



Research

The Changing Landscape of
Corporate-Startup Engagement

September 2021

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Corporate
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WHY STARTUP-CORPORATE PARTNERSHIPS MATTER NOW



Irina Sigalovsky
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Startup-corporate partnerships play an increasingly important role in the corporate innovation journey and startup evolution. Yet this topic has not been widely researched or investigated. MIT Corporate Relations, which the Industrial Liaison Program (ILP) and MIT Startup Exchange are a part of, were delighted to collaborate with Innovation Leader to better understand the challenges and best practices of startup-corporate partnerships. Together, we reached out to a broad range of startups, early and late stage, as well as global corporations working across sectors and geographies to capture their expectations and perspectives about pain points and what needs to be done to make startup-corporate partnerships more successful. This report captures some of the most interesting findings and, even more importantly, further illuminates the white spaces and raises additional questions that will guide future research into this important topic.

The strong corporate relations that MIT has been forging since 1861 have proven to be a key success factor to creating transformational impact on the world. More recently, as corporations increasingly expand and accelerate their open innovation efforts, the MIT Startup Exchange platform was created to help them leverage

WHY STARTUP-CORPORATE PARTNERSHIPS MATTER NOW

MIT's world-class startups and entrepreneurial spirit by facilitating highly-vetted and targeted connections between them. Currently, MIT Startup Exchange has over 1400 active startups, and it is adding MIT-connected startups at an average rate of 140 per year. Together, the two programs have a unique understanding about how large global corporations and startups work together.

The value of leveraging complementary capabilities and the prospective impact that startup-corporate partnerships entail are potentially-game changing. For a small, high-growth startup, it may mean leveraging distribution channels, building up their reputation to help initiate other partnerships, and/or validating their technology or business model. For corporations, it may be an opportunity to reinvent their product offerings; rapidly de-risk, test, and acquire innovative technologies; foster in-house innovation; and/or quickly acquire new skills or creative talent.

While both sides naturally strive to achieve positive outcomes, the truth is, these relationships can be very challenging for both parties, and many end up being a disappointment or failure. On top of that, 2020 brought us a global pandemic that is pushing us to rethink the

way we work and collaborate, and is making us pivot in ways never tried before.

So, what are the root causes of failures and/or inefficiencies when startups and corporations work together? What is not working for entrepreneurs? Where do corporations fall short? How can we decrease the risk associated with these relationships and, more importantly, how can we improve them so they deliver on their full potential? In collaboration with Innovation Leader, we asked both parties to share their views and best practices. In addition, the Innovation Leader team conducted in-depth interviews with corporate innovation experts and startup founders. These are some of the questions we posed:

- ◆ What drives you to seek startup/corporate engagement? Which are the most challenging aspects of it, when initiating collaborations and then scaling up?
- ◆ Which resources do corporates have in place, and which ones are considered most needed to support startup engagement? Who are the senior leaders supporting (and providing funding for) this activity?

WHY STARTUP-CORPORATE PARTNERSHIPS MATTER NOW

- ◆ How did the level of startup/corporate interaction change, and what were the most challenging aspects of operating throughout the pandemic?
- ◆ How do you measure success? Can you point to successful outcomes? And what advice would you offer to help others get there?

In the next pages, you will find interesting and useful statistics, revealing interviews with founders and corporate leaders, as well as some anonymous advice provided by entrepreneurs and corporate professionals who responded to our survey. As we reflect on it, it is our goal to incorporate these learnings into our practice. We hope these will help you as well. The more we learn about challenges and solutions to startup-corporate partnerships, the better equipped we will be to support our innovation networks and entrepreneurial ecosystems.

— Catarina Madeira & Irina Sigalovksy

“The value of leveraging complementary capabilities and the prospective impact that startup-corporate partnerships entail are potentially game-changing.”



EXECUTIVE SUMMARY

The goal of this research project was to provide a clear picture of the state of corporate-startup interaction in 2021. We relied on data from a survey that received 255 responses from corporate leaders and entrepreneurs, as well as a series of qualitative interviews. Among the key findings:

Scouting and engagement efforts increased during the pandemic period. Without the ability to travel to trade shows, demo days, and university campuses, corporate leaders have shifted to more digital ways of scouting and collaborating with startups. Forty-three percent of our respondents said that their startup engagement had increased since March 2020, and the increase was even more pronounced for companies based in Europe (57 percent) and Asia/Pacific (60 percent.)

Prototypes, not PowerPoints, are what set startups apart. Most corporates say that a “quality” startup is one that has moved beyond the PowerPoint stage and had built prototypes or is already working with pilot customers.

Building internal support, and differences in operating speed, are the biggest challenges of corporate-startup engagement.

The top challenge of working with startups, according to our corporate respondents, is persuading other internal stakeholders of the merits of collaborating with or making investments in startups. And both corporate and startup respondents note that the difference in operating speed between the two types of organizations can cause friction and frustration.

CEOs and CTOs tend to be the executive sponsors of this activity. At 46 percent of large companies, either the CEO or CTO is the key senior leader to provide support. Just 15 percent of respondents said they don’t yet have senior support.

Corporate partnerships are a key reason startups participate in an ecosystem, and a factor they see as crucial to their eventual success. Moreso than recruiting talent, generating buzz, or raising money, startups participate in communities or ecosystems

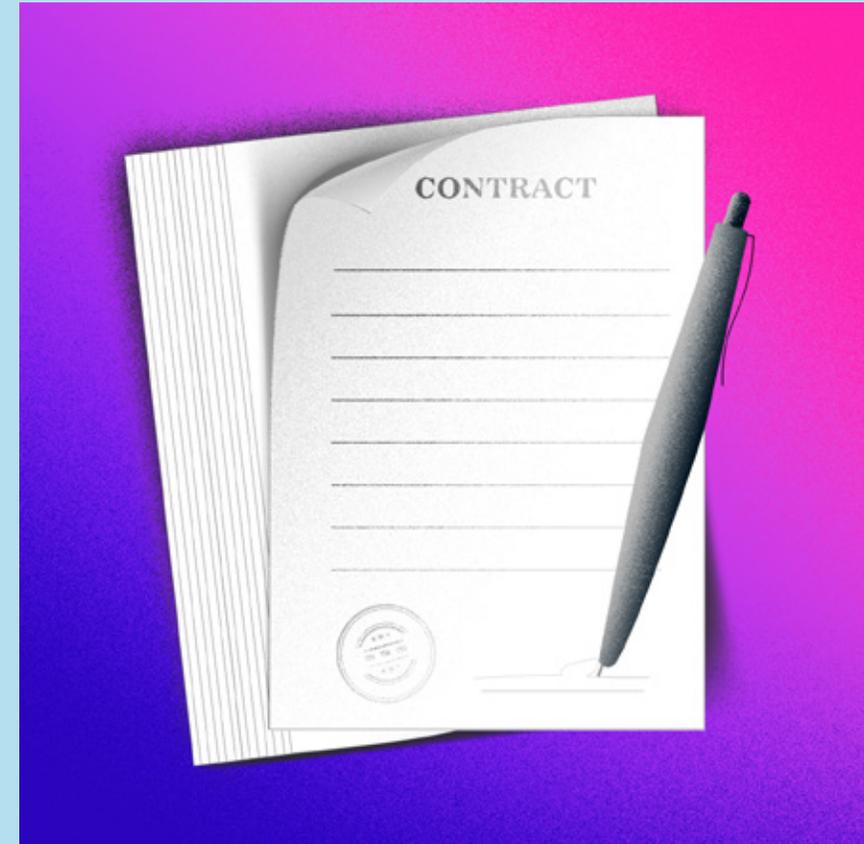
EXECUTIVE SUMMARY

predominantly to get introductions to prospective corporate partners. Eighty-five percent of startups believe that corporate partnerships (not including corporate VC funding or acquisition by a corporate) will be important to their eventual success.

Helping startups navigate internal bureaucracy and approvals paves the way for good outcomes. When scaling up a project with a corporation, 53 percent of startups say that identifying the right internal partners is key to success. These partners can help work through contracting, technology integration, and other challenges.

Stay focused on the ‘why.’ Startup engagement programs don’t endure for the long haul if they’re not linked to a well-articulated strategic need. To quote one anonymous respondent from pharmaceutical industry, “Startup interaction feeds our innovation pipeline and teaches us about new market opportunities. It feeds the desire for sustained growth.” Another respondent from the financial services sector says, “The pace of change is greater than our ability to respond, let alone lead, and partnerships are vital to our survival.”

Success is achievable. Nearly 77 percent of respondents said they could already point to concrete successful outcomes of startup engagement. We hope this report will help you deliver those kind of tangible results in your own organization.



A 'FAIRLY EXPERIENCED' RESPONDENT SET

We sought to understand how much experience our corporate survey respondents had with any sort of startup engagement or ecosystem participation.

How much experience has your company had with startup engagement to date?



Our overall corporate respondent set can be described as “fairly experienced” when it comes to startup engagement. When analyzing responses to some questions, we created a “very experienced” respondent set, including 23 respondents, who said that their experience level was 8.5 or higher. In the pages that follow, we contrast their answers with those of the full respondent set.

Industries on the lower end of the experience spectrum included industrial manufacturing (5.2), financial services (5.3), and chemicals (6.) On the higher end were technology (7.9), energy and utilities (8.9), and automotive, transport, and logistics (8.9). Healthcare-related industries, which we grouped to include healthcare delivery, medical devices, and pharmaceuticals, matched the overall average response, at 7.1.



5.2
MANUFACTURING



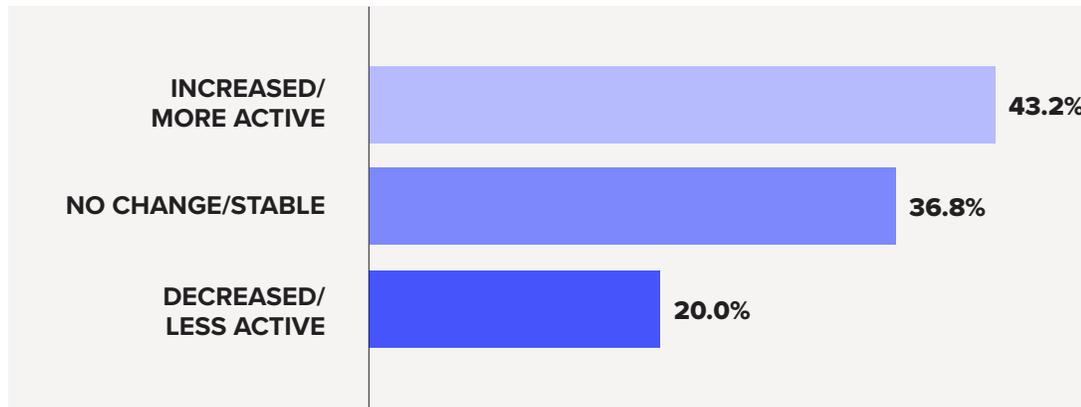
7.1
HEALTHCARE



8.9
AUTOMOTIVE

HOW HAS THE PANDEMIC CHANGED ACTIVITY LEVELS?

Change in Startup Engagement Since March 2020



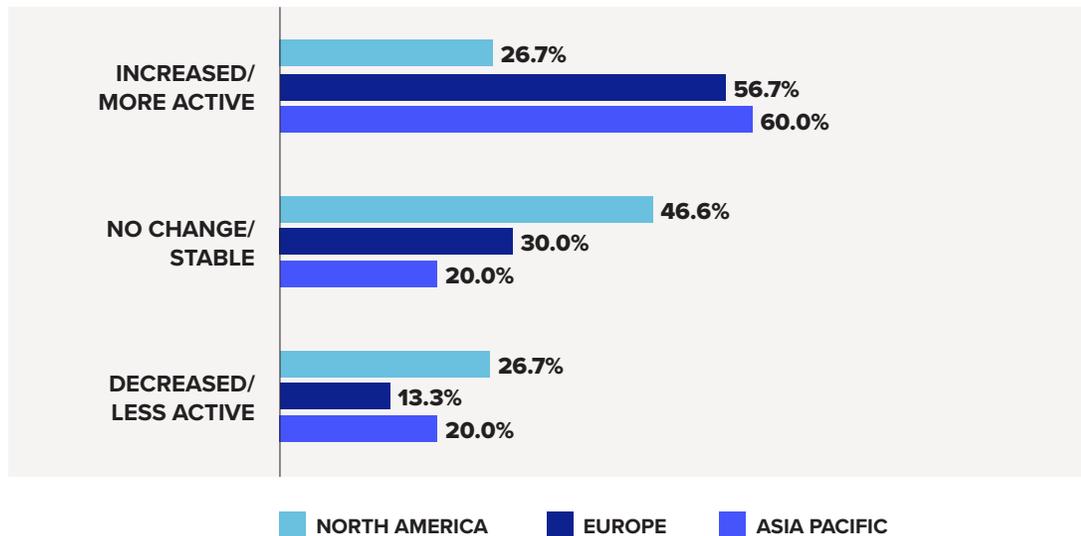
Just 20 percent of our respondents said that they had become less active in the startup ecosystem throughout the COVID-19 pandemic. But the plurality of our respondents, 43 percent, said they'd actually become more active. "Projects that were put on hold are now moving again," explained one respondent from the hospitality industry. "New projects have started."

In our "very experienced" respondent set, interestingly, it was more likely that their activity had stayed static during the pandemic (39 percent) than to have increased (35 percent), and it was also more likely that they had seen a drop in activity (26 percent), compared to the full respondent set. One possible reason? These companies may have entered the pandemic with a higher baseline level of activity and investment than the average company.

On the following pages, we break down changes in activity by geography, and provide insights into the dynamics behind the changes.

HOW ACTIVITY CHANGED, BY COMPANY LOCATION

Change in Startup Engagement by Geography



When seen through the lens of location, companies based in North America were more likely than those in other geographies to have kept their startup engagement activity on an even keel throughout the pandemic (47 percent), with about a quarter seeing it increase or decrease. Companies in Asia-Pacific were most likely to have seen an increase in activity, closely followed by those based in Europe. (We didn't receive enough responses from other regions of the world to examine their activity level.)

COMMENTS: WHY ACTIVITY INCREASED OR DECREASED (CON'T)

A sample of corporate respondents' comments on why activity has increased, remained stable, or decreased in their organizations.

