THE 2022 R&D AND INNOVATION AGENDA

The resurgent innovation imperative in a post-pandemic world



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EXECUTIVE SUMMARY

We live an age of mounting upheaval. As the year 2022 began, it would have been reasonable to think that the worst ravages of the global pandemic were behind us, and that the world might settle once again into a more predictable pattern. But it was not to be. Instead, we have faced persistent supply chain issues, the specter of inflation (and possibly global recession), and continued economic uncertainty. Plus, there's war in Ukraine, growing tensions along the Taiwan Strait, and the threat of instability even in the world's most developed economies.

In another time, perhaps even a few years ago, such difficulties would have led corporations to reduce their innovation ambitions. Conventional wisdom among executives has held that when the business outlook is unclear, it's difficult to justify strong investments in a speculative future. Before acting, you must know which way the wind will blow.

Yet our annual study of trends in corporate R&D and innovation suggests otherwise. In 2021, respondents told us that their companies were growing more ambitious with their innovation programs. Then, in 2022, instead of a retrenchment, innovation plans became *even more ambitious* – and senior executives became *even more committed* to supporting an expanded innovation mission with a clear strategy **(Figure 1)**.

The most immediate explanation is that R&D and innovation programs have emerged from the pandemic with fresh wind in their sails. During the worst of the COVID-wrought crisis, innovation teams helped their colleagues enact dramatic business changes overnight. And when highly effective vaccines materialized in record time – thanks to long-running research on mRNA as an innovative new vaccination

Figure 1. Innovation ambitions

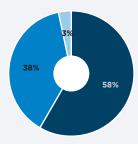
To what degree have your organization's innovation ambitions changed within the past 12 months?

- 15% Significantly more ambitious • 12% Somewhat less ambitious
- 47% Somewhat O 1% Significantly less ambitious
- 25% About the same as before



We have a well-articulated corporate innovation strategy.

- 58% Strongly agree 0% Somewhat disagree
- 38% Somewhat O% Strongly disagree
- 3% Neither agree nor disagree



approach – it served as a vivid reminder to executives worldwide of how much value can be created by longterm investments in science and technology.

There are also deeper forces of technology change at work. These forces are in fact the most powerful underpinnings of today's bullish attitudes on innovation, and they have been operating since well before COVID first appeared. Our research suggests the ascendant importance of "deep tech" will continue to drive corporate innovation trends for years to come.

Over the past few decades, the most consequential innovations have been associated with software and the internet. Digital transformation remains an important corporate priority. But a great number of other technology revolutions now loom on the horizon, spanning a wide range of disciplines from robotics and AI to synthetic biology to cleantech to nanomaterials and much else in between.

When it comes to innovation, as with many other aspects of business and society, the pandemic appears to have accelerated changes that were a long time coming. The rising importance of corporate R&D and innovation functions, especially with an eye toward investing in the next generation of transformative technology platforms, looks like a correction that's here to stay.

I. THE PANDEMIC AND ITS AFTER-EFFECTS

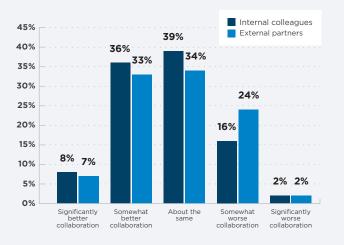
Collaboration improved during COVID

Early in the pandemic, companies scrambled to support day-to-day collaboration as employees began working from home rather than in the office. Yet at least for R&D and innovation teams, this year's survey suggests that the pandemic's overall effect on collaboration was slightly positive (**Figure 2**). This was true both for innovation projects with external partners and those involving internal colleagues.

To be sure, it has not been all sunshine and roses. In the spring and summer of 2020, innovation teams struggled with several consequences of the lockdown. One of these was how to keep lab work going. In many cases, there was no choice but to scale back. Scientists and technicians would rotate on-premise shifts to keep mid-flight experiments running, while everyone else caught up on desk work – writing up research

Figure 2. COVID's effect on collaboration

How has the COVID-19 pandemic affected your ability to collaborate on innovation projects?



and submitting to journals; planning new research strategies; and so on. For many teams, the normal flow of innovation work was profoundly affected.

Innovation brainstorming constituted a second activity where collaboration suffered – especially for sessions focused on big-picture, strategic questions with multiple lines of inquiry. As we heard from a range of interviewees, there is really no substitute for creative sessions conducted in-person. As travel restrictions became less severe, most innovation teams continued working remotely, except for group planning and strategy sessions – in which case the impulse was to gather collaborators in the same location once again.

