

The State of the State of Innovation in New Jersey



A Report Based on State-wide Survey
February 2022

Aaron Price, TechUnited:NJ
Richard Kasmin, Ph.D., NJEDA
Forough Ghahramani, Ed.D., Edge
Dave Belanger, Ph.D., Stevens Institute of Technology
Tianxia Xiao, Princeton University
Ana Mazumdar, TechUnited:NJ



We are proud to share the State of The State of Innovation in New Jersey Report. The collaborating partners, that include TechUnited, NJEdge, The New Jersey Economic Development Authority (NJEDA), and The New Jersey Big Data Alliance (NJBDA) worked closely together, using a data-driven approach, to shed light on existing opportunities and areas of growth in New Jersey's innovation community. Special thanks to the Princeton University Graduate School and the GradFUTURES Fellowship program for providing a Fellow to assist with the study. We also want to acknowledge the support of the New Jersey Business & Industry Association (NJBIA) in promoting the survey.

The findings are telling and perhaps not shocking – New Jersey is very strong on talent, access to markets, and connections to corporate and educational networks. Meanwhile, there are clearly areas of opportunity to recruit investors to New Jersey. Results indicate the need for increasing the number of accelerators, incentives for attracting businesses to New Jersey, and policy improvements. For long standing prosperity and innovation, we need everyone to participate in New Jersey's innovation economy. Professional development, education and training is important for as many people as possible to become successful innovators and entrepreneurs.

It should be noted this survey was conducted just prior to the passage of the New Jersey Economic Recovery Act of 2020 (ERA), which was signed into law in January 2021. The ERA created a broad set of tax incentive, financing, and grant programs that address the ongoing economic impacts of the COVID-19 pandemic and advance a stronger and fairer New Jersey economy. Included in the ERA are programs that will bolster the state's startup and entrepreneurial economy, such as the New Jersey Innovation Evergreen Fund¹. This first-of-its-kind program will combine state funds with private capital to support young, innovative businesses. As some ERA programs have just recently launched, and others are under development, it will take some time to yield the results of these public-sector efforts. Recent data, however, suggest the state is already making inroads to better support New Jersey's innovation ecosystem. For instance, data from PitchBook shows a recent surge in venture capital (VC) activity, with innovation-focused New Jersey companies securing more than twice as much in VC deals in 2021 than in 2020. New Jersey now ranks ninth in the nation based on venture capital dollars invested per state – up three spots from where it stood in 2020.

We encourage you to review this report and to take action where you see areas of opportunity. If there are areas that any of the collaborating partners can act as a partner to help, please let us know. While each of our individual organizations are working on some of these issues, we are eager to partner where possible to address the gaps and raise economic competitiveness, resulting in increasing the talent pool and contributions to New Jersey's economy.

We thank all of the contributors to this inaugural report. The collective effort, dedication, and commitment is appreciated and commendable. By working together, we are certain we can make a significant impact for the entrepreneurs and innovators who are currently in New Jersey and those who will find a home with us in the near future.

While there are clearly areas for growth, there is strong momentum in the NJ innovation economy. Join us in helping to build the next chapter of technology and innovation in New Jersey.

Sincerely,



¹ See www.njeda.com/evergreen

Executive Summary

TechUnited in partnership with the New Jersey Big Data Alliance (NJBDA), the New Jersey Economic Authority (NJEDA), and NJEdge **embarked upon a project to obtain baseline data of the opportunities and challenges for innovation and entrepreneurship in New Jersey.** Representatives from these organizations worked together to develop and distribute the State of the State of Innovation in New Jersey online survey to the broader New Jersey community to identify the view of the state of innovation in the state - including what is working well and where additional resources are needed. The survey provides insights into the needs, challenges, as well as opportunities for entrepreneurs in the New Jersey innovation ecosystem. Understanding that things evolve rapidly in pandemic and post-pandemic times, the intent is for the 2021 survey results to serve as a baseline to be used for comparison purposes to subsequent survey data.