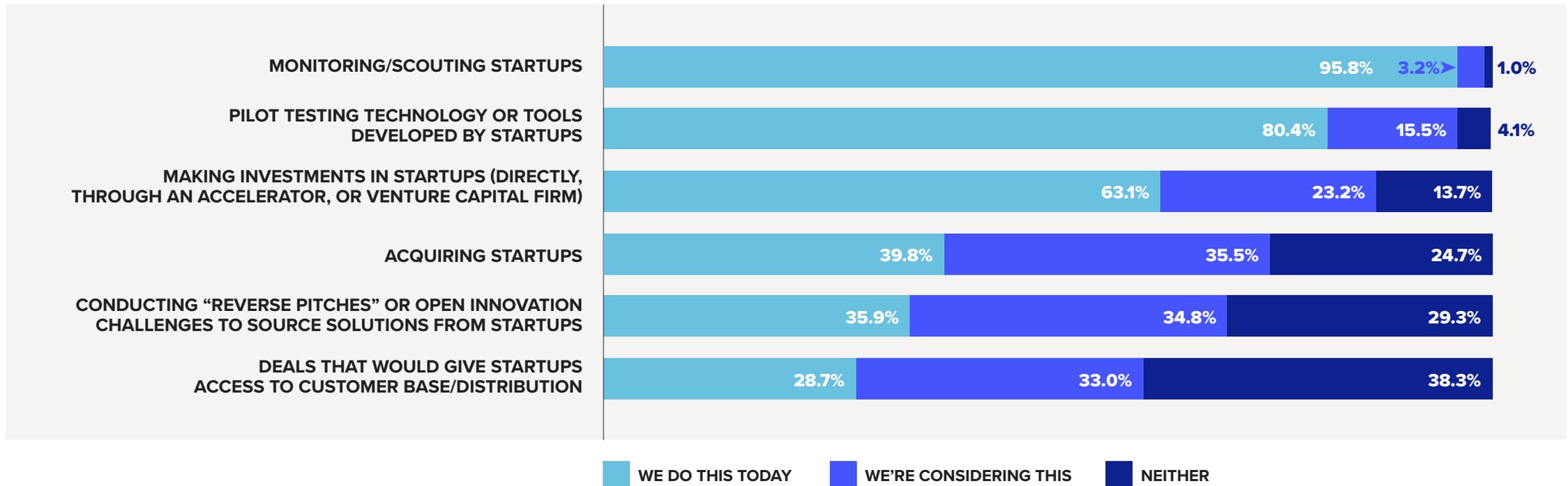
INCREASED/STABLE/DECREASED?	WHY ACTIVITY HAS INCREASED, REMAINED STABLE, OR DECREASED	INDUSTRY
Increased	“Since setting up our innovation team about five years ago, we have started to move from early discussions to actual investments and partnering with startups. Several projects have progressed to a proof-of-concept stage or further.”	Industrial Manufacturing
Increased	“We set up a corporate venture capital vehicle.”	Forest, Paper & Packaging
Increased	“Easier to connect, due to the virtual format of calls and conferences.”	Agriculture
Increased	“Increased belief in the need for external partnering, followed up by opening up a new innovation hub in Boston.”	Pharmaceuticals & Life Sciences
Increased	“We’re looking for different solutions to test.”	Agriculture
Increased	“Projects that were put on hold are now moving again. New projects have started. Growth is creating new opportunities and pain points that need to be solved.”	Hospitality & Leisure

COMMENTS: WHY ACTIVITY INCREASED OR DECREASED (CON'T)

INCREASED/STABLE/DECREASED?	WHY ACTIVITY HAS INCREASED, REMAINED STABLE, OR DECREASED	INDUSTRY
Stable	“The front of the funnel (early engagements) increased through virtual events and meetings, but the number of partnerships coming out of that has probably decreased as technology attention turned to enterprise tools for remote work.”	Financial Services
Decreased	“No face-to-face meetings due to pandemic.”	Consumer Goods & Products
Decreased	“Pandemic driven cost-cutting measures left us with less freedom to gamble with unproven startups.”	Energy & Utilities
Decreased	“Most startups cannot fulfill their proposed technology promises.”	Industrial Manufacturing
Decreased	“Our innovation focus in general has shifted a little closer to Horizon 1 (defending/expanding current business). We are doing less collaborating with startups, and are doing more buying from them instead.”	Automotive, Transport & Logistics
Decreased	“Trying to survive, so new work with startups has been put on hold.”	Consumer Goods & Products

MOST COMMON TYPES OF STARTUP INTERACTION

How Organizations Interact, or Consider Interacting, with Startups



Our “very experienced” respondent set was more likely to say “we do this today” to everything on this list. For instance, 100 percent say they monitor or scout startups, 96 percent say they pilot test technology developed by startups, and 39 percent say they engage in deals that would give startups access to their customers or distribution.

COMMENTS: HOW CORPORATES MAKE THE CASE FOR STARTUP INTERACTION

We asked our corporate survey respondents to share advice about how they made the case for startup interaction within their organizations. Here's a sampling of their answers.

“We have provided specific examples showing how startups complement plans for our existing product lines.”

**Industrial
Manufacturing**

“Doing pilots and showing results.”

Hospitality & Leisure

“Startup interaction feeds our innovation pipeline and teaches us about new market opportunities. It feeds the desire for sustained growth.” — Pharmaceuticals & Life Sciences

**Automotive, Transport
& Logistics**

“[We outlined the] need for a faster speed in adapting to technological changes and new business models, which require looking at external solutions like startups.”

**Industrial
Manufacturing**

“Simply that the pace of change is greater than our ability to respond, let alone lead, and partnerships are vital to our survival.”

Financial Services

“It is clear to us that we are a brand. We are in no position to do material science, develop manufacturing technologies, or create software. Therefore, startups are key for us.”

Retail

“We explained disrupted industries, like taxi by Uber and Lyft, or video rental by Netflix.”

Chemicals

“Cost/benefit analysis of building a capability internally versus importing it...”

Agriculture



Paul Konasewich

Director of Business
Development

PACCAR

PACCAR is a Fortune 500 company based in Bellevue, Wash. that manufactures trucks under the brand names Peterbilt, Kenworth, and DAF.

Startup engagement activity is “way down.” Over the course of the pandemic, Konasewich says, “We kept doing our activities, but largely with companies we already knew. The reality is, we’re pretty busy already and we have a small staff, so we had lots to keep ourselves busy with companies we already knew.” Konasewich helps oversee a Silicon Valley innovation center for PACCAR, which opened in 2017.

But online events can engage peers throughout the company. Earlier in 2021, Konasewich hosted three “tech days” online so that his colleagues around the company could get to know startups focused on vehicle electrification, autonomy, and new manufacturing capabilities. “The online format was better than in-person for that event. I was able to get people from around the world to engage. We hosted it on Microsoft Teams, and we found channels that already existed in Teams oriented to those topics. It also makes it a lot easier to record the meeting. My intern sliced and diced it, and we posted videos on our intranet with the startups’ slide decks, so that becomes an evergreen resource.”

Faith-based ROI. “Having [an innovation] center in Silicon Valley is very expensive. Doing it involves much more of a faith-based ROI, to tell you the truth. I compare it to going to church. You don’t go to prove that god exists; you believe that god exists, so you go to church. I just believe in my soul that this is important. The people trying to get the ROI [model] to tell them to be here will never make that case.”

INNOVATOR PERSPECTIVE: PACCAR (CONTINUED)

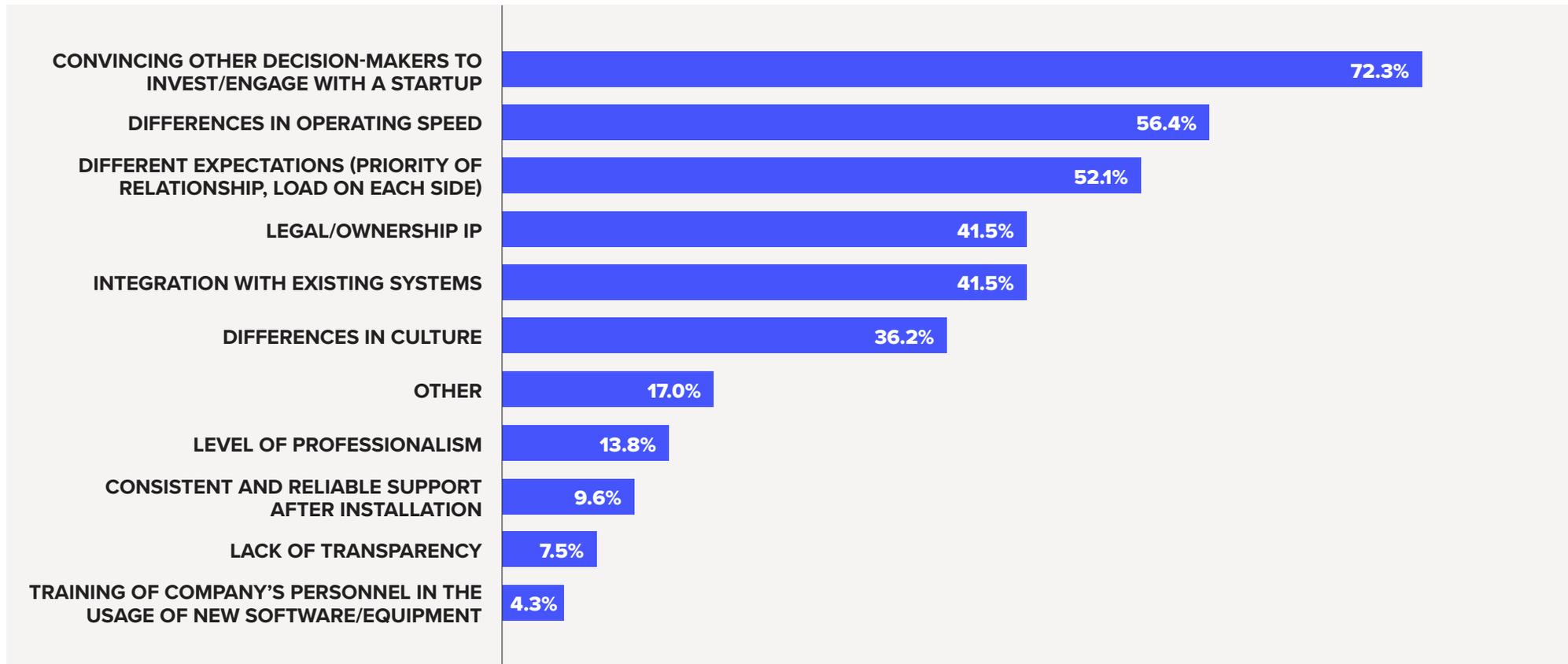
Success stories. “In January, we announced a big partnership with Aurora, an autonomous technology developer, because of the [innovation] center. We knew the whole space of autonomy developers very well, and we had pretty clear criteria about who we wanted to be talking with, and who we felt just wasn’t going to do well. Our view would’ve been a lot more fragmented if we didn’t have a center here. I walked Aurora into the center two years ago.”

The follow-up is everything. “My problem isn’t finding startups – it’s what do we do with a startup after we find it.” Konasewich says that most companies, with concerted effort, could identify three or four startups relevant to their current or future strategy. But most large organizations, he adds, have “decades of history doing incremental improvement.” Finding avenues for collaboration with startups, and internal partners who can help knock down barriers, is “where it gets real,” he says. “And that’s where the opportunity is, as well.”



THE BIGGEST CHALLENGE: GETTING BUY-IN

Most Challenging Aspects of Working with Startups, for Corporates

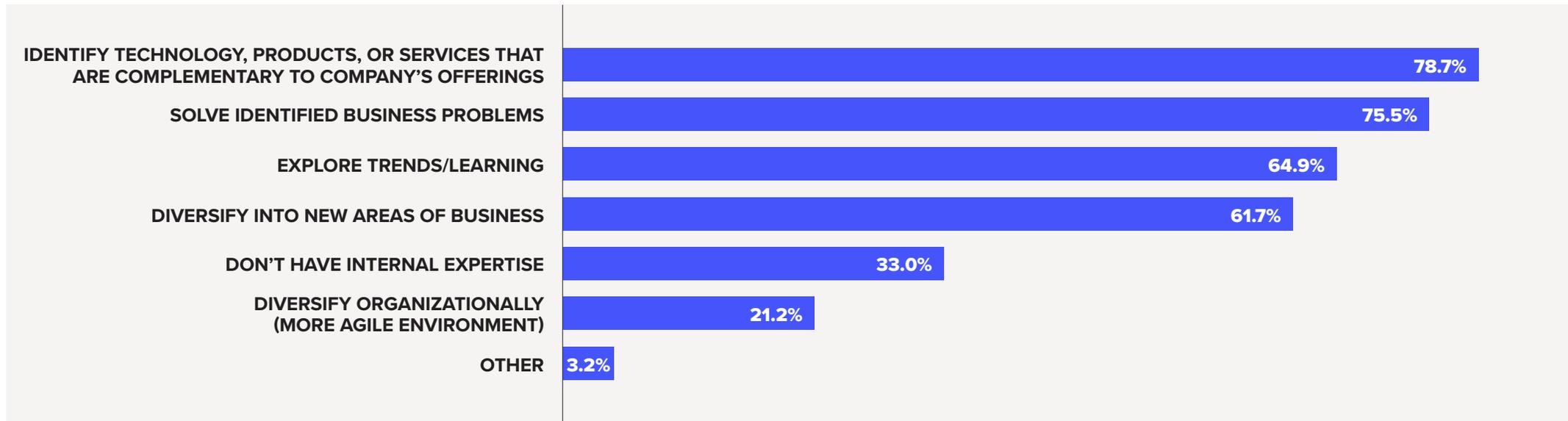


The top challenge for our “very experienced” respondent set was different: integrating startup tech with existing systems, showing that they are more likely to be confronting concrete, nuts-and-bolts issues than cultural ones. But “convincing

other decision-makers” was a close second. Other challenges mentioned included information security issues; procurement; leadership changes in business units; and differences in operating speed.

WHAT'S DRIVING STARTUP ENGAGEMENT

Key Drivers of Your Organization's Efforts to Interact with Startups



The top drivers for our full respondent set and the “very experienced” respondents were the same. Large companies are seeking technology, products, or services that will help them grow and improve their business.

COMMENTS: STARTUP ENGAGEMENT ADVICE FROM CORPORATES (CONTINUED)

This table highlights some of the advice on startup engagement shared by corporate survey respondents representing various industries.

“A dedicated team with the budget and authority to act quickly when dealing with startups is important. This includes the ability to quickly enter into contracts (including NDAs etc.)”	Industrial Manufacturing
“Be clear about your expectations. Make sure you have the resources in place to follow through after scouting/whatever activity you choose. Business buy-in is key. Senior management sponsorship/engagement is also key!”	Chemicals
“Be transparent. If you don’t plan on working with [a specific startup], let them know as quickly as possible so they can move on. Bring in the decision-makers early, and [use them to] identify one small pilot to explore.”	Automotive, Transport & Logistics
“Early collaboration engagement with limited red tape to build trust and a working relationship.”	Pharmaceuticals & Life Sciences
“Have a clear path to market in place first— whether that’s tech/APIs/etc. for integration, streamlined procurement, or innovation units that are resourced and funded to execute independently. Also, [you should] have a clear perspective on what you’re looking for, and why a startup is the right partner to help you realize that ‘why.’”	Financial Services

COMMENTS: STARTUP ENGAGEMENT ADVICE FROM CORPORATES (CONTINUED)

“Having a dedicated liaison inside (who has an established network within the company and the ability to communicate well) and outside ([someone] who has knowledge of the startup communities).”

Industrial
Manufacturing

“Be intellectually honest with yourself on what you’re trying to do, and be clear with the startups what your limitations are.”

Automotive, Transport
& Logistics

“It works very well when we (the corporate) understand what our technology/product needs are, and have put some level of detailed requirements together and thought about what the next step looks like if a startup is able to fulfill those requirements in a concept.”

Automotive, Transport
& Logistics

“You need an internal engagement team that understands both the business and technology elements of the opportunity, as well as how to utilize the ‘smallco’ interaction to create value within our existing company tech strategy/framework.”