The ability to vet external partners also sagged during early COVID. This was especially true of innovation projects that involved lab-based research or manufacturing expertise. It is one thing to hold partnership discussions on Zoom, but guite another to inspect a factory from afar. We heard from multiple leaders that their ability to launch new partnerships involving wet labs or industrial production essentially ground to a halt - at least until corporate innovators were cleared to travel again. Even in cases where a partner relationship technically could have been consummated virtually (e.g., partnerships involving cloud-based technologies), most innovation leaders told us that the management trust between their company and the partner developed more slowly than otherwise. In some cases, they found it impossible to build sufficient rapport remotely, especially in strategically sensitive domains or on tricky upstream projects.

Yet in retrospect, these difficulties may have been a blessing in disguise. Although many innovation teams are still operating at least partially remote, it is now by choice rather than of necessity. The pandemic forced R&D and innovation groups to build stricter discipline in distinguishing between different types of collaboration. At many companies, it is now easier for innovators to carve out uninterrupted heads-down time when delving deep into a problem space – while also being able to congregate for those activities where face-to-face collaboration is critical. For a sizable proportion of this year's respondents, this represents a "best of both worlds" scenario that is an improvement on the pre-pandemic status quo.

Process improvements dominated 2021

During the height of COVID, many innovation efforts acquired an all-hands-on-deck quality. Many more people became "innovators" than the actual teams carrying that name. And the activities of many R&D and innovation professionals took on a sudden enhanced importance – especially when solving urgent problems such as architecting a virtual workplace, making or procuring personal protective equipment (PPE), reconfiguring operations for supply chain durability, and so on.

The net effect is that most companies once again began to view innovation as a mission critical capability. Before COVID, corporate R&D and innovation groups were often sleepy corners of the company hierarchy. And while it is true that some of those teams suffered cutbacks to both staff and budget in the early days of the pandemic, those days are long since over. More recently, those early setbacks have been countered by a broad upswing in relevance and corresponding re-investment. For our qualitative research, both in 2021 and 2022, we heard many stories of innovation teams adding new headcount and gaining greater stature within the organization.

Innovation's increased salience has materialized in different ways over time. New innovation programs instituted in 2021 leaned dramatically toward process improvements – effectively a greater formalization of the innovation organization, based on a renewed understanding of its importance to the company's fortunes (**Figure 3**).

As one might expect, by 2022 these COVID-era efforts were steadily viewed as "mission accomplished" and had

largely subsided. But their effect remains: the innovation processes have been better codified, their expected contributions to the organization better defined, and innovation's ability to manage its own priorities, resources, and outcomes better ensured.

In some industries, upgrades to the innovation mission stem from pandemic-era changes wrought upon the business itself. In much of the retail and services sector, for example, consumer behavior has shifted in ways that may prove durable. The innovation leader at a national restaurant chain explained that during the pandemic their business shifted dramatically from the customary dine-in business in favor of drive-through. Although the numbers have eased backward somewhat, there is a sense that it may never go back to 50/50 where it once was. A range of related anecdotes suggest that it may be some time before most innovation teams know what the steady-state version of post-pandemic "normal" truly looks like.

Supply chain issues are a short-term concern

For the past few years, and especially from late 2021 through much of 2022, supply chain issues complicated daily operations for a large swathe of companies. Almost no sector has been spared, from food companies dealing with chicken shortages to automakers struggling to secure semiconductors. The war in Ukraine has further exacerbated these difficulties by creating global fuel shortages that have sharply increasing shipping costs – leading to additional supply chain bottlenecks.

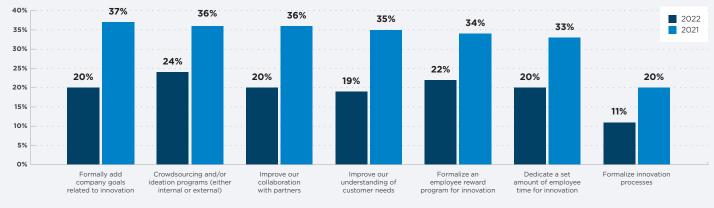


Figure 3. 2021's innovation priorities

Which of these actions has your firm taken to improve the company's ability to innovate? (percent answering "currently piloting") When these problems have been most acute, R&D and innovation teams have been pulled into the battle to secure supplies. As one leader put it, there has been constant pressure to answer the question "how are you saving my business today?" As such, long-term innovation projects have at times taken a back seat to an all-hands-on-deck response. Perhaps it is no surprise that 75% of survey respondents reported that supply chain issues were having at least some impact on their innovation activities (**Figure 4**).

