Making the

Startup Ecosystem
More Equitable

Engine

November 2021

Introduction

Startup founders with a good idea and a connection to the open Internet should have the opportunity to succeed, no matter where they are or what they look like. But within the startup ecosystem, underrepresented founders, employees, and investors all face inequities. In the U.S., roughly 77 percent of VC-backed founders identify as white or caucasian[1] and only 1 percent of venture backed startups were led by a Black founder.[2] In 2020, only 2.3 percent of VC funding went to startups led by women.[3]

There's a moral and a business case for changing that. Diverse teams generally produce better outcomes, with studies showing that racially and gender diverse teams are 33 percent and 21 percent more likely to be profitable than their less-diverse peer teams, respectively.[4] Diverse teams with more gender and racial representation often serve a more diverse customer base and develop solutions and services aimed at a wider audience. Simply put, diverse perspectives lead to better innovation. Diversity within the leadership team of a company is also directly correlated to increased innovation as measured by revenue from new products and services. And studies show that one million employer businesses and 9.5 million new jobs could be created if only underrepresented founders had equitable access to start and scale their businesses.[5] In order to bring more diversity into the ecosystem, it is important to ensure diversity is prioritized throughout; institutions, individuals, and policy must do better to support diverse innovators.

This booklet will examine the barriers many underrepresented founders face across the startup ecosystem, identify the specific roadblocks that stifle their success, and make recommendations for policy changes that could lead to more equity for founders, investors, and employees. Having an inclusive framework is critical for the fabric of our nation and imperative for the U.S. to remain competitive as a global leader at the forefront of innovation.

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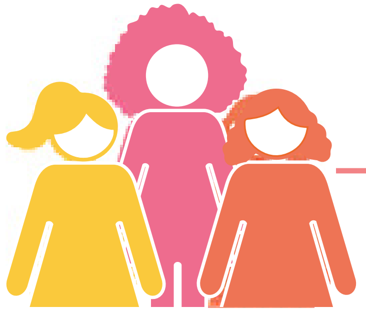
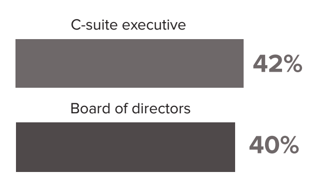
To prioritize an accurate representation of the diversity in our startup ecosystem and this booklet, Engine defaults to using the words entrepreneurs typically use to describe themselves and their backgrounds. For the purposes of this booklet, when referring to a group of individuals, the term underrepresented founders includes entrepreneurs of color and women entrepreneurs. This term may also encompass members of the LGBTQ+ community, low-income individuals, rural innovators, and any other innovator that has been historically, geographically, or economically disenfranchised creating challenges for them to innovate. For members of the Latin American culture or ethnicity, Engine defaults to using the term Latinx, but for statistics where the data cannot be reconciled, other terms may be used, including Latino and Hispanic.



Women in the Startup Ecosystem

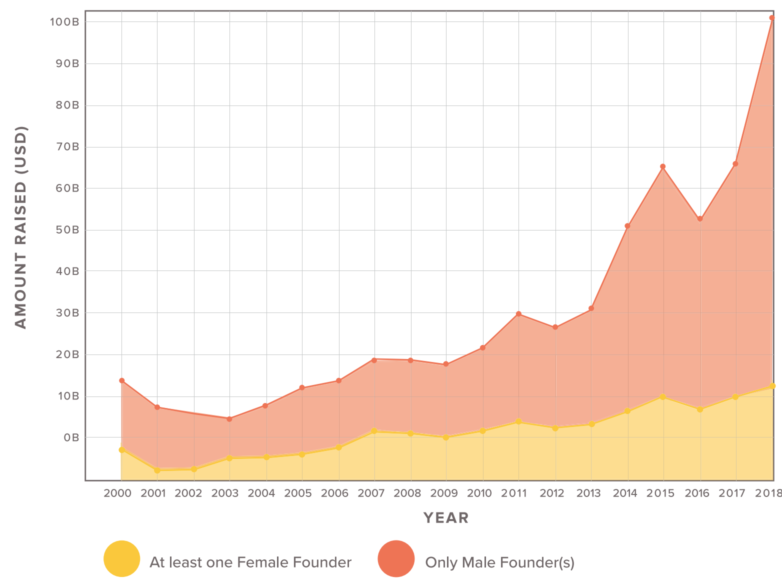
By the numbers: The number of startups with at least one woman founder has been steadily increasing, but still remains under 30 percent,[6] despite the fact that women make up more than 50 percent of the population and are more likely to obtain college degrees.[7] Leadership opportunities for women in startups also continue to lag behind opportunities afforded to men. Studies estimate that only 40 percent of startups have at least one woman on their board of directors, and just 42 percent have at least one woman in an executive role.[8] And only 14 percent of startups have a female CEO.[9] While 2020 was a record year for companies going public, with the number of initial public offerings hitting 442 by mid-December, just four of these companies were founded and led by women.[10] And for women founders and employees who are able to pursue careers in entrepreneurship, they also lag behind men in compensation packages. In 2019, though women represented 13 percent of all startup founders, they only reported holding 7 percent of founder equity.[11] Additionally, while women make up 34 percent of all startup employees, they hold just 20 percent of employee equity.