Aerospace & Defense

“Set clear project goals and KPIs; align around quick-wins which are low-cost and high-value projects; seek out stakeholders who are the most willing to give startups a try.”

Hospitality & Leisure

“Start with a fast-triggered, no-strings-attached early collaboration to assess the scientific proof of concept and fit, before spending time on IP and equity discussions.”

Pharmaceuticals
& Life Sciences

COMMENTS: STARTUP ENGAGEMENT ADVICE FROM CORPORATES (CONTINUED)

“[Create] streamlined internal processes to make it easier to go through the test, contracting, and approval process. Alignment with business need is a pre-requisite for most engagements.”

Financial Services

“The first step is not corporate venture capital. Senior management buy-in is critical. Don’t chase cool tech — find solutions to business challenges.”

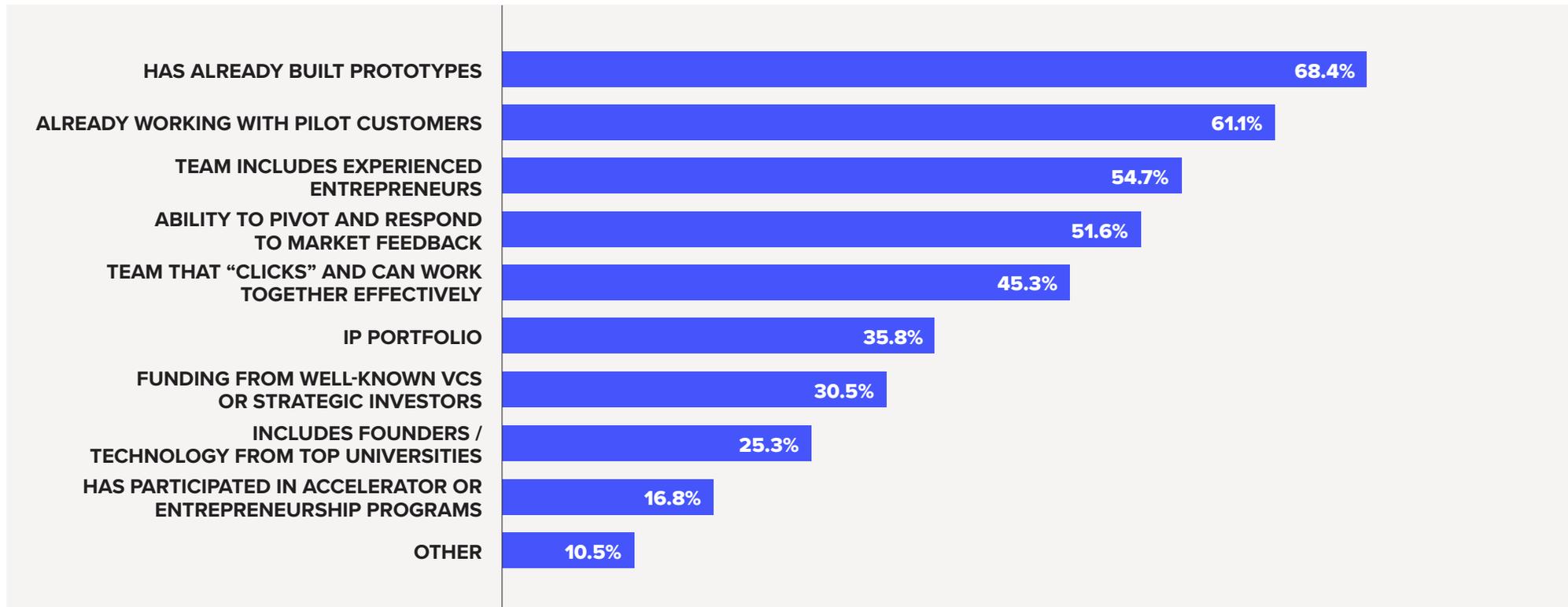
Consumer Goods
& Products

“The startups we are engaged with provide new capabilities that are very relevant to our core strategies and product lines. This has been an easier place to start, in terms of selling the need to engage with startups.”

Industrial
Manufacturing

WHAT CONSTITUTES A ‘QUALITY’ STARTUP?

How Corporates Define a “Quality” Startup to Collaborate With or Invest In



We saw no difference in how these qualities were ranked by our “very experienced” respondents; large companies seem biased toward startups that have moved past the PowerPoint stage and have working prototypes

or early customers. The “other” responses to this question included “low delta between marketing and reality” and “has some operational and support infrastructure in place.”



Steve Russell

Deputy Vice President and
General Manager

FAST Labs

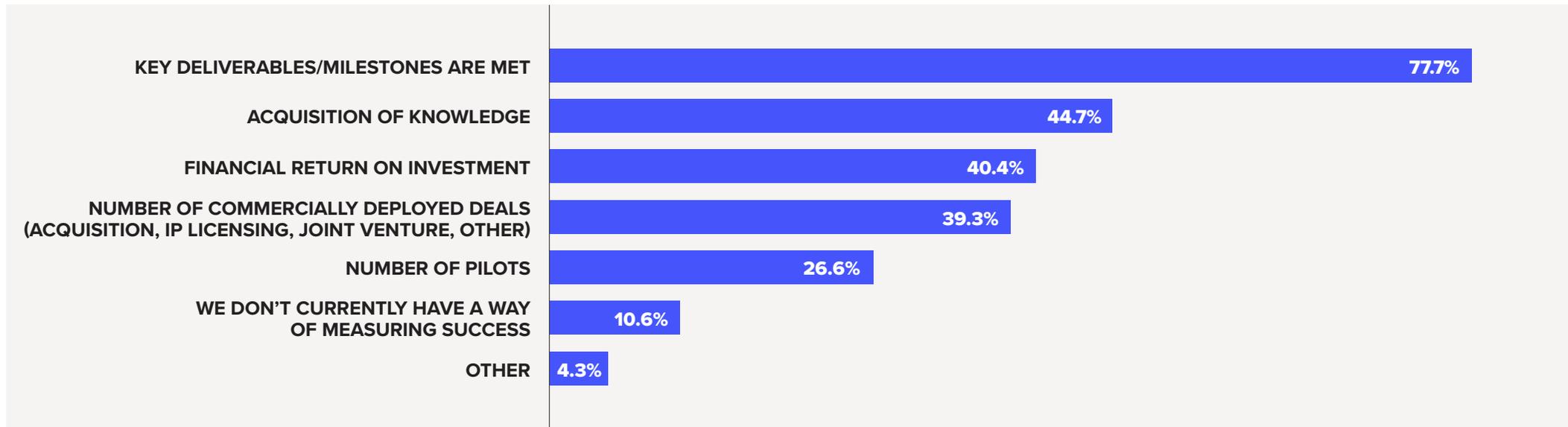
FAST Labs is a funding
and advanced technology
initiative within BAE Systems'
electronics systems group.

“If you go back a few decades,” says Stephen Russell of the aerospace and defense firm BAE Systems, “United States Department of Defense R&D funding represented over a third of global R&D spending. If you fast forward to now, the US Department of Defense R&D spending is less than two percent of global R&D spending. ... We want access to that other 98 percent of the research and development that’s going on. That’s great, innovative work that we wouldn’t have access to if we just focus on our more traditional customer set of the large department defense or some of our larger commercial partners that we work with.” Much of it springs from startups and small businesses.

Some of Russell’s advice for connecting to the startup ecosystem:

- ◆ Be a partner looking for “win-win” opportunities that provide a path to market for the startup, and access to promising technologies for the large company.
- ◆ Be sensitive to the challenges of small businesses and startups. For example, what may seem like a small contractual or invoicing delay to a large company may put a small business in jeopardy.
- ◆ Be careful not to levy “big company” processes on a small business that are not staffed to deal with such processes.
- ◆ Do not expect military-ready products from a small commercial startup. Instead, work with them to mature their technologies, processes, and products.

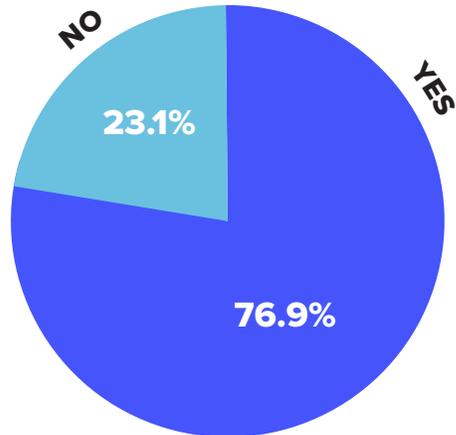
How Corporates Measure Success When Working with Startups



Our “very experienced” respondent set puts even more weight on startup partners that hit their milestones, and for those respondents, financial ROI and learning (“acquisition of knowledge”) are tied for second place. Also: none of the “very experienced” respondents say they lack metrics, while nearly 11 percent of the full respondent set have not yet put metrics in place.

SUCCESSFUL OUTCOMES

Can you already point to concrete successful outcomes as a result of startup interactions?



Surprisingly, nearly 77 percent of respondents said they can already point to successful results from their startup engagement. Among our “very experienced” respondent segment, that number rises to 86 percent. See comments about specific outcomes on the following page.

COMMENTS: CONCRETE OUTCOMES OF ENGAGEMENT

Nearly 77 percent of corporate respondents said they could point to concrete successful outcomes of their startup engagement activity. Some examples included:

“Acquisition of a start-up, which became a new business unit.”	Consumer Goods & Products
“Commercialization of the technology into a product.”	Automotive, Transport & Logistics
“We have launched several products that are generating revenue based on partnerships with startups.”	Retail
“Successful investment.”	Consumer Goods & Products
“Licenses and acquisitions.”	Pharmaceuticals & Life Sciences
“New business venture based on startup technology, which meshed with our technology and experience.”	Consumer Goods & Products
“Successful pilots and proofs-of-concept, as well as commercialization efforts.”	Standards Organization



Sujata Mehta

Assistant Vice President
of Innovation

FM Global

FM Global is a Rhode Island-based mutual insurance company.

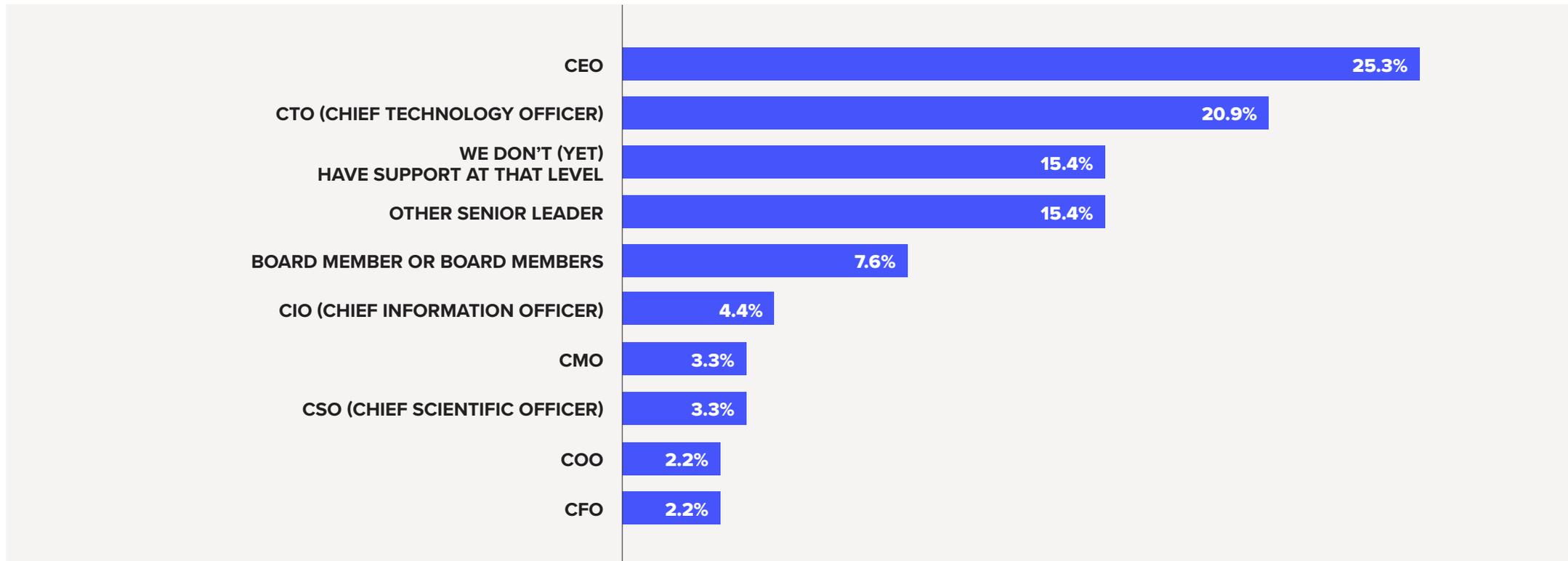
A case study in computer vision technology and insurance. “I’m actually in the process of now transitioning a very successful startup engagement to the organization. ... We started with the assumption that there were certain capabilities in the computer vision space that we as an organization thought would be very beneficial to our business. ... We reached out internally to all our business sponsors, and figured out use cases of how we could use this...”

“Armed with that information, we went out on the exploration journey. We did a full landscape research, figured out who the players are in the field — the big ones, the small ones — and then we shortlisted 20 to 25...”

“From 25, we went down to four before we selected. We did proof-of-concepts with them, and then finally ended up selecting one vendor. ... We ended up doing paid proof of concepts to make sure... We’re not having [the startups] do anything for free. From there, it’s been a very successful engagement, because we took the time and the effort to research and made sure we like everything about the vendor — not just the product or service, but more about understanding how they work, how flexible they are, whether they’ll be deterred, whether they have the staying power — because all of those are very big, important factors. Now, we’re in the position of helping them. We’ve mentored them throughout. They have delivered really well. ... We’re ready to transition this relationship over to our product organization, where they will work with [the startup] and actually build products around their offerings.”

WHICH LEADER SUPPORTS STARTUP ENGAGEMENT?