Figure 4. Supply chain's effect on innovation

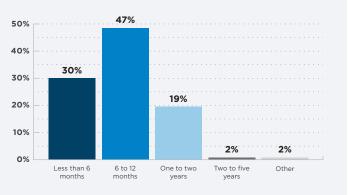
Which of the following best describes the effect that ongoing Supply Chain issues have had on your company's innovation activities?



10%

25%

To the extent your innovation programs have been affected by ongoing Supply Chain issues, how long do you expect the changes to last?



And yet, very few leaders (only 10%) expect supply chain woes to exert a significant effect on their innovation activities. Although it has been common to down-prioritize longer-term innovation projects when supply chain problems overwhelm the organization, almost everyone assumes that strategic priorities will continue forward, albeit at whatever background pace is tolerable amidst the short-term upheaval. Even these distractions appear to be transient, as more than three-quarters of respondents expect supply chain issues to subside within the next 12 months.

In the longer run, the recent supply shocks seem to have boosted the perceived value of innovation to the company. Innovation teams' ability to pivot quickly and find creative solutions to pressing problems has raised their stock culturally among colleagues. At the executive level, leadership teams have re-learned the strategic value of maintaining a healthy innovation portfolio to future-proof the business from dislocations. Going forward, to shore up the continuous availability of core materials and product components, companies are looking to a revamped innovation group to help lead the charge. As an R&D leader at a large agribusiness explained, "we are re-thinking the role innovation must play, because we can't take anything for granted anymore."

Inflation has not dented ambitions

Whereas supply chain challenges present an immediate threat to business continuity, the specter of persistent inflation has threatened to cast a pall on forward-looking innovation plans. Through the first half of 2022, many R&D and innovation leaders adopted a wait-and-see attitude, delaying aggressive re-investment in core innovation programs until they could determine whether recession-driven budget cuts were likely to materialize. In some industries – particularly those with short cycles such as consumer goods, food & beverage, and retail – innovation leaders have proactively cut back on projects and programs in anticipation of rockier days ahead.

Despite the extra caution, our research shows that most innovation leaders do not expect to make permanent changes to their strategic ambitions, regardless of the macroeconomic climate. In fact, nearly a third of respondents (31%) expect that inflation pressures will make their company *more willing* to invest in longerterm, non-incremental innovation programs (Figure 5). And although inflation's effect on innovation activities may last somewhat longer than supply chain issues, the vast majority of respondents (83%) expect the lingering effects of inflation to dissipate within the next one to two years.

Figure 5. Inflation's effect on innovation

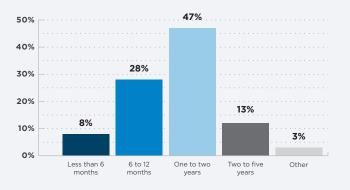
Which of the following best describes the effect that current and expected inflation issues are having (or are likely to have) on your company's willingness to pursue non-incremental innovations ("horizon 2" and "horizon 3")?

4% Significantly more willing
27% Somewhat less willing
27% Somewhat more willing
27% Somewhat less willing
43% About O% Not sure / don't know

To the extent your innovation programs are being affected (or are likely to be affected) by current and expected inflation issues, how long do you expect the changes to last?

27%

43%



Consider how today's uncertain business climate has raised the profile of corporate R&D and innovation teams. Even just a few years ago, virtually all large companies viewed innovation programs as fundamentally discretionary – "nice to have" activities that could safely be pared back in a downturn. But with large structural changes looming on multiple horizons – from geopolitical instability around the world, to the threat of future pandemics, to the economic effects of climate change – executive teams have increasingly come to view R&D and innovation programs as mission-critical. As one senior executive explained to us, "in this environment, we all realize you can't save your way to growth."

This mindset shift is driving corresponding changes in firm behavior. The most consequential of these is a renewed preference for investing in organic innovation programs led by in-house teams. That's a marked contrast from the prevailing dynamic of the past twenty to thirty years, in which firms relied upon M&A activities (usually, acquiring startups) to "buy innovation" rather than prioritizing internally developed innovation programs. Although acquisitions will continue to be a part of the innovation and growth playbook, many of this year's research participants believe that a switch toward sustainable in-house capabilities will persist as a favored innovation vehicle for years to come.

