals “plugged in” to new sources of knowledge, when needed. While social media and crowdsourcing platforms are highly effective for most companies using them, it is not a replacement for traditional knowledge management systems, which are designed to capture knowledge sources across the company, even after such sources exit the organization. Social media platforms do not do this. With the right combination of knowledge management and social media, a company can ensure that knowledge is not only captured and retained, but also disseminated quickly and efficiently where and when it is needed.

Finding the right OI tool for the right need

Some survey respondents indicated that they often experience difficulty selecting the right tool or service provider for the need at hand. There are many tools, systems and service providers, and their capabilities often overlap. Few of the companies that have developed an advanced capability in open innovation have developed a “toolkit,” allowing innovation seekers within their companies to identify the type of need they have, and quickly find the appropriate tool. The same objective can be achieved simply by having a person or team trained in open innovation, and by having them serve as a resource for those seeking outside knowledge. This is how many companies initiated their open innovation programs, allowing them to continue to develop as open innovation wins increase, and demand continues to accelerate.

How Does Your Organization Compare?



If you haven't already taken the OI Scorecard Survey, [click here](#) to get your organization's Open Innovation Score.

GET YOUR OPEN INNOVATION SCORE

Assessing and developing OI team members

Finding the right persons to lead and implement a new open innovation program is not as easy as assigning any R&D resource to the task. It requires a unique set of skills and capabilities that are not always inherent in every R&D professional. Instead of deep, scientific thinking, the OI professional must be able to think broadly, and see possible connections across the boundaries of industry and scientific discipline. They must be good networkers, and have the ability to inspire others to think and work collaboratively. They must view the entire global innovation community as their laboratory, and be able to spot unobvious connections across organizational and academic boundaries. Psychometric evaluations are available (e.g. the NineSigma-Caliper evaluation) to aid in the selection of the right resources, as well as the development of OI professionals and effective teams.

Aligning the organization's reward systems

Although it was mentioned several times in this report, the alignment of open innovation objectives and corporate rewards systems continue to be a challenge with many organizations implementing new OI programs. Like open innovation, with the introduction of any new process, the human resources department must be included to ensure that the proper metrics and rewards structures are implemented. No large organization can change its culture in a manner that is predictable and controllable. However, certain influential behaviors can be modified through the use of enforceable metrics. By implementing the proper metrics, and celebrating successful OI projects with enthusiasm at all levels of the organization, the culture can be rapidly influenced in the desired direction, allowing open and collaborative innovation internally and externally.

Legal policy and the acceptance of OI

Another area that is often lagging behind the introduction of a new open innovation program is within the legal department. Many legal policies restrict or even prohibit personnel from engaging outside resources for new product development activities. A simple IP strategy should be developed that clarifies what is core to the business and must be owned, versus IP that is peripheral to the business and thus acceptable to license. Such an IP strategy should be considered a business decision, and not a legal decision, although it will have a direct impact on the conduct of legal negotiations. Similar to rewards systems, legal policies that do not include open innovation considerations can unexpectedly halt the acquisition of an outside resource. To change such policies is easy. However, it requires strong, proactive executive sponsorship that can demand such changes across the company. Process development for new OI initiatives should include all parties and departments that will have an influence on the adoption of any outside knowledge resource. Such policies occasionally constrict collaboration among different business units and departments, and should thus not be restricted to external collaboration.

Middle Market OI participation

The number of companies participating in open innovation is rapidly increasing. Smaller and mid-sized companies have the same needs to innovate as large companies, but often do not have the financial resources necessary to participate in a well organized manner. Mid-sized companies (\$250 Million to \$1 Billion USD) as well as smaller organizations have participated as solution providers since the term "open innovation" was coined. Now that they are ramping up to participate as solution seekers, some barriers are still too high for many. Assigning resources to initiatives that are not directly linked to future operating income is risky for many individuals and departments—especially in a down market. Therefore, if a smaller or mid-sized company wishes to formalize an open innovation function, it will require executive buy-in and sponsorship, with the understanding that open innovation will lead to early-to-market advantages and long-term cost savings.

Innovation consultancies and intermediaries will have to begin exploring new cost-effective ways to provide services to these markets, while ensuring the same level of success. As open innovation is still a young and blossoming industry, many new services, tools and platforms will continue to be developed, providing new opportunities for participation at all levels.

Understanding the value of OI at all levels

Open innovation value is a relative term. Depending on who is asking the question, value can be perceived differently among different areas and levels of the organization. Therefore, when introducing an open innovation program to any organization, various value propositions may have to be developed in order to ensure buy-in at all levels. For example, a business unit leader may view open innovation as an opportunity to bring products to market faster, or as an opportunity to find disruptive innovation opportunities that will shift the markets in their favor. The Chief Technology Officer may view open innovation as a potential improvement to the R&D cost center. The Chief Marketing Officer may view it as a way to increase the company's capacity for ideation. To gain buy-in within each of these areas, carefully crafted value propositions will need to be developed and rolled out with a corporate change management program that includes training and education activities that are customized for each part of the organization.

Closing the gap between identifying and capitalizing on OI solutions

Another concern that was repeatedly mentioned in the survey was the gap that exists between the stage where an outside innovation is identified, and the point at which it is capitalized within the acquiring company. This gap can be the result of several of the trends and concerns mentioned above. Culture, rewards systems, process, training, and having the right people involved at each stage are some of the most common culprits. Given the unique nature of each company's culture, organizational structure, industry alignment and size, there cannot be a one-size-fits-all solution. An open innovation program must be carefully thought out and planned, beginning with the strategic alignment of the program and identification of goals and objectives, and continued through with the proper design and rollout. The development of a new open innovation program, process and organization should not be viewed any differently than the development of any other new business process or organization.

Corporate OI portals on the rise

Many companies, universities and government agencies are recognizing the advantages of open innovation and implementing portals, or web pages that communicate to the outside world what new innovations they are seeking. Such portals are an effective means of recruiting new solution providers and collaboration partners. In fact, they are so effective that more and more companies are implementing them. Today, we see websites like Innovate with Kraft, General Mills' GWIN, and the Clorox Innovation Site. Although the number of such websites is perhaps still under 100, they are rapidly increasing in number. Solution providers will no longer be able to scan all innovation portals to see where opportunities exist. As site numbers increase, they will likely go back to those sites with which they are most familiar, based on either proximity or industry. Until such innovation portals can be aggregated, one can expect innovation performance to increase incrementally, at best, as a result of such portals.

We are interested in hearing your feedback on the OI Scorecard Survey report. If you have any comments or questions, please contact us at innovation@ninesigma.com. If your corporate innovation team is interested in taking the survey and evaluating results within your group, NineSigma can facilitate this process. Contact us to learn more.