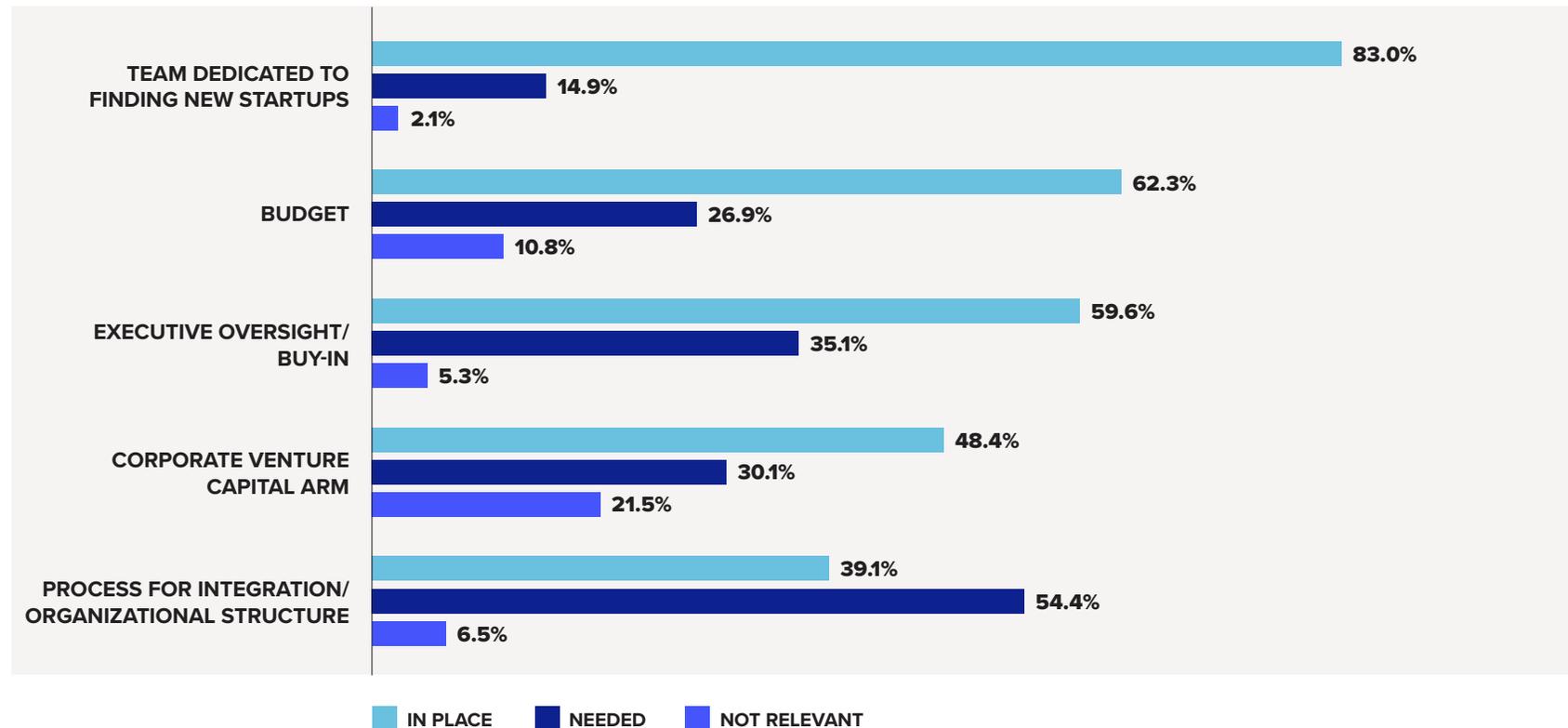
Senior Leader (Outside of the R&D or Innovation Group) Who Supports the Need to Interact with Startups



We asked respondents to choose the leader, outside of the R&D or innovation group, who is most supportive of startup engagement. In our “very experienced” set of respondents, the CTO was more likely to be the key supporter (33 percent), and the CEO was in the second spot (24 percent). Of those who cited “other senior leader,” these included business unit heads, Chief Investment Officers, or Chief Commercial Officers.

INTERNAL RESOURCES FOR STARTUP ENGAGEMENT

Resources Corporates Have for Startup Engagement, or Feel that They Need



The two most-needed resources that are not yet in place were a process for integration of startup solutions or technologies (54 percent), along with executive oversight or buy-in (35 percent.)

Nearly one-third of our “very experienced” respondents agreed that they are in need of a better process for integration or better organizational structure. But just 5 percent of that group said they are in need of budget. 78 percent of that group said they have a corporate venture capital arm in place.

INNOVATOR PERSPECTIVE: SUMITOMO CHEMICAL AMERICA

Yosuke Nakashima

Senior Manager,
Corporate Venturing
and Innovation

Sumitomo
Chemical America



Hiroyoshi Nakajima

Senior Manager,
Corporate Venturing
and Innovation

Sumitomo
Chemical America



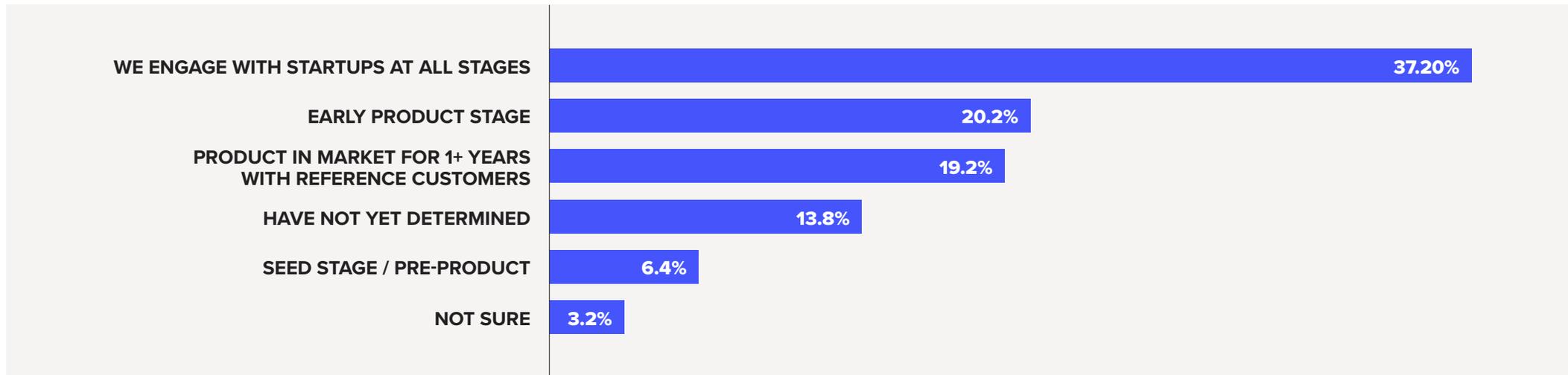
Sumitomo Chemical America is part of one of Japan's largest chemical and materials manufacturers.

We start with validation. “We have multiple ways to engage with startups... What we prefer is to first...conduct proof-of-concept research with startup companies, or sometimes academia to validate the technology. ... After evaluating their technologies, we like to consider comprehensive collaborations, more long-term collaborations...or we consider making an investment in the startup companies. [One example is Conagen], which is located in Boston. They are a synthetic biology company, making...high value chemicals by using engineered microorganisms. ... More than three years ago, we started working with Congagen to develop one specific chemical by leveraging their technologies. We started a research project with them. After building a trusting relationship with them through the project, Sumitomo Chemical Japan decided to make an investment in Conagen. Sumitomo Chemical invested \$30 million in Conagen last year. ... The Corporate Venturing and Innovation Office we belong to was the first contact with them, then we started a project with them, and then after that Sumitomo Chemical made an investment in them.” — Yosuke Nakashima

The goal is a true partnership. “Communication and transparency [are] quite important. To share the ultimate goal is quite important when we work with startups. ... If I compare [big corporations] with startups, startups need to have clear short-term and long-term goals and commitment from corporations. ... We have to...think about how we would like to work with your startup to grow, or to establish, or to create a new business together. ... I was told that some Japanese companies tend to think about a startup as a supplier or vendor, but...you have to become a partner. Each startup has very unique...technologies...which Sumitomo Chemical does not have. That's why we work with them. So therefore, we have to respect them.” — Hiroyoshi Nakajima

WHAT STAGE OF STARTUP IS IDEAL?

Is there a “best” or “ideal” stage of startup for you to engage with?



Our “very experienced” respondents were more likely than the full respondent set to be open to engaging with startup at any stage (52 percent are open to that.) More of that group (26 percent) also preferred working with startups that have had a product in the market for at least one year, with reference customers. They were also less inclined to engage with startups in the pre-product or early product stage.

COMMENTS: WHAT WOULD YOU CHANGE?

What if you could wave a magic wand, we asked corporate respondents, and change how your organization interacts with startups? Here's a sampling of what was on their wish list.

“Allocate 10% of all R&D employees' time to engage with external innovation. This would ensure resources for external collaboration, as well as benchmarking and inspiration for internal innovation.”	Pharmaceuticals & Life Sciences
“Being willing to pilot just to try something new. And for technology integrations to happen much faster, so we don't have to turn down ideas because it doesn't fit into our tech roadmap.”	Automotive, Transport & Logistics
“Change the mindset that corporates [create] better technology than startups.”	Automotive, Transport & Logistics
“Clear perspectives, and commitment, from leadership on the outcomes that will help our scouts know when they've found what we're looking for.”	Financial Services
“Faster approval process. Speed tends to be slower in groups that have not worked with startups often. Those that have are faster at decision-making.”	Financial Services
“Financial executives would understand that this is a startup, and NOT an established business. There is risk, but it is a calculated risk with tremendous possibilities.”	Consumer Goods & Products

COMMENTS: WHAT WOULD YOU CHANGE?

“Improve internal communication on successes, failures, and learning.”

Consumer Goods
& Products

“Increase targeted searches to address identified needs/gaps, and decrease fishing expeditions to learn about ‘cool tech.’”

Aerospace & Defense

“It would be great if our organization looked to startups sooner, and wasted less time and money building and floundering [with] internal capabilities, only to look to startups in the end.”

Agriculture

“Keeping a consistent timing to provide feedback and a clear answer to startups. This is taking too long at the moment and, while one solution is to apply more resources, it doesn’t always make the overall process more efficient.”

Automotive, Transport
& Logistics

“Less red tape. Concentrated support upfront, including access to customers.”

Energy & Utilities

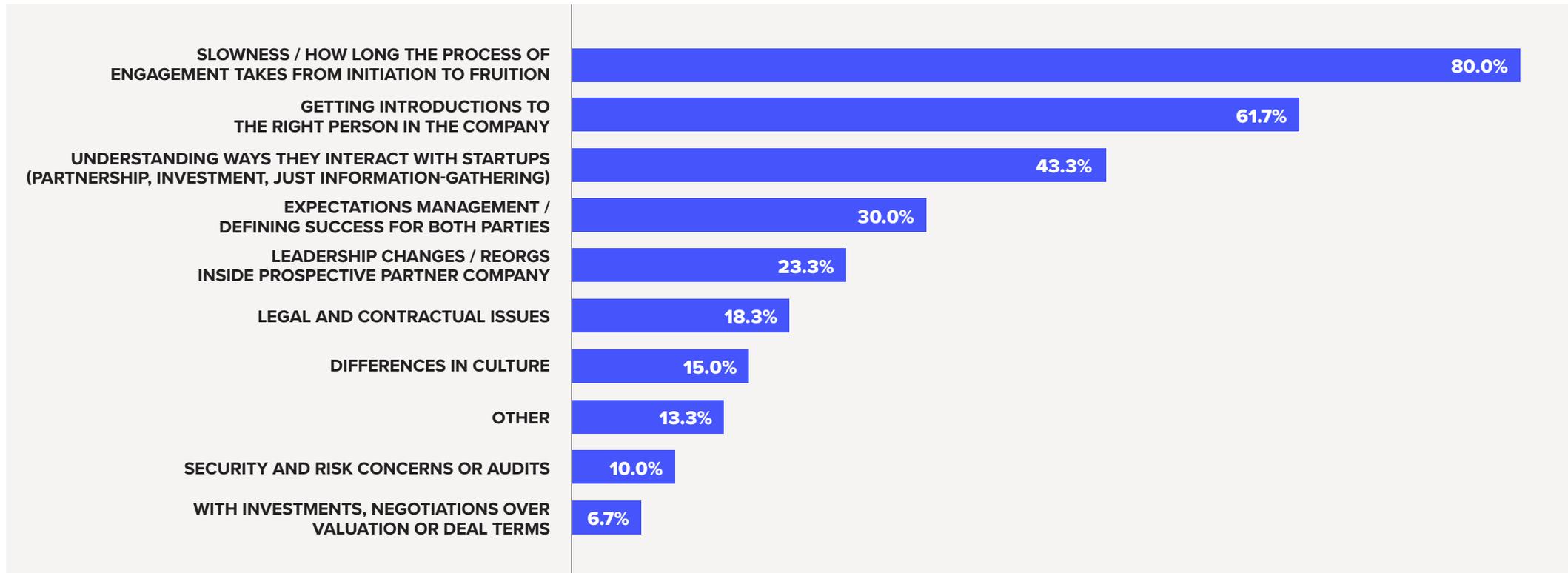
“Quantify risk upfront and handle the procurement process appropriately given the quantified risk and risk appetite. I.E., create lanes for test cases and proof-of-concepts, instead of a full production-level procurement process.”

Financial Services

CHALLENGES FOR STARTUPS

What are the most challenging aspects of initiating a formal engagement with a large company, such as a pilot test?

Other challenges cited by entrepreneurs included: problem discovery; “vision management” and “getting appropriate mind-share for something different”; and getting funding allotted for pilot tests.





Adam Behrens

CEO and Co-founder

Mori

Mori is a Cambridge, Mass. startup spun out of an MIT lab that uses a silk-based protein to extend the life of perishable foods.

Clearly define the success criteria. “We spend a long time on the problem definition, with an eye towards trying to define some kind of technical milestone. When pilots have gone well, there’s at least been an attempt at defining success criteria on the front end. ... It allows both sides of the partnership to communicate really discretely around success and failure.”

Working with legal departments. “Where we see bureaucracy always rear its head is when contracts are in legal. What helps facilitate it being productive is making sure that the business unit lead is seeing what is fair... That could come down to payment or IP ownership or whatever it may be. If you have that internal champion on the business unit side, having them broker it through legal as an active contributor helps with the process.”