There are two underlying causes driving this trend. First, many executives expect that today's rising interest rates will signal a permanent end to a long-running era of cheap capital. If so, the ease with which corporate entities manage to buy innovation assets on the public markets will wane. In parallel, there has been an upswing of foundational technology innovations across a wide range of disciplines and domains, from quantum computing to genetic engineering to advanced materials. The "deep tech" investments in basic research increasingly present attractive innovation opportunities in nearly every industry. In addition to building internal programs to follow these trends, a growing appetite for external partnering, co-creation, and emerging technology incubation has begun to prevail.

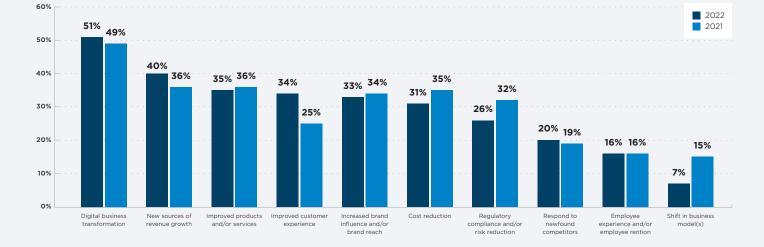
High-level business priorities haven't changed

Over the past few years, the world has been buffeted by an incredible amount of change. But you wouldn't know it by looking at this year's survey, as the top business priorities remain virtually unchanged from 2021 (**Figure 6**). As has been the case for years, digital transformation tops the list – followed by new sources of revenue, product improvements, improved customer experience, increased brand influence, and cost reduction.

Perhaps even more surprising are those priorities that have remained stubbornly low. Despite hiring challenges wrought by a historically tight labor market, corporate innovation's desire to improve employee retention has not budged. Similarly, companies do not feel heightened urgency to respond to new competitors or to avoid being disrupted. And they are even less likely to prioritize business model innovation. As a senior leader at a multinational apparel company explained to us, the need to revolutionize their industry has taken a back seat given all the turmoil surrounding the business. Merely staying the course has felt like a win.

Figure 6. Top business priorities

Which of the following initiatives are likely to be among your organization's top business priorities over the next two years? (select up to three)



Two common-sense factors help explain what at first may appear to be counterintuitive results. First, most of the pandemic-fueled turmoil over the past few years is fundamentally transient – immediate shocks which, although extremely disruptive in the moment, are departures from baseline. Second, the "noise" from these superficial changes has allowed deeper-seated trends to continue spreading steadily in the background – including the requisite innovation work to capture value from emerging technologies.

As we noted in last year's study, many of the innovation governance and strategy trends from 2021 have been in the works for several years. This year is no exception. As a senior executive in the food & beverage industry told us, they expect "peaks and valleys" in the shortterm business outlook, and as a result they practice strategic patience when investing in long-term opportunities. "We just try to work around the shortterm dislocations, whatever they happen to be this year," she explained. Further, although the macro-level priorities appear stable, how companies choose to innovate has changed substantially – in a way that reflects a fundamental shift in innovation appetites and approaches. As we shall see in the next section, this "grand pivot" of innovation practices has been shaped and accelerated by the pandemic, but it also has deep roots extending back many years.

II. INNOVATION'S GRAND PIVOT

The innovation mandate has shifted

By the start of 2022, most innovation leaders had moved past early-pandemic crisis mode. Even as some continued to navigate aftershocks such as supply chain challenges and mounting inflation concerns, attention has swung back to creating future value. This ongoing shift has yielded an interesting mix of innovation priorities – some of which have changed markedly since last year (**Figure 7**). Our research highlights two particular areas of renewed prominence: co-innovating with customers, and building new avenues for growth.

In the wake of the global pandemic, a desire to regain customer intimacy makes sense. Companies around the world have scrambled to support remote employees, but for many innovators the more consequential dislocations were their interactions with customers – especially lead users. Stripped of the ability to visit customer sites, many innovation teams found it harder to build aggressive strategies for new versions of their products and services. Although the 2022 data show a clear priority for strengthening customer engagement with existing products, many companies also expect to leverage those improved relationships for new product development. In 2021, many of the "unmet needs" prioritized by innovation leaders were still directly related to the pandemic response – for example, expanding remote product support. This year, most innovators have returned their attention to delivering net-new customer value from product introductions.