Percentage of U.S. startups with at least one woman in a leadership position



*According to the Silicon Valley Bank's 2020 Startup Outlook Report

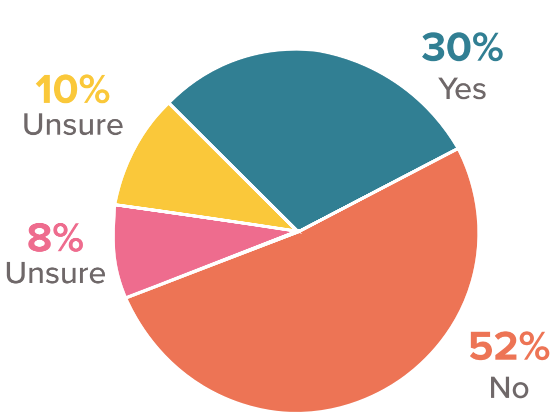
65 percent of venture firms had no female partners



*The current landscape of investing in the U.S. according to Kauffman Fellows

The startup ecosystem needs more women at all levels of employment. Startups with women founders hire[12] 2.5 times[13] more women than those led by male founders, and a company led by a woman founder and woman executive will hire six times more women. But it cannot be the burden of women alone to increase gender diversity; it is critical that startups,[14] ecosystem support organizations, and investment firms led by men increase resources and energy spent on recruiting, supporting, and retaining women.

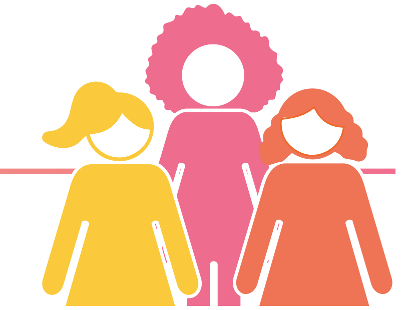
Percentage of U.S. startups with programs in place to increase the number of women in leadership



*According to the Silicon Valley Bank's 2020 Startup Outlook Report

Key Takeaways

- While the number of startups with a woman founder is increasing, there is still work to be done.
- Women founders and startup employees are not only underrepresented in the startup ecosystem, but they also hold less founder and employee equity.
- Startups with women founders are significantly more likely to hire women than those led by male founders.



Gender and startup funding: Startups with all-male founders are more likely to secure capital than startups with women founders. In 2020, startups with a woman founder raised just over $20 billion in venture funds.[15] And while this number has jumped to $40 billion for 2021, startups founded by teams entirely made up of women have still struggled. Reports indicate all-woman founded teams have raised just 2.3 percent of venture capital this year, while mixed-gender teams have raised 11.7 percent of funding, and male-founded teams have raised 86 percent of funding.[16] These statistics are even more bleak for women of color—startups led by Latinx and Black women combined raised just .43 percent of venture capital in 2020,[17] down from .67 percent the year prior. Black and Latinx women also raise significantly less than the national median seed round of $2.5 million, raising on average $125 thousand and $200 thousand respectively.[18]