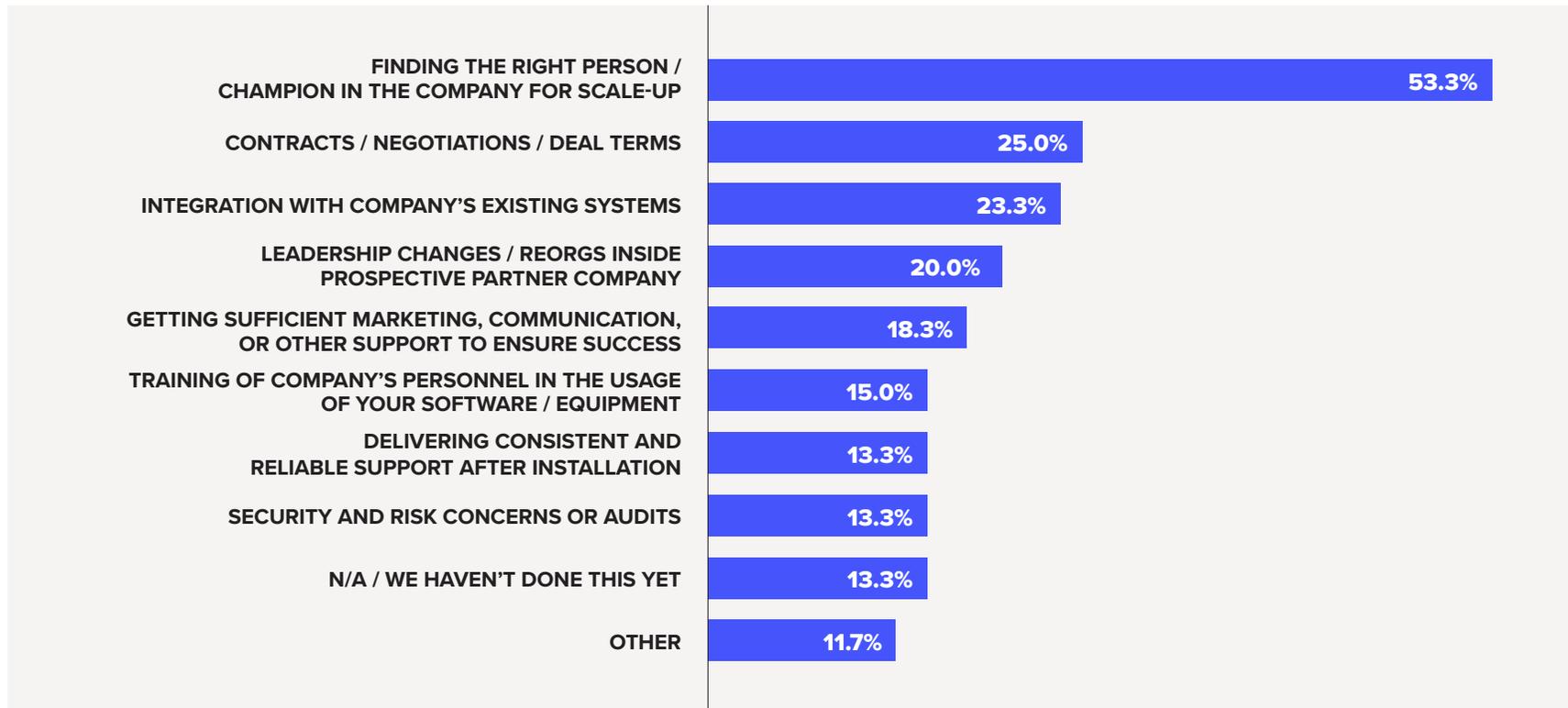
Be transparent about timelines. “Our agreements...on the fastest scale have taken three months, and the longest has probably been like, 18 months or so. Depending on the stage of startup, companies could be living and dying by those timelines... Being transparent about the timeline allows the startup to communicate effectively to their backers. I don’t mind that [a] contract takes a year [if] I know that for the next six months, 90 percent of my staff will be working on this. ... [So] there are these moments where sometimes delays are okay.”

“We all have our own backers, and we all have to justify our milestones and funding, but if these contracts are in perpetual delay, it’s very hard for me as an operator to hold back resources.”

CHALLENGES OF SCALING UP BEYOND PILOTS

What are the most challenging aspects of scaling up engagement with a corporate partner, post-pilot?

Navigating the complexity of a large organization is far and away the top challenge for startups seeking to scale up a successful early test or proof-of-concept. A distant second: negotiating the contract.





Xinjin Zhao

Senior Technology Scouting
and Ventures Advisor

ExxonMobil

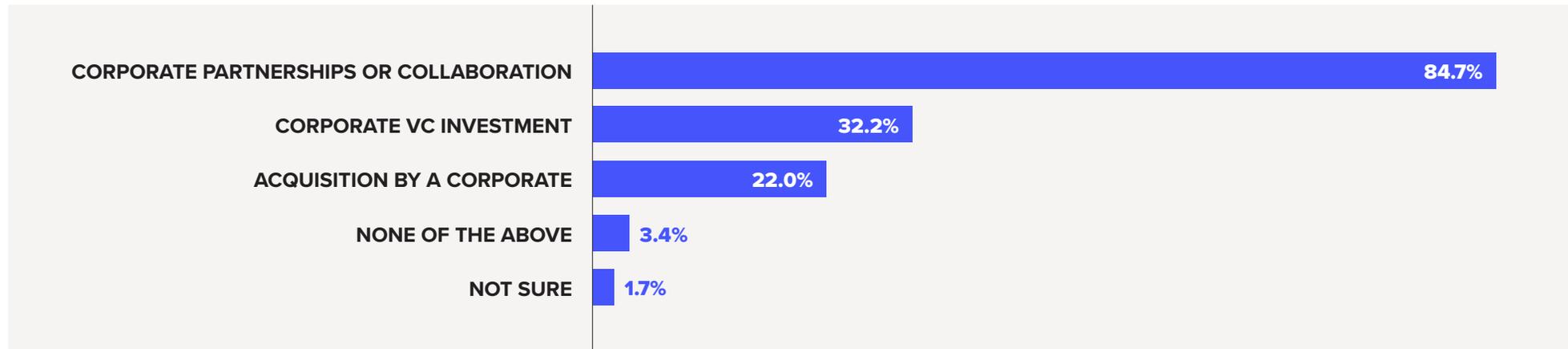
Because startups and large companies seem to operate in different worlds, a good place to begin a relationship is by creating a common understanding of what problems need to be solved, says Xinjin Zhao of ExxonMobil. Too often, he says, startups try to approach corporate relationships by pitching their “wonderful technology,” rather than by honing in on specific problems it could solve for a business.

Below are the top three questions he advises entrepreneurs to ask when initially meeting with corporates.

- ◆ What does the decision-making process at your company look like?
- ◆ What are the mega-trends that you are watching in your industry?
- ◆ What are the pain points your company is trying to address?

STARTUP SUCCESS FACTORS

Which of these do you feel will be important to your startup's success?



Pilot tests, co-development, licensing deals, and other types of corporate collaboration are seen by entrepreneurs as far more important than corporate venture capital funding or an eventual acquisition.

COMMENTS: DETERMINING WHICH CORPORATES TO WORK WITH

How do startups determine which corporates they will collaborate with, or accept investment from — and which they won't? We asked entrepreneurs about signs that suggest they should avoid interacting with a particular company, or that they would benefit from interactions with another.

“How well they truly understand our tech, how highly they value it, and how straightforward they are about both how much and how often they will support us, and exactly how they are benefitting...”

Venture-backed startup

“Companies that are challengers, not defenders, are who we want to collaborate with. Companies that are hungry for an edge over their competition, and are ready to be early adopters and take the risks associated with that.”

Venture-backed startup

“Our main rule is that a business line is the buyer. Corporate strategy and innovation are fantastic for providing guidance and support, and we value their input. We've just found that for the projects to move forward, the group that is directly responsible for the P&L...must be the lead team members.”

Bootstrapping startup

“Generally we avoid pilots whenever possible, as we have demonstrated our ability and capability across multiple verticals. Pilots often suggest hesitation and needless process; that is a road to mediocre results.”

Venture-backed startup

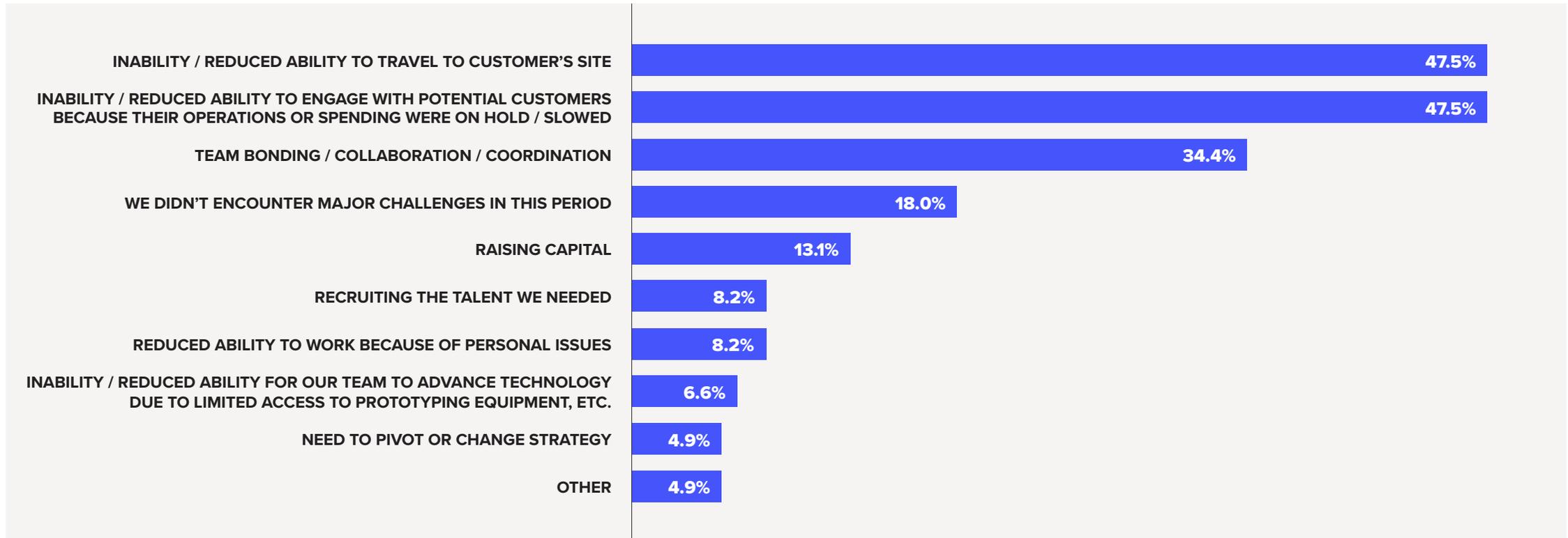
“Avoid [companies] if the internal not-invented-here factor is high, and we cannot identify a champion [or get] group buy-in early in the engagement.”

Bootstrapping startup, seeking venture funding

TOP PANDEMIC CHALLENGES, FOR STARTUPS

What were the most challenging aspects of operating in the period between March 2020 and the present?

For entrepreneurs, the two biggest challenges of the pandemic time period were both customer-related: less ability to travel to customer sites, and some amount of spending or operational interruptions on the part of their customers.





Ken Durand

Accelerator Director

Comcast NBCUniversal
SportsTech

Durand previously worked
in emerging technologies for
Dover Corp. and Ericsson.

Startups need internal champions to navigate the BigCo landscape. “From the corporate side, a lot of times, a [startup engagement] program gets started, but the people who have to do the physical work of integrating the startup’s technology view the startup as just any other vendor, and they don’t understand that it’s a three-person company. They can’t spend the next six months going through your legal contracts. They can’t have five meetings a week to make a decision, or they’re going to go out of business. Somebody inside the company needs to have the accountability to help the startup maneuver while they’re trying to get something off the ground.”

Early commercial deals can be tough for startups. “What startups struggle with the most is putting a commercial deal to paper – putting something in front of this potential customer that entices them to move forward in some sort of paid way, and that is acceptable to the legal and risk people on the enterprise side. My advice is often, don’t try to get an enterprise-wide deal the first time out. Figure out how to get paid a little to do something that will help you get the next deal.”

Selling the vision. “When you start a [startup engagement program], you’re going to have misses, and you have to be comfortable with that. The startup founder may have said all the right things in the interview, but entrepreneurs think about where they’re going, not where they are. They say, ‘Yes, we can do that,’ but it’s a future thing. They talk in terms of their vision, which is what you teach an entrepreneur to do.”

INNOVATOR PERSPECTIVE: COMCAST NBCUNIVERSAL (CON'T)

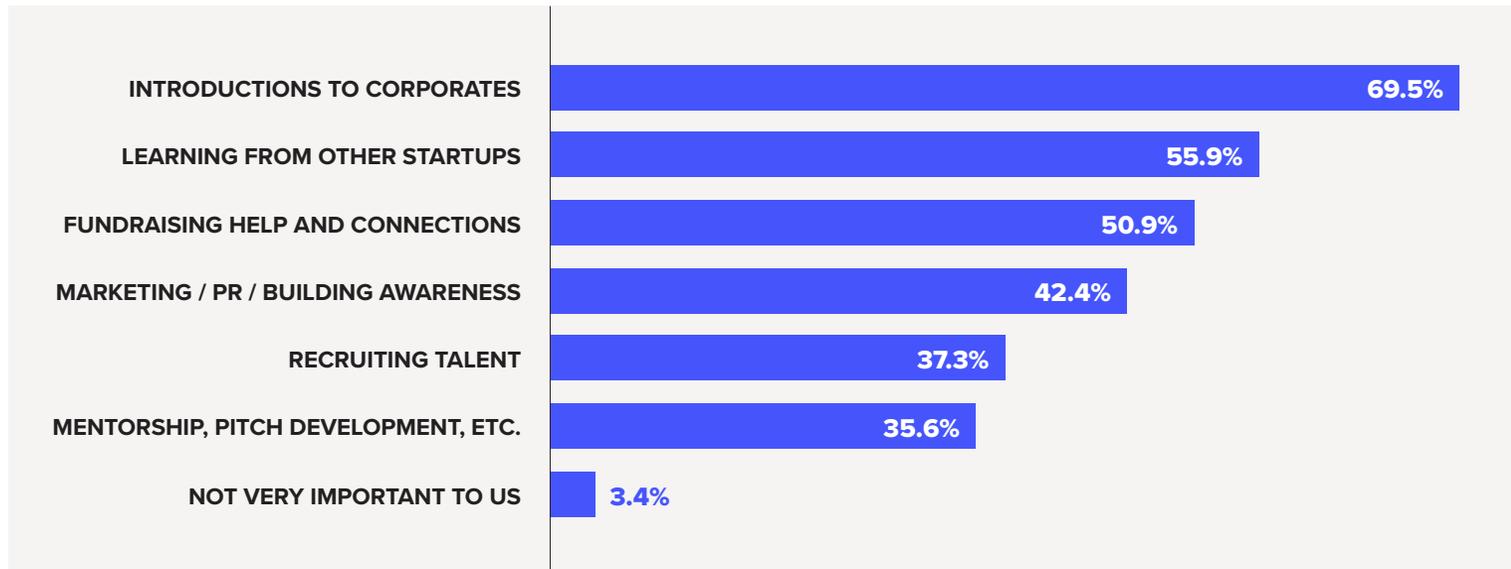
How many meetings does it take? For startups, Durand says that it may take “a few meetings to discover a problem that [the corporate is] really interested in paying to solve. I don’t advise people to give up after one meeting.” But, he cautions, “there’s a moment where you can tell that you’re getting polite meetings, as opposed to people invested in or caring about what you’re doing.”

Understanding the recipe. “One of our leads from Comcast said it this way: ‘A lot of times, we know the cake we want to bake, but we don’t have all the ingredients.’ Breaking down the ingredients and understanding which ones you don’t have — that’s often what a startup can help with. Startups don’t come with a full cake; they come with an ingredient. But if you haven’t broken down your needs and you don’t understand the recipe, you don’t know what ingredients you need.”



BENEFITS OF ECOSYSTEM PARTICIPATION, FOR STARTUPS

Why is it important for your startup to participate in a startup community or ecosystem (whether local or more global / distributed)?



More so than help raising money or recruiting talent, nearly 70 percent of our respondents said they participate in startup communities and ecosystems for introductions to corporates. Just three percent said they don't find ecosystem participation important.



Claudia Reuter

CEO

**Stealth Mode Startup /
High Alpha**

High Alpha is a Indianapolis-based venture creation studio. Reuter was previously a Managing Director at Techstars and an SVP at the publisher Houghton Mifflin Harcourt.

