Startup-Corporate Experiments

Finding Success with Proof-of-Concepts.

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By 500 Startups

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Introduction

Over the past decade, corporations have made large strides in pushing innovation efforts to protect against disruption and new entrants in their markets. These initiatives include hosting hackathons, running internal innovation contests, or developing their own corporate accelerators. From what we've seen, most large multinationals now have teams dedicated to exploring innovation or partnering and experimenting with high potential ecosystem partners.

With the unprecedented events of 2020, we have been encouraged by the willingness of corporations to think through new ways to open its gates and creatively utilize its products, services, and talent. From issuing open calls for startups to tackle crucial healthcare topics, to building new alliances and consortiums to accelerate PPE manufacturing, never has it been a more urgent and promising time to showcase your company's assets and capabilities to the outside world.

But for many corporations, the pandemic and now recession has cast a spotlight on what are often perceived as cost centers, compelling teams to consider how to restructure their teams and processes for maximum efficiency to produce the outcomes desired by executives.

In a recent survey of more than 80 senior-level innovation leaders, 500 Startups found that large corporations have moved past the reactionary stage and while they have no plans to halt innovation activity, the greatest priority is enhancing existing R&D initiatives and capabilities. Some of these initiatives are comprised of pilot partnerships to test new technologies.

After the events of 2020, we found that large corporations have no plans to halt innovation activity. But their greatest priority is enhancing existing R&D initiatives and capabilities.

Our team believes that following a crisis like that of 2020, doubling down on **innovation through startup collaboration** is more important than ever. However, these initiatives must be structured and executed with expert care and diligence to minimize waste and for corporates to maintain their reputation in the startup ecosystem.

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There is much that has been written on disruption and the state of internal innovation labs, but we've found there to be much less written on the unwieldy and often painful process of running an experimental project with a startup. These most often take the form of proof-of-concepts (POCs) and pilot programs.

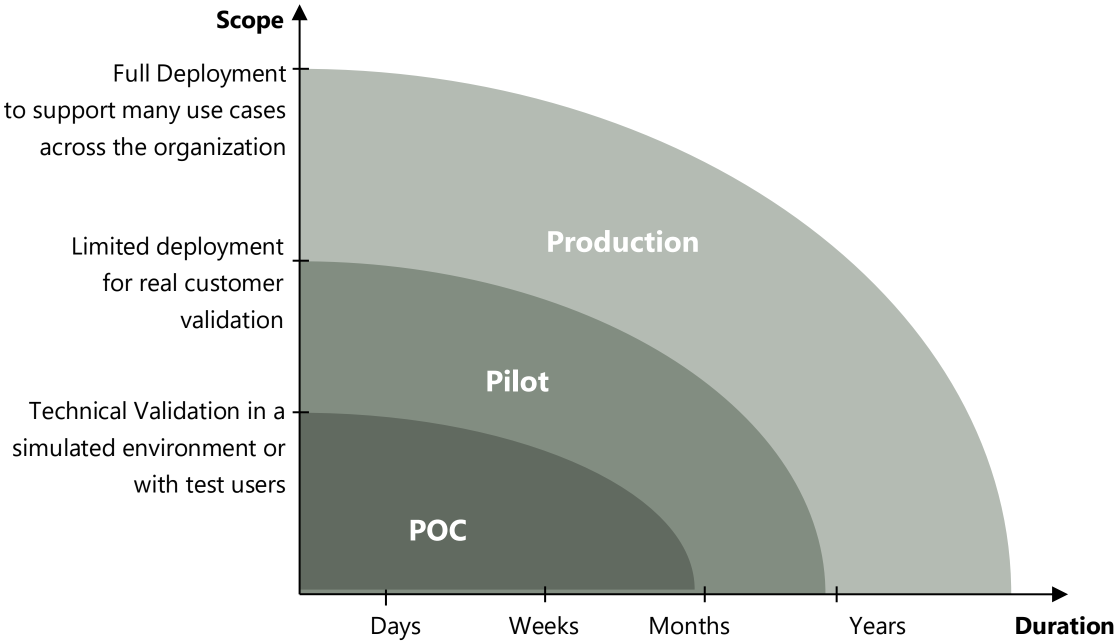
This is why our team set out to interview a selection of twelve prominent innovation practitioners from a range of different industries to see how internal stewards of innovation are trying to make it happen and what best practices they might share with their peers. As advisors in this space for over a decade, we've seen how difficult the process of innovation is, and how isolating the role may be for those who feel like they have to move mountains to get a pilot with a startup. What's more, innovation with startups is often viewed as a 'nice to have', so doing it the right way can help solidify the team as a central, indispensable part of the company — more important than ever in these uncertain times.