The pandemic also disproportionately hurt women-founded, venture capital-backed startups which struggled,[19] even though venture capital-backed startups overall thrived.[20] The already-low peak of 3.4 percent of venture capital funds directed towards women-founded startups in 2019 sank to 2.4 percent in 2020.[21]

The vast majority of startups don't receive venture capital; it's estimated that less than one percent receive that type of funding.[22] A far greater number of startups rely on a combination of funding, including self-funding and capital from friends and family, credit cards, and loans, which can have disparate outcomes for women founders. In February 2021, Fundera reported that only 25 percent of business loan applicants were women, and only 32 percent of applicants are approved for financing.[23] Women are on average quoted higher interest rates and are approved for debt less often than their male counterparts. They have lower credit scores on average than men, a fact that is likely also tied to wage and wealth gaps. For Black women, these challenges are magnified—in 2016, 66 percent of Black women stated that access to credit and money for expansion was a financial barrier.[24] Black women also report receiving less financing than requested, or they refrain from applying for financing altogether. Additionally, Black women business owners are more likely to look to personal funds to finance their endeavors, with 31 percent of Black women business owners reporting doing so compared to 16 percent of nonminority business owners which can significantly impact long term wealth building.[25]

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Key Takeaways

- Startups led by Black and Latinx women raise just .43 percent of venture capital in 2020.
- Venture capital funds directed towards entirely women-founded startups represented just 2.3 percent of total funds thus far in 2021.
- Women founders also struggle to access other forms of capital, including business loans.
- Childcare can serve as a barrier for women founders. Policymakers should take steps to ease the childcare burden so more women can pursue entrepreneurship.

Women in the Startup Ecosystem

Startup Spotlight

Tomodachi

Los Angeles, CA
Na Xue, Co-Founder

"[A]s I made my transition from teaching to starting my own company, it has been difficult to find funding and the support that I need, especially as a woman and mother. I found research that shows around roughly 3 percent of the funding that comes from venture capital goes to women-founded startups and yet, when you look at the percentage of startups with women founders, it's around 28 percent. There is a real disparity there. Moving forward, we need to work to address reducing that gap."[26]

Women in investment: Women also struggle to gain meaningful representation in the investor world. As of 2020, 65 percent of venture firms had no female partners,[27] and studies have shown that only 12 percent of venture firms or angel investors have women making investment decisions.[28] But women venture capital partners are twice as likely to invest in women founders.[29] Therefore, without representation across the ecosystem—from founders to mentors to networks to investors—women founders will remain underfunded which limits the opportunities for innovation and consumer benefits.[30] For instance, a predominantly-male team of investors may not comprehend the utility of the product or service aimed at an audience that isn't predominantly male.[31]

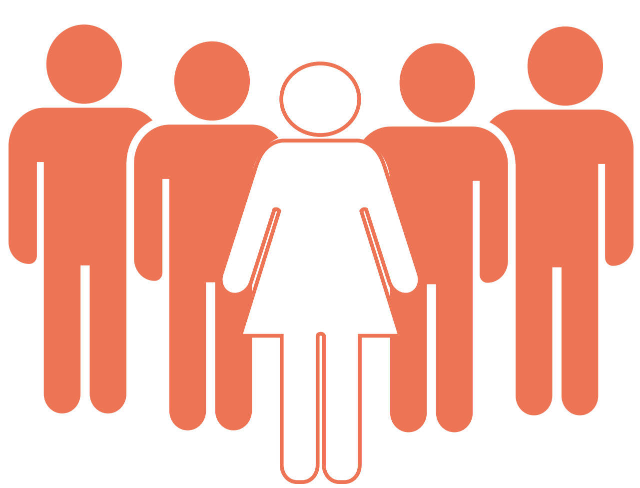
Startup Spotlight

Dipper

New York, NY
Netta Jenkins, Co-Founder

"The number one thing for folks who want to help and stay committed is to look at the gaps first. Black women statistically receive 0.2 percent of venture capital. That is a major, major gap. A lot of times, VC firms aren't looking for early-stage entrepreneurs or businesses, which is another big barrier. And a lot of Black and Brown entrepreneurs cater their services towards Black or Brown people, and investors can't see the vision or the mission of their companies."[32]

65 percent of venture firms had no female partners



Key Takeaways

- Few venture firms have women making investment decisions, but women venture capital partners are more likely to invest in women founders.
- Policymakers should work to enhance diversity amongst the investor pool, including through reforms to the SBIC program to attract more gender and racial diversity.