A burning need beats a great widget. “All of this stuff comes down to people and relationships. And I think [one] of the things that we’ve coached startups on is really taking the time to understand who you’re talking to, understanding the burning challenges that they’re facing in the large organization, doing the research on what the company is experiencing in the market, what they say their strategy is, and really being thoughtful about what you’re building and [being] supportive of what that organization needs. I think sometimes, people get so excited about what they’re building that they end up talking about, ‘I’ve got this great widget, I’ve got this great thing.’ And that’s wonderful – but that’s like a lot of noise to a large organization. So just take the time to do the research on who you’re talking to, and what matters to them, and then think about how you can help solve that problem for them... It’s the most critical thing, and that’s usually where people get side-tracked because they think, ‘Oh, I’ve made this awesome thing.’”

Startups can fall into a trap. “It’s very easy for startups to fall into a trap, where they’re doing a ton of work, and burning a lot of calories, on something that they think is going to turn into a huge sale. And it turns out that they’re not even going to get paid for the work they did, and it may turn into nothing. I think making sure that there’s some sort of skin in the game to show that there’s real engagement on both sides, [that] is really important.”

Think a few steps ahead. “The more startups can do at the beginning to be organized about their paperwork, and think about enterprise-level security, and all the things that a large enterprise needs to worry about, the better. ...Even if you’re not in a position to do some of those things yet, be able to demonstrate how you’re going to get there. Because that’s going to give your corporate partner more confidence in your roadmap and your ability to engage.”

COMMENTS: STARTUPS' ADVICE TO CORPORATES

What advice would entrepreneurs offer to corporate leaders about interacting more effectively with their fledgling businesses? Here are some selected responses:

“Effectively leverage what each side has available. Corporates have cash, but are not fast. Startups want to move quickly, but have little cash. A corporate can engage with startups with minimal cash investment (e.g., a pilot project) and learn a lot — if they let the startup move fast.”

Venture-backed startup

“You need an committed evangelist, who truly understands tech and [the] value proposition, to sell it internally to corporate.”

Venture-backed startup

“Help set clear goals for what success looks like.”

Early-stage, pre-revenue startup

“Don't take years debating about moving forward when there is significant internal opposition. Just say no.”

Bootstrapping startup, seeking VC

“Create a portal for startups that want to partner with you to submit short pitches that are vetted and routed to a dedicated member of your organization.”

Bootstrapping startup

“Clarify up-front the ways in which your company engages with startups, and if those ways are spread across different groups/departments within the company.”

Early-stage, pre-revenue startup

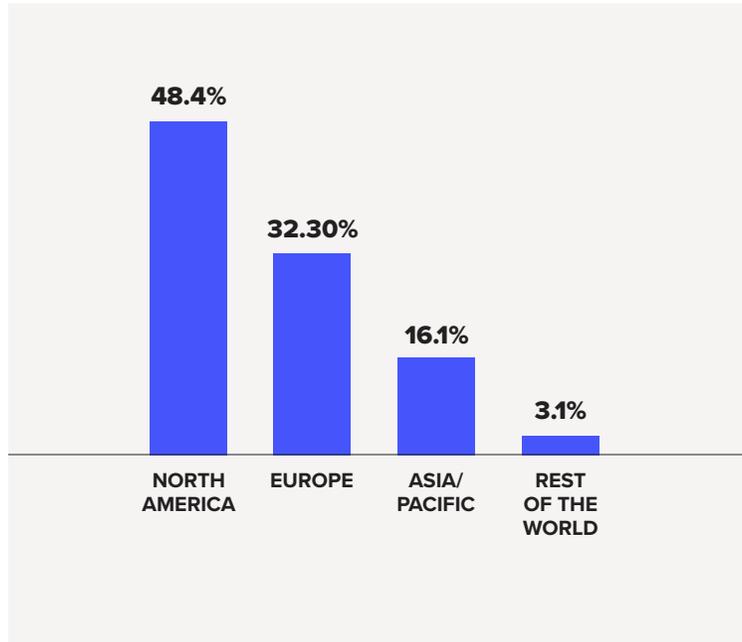
5 KEY CONSIDERATIONS FOR SUCCESS

This table highlights some of the advice on startup engagement shared by corporate survey respondents representing various industries.

FOR CORPORATES	FOR STARTUPS
<p>Defined business case for startup engagement. In many companies, this involves finding technology, products, and services complementary to existing offerings, or solving identified business problems.</p>	<p>Identifying initial point of contact for conversations, and other internal champions who can help break down barriers.</p>
<p>Senior leadership support (in many companies, this is the CEO or CTO.)</p>	<p>Identifying and staying focused on a “burning business need,” rather than pitching a “shiny widget.”</p>
<p>A clear internal point of contact for startups to engage with, and process for evaluating them. Many companies focus on startups that have already built prototypes, or are already working with pilot customers.</p>	<p>Creating a sense of momentum and urgency within the corporate partner. Are there competitive dynamics, key customers waiting, or simply the reputational benefits of “being first” that can contribute to this?</p>
<p>Process in place to enable startups to navigate internal legal, compliance, and security reviews in a more “lightweight” manner — especially for early pilot tests.</p>	<p>Being able to access legal advice and business mentorship when projects arrive at the contract stage.</p>
<p>A way to monitor progress, and communicate successes internally and externally.</p>	<p>Delivering on key milestones, and focusing on successful integrations with partner’s business and systems.</p>

ABOUT THE CORPORATE RESPONDENTS: LOCATION

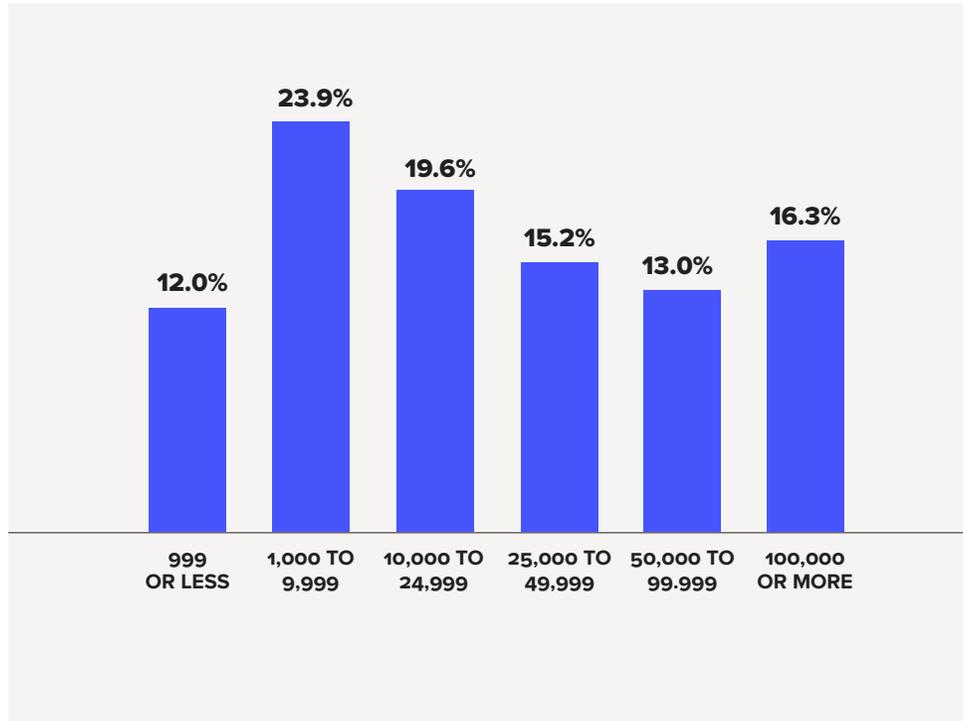
Company Headquarters



Nearly half of our corporate respondents work for companies based in North America, and another third for European companies.

ABOUT THE CORPORATE RESPONDENTS: SIZE

Number of Employees



We specifically sought corporate survey respondents from larger companies, who in some way interact with the startup ecosystem. Just 12 percent of respondents work for a company with fewer than 1,000 employees.

ABOUT THE CORPORATE RESPONDENTS: INDUSTRY

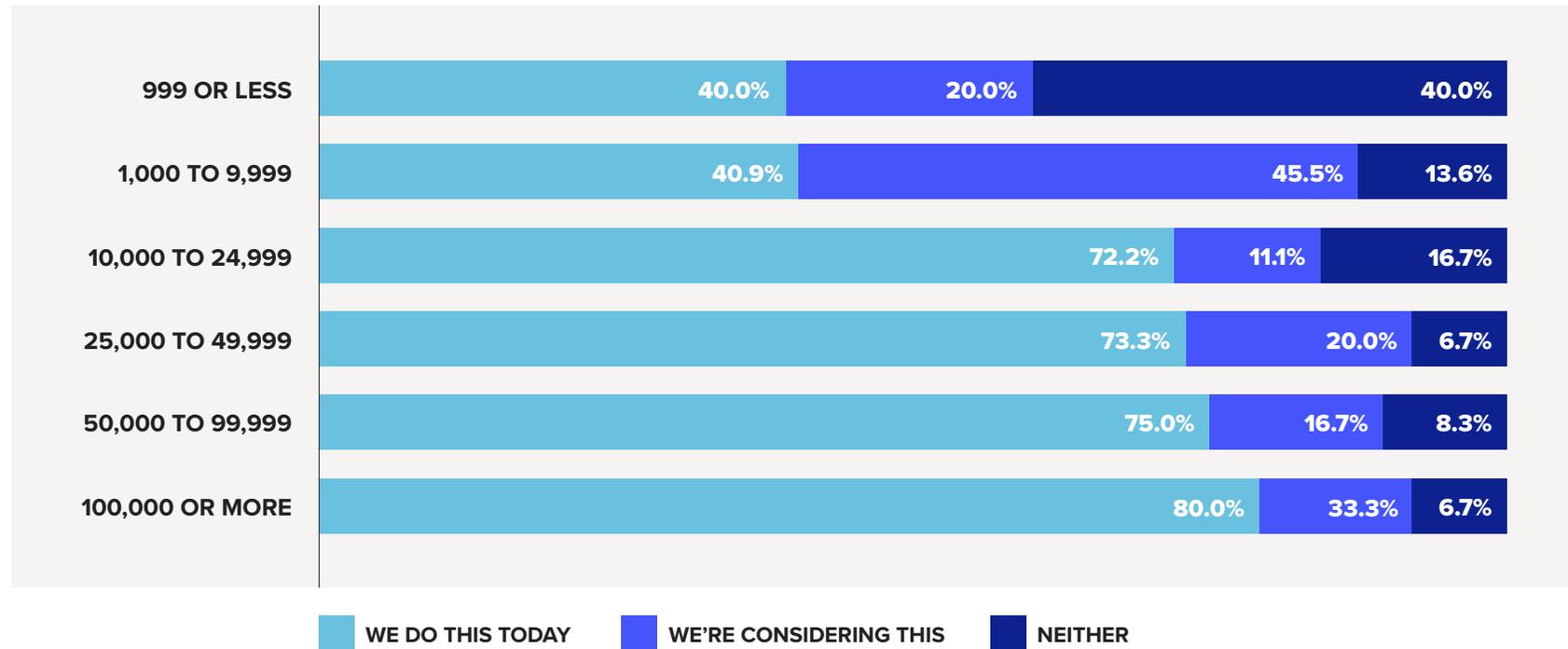
What is your organization's primary industry?

Automotive, Transport & Logistics	12.1%
Industrial Manufacturing	11.0%
Energy & Utilities	9.9%
Consumer Goods / Consumer Products	8.8%
Financial Services	7.7%
Technology	7.7%
Chemicals	6.6%
Pharmaceuticals & Life Sciences	4.4%
Agriculture	3.3%
Engineering & Construction	3.3%

The industries listed at left represent nearly 75 percent of our corporate survey respondents; one quarter come from other industries.

INVESTING IN STARTUPS, BY COMPANY SIZE

Companies Making Investments in Startups (Directly, Through an Accelerator Program, or Venture Capital Firm), by Number of Employees

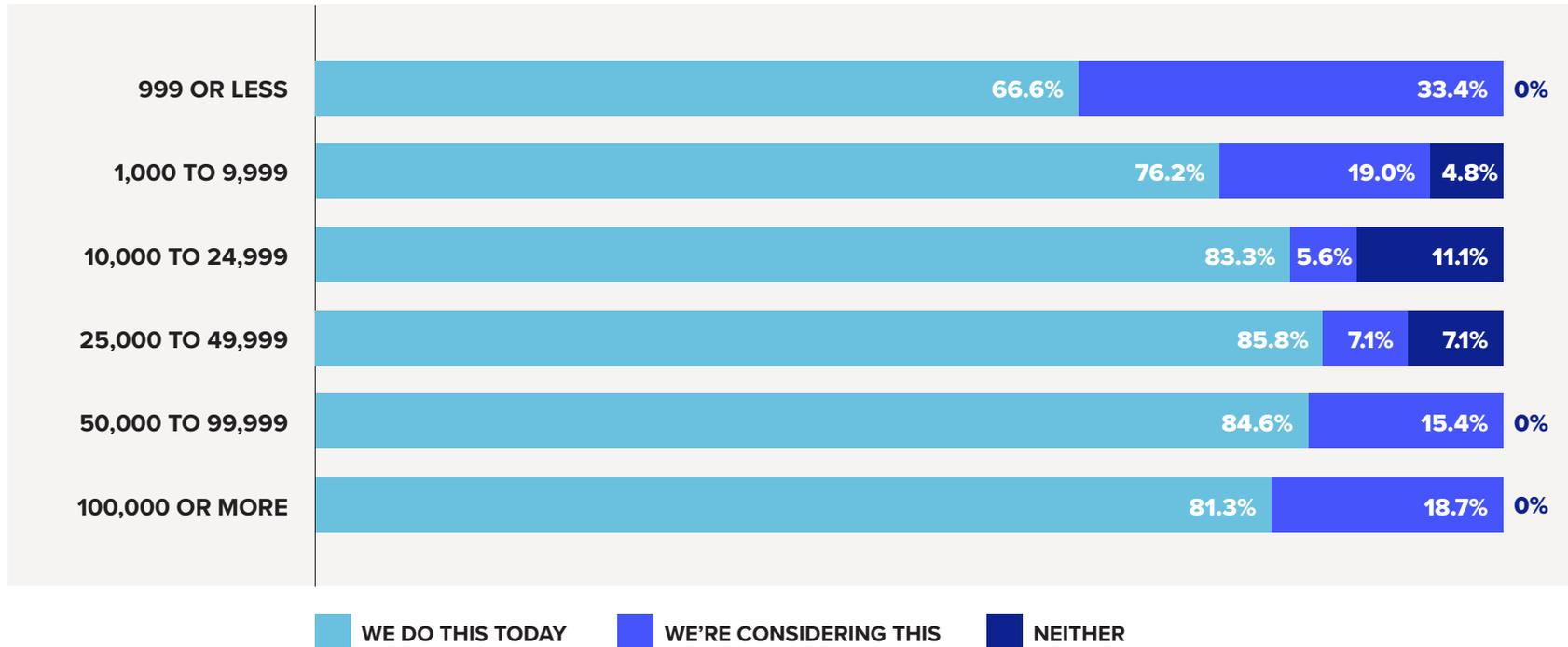


Companies with more than 10,000 employees were much more likely to have a corporate venture capital arm that invests in startups, or to make these investments through accelerators or as a limited partner in “traditional” VC firms.

Our “very experienced” respondents were even more likely to be making startup investments (at 83 percent) than the largest companies shown on this chart.