We hope that this paper provides some helpful insights and tactics as you navigate your own journey with startup experimentation and prepare your company for its next era.

Corporate Proof-of-Concepts: A Primer

What is a Proof of Concept? There's a lot of different ways that companies define a POC, and often confusion as to where you draw the boundaries between a POC, a pilot, a Minimum Viable Product (MVP). Some use proof of concept, pilot, and MVP interchangeably. But from our experience, most definitions of POC tend to converge on the notion of testing to confirm ***feasibility*** of a solution, or feasibility of the most critical and central element of a solution. In most cases, if this is not confirmed to be true, then the startup's fundamental value proposition and market prospects are in jeopardy. A pilot would be a way to validate whether those claims hold up in a broader context. The differences between a POC and pilot lie in both scope and time horizon, as seen in the graph below.

Scope and time horizon between common corporate experiments[1]:



1 Adapted from Alchemist Accelerator ' Evaluating an Enterprise Software Platform'

At the POC stage, we believe there should be a product that exists in some form; it cannot just be an idea or demo. It should be customized and embedded into the partner's environment. These experiments are conducted in a targeted, isolated manner that involves a subset of a potential client's organization, and should only span a few weeks or months.

POCs should be hypothesis-driven.

At 500 Startups, we define POCs as experiments to validate the fundamental claims that the technology makes.

POCs are characterized by an overarching hypothesis regarding the technology, which will vary depending on the industry:

- *[For a Blockchain Company]:* Can Technology X validate the financial transactions more quickly than Technology Y?
- *[For a Mobility Tech Company]:* Can this vehicle sensor cover at least a range of 200 meters?
- *[For a financial services company]* Are users of a financial literacy product more likely to use add-on products like life insurance or annuities?

As such there may need to be multiple POCs required to test different components of an overall system of infrastructure.

Experiment Features of POCs vs Pilots

	Proof-of-Concept	**Pilot**
Purpose	*Validates whether technology will work within corporate environment*	*Validates technology use cases with real user feedback, and signals that larger scale deployment is feasible*
Audience	*Internal Group*	*Customers*
Duration	*Days to Weeks*	*Weeks to Months up to Years*
Return on Investment / Revenue Generation	*Does not test for ROI*	*Tests for ROI and sightline to commercial viability*
People Involved	*Limited small team (~2-3), with select sign-off from sponsor*	*Dedicated Team, with buy-in and approval from various business units*

For startup founders, proof-of-concepts are an essential step in both the product development and fundraising journey. Testing in a controlled environment provides product teams the opportunity to stress-test the limitations of the product and determine what is able to be accommodated. For startups exploring different industries and markets to apply their technology to, POCs could allow for a new test in a new vertical to determine whether the market can be expanded.

In raising follow-on funding, successful POCs can be used as evidence that there is a need for the technology in market, and signal attractiveness to larger, more influential commercial partners down the line. Some later-stage investors will not consider founders unless there are similar tests that have been done to show product viability. To investors, they represent the ability for the startup to meet the requirements of different environments and scale for the future.

Case Study:

Founded in 2012, Trōv was a startup that originally provided on-demand, mobile-based insurance to cover damaged or stolen personal items, such as personal electronics, jewelry, or musical instruments. In 2017, Trōv struck a partnership with Waymo to provide trip-based coverage for autonomous vehicle riders, marking the first time the startup worked in the automotive or mobility space. This initial test paved the way for new industries and today mobility and automotive comprise a significant focus for the now Series-D startup.

Trov Dec 2017 Press Release

For corporates on the other hand, we've found that the ultimate objective of many corporate-startup partnerships is integration into the corporate's technology infrastructure and product roadmap in some way.

The term "fail fast and cheap" is a popular one in the innovation world, and POCs provide the perfect mechanism for doing so.

When done properly, POCs should demonstrate whether something meets a certain criteria or threshold in order to continue moving forward, allowing teams to avoid deploying significant time and resources towards an effort that may not be worth the organization's time. POCs are often a first step for a corporate to assess how well the startup's technology is going to function in the organizational environment, as a preview of how well it may ultimately integrate.

POCs can be used for specific use cases as defined by business units, or more 'blue sky' initiatives that are designed to explore what could be disruptive to the company years down the line. However they are a more common 'checklist' item when they are tied to an area of technology need or theme that has been prioritized by corporate; in the 'blue sky' scenario, it can be hard for a POC to 'de-risk' a technology sufficiently for the project to move forward.