Startup Founders of Color

By the numbers: Systemic racism and race-based wealth gaps have had a significant impact on the ability of founders of color to launch and grow startups. For example, in the U.S., for every dollar the average Black family owns, the average white family owns about eight dollars; for every one dollar of assets the average Latinx family owns, the average white family owns about six dollars.[33] And inequities only balloon from there.

According to a 2020 report, just 1.7 percent of Black founders received venture capital funding[34] and only about 1.3 percent percent of venture capital-backed startups had Latinx founders.[35] And a 2019 report estimated that Asian founders make up roughly 17.7 percent of those backed by venture capital.[36] And while underrepresented founders are making strides in the venture capital world, white male founders still dominate the space—most estimates[37] indicate more than 70 percent of founders are white,[38] and roughly 90 percent are male.

In addition to the lack of founders of color in the startup ecosystem, startups themselves similarly struggle with racial equity in their infrastructure. Studies show almost 80 percent of startup executives are white, while only 2.1 percent of executives are Black and 2.6 percent of executives are Latinx.[39]

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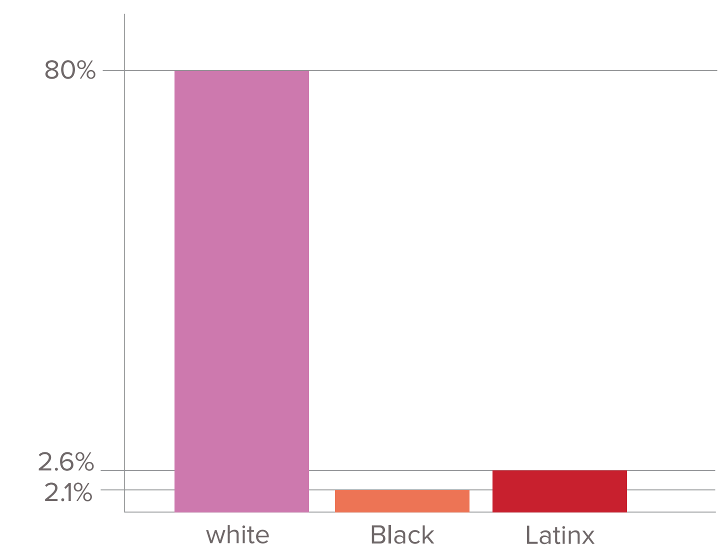

Key Takeaways

- According to a 2020 report,[40] just 1.7 percent of Black founders received venture capital funding and just 1.3 percent of venture-capital backed startups had Latinx founders.
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Startup Spotlight

Hacking the Workforce

Alexandria, VA
Safi Mojidi, Founder

"Despite the critical role entrepreneurship plays in the development of wealth in families as well as communities and economies, the opportunities to start and expand a business are not equal for Black Americans in the U.S. Black entrepreneurs are nearly three times more likely than white entrepreneurs to have their business growth and profitability significantly impacted by a lack of financial resources."[41]

Startup Founders of Color

Founders of color and startup funding: Underrepresented founders struggle to obtain most sources of financing that support innovators which only stands to push them towards riskier alternatives to make their visions a reality or out of the startup ecosystem altogether. Black- and Latinx-owned small businesses, for example, are often pushed to use riskier credit options to capitalize their businesses—including personal credit cards and cash advances—at higher rates than white-owned small businesses.