But the urge to push the envelope only goes so far. Disruptive innovation has remained a low priority, hovering at just above 20%. Since at least 2020, there has been no need for companies to kick-start their own cycles of creative destruction. Disruptions have arrived on their doorsteps, whether welcome or not. This year, it is no longer the pandemic that is the main source of disruption. Rather, emerging "platform" technologies in a wide variety of scientific and engineering disciplines have inched close enough to maturity that they are kicking off the specter of substantive change across a number of industries.

The two most dramatic shifts in innovation priorities are therefore reactions to the brisk pace of external technology-driven disruption. Above all, companies in 2022 are feeling a heightened need to respond to new competitors encroaching on their space – a priority which has more than tripled, from 16% to 49%. A close counterpart is the need to identify and selectively exploit new whitespace opportunities ahead of rivals – which has itself more than doubled in priority, from 17% to 41%.

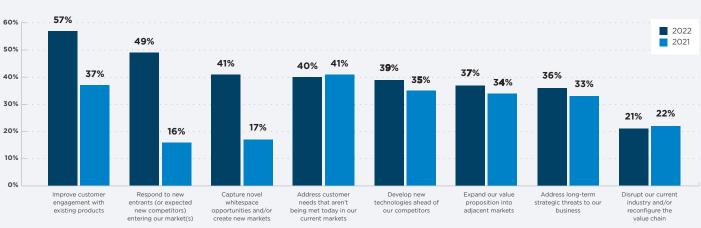


Figure 7. Innovation outcomes

company? (percent answering "very important")

How important are each of the following innovation outcomes to your

Investing in the future is the new priority

In 2021, as discussed earlier, innovation teams were busy launching or piloting operational innovations and process improvements. They set about formalizing the company's innovation goals; dedicating explicit time for employees to innovate; and formalizing innovation processes. But in 2022, the focus has shifted.

In line with the mandate to capture new whitespace opportunities, the mix of innovation activities has evolved. A growing proportion of companies are implementing programs that seek to chart new territory (Figure 8). Often, these activities go hand-in-hand. For example, it is common for a new innovation center, comparatively unburdened by the institutional baggage of an existing team or function, to build technology scouting programs, academic sponsored research programs, and other strategic innovation levers. Our conversations with innovation leaders highlighted that these initiatives were driven by the accelerated pace of new technology introduction in the external ecosystem.

A fresh wave of digital transformation is one contributing factor. Nearly every industry is exploring how AI and machine learning can automate insight collection and decision-making. Within retail, the notion of frictionless commerce and automated checkout has arrived. Logistics companies told us about end-to-end supply chain tracking through embedded sensors and big data. And in healthcare and life sciences, various companies from big pharma to hospitals to med device companies are looking towards big data to provide a comprehensive analytics picture of the quality of care.

Although many of these platforms are digitally enabled, an increasing proportion of disruptive technologies derive from fundamental advances in quantum physics, genetics, neuroscience, nanoscale devices, materials engineering, and other domains. To mention a few examples, biobased materials are already changing the game in packaging and consumer goods. In healthcare, advances in pharmacogenomics may herald a treatment revolution with the advent of precision medicine. And in agriculture and food, new gene editing technologies may change the landscape of plant and animal breeding forever.

In recent memory, most large companies would have seen such disruptive technologies as a threat. But the R&D and innovation leaders we spoke to think differently now – they see growth opportunities sprouting up everywhere on the horizon. One side effect of the pandemic is a renewed appreciation among top executives that innovation cannot be short-changed, at least not without significant downside risk. As a result, firms are investing in the technologies that will power the future of their industries. How well those investments will pan out depends on whether companies are properly organized for success.

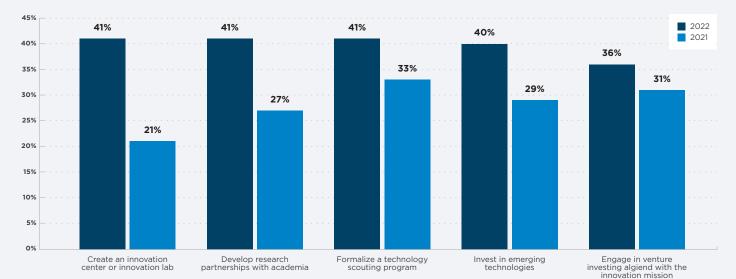


Figure 8. 2022's innovation priorities

Which of these actions has your firm taken to improve the company's ability to innovate? (percent answering "currently piloting")