PILOT TESTING STARTUP TECH, BY COMPANY SIZE

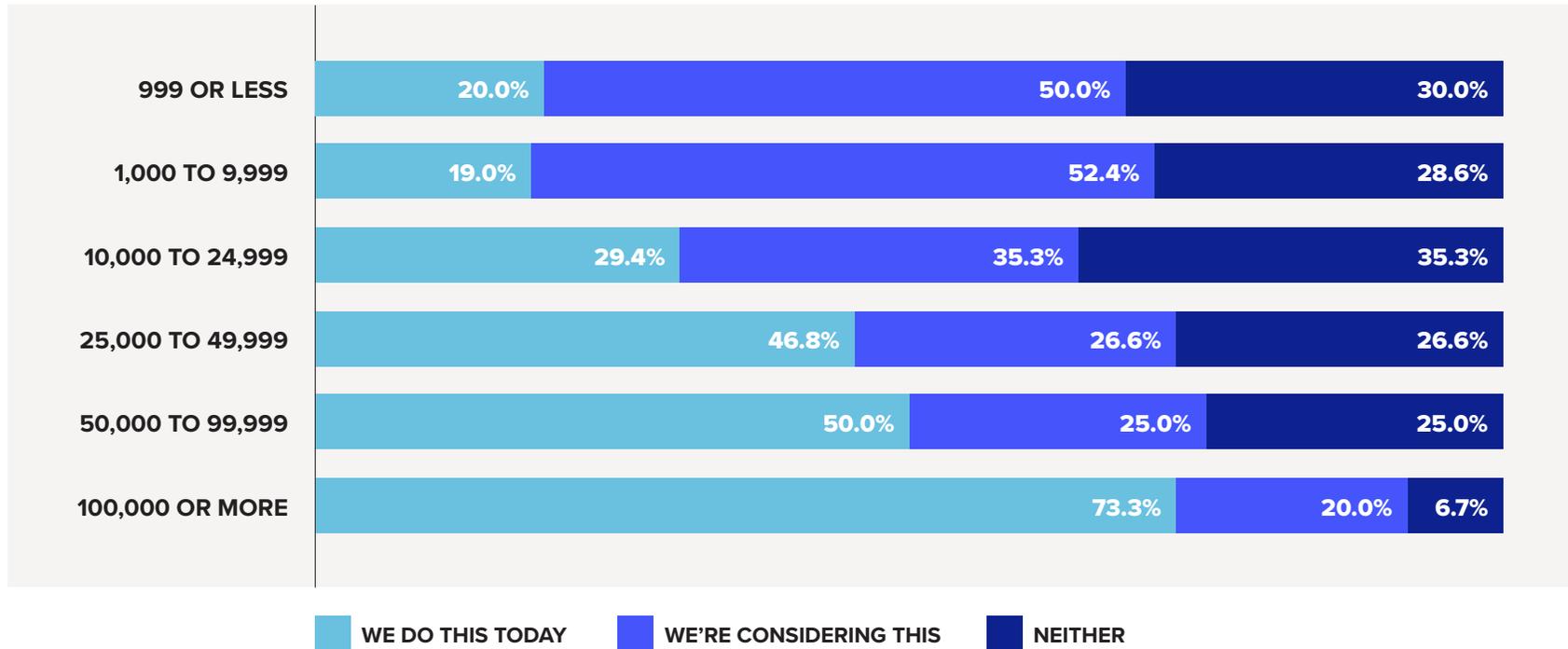
Companies Pilot Testing Technology or Tools Developed by Startups, by Number of Employees



Pilot testing new technologies or tools is less common in smaller companies than those with 10,000+ employees, perhaps because of resource constraints/limited bandwidth. And interestingly, this activity drops a bit with the largest companies (100,000+), perhaps due to the speed at which they operate, or more complex requirements related to security, risk, and compliance checks.

STARTUP ACQUISITIONS, BY COMPANY SIZE

Companies Acquiring Startups, by Number of Employees



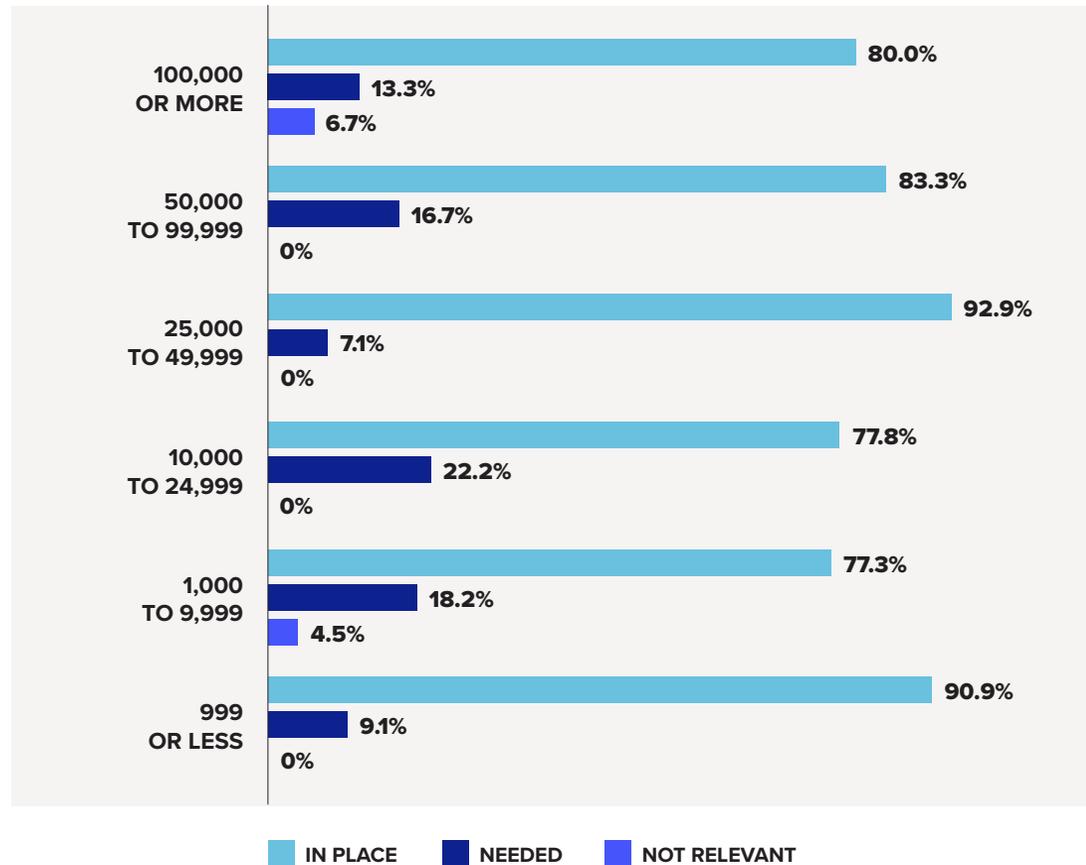
Here, the largest companies were much more likely to be acquiring startups to get access to their technology, IP, talent, or customer base.

Companies in Europe and North America were also about twice as likely to have done startup acquisitions than those in Asia-Pacific.

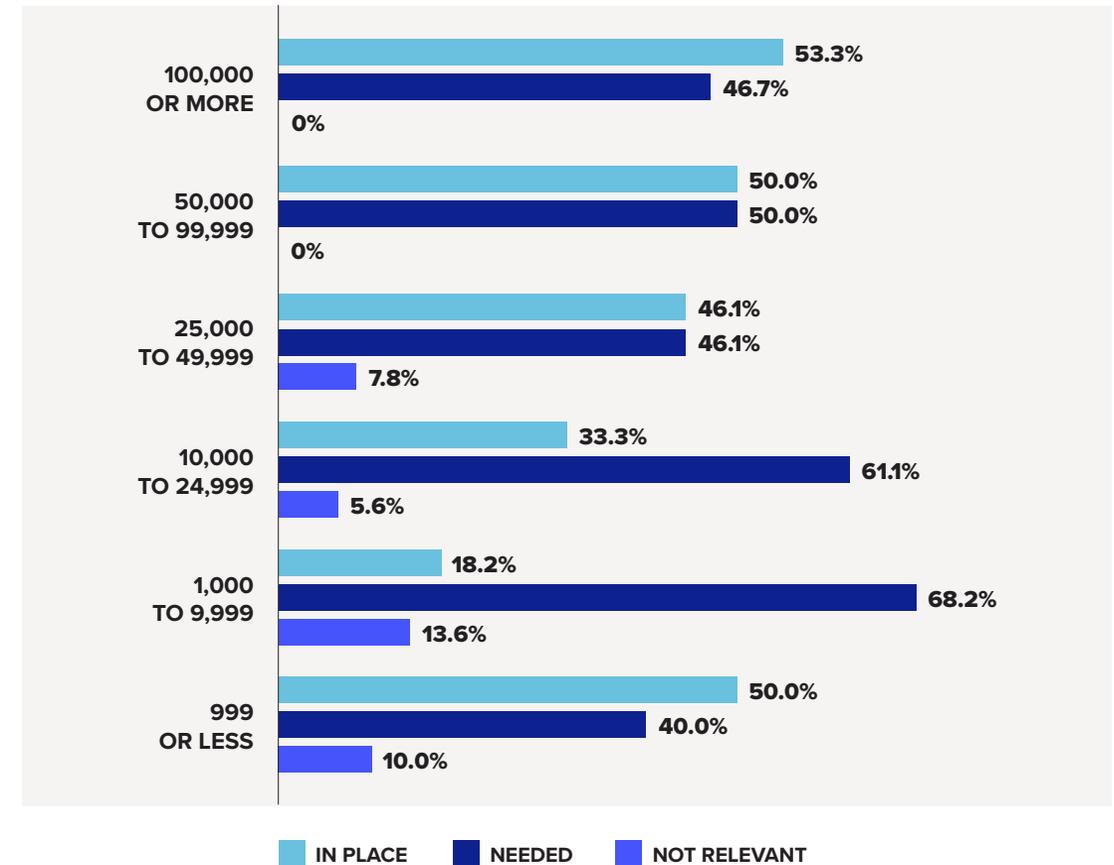
TEAM AND PROCESS, BY COMPANY SIZE

Of these resources related to startup engagement, which do you have in place, which do you feel you need, and which are not relevant?