In 2020, when venture capital ultimately reached nearly $150 billion,[42] Black- and Latinx-founded companies raised just 2.6 percent of venture capital,[43] despite demographically making up roughly 32 percent of the U.S. population. And in the first half of 2021, just 1.2 percent of venture capital funding went to Black entrepreneurs.[44] Even in the San Francisco Bay area, where the largest amount of venture capital funding is directed to Black- and Latinx-founded startups, it amounts to just 1.8 percent of venture capital in the region.[45]

Outside of institutional funding, founders of color struggle to raise other forms of capital as well. Relative to white founders, Asian, Black, Hispanic, and American Indian or Native Alaskan entrepreneurs rely more heavily on capital from personal and family sources.[46] For underrepresented founders that do pursue business loans, they are often denied at higher rates than white founders. For example, according to a 2020 study, just 20 percent of the Latinx business owners that applied for national bank loans in excess of $100,000 received financing.[47] Meanwhile, 50 percent of white business owners applied for loans of similar size were granted financing. Underrepresented founders, including Black, Latinx and Native American Founders, also face higher interest rates compared to their white counterparts.[48]

And, disparities in credit scores also impact bank loan availability, limiting capital access for founders of color. Studies suggest that underrepresented founders —including women, Black, Latinx, and Native American founders[49]—all have relatively lower credit scores.[50] This is at least in part influenced by systemic income and wealth inequality and the credit scores are then used by banks to determine who does and does not get a loan. If founders cannot get a loan, they can't build credit history or increase their credit score, perpetuating a cycle of disadvantage.

Key Takeaways

- Founders of color face barriers in accessing most forms of capital, not just venture capital.
- Underrepresented founders are less likely to be granted loans and face higher interest rates.
- In 2020, Black and Latinx founders raised just 2.6% of total venture capital funding.
- Policymakers need thorough and accurate data to inform efforts to bring equity to capital access.

Startup Spotlight

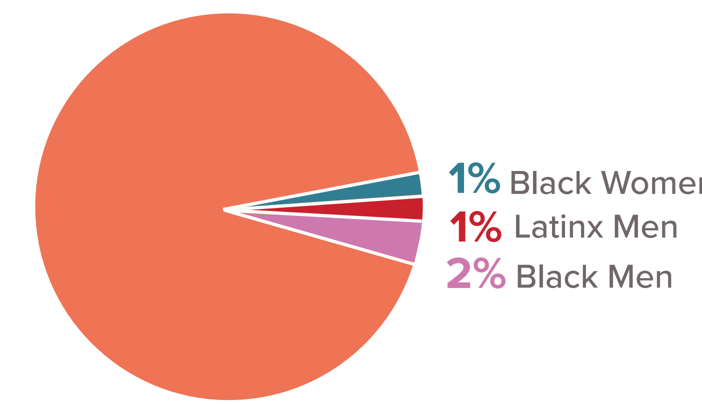
Productions.com

Atlanta, GA
Carolyn Pitt, CEO

"Accessing capital is one of the hardest things that founders have to do. And research has shown that it's much harder for women founders to access capital, and even harder yet for founders of color. As a Black woman founder, my experience has borne that out...But it's not just venture capital that is more challenging for underrepresented founders to access. Black and Brown founders often don't have a friends and family round—or they have one that's substantially smaller than their counterparts—due to the lack of generational wealth."[51]

Investors of Color: A stark lack of internal diversity within venture firms exacerbates representation problems throughout the startup ecosystem. Studies indicate over 80 percent of venture capital firms lack a single Black investor.[52] Some estimates indicate that only 1 percent of venture capital professionals are Latinx men, virtually zero percent are Latinx women, just 2 percent are Black men, and 1 percent are Black women.[53] Black-owned and -led venture firms have boosted investments in diverse startups, and Latino-owned firms in the San Francisco Bay area have banded together through LatinX VC. But less diverse firms must similarly take on work to increase equity and representation. Angel investors—who typically invest in startups earlier than venture capital firms—also lack representation—as of 2017, over 87 percent of angel investors were white and over 77 percent were male.[54] Hispanic and Latinx angel investors represented just 2.3 percent of total angel investors,[55] while Black investors represented 1.3 percent and Asian investors just 5.7 percent.[56]

Race and Gender of Venture Capitalists in the U.S.