Corporate POCs: Our Key Findings

__Horizon 3 Startup Collaboration Example:__ To expand beyond tire services, a multinational tire manufacturing company set out to conduct various startup experiments to explore predictive maintenance technologies and test new business models for the future. Compared to more targeted technology sourcing efforts, this initiative was not linked from the start to specific business units. With the support of company leadership, the innovation team prioritized broad themes that it knew would be critical in the next decade as consumer behavior and trends around car ownership continue to evolve. In 2020, the company introduced a software-based fleet servicing platform aimed at fleet operators, a new foray for the company to position itself for the mobility landscape of the future.

- **Corporates have a strong preference to work with later stage startups — at minimum Series A.** Every innovation lead we interviewed from a corporate said that they are looking for startups that have tested their offering in some form already, and over half of respondents said Series B or later would be preferred. This corresponds with the requirement we've often seen for startups to have proven case studies before corporates are willing to engage in POCs, and the more relevant the case studies the better.
- **Most corporate teams are more comfortable bringing in startups for "Horizon 1-2 initiatives".** While most teams sought to identify both incremental and radical opportunities for growth, startup introductions and collaborations tended to work most smoothly for more targeted, near-term initiatives where there was a defined need by a business unit.
- **The length of Corporate POC's can span anywhere from 1 to 6 months, with most falling around 3-4 months.** Most proof-of-concepts should be executed rapidly, but we've found that corporate environments continue to present a barrier to agility. All respondents expressed the desire to move more quickly than the current speed at which they have been able to operate.
- **Success Metrics still center around volume of activity:** At least half of respondents said that 'number of startups introduced to the organization' is a key metric for success. More outcomes-driven business units include additional metrics such as 'Number of POCs or engagements completed' and cost savings. Less common but refreshing to see were goals such as "Impact on overall project speed."

- **The business value that startups bring is just as critical as their technological performance:** If it's a technical solve for an existing challenge, the startup must be able to explain the details of how it works, but also connect to the business impact that it delivers. The decision maker at a large corporate must see the how it will influence his or her business metrics.
- **Two or three startups is a common number of external partners to work with in a single testing cohort.** Most teams we spoke to preferred to test at least two similar technologies concurrently to reduce risk and compare outcomes.

We believe that many of these findings can be boiled down to the ingrained risk aversion of corporations, perhaps most prominently in Financial Services. The exception may be when the designated 'innovation' function is isolated and operates with a different culture and metrics from the rest of the company, and may not require as much collaboration or buy-in from business units. But from our experience, teams structured in this way tend to work less frequently with the external ecosystem, preferring greater secrecy.

The Biggest POC Challenges… And how to overcome them

Every corporation is different and the reason why a POC runs into challenges or fails to take off is going to be a result of a confluence of different factors, including internal politics, reputational pressures, and the business climate at the time. But we've seen most open innovation efforts converge into a few common paths, and the 'intrapreneurs' pursuing these paths tend to run into similar types of challenges:

1. **It's not enough to have an interested stakeholder with a problem to solve, but an interested stakeholder with an open mind about the process to get to the outcome and the ultimate form the solution takes.**

   500 Recommendation: Take the time to define the real problem *behind* the one that is being stated, understand the context around the ask, and the potential motivations of the stakeholder and his/her business unit. For example, is the business unit under pressure to deliver for a specific milestone event? (500 Startups has worked with partners whose mindset regarding startup engagement was shaped by looming deadlines from HQ, be it a seasonal product launch or having something press-worthy for CES). Our teams kick off nearly all engagements with a rigorous scoping exercise to define what success looks like in all its forms, and how far we can push the boundaries.

2. **Startups often have to prove that they are better than the existing legacy technology — not just a measurable improvement, but substantially better.** When an existing solution already exists, the inertia is always to continue using what has been working, even if it's widely acknowledged to be problematic. This is especially true when time, money, and resources have already been spent bringing everyone up to speed on the original vendor (several respondents referenced existing technology giants like IBM and Microsoft as examples of the 'familiar' vendors that IT is comfortable with).

> ***500 Recommendation:*** Try to understand why the guidelines are the way they are, and see what you can do to change the existing benchmark. Talk to the people who are deciding these metrics and/or requirements, challenge them to think outside the box a bit. For example, it's not uncommon for a business unit to place narrow requirements around a particular problem that might be relevant when dealing with a vendor, but a new technology or combination of technologies renders those requirements irrelevant. (500 Startups has seen this happen in particular where engineering requirements become disassociated from actual customer problems). Make sure to ask why requirements are what they are and take a human-centered approach to re-examine them.

3. **Securing startup engagement budget from the proper departments can be frustrating, as it's often perceived as 'wasted' or 'additional' budget due to the uncertain nature of the POC outcome.**

> ***500 Recommendation:*** Frame up the POC as one that is different from a typical project and serves a simultaneous purpose as an important learning exercise for all parties involved.