Team Dedicated to Finding New Startups

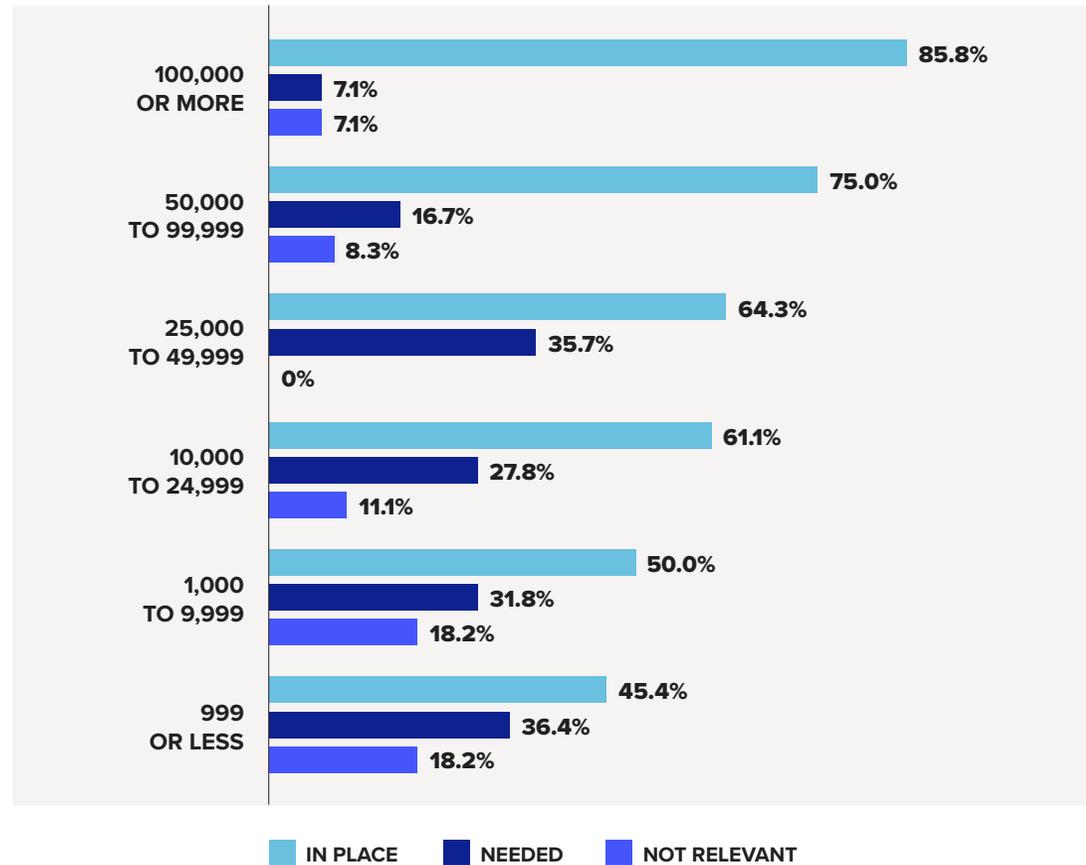


Process for Integration / Organizational Structure

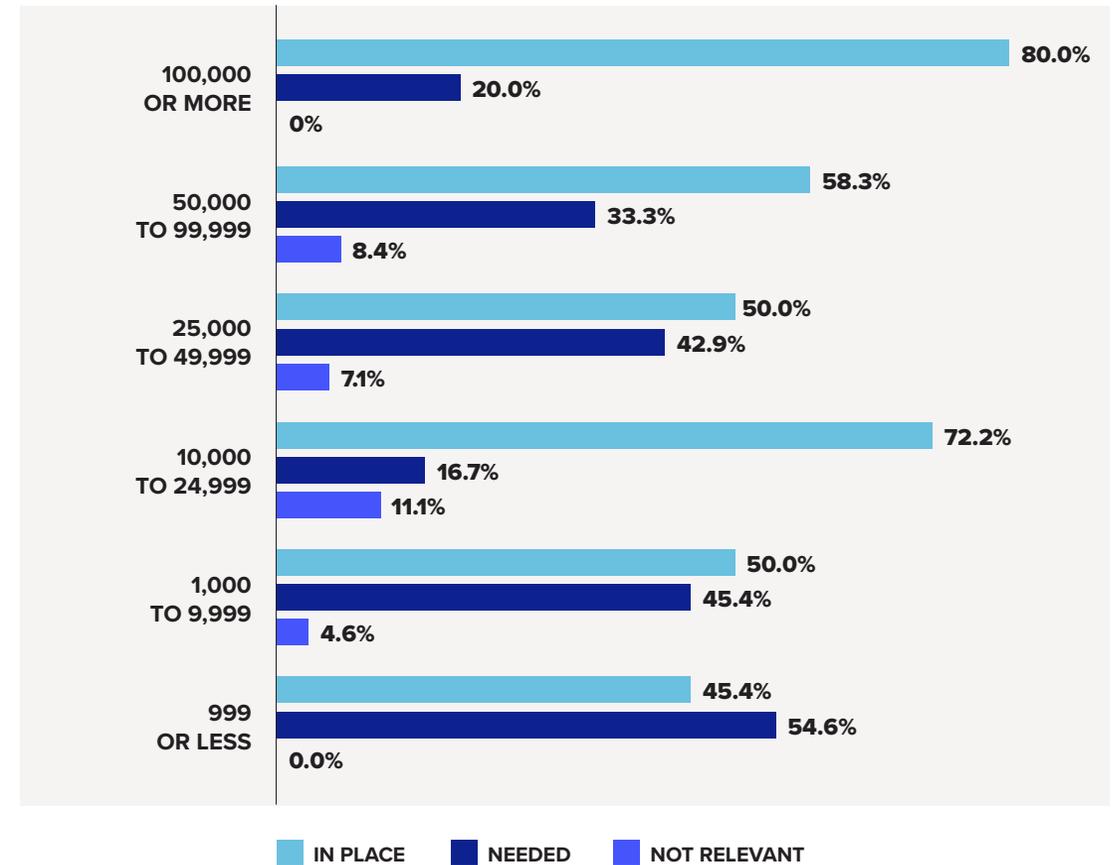


BUDGET AND BUY-IN, BY COMPANY SIZE

Budget



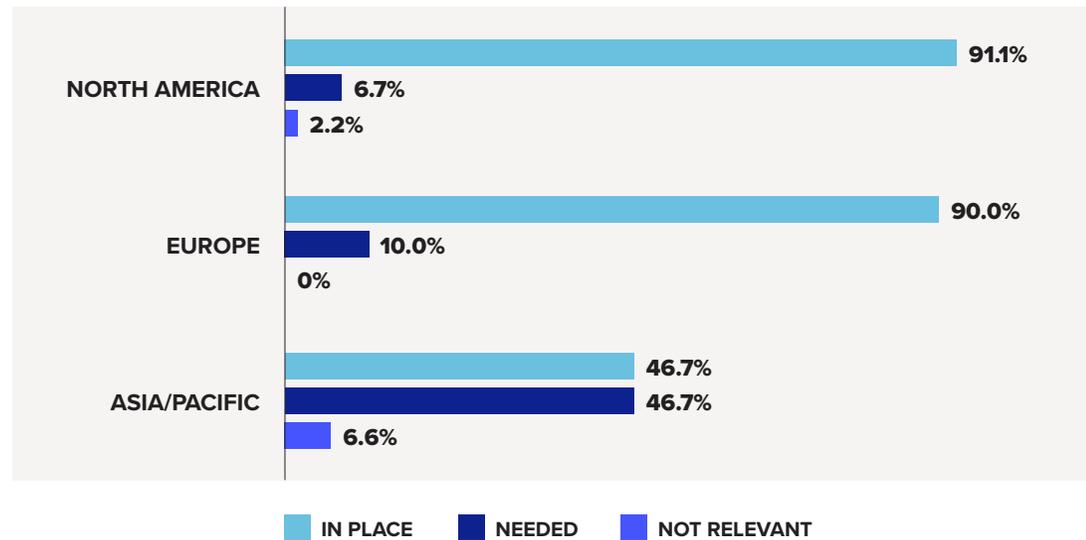
Executive Oversight / Buy-in



TEAM AND PROCESS, BY GEOGRAPHY

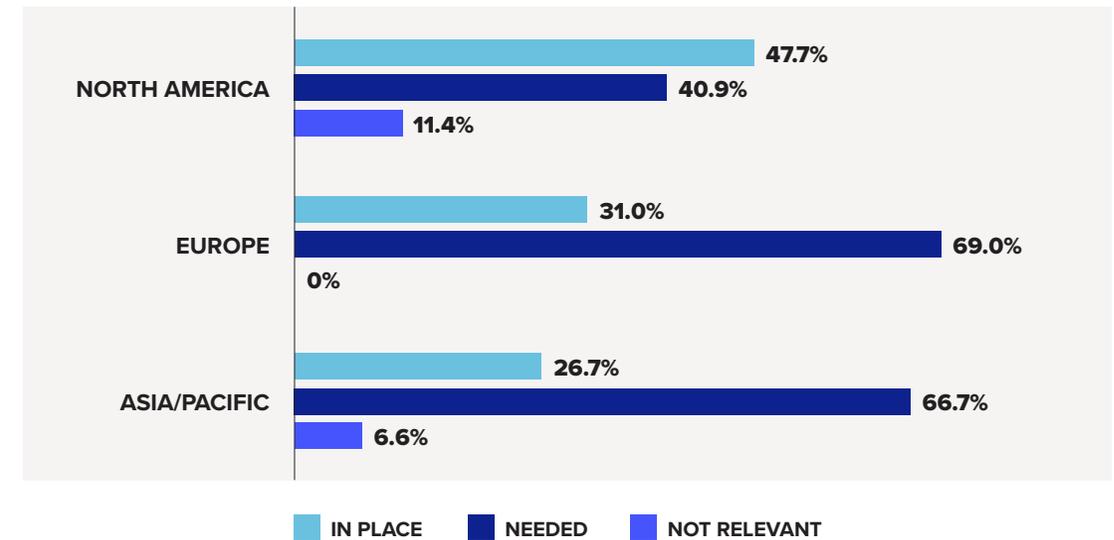
Of these resources related to startup engagement, which do you have in place, which do you feel you need, and which are not relevant?

Team Dedicated to Finding New Startups



The lack of a dedicated team for startup scouting may be hampering some companies in Asia/Pacific.

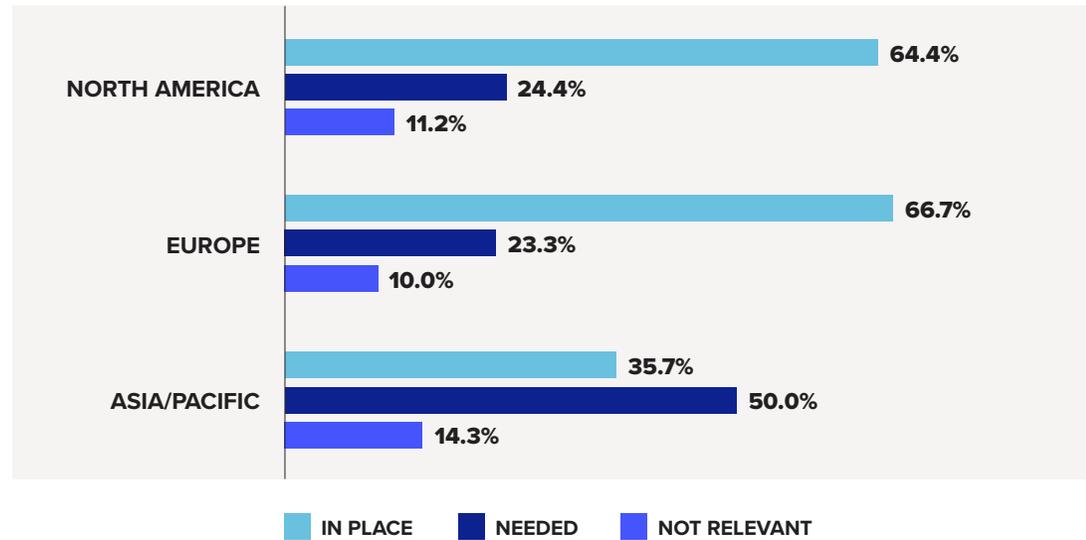
Process for Integrating Startups, by Geography



Companies based in Europe and Asia/Pacific were more likely than those in North America to feel that they need a better process for integrating startup technologies and solutions into their business.

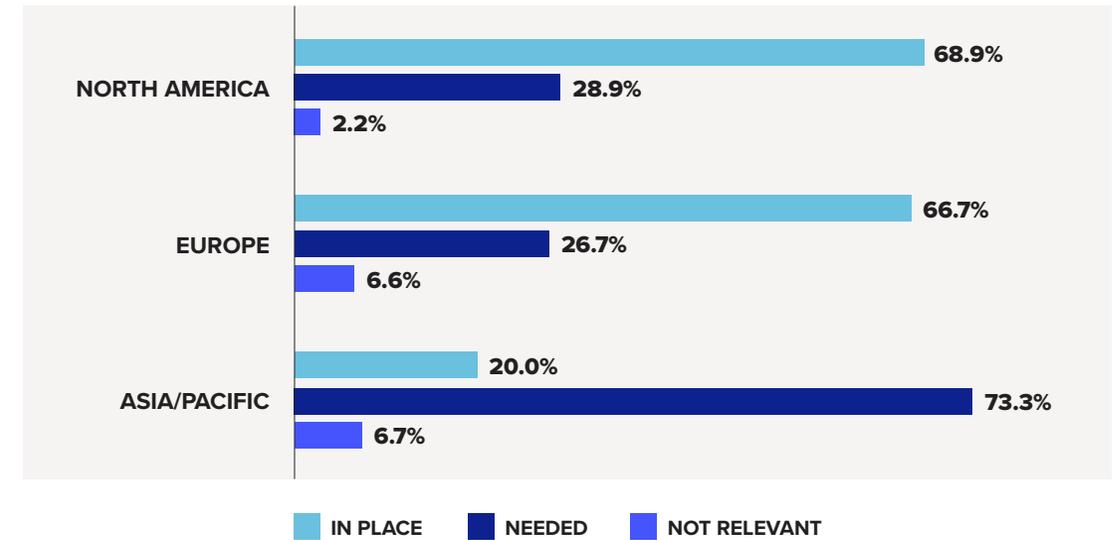
BUDGET AND BUY-IN, BY GEOGRAPHY

Budget for Working with Startups, by Geography



Companies in the Asia/Pacific region were most likely to say they are in need of additional budget for startup engagement...

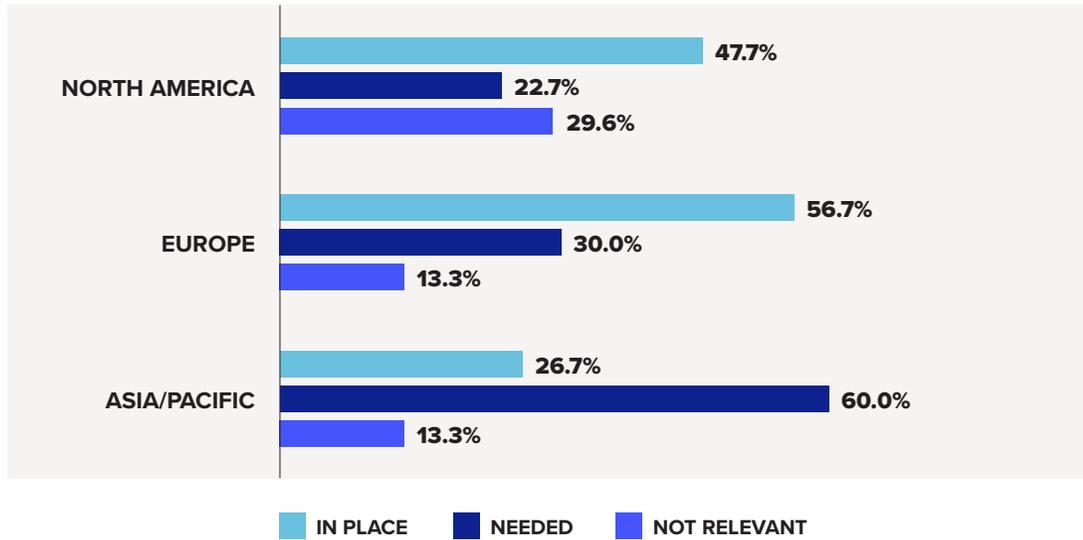
Executive Oversight/Buy-in for Working with Startups, by Geography



...And companies in that region also felt they needed to improve their executive buy-in and support.

CORPORATE VENTURE CAPITAL, BY GEOGRAPHY

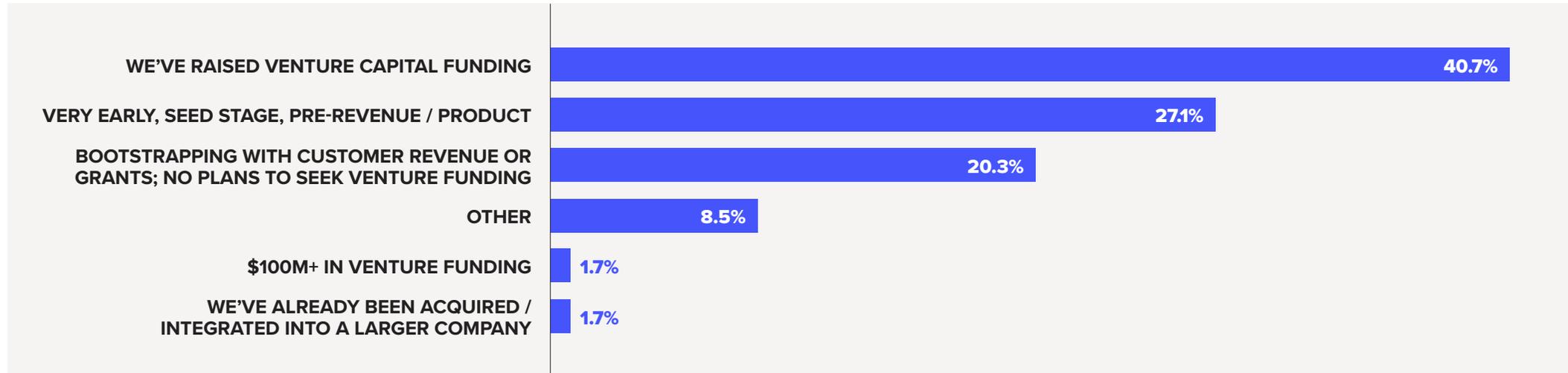
Use of Corporate Venture Capital Arms, by Geography



Companies in Asia/Pacific were most likely to feel they would benefit from a corporate venture capital arm, while more than half of our European respondents said they already had one in place.

ABOUT THE STARTUP RESPONDENTS

Which stage best describes your startup?



Nearly 41 percent of our respondents had raised some amount of venture capital funding; an additional 20 percent said they were bootstrapping on customer revenue, without plans to seek venture funding. The most common “other” responses involved bootstrapping with plans to eventually raise venture capital.

ABOUT MIT CORPORATE RELATIONS

MIT Corporate Relations aids and directs companies interested in multidisciplinary involvement with the Institute. Its expert staff works with MIT senior administration, faculty, and company executives to structure and define individualized alliances that mutually benefit the company and MIT.

MIT Corporate Relations also offers industry access to MIT through two integrated programs, the MIT Industrial Liaison Program (ILP) and MIT Startup Exchange.

The Industrial Liaison Program is instrumental in providing connections to MIT faculty, departments, labs, and centers. It serves companies across the globe and is organized both geographically and by industry.

MIT Startup Exchange actively promotes collaboration and partnerships between MIT-connected startups and industry. Qualified startups are those founded and/or led by MIT faculty, staff, or alumni, or are based on MIT-licensed technology. Industry participants are principally members of MIT's Industrial Liaison Program (ILP).

Contact: ilp-info@mit.edu

Upcoming in-person and online events calendar: <https://ilp.mit.edu/attend>

For more information: <http://corporaterelations.mit.edu>



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