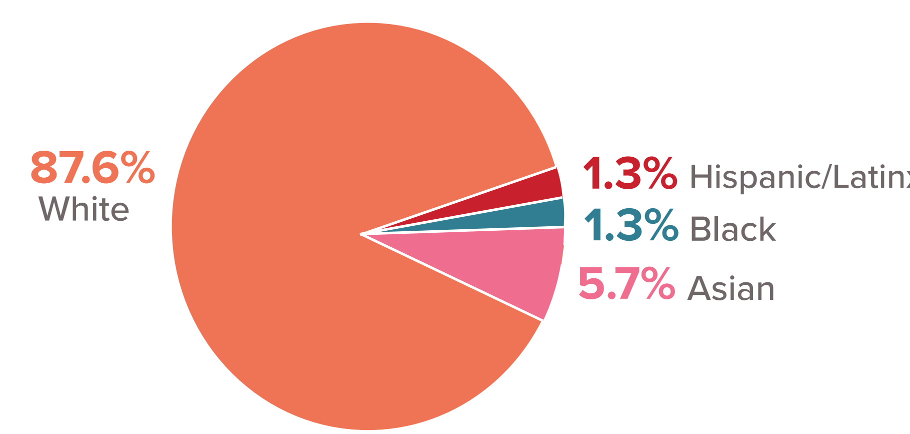
*According to Richard Kirby of Equal Ventures

There are virtually zero Latinx women who are venture capitalists in the U.S.

Key Takeaways

- Lack of investor diversity exacerbates diversity problems throughout the ecosystem.
- Policymakers should inventize a more equitable allocation of venture capital, including through the exploration of public-private partnerships, and consider adopting changes to the definition of accredited investor.

Race Demographics Among Angel Investors



*According to The American Angel Report distributed by Harvard Business School

Barriers for Underrepresented Founders

Mentoring and networking: While funding is perhaps the most significant barrier underrepresented founders face, there are other factors that affect a startup's outlook. Networking and mentorship opportunities can guide a startup founder on a path towards success as mentors can serve as valuable resources for support, guidance, and industry contacts.[57] But this is only the case if the founders are granted access to this well of knowledge. Underrepresented innovators and entrepreneurs have been historically excluded from many of these networking and mentorship opportunities, bypassing benefits essential to innovation and growth.[58] Studies have shown that, for example, women founders who were able to scale their businesses were 10 percent more likely to have mentors that were successful in entrepreneurship. Without connections to networks of funders, startups are often unable to raise money. And without enough representation in the startup and investor communities, it can be difficult for underrepresented founders to build the networks they need.

★ Startup Spotlight

Postagraph

Gaithersburg, MD
Pelumi Olatinpo, CEO

"[A] lot of funding that happens in this area is based on relationships. A lot of white entrepreneurs that are building startups already have those networks and connections. . . . Programs to implement tax incentives for angel investors could work in a way that bypasses some of the problems associated with other private funding programs. I think a program that adds a lot of incentives for angels to make investments in underserved communities could actually work."[59]

Education and training: The nation's innovation ecosystem relies on high-skilled, diverse talent to build and grow startups. But, in order to grow and sustain diversity in innovation, public and private investment in a diverse talent pipeline, including through education, is crucial. Creating a successful talent pipeline must start early, to excite young students about innovation. But it also requires encouraging talented students to channel that excitement into careers that spur innovation and startup formation. Anecdotal evidence suggests that disparate access to education, lack of encouragement at an early age, discrimination, difficulty balancing work and family, and lack of representation are barriers that keep underrepresented innovators from entering STEM fields. Disparities in education representation are compounded by problems of retention, which often pushes people out of the innovation pipeline early. Students of color represent 38.5 percent of STEM postsecondary students, but Black and Latino students switch out of STEM degree programs at higher rates than their white peers.[60] In addition, an estimated 20 percent of Black STEM Ph.D. holders and 20 percent of women STEM Ph.D. holders ultimately leave STEM fields. This contributes to underrepresentation in the workplace, where, of all STEM professionals, only 9 percent are Black and only 7 percent are Latinx.