4. **POC's are not necessarily the golden ticket forward; many people outside of the innovation team do not take them seriously.** For some companies, it's just one proof point of many that need to be gathered for a new technology to be fully explored. Others might believe a POC did not measure the right 'use case' and discount the result of it.

> ***500 POV:*** Set the right expectations with your key sponsor. If additional stakeholders are looped in, hear them out. Make sure they are heard but emphasize that only a core point is being validated and other requirements can wait for a pilot.

5. **Success metrics are often directional and not 'set in stone', and ones that are more defined tend to be activity based (e.g. start-ups introduced), which can be hard for the rest of the organization to see the value of**

> ***500 POV:*** Communicate that the POC is a necessary step for validating the opportunity for significant financial impact down the line, and may also prevent misuse of resources. If you are responsible for multiple innovation initiatives, try to construct a portfolio approach to success metrics and present a combination to your project sponsors. Gather small wins and qualitative feedback that can be easily shared along the way.

Best Practices for POCs We Have Seen

Experimenting with startups in a corporate environment is never easy, but we have seen some creative and resourceful methods deployed to ease what can be a cumbersome process:

- **Scout for Business Units (BU's) that are deeply unhappy with the current solution:** An innovation practitioner from a Financial Services Multinational said that one of the ways she has sourced appetite for startup engagement is keeping a regular pulse on where in the organization people are complaining most loudly about existing technology vendors. "If the existing solution works but is a pain in the butt, this is a great place to be."
- **Standardize 'templates' or establish clear POC 'paths' that provide clarity on specific action items required to proceed with a POC:** Consider what frameworks could help the POC owner understand exactly who needs to be engaged when and remove typical procurement friction. For example, one innovation lead from a Multinational Automotive Manufacturer said that each technology test is tagged to a distinct POC path that indicates whether it will go into the next production line and for which vehicle models.
- **Develop an internal network to share startups that have been brought into the company ecosystem:** One ecosystem partner has set up a system where new POCs may bypass certain procedures if a startup has been previously vetted by another BU.
- **Find a way to bring executives together:** One Global Financial Services Provider institutes a round table of BU executives tasked with finding POC opportunities for areas of disruption. This has ensured that POCs have senior level buy in and are attached to a stakeholder who has the authority move to a pilot or commercial engagement when warranted.
- **Provide broad visibility to a large number of BU stakeholders early in the sourcing process.** This approach, conducted at a major Automotive Conglomerate, allows a large number of both startups and stakeholders to be filtered by alignment, commitment, and problem fit for both parties.

Additional Highlights: What Innovation Leads want to know

In our conversations, we also polled our innovation leads on what they are most curious to hear from others conducting experimentation in the industry:

Engagement Strategy	• "For others who are in an innovation team that is more remote [from HQ], how do you avoid being written off as a cost center?" • "How do you position yourself to startups? Do corporations pay the startups during the POCs?"
Process	• "How are companies balancing incremental innovations requested from their BUs with more forward-looking solutions?" • "How are others speeding up the process or making it more efficient?" • "How do you get [business units] to pay for the POCs?"
Metrics	• "How are others striking the balance between learning and actual outcomes?" • "Are innovation teams actually happy with POC projects even if they don't work out?"
General	• "How is everyone expanding their network during COVID/ WFH environment"?

500 Startups Corporate Growth Team Can Help.

With our experience facilitating different types of corporate-startup engagements around the world, 500 Startups has gathered unique insights on what different parties need to be successful in different situations. The team has honed a set of capabilities to help corporations achieve more successful outcomes when working with startups, which spans the end-to-end POC process as well as building their own internal growth areas.

Business Challenge Identification	Startup Sourcing	POC Scoping and Set-Up	POC Oversight

Who we are as a Firm

500 Startups is one of the most active global early stage venture capital firms. Since our inception in 2010, we have invested in over 2,500 companies across 78 countries, but we aim to extend our global footprint beyond investing. Through our partnerships with corporates, investors, governments and foundations, we are committed to building interconnected startup ecosystems across the world. We have engaged with more than 100 corporates to help them transform their business or identify new sources of growth. We support companies looking to accelerate their growth through external startup partnerships or internal venture acceleration.

Get in Touch to learn more:

innovation@500.co

Authors:

Jenny Wu
Director of Corporate Growth, 500 Startups

Roland Osborne
Practice Director of POCs and Pilots, 500 Startups

Additional Contributors:

Vijay Rajendran
Head of Global Corporate Growth

Jennifer Lee
Director of Corporate Growth, 500 Startups

To learn more about 500's Corporate Growth solutions and how to build startup partnerships the right way, contact us at innovation@500.co