Funding flows to innovation centers

As firms continue to expand their innovation investments, tracking how the money will be spent gives important clues as to strategic intention. In this sense, the most striking trend of 2022 is the sharp uptick in the companies that are funding new innovation centers - which is now up to 49%, nearly double the 2021 level (Figure 9). rejiggered versions of previous efforts; others have been launched from scratch. They tend to have well-defined missions that focus on driving non-incremental innovation. Particularly given the surge in emerging technologies, their activities focus on incubating game-changing opportunities upstream of the normal investment case "in the business." They place an emphasis on partnering with startups, scientists, and other innovators – seeking to find the most efficient

Which of the following methods does your firm use to fund new

innovations? (select up to three)

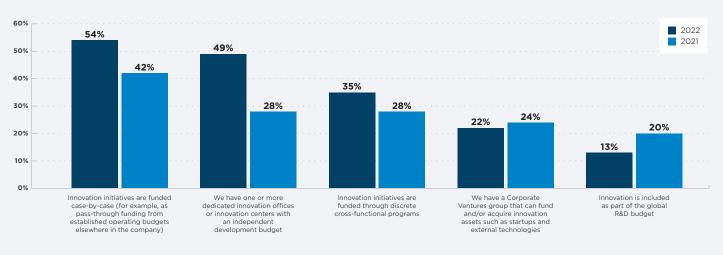


Figure 9. Innovation funding mechanisms

There was a time when "innovation center" almost always meant a regional R&D hub. These days, it is also increasingly common that the term refers to a standalone department operating separately from the corporate R&D or Product Development functions. This type of innovation center typically has its own staff and budget, along with a mission to spearhead innovation efforts that are beyond the risk/reward appetite of mainline P&Ls and business functions.

The first generation of these innovation centers ran its course over the past decade. Many have been derided as "theater" due to uncertain mandates, poorly designed processes, or weak internal connections with other innovation groups. Teams plagued by such issues have largely faded away, often quietly disbanded as part of broader leadership changes. Those that have survived tend to have clearer directives and better internal support.

This second generation of innovation centers is driving the sharp upward tick in our survey data. Some are path to proving a business case and accumulating scale-up leverage on behalf of the company.

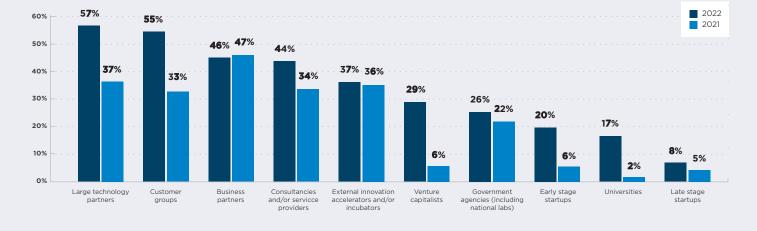
Firms prioritize new partnerships

When it comes to innovation partnerships, the survey data are unmistakable: certain types of partners have become much more common **(Figure 10)**. Partnerships with large technology players, customer groups, venture capitalists, early-stage startups, and universities are all are way above their 2021 levels. This begs the question – why?

One straightforward answer is the return from COVID. With the easing of travel restrictions and the return to "normal" operations, companies have re-engaged with typical innovation channels that had become less active during 2020 and 2021. Although that's part of the story, there are other factors that are more important. As we spoke with corporate R&D and innovation leaders, a more nuanced picture emerged.

Figure 10. Innovation partners

How often do each of the following ecosystem partners contribute to your company's innovation efforts? (percent answering "consistently")



Although large technology partners and customer groups often feature in core innovation programs geared toward product extensions and operational improvements, they're also implicated in other types of innovation projects. These types of efforts exist at the vanguard of current innovation practice and represent a trend that is independent of the pandemic's effects. Good examples can be found in the stitching together of data across a value chain. Healthcare companies aim to understand the entire spectrum of care. Food providers seek insights for how to deliver the freshest goods to market. Automotive companies need to understand how their solutions must evolve as the future of mobility takes shape. In each case, innovators are listening more closely to both their direct customers and the end consumer. They are also partnering with upstream and downstream suppliers, as well as new types of technology providers, to pool and analyze data that can drive critical innovation insights.

Separately, we must consider what's powering the rise in innovation partnerships with venture capitalists, early-stage startups, and universities. In recent years, due to both continued digital disruption and emerging "platform" technologies such as synthetic biology and renewable energies, companies have taken an increasingly keen interest in direct access to the breeding grounds for early-stage, potentially game-changing innovations. Since most corporations are not set up to interface comfortably with startups, it has become fashionable (even pre-pandemic) to partner with incubators and accelerators. These programs serve as gatekeepers, brokering access to regular cohorts of promising entrepreneurs, while also allowing corporations to right-size their commitment level.