★ Startup Spotlight

Infiltron

Warner Robins, GA
Chasity Wright, Founder

"I worked on a bill to provide funding to STEM organizations that focus on students of color across Georgia's education system. That funding has gone to create STEM clubs across the state. We are hosting targeted workshops, and we are seeing more Black and Latino children engaged with science and math throughout the course of their education. I wanted to be part of this effort to give students opportunities that I did not have at their age. If I had a STEM club in elementary school, then I think I would have been an aerospace engineer a lot earlier in my career."[61]

Family care responsibilities: Family care responsibilities, which often disproportionately fall to women, limit opportunities to pursue entrepreneurship. In 2016, an estimated 2 million parents made career sacrifices because of barriers associated with childcare, and with women frequently bearing the brunt of childrearing responsibilities.[62] In one study, 54 percent of women entrepreneurs who were parents indicated they were the primary caregiver for their children versus only 37 percent of male founders.[63] And women-led startups struggled in particular amidst the pandemic, as parents had to juggle working from home and remote learning or homeschooling.[64] This disruption in access to childcare hit women of color even more acutely, especially those that don't have affordable or available childcare options near them.[65]

★ Startup Spotlight

Empathy Rocks

Bellevue. WA
Dr. Grin Lord, Founder and CEO

"When entering the startup world, I was most affected by access to child care. It's cost prohibitive, and remote schooling plus lack of consistent child care almost stopped my startup journey. Since becoming a parent, I've taken jobs that barely made a profit when accounting for the cost of childcare for two kids under 5 years old. That is scary to me given that I am a doctoral-level psychologist. I have an amazing amount of privilege and job opportunities, and yet I still struggle."[66]

Access to Broadband: Broadband adoption is vital for the success of tech startups. However, the two most challenging barriers to adoption remain: access and affordability. Whether through home or commercial connection, startup founders need Internet connectivity. The percentage of white Americans with no home broadband access sits at 10 percent; however, this figure jumps to 14 and 17 percent when looking at Latinx and African American consumers.[67] Underserved communities often have limited access to smartphone data plans, which are the only source of broadband access for some people. It's estimated that 17 percent of Black consumers and 15 percent of Latinx consumers in the U.S. rely exclusively on mobile broadband to access the Internet.[68] These communities need equitable broadband adoption to ensure that any startup founder across the country is equipped to launch an innovative business.

Key Takeaways

- Access to mentoring and networking opportunities can guide a founder to success.
- Representation in the startup and investor communities is essential for underrepresented founders' ability to build out a network.
- Support for diverse students and diversity in STEM programs is crucial, but so are investments in recruiting diverse STEM educators, and efforts to improve retention in STEM fields.
- Family care responsibilities disproportionately affect women and serve as a barrier to entrepreneurship.
- Affordable, accessible, reliable broadband is critical for startups, and inequitable broadband access keeps would-be entrepreneurs out of the startup ecosystem.

What Policymakers Can Do

Within government: Policymakers need to prioritize attracting and retaining diverse leaders and employees across every government agency that funds or regulates research and development sectors. Doing so will help emphasize the need for diversity throughout the ecosystem, and can help to ensure equity in decision making.

Policymakers need thorough and accurate data on startups and underrepresented founders to inform their work. With better data, policymakers will better understand where funding is needed and where programs are failing. The implementation of the Paycheck Protection Program, for example, highlighted the importance of data collection. Though the program was designed to assist those small businesses most in need (many of which were minority-owned), Black small business owners, for example, were—at least initially—shut out of funding at high rates.[69]

Address inequities in STEM education: Policymakers should also consider addressing inequities in STEM education, so that more students know that entrepreneurship is a path that can be pursued, including by addressing STEM's "leaky pipeline." Understanding the "leaky pipeline," and ensuring that underrepresented innovators are inspired and able to pursue lucrative careers is critical but will require further data collection. And it is important to note that fostering STEM jobs should be inclusive of those positions that do not require postsecondary education. Innovation does not require a degree, so inquiry into innovation retention should not focus on only advanced education-related factors. For example, alternative education like immersion programs or "boot camps" can be another successful path to STEM and innovation careers.

Improve existing tools: Government should improve existing mechanisms for federal funding, so startups can better tap into current resources. Policymakers should consider a number of efforts, including: streamlining and expanding small business forgivable loan programs so that Black- and Latino-owned businesses are not unfairly denied and have better access to (emergency) relief; widening and simplifying the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs to include more U.S. startups; and accelerating reforms and addressing acknowledged shortcomings in startup access to National Science Foundation (NSF) grants, and expanding funding. Applying for grants is a lengthy and time-consuming process with applicants competing for set amounts of money. This is often not suited to the startup lifecycle where companies tend to need more flexibility and—a potentially smaller amount of—capital quickly. The government could funnel some traditional SBIR and STTR funding through incubators, accelerators, and innovation intermediaries who can disburse it directly into the startup ecosystems in their communities. This would make government grants more nimble and allow more focus on underrepresented founders.

Prioritize diversity amongst STEM educators: Policymakers should not only address equity in STEM education programs but also encourage and invest in efforts to diversify the educator workforce. Alternative route certification programs, for example, attract more diverse educators and should be expanded. More broadly, the government should build and encourage the narrative that teaching STEM is a viable career path for all, both through explicit programming and through more expansive loan forgiveness.

Access to affordable childcare: Policymakers should take steps to ease childcare burdens so more women can pursue entrepreneurship. This could include boosting childcare subsidies, building on incentives that enable employers to provide childcare, and investments in childcare in areas lacking enough facilities, as supported by the administration.[70]

Incentivize private investment: Policymakers should consider incentivizing private investment, including through public-private partnerships. One option, the New Business Preservation Act, would help incentivize investments in startups by creating an equity investment program at the Treasury Department to give states the necessary funding to support the growth of new startups. And that funding would be directed to underrepresented founders in less traditionally tech-heavy regions of the country. Another option is to create a federal angel investor tax credit to incentivize investment in underserved businesses.

Policymakers should also consider expanding the definition of accredited investor so that diverse populations that have been historically affected by wealth inequality have more opportunities to invest in companies and in turn build wealth. Policymakers can consider, for example, lowering the financial thresholds, or directing the SEC to develop a new mechanism to certify accredited investors through an understanding of financial and investing concepts, or permitting those with certain university degrees (ex. in finance) or experience to qualify. Another option would be to consider reforms to the Small Business Investment Company (SBIC) program, to encourage the SBA to license smaller funds (which are more likely to be diverse) as SBICs.[71] Smaller licensed funds are more likely to make smaller investments in smaller businesses, which means women and minority-owned businesses are likely to benefit.

Fix disparate broadband access: Founders of color need viable Internet connection, affordable devices, and effective digital literacy training to help prepare them for market participation. Congress should support legislation that provides block grants to states for broadband deployment in poorly served areas, along with the deployment of middle-mile networks and promoting assistance to providers' low-income programs.[73] Policymakers should support legislation that implements affordable tiers of broadband service during deployment including requiring a minimum service tier that guarantees low pricing.[74]

Access to innovation education resources: Policymakers should ensure innovation education resources and programs are available to underrepresented students regardless of race, gender, or geography. I&E programs, which range from guiding students from an idea to a business or technology launch to focusing further upstream by training students to be more innovative and creative, could attract students from outside traditional STEM fields to pursue entrepreneurship.[72] The federal government should invest in programs aimed at expanding and revising STEM and I&E curriculum resources so that innovation education is exciting and inviting to all students. Federal entities can fund and encourage state and local funding of tailored education programs for students of all ages. Additionally, the government should invest in local STEM and I&E co-curricular and extracurricular programs for primary and secondary schools in underserved communities. For postsecondary education, the government should invest in innovation-related clubs at HBCUs, land-grant universities, and other postsecondary education institutions that attract more diverse student bodies, including community colleges.

Access to networking and mentorship: Policymakers should also work to expand access to networking and mentorship opportunities for underrepresented founders. For example, the Small Business Administration should work to hire and retain more staff of diverse backgrounds, especially in its regional offices, ensure regional offices receive and distribute resources equitably to their geographic regions, and focus on programs targeted at underrepresented entrepreneurs like the 8(a) Business Development Program.[75] The federal government needs to also take a more active role in outreach, actively seeking out diverse entrepreneurs and improving the accessibility of government resources. This should include supporting online resources, which have the potential to connect underrepresented innovators with perspectives beyond a single mentor. Policymakers should also focus on directing more funds to incubators and accelerators who are often the best attuned to the needs of their communities to better ensure that support systems needed by underrepresented founders are getting the resources they truly need.

Several of the ideas discussed here are further examined in comments Engine submitted to the PTO in March of 2021.[76]

Endnotes

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