By 2022, merely sponsoring a startup accelerator had become table stakes. Corporate innovation teams are now looking to extend their reach further, by building out scouting and partnerships programs capable of discovering and liaising with startups on their own. These teams can go well beyond the volume and breadth of interactions the company can accrue from acceleratorbased relationships alone. And because academic research drives much of the groundbreaking innovation in the physical sciences, life sciences, and materials sciences (among other fields), innovation centers and advanced R&D teams have been rekindling sponsored research agreements and other forms of academic and university partnerships as key levers for seeding their innovation portfolios with fresh options.

As multiple leaders explained to us during this year's interviews, their teams no longer have time to explore all the high-potential innovation opportunities they see on the horizon. Rather than risk falling behind, and rather than scaling up end-to-end disruptive innovation capabilities solely in-house, they also rely on external partners and collaborators as a primary means of attaining the necessary speed, scale, and leverage.

Innovation metrics are increasingly enterprise-wide

For years, innovation's ability to measure its impact on the business has been insufficient. This is not for lack of trying. Indeed, R&D and innovation leaders have long wrestled with how to demonstrate their function's full value to executives and the board. The problem is that, while incremental innovations are relatively easy to assess – since they fit directly into highly quantified day-to-day operations – valuing more ambitious innovation efforts is often little more than conjecture. Precise estimates of future value immediately invite skepticism, especially since it may be years after project inception before it's possible to assess results.

Yet this year's data suggest that innovation leaders are giving big-picture metrics another go – at least within the limits of currently available methods. More than half of all respondents (51%) reported that their companies were measuring innovation's effectiveness on a corporate-wide basis through direct financial measures (Figure 11). That's an increase of 59% above 2021 levels (32%). Similarly, the percentage of firms that are consistently measuring process- and stagebased innovation metrics (velocity through the pipeline, rate of new project creation, etc.) increased from 23% in 2021 to 43% in 2022.

Most of the leaders we spoke to are aware that these methods are unlikely to capture all of the value that R&D and innovation teams provide to the organization. Long-term strategic innovation programs can theoretically be measured through complex scenario design and simulation modeling – but the heavy resources required are mostly beyond the appetite of even today's largest companies. Nonetheless, with enough organizational discipline and the right systems and tools, most of the nontransformative innovation returns can be assessed systematically. When combined with sufficient strategic alignment at the C-Suite level, that's enough to provide a coherent enterprise-wide picture of innovation's return on investment.

The reasons for making a renewed push into company-wide innovation metrics is simple: companies are placing greater strategic importance on their capacity for innovation, and as such they need better measurements for the progress they've made. One executive told us that he was re-hired with the explicit goal of firming up the company's innovation strategy and then reporting the results regularly to the board. Another leader explained that there has been a change of heart within leadership – they are now prioritizing organic innovation (rather than M&A), and the senior team needs to know exactly how well it's going. We heard many similar sentiments across this year's interviews.

Innovation feels "harder" – and more important

In recent years, two competing realities have persisted across corporate R&D and innovation programs. On one hand, many companies have made flashy investments in new innovation centers, corporate venturing units, and startup accelerators – sometimes accompanied by significant fanfare. On the other hand, many mainline R&D and innovation functions have carried on under separate cover, often being asked to "do more with less." This dichotomy has led to a certain schizophrenia in how large organizations have pursued enterprise-wide innovation goals.

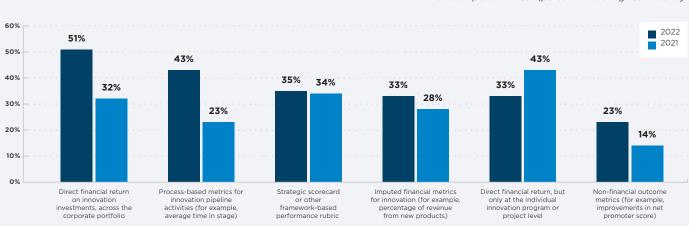
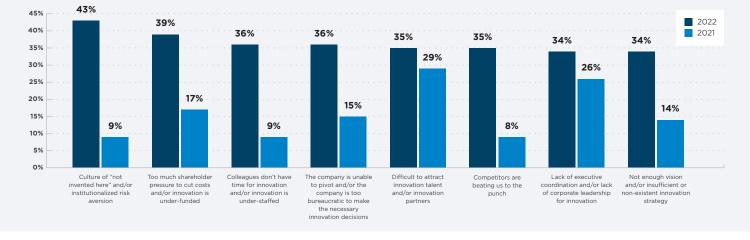


Figure 11. Innovation metrics

How often does your firm use each of the following methods to measure innovation performance? (percent answering "consistently")

Figure 12. Innovation impediments

How significant are each of the following factors as impediments to overall company-wide innovation success? (percent answering "very significant")



In 2022, there are signs that these coverage and alignment gaps are closing. Perversely, one indication is that innovation leaders rate the impediments to their success as more severe than before **(Figure 12)**. On almost every measure, survey respondents viewed their jobs as harder this year than in 2021. It is not that companies have gotten materially worse at providing strategic vision for innovation, or responding to competitive threats, or freeing up bandwidth to support the innovation mission. Rather, executives perceive the stakes as higher, and therefore the prevailing levels of organizational support have quickly become inadequate relative to the task at hand.

That is not to say that all of innovation's perennial challenges are now perceived as substantially harder. Large companies have long struggled to attract and retain top innovation talent, primarily because top-tier startups are able to offer a stronger sense of purpose and higher financial upside. To be fair, this difficulty still exists, hence why 35% of our survey respondents listed an inability to recruit innovation talent as a "very significant" concern. And yet, given the extreme difficulties employers of all stripes have experienced in retaining exceptional talent in the recent labor market, it is surprising that this impediment for innovation teams hasn't grown even more pronounced.

Anecdotally, we heard very little from this year's interviewees about challenges in attracting talent. Much more common were comments about the exploding opportunities arrayed before them, and the importance of ramping up next-gen programs and processes in pursuit of the organization's innovation needs. In this sense, although it is early in the post-pandemic business cycle, there are multiple pieces of evidence suggesting that R&D and innovation functions may have reached a turning point in their evolution.

Corporate innovation teams were once among the sleepier corners of the modern enterprise -typically overlooked by the most ambitious corporate careerists, and constantly overshadowed by startups in the public's imagination. Yet this year has seen an increase in the proportion that have been asked to tackle larger missions with bigger and more inspirational goals - to build a better healthcare system, or to design the future of mobility, or to achieve net-zero emissions. Whether this is a maddening, frightening, or exhilarating notion will depend on the individuals involved, as well as the organizational and industry context. Regardless, if 2022's trends persist, the elevated position of R&D and innovation programs may become the new normal.



Wellspring



Wellspring is the world's leading provider of R&D and Innovation Management software and solutions for corporations, universities, and government agencies. We help clients succeed in today's innovation economy by coordinating global R&D and innovation programs – managing development portfolios, researching technology trends, finding innovation partners, identifying startups, and commercializing inventions. Wellspring works with more than 500 organizations worldwide to support the continued development of the global Knowledge Supply Chain.

ABOUT THIS STUDY

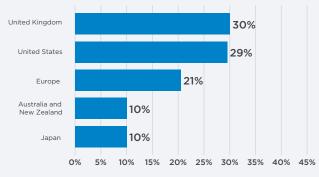
Our findings in this report are drawn from Wellspring's fourth-annual study investigating the R&D and innovation agenda at companies worldwide. In April and May of 2022, we fielded a 50-question phone survey with 553 mid- and senior-level corporate innovation professionals across industries.

Respondents were selected from a representative online panel of leaders; all participants were based in the US, UK, continental Europe, Japan, Australia, or New Zealand and were current employees at firms of \$1B or more in annual revenues.

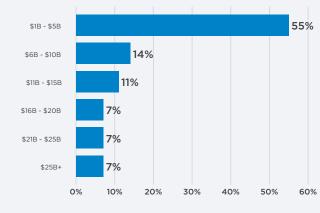
We screened respondents by seniority, functional affiliation, geography, and company size, as well as their level of involvement in the company's innovation efforts. In our data analysis, we controlled for company size, headquarters location, primary industry, and other factors.

To supplement the data analysis, we conducted several rounds of primary interviews in the summer of 2022, totaling dozens of interviewees across a diverse set of industries.

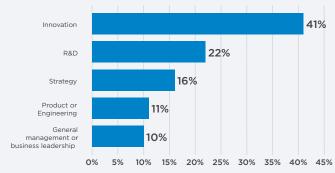
Primary Geography



Annual Revenue



Primary Function



Senority Level