The State of the State of Innovation in New Jersey findings and recommendations serve important input to the state about the opportunities that are available and the challenges yet to overcome in New Jersey for the entrepreneurship and innovation community. It is our hope that the in-depth insights will be useful to academic institutions and the investment community, resulting in enhanced service offerings and educational programs for innovators and entrepreneurs. Results of the survey can be used to inform government policy decisions as well as curriculum decisions for institutions of higher education about the skill requirements for the necessary workforce and the resource and services that universities can provide for entrepreneurs and the innovation ecosystem. With this gained knowledge, we will likely have greater advocacy for changes in certain public policies, helping to promote diversity, Equity, and inclusion, and creating a stronger and fairer economy in New Jersey. In addition, organizations such as the NJBDA, NJEDA, NJEdge, and TechUnited can leverage the results to develop necessary programming to address the needs identified for strengthening the New Jersey Innovation ecosystem.



The survey was administered during late **Fall 2020 through January 2021** across government, industry, non-profit, and higher education community.
A total of 276 individuals participated in the survey.



Organizations Represented

The represented organization size breakdown based on sales included 60% small (less than \$5million), 16% medium (\$5million - \$35 million), and 24% large (\$35 million+) businesses. 91% of the organizations were headquartered in New Jersey and 41% had locations outside of New Jersey as well. 64% were private-for-profit organizations, 10% Academia, 8% government, 7% public for-profit, and 13% non-profit/other. The sectors represented included Technology (41%), Finance & Professional services (12%), Education (12%), Manufacturing (7%), government (3%), and Retail (3%). Among the organizations represented, the categories included Healthtech (25%), Artificial Intelligence (10%), CleanTech (9%), Smart Cities (6%), FinTech(5%), and Other 46%. The CEOs of 65% of the companies represented in the survey identify as male, and 23% as female, 12% unknown/ other. The ethnic diversity of the CEOs for the represented companies included 51% Caucasian, 13% African American, 9% Asian, and 9% Latino/Hispanic, 19% other/unknown. 73% of respondents indicated that their company has implemented Diversity, Equity, and Inclusion (DEI) policies. Additional information is included in appendix A.



Survey Participants

Survey participants included entrepreneurs/founders (55%), corporate (26%), service providers (29%), academic (17%), investors (11%), government (2%).

82% of respondents had **at least a bachelor's degree**, including Ph.D. (19%), Masters (33%), Bachelor's (30%), and high school or trade degree (14%).

63% of respondents identify as male, 33% female, 4% as other.

Ethnicity of respondents included 52% Caucasian, 13% Asian, 11% African American, and 10% Latino or Hispanic, and 13% other. Additional details are included in Appendix A.

KEY FINDINGS INCLUDE:



Access to talent is very important for an innovation ecosystem, and New Jersey scores well on this metric. Thirty three percent of respondents chose access to talent as a top three element of an innovation ecosystem. Of these respondents, seventy nine percent agreed or strongly agreed that New Jersey has adequate access to talent.



Funding opportunities and government support for innovation were also selected often as top three elements of an innovation ecosystem. On these elements, respondents on net reporting New Jersey lacks adequacy in both elements. Clearly, respondents believe government support and access to capital are important elements of a healthy and growing innovation ecosystem, and these elements are in need of attention.



Public policy is seen as a weak point of the innovation ecosystem. High taxes, a lack of incentives, and onerous labor laws are highlighted as issues constraining the growth of the innovation ecosystem.



Access to investment, at every stage and in every form, is seen as a significant drawback to growing the innovation ecosystem.



While access to human and institutional capital is generally seen as an attribute of New Jersey's innovation ecosystem, some areas are in need of attention. These include events, such as conferences and business plan competitions, access to incubators and accelerators, and generally supporting growth of a network of entrepreneurial peers.



Universities have an important role in knowledge dissemination and workforce development in the innovation ecosystem. University-based entrepreneurship centers that promote entrepreneurial activity and idea-formulation for new companies, resources and facilities for academic spinoffs, providing access to digital technology tools and computing capability for innovation, entrepreneurial training and seminars for intellectual property and the technology commercialization policies and processes were additional important contributions of universities.

The findings indicate that the state is well regarded in terms of human capital and sharing of knowledge and skills, such as the depth of the talent pool, access to professional services, and knowledge from universities and research-intensive organizations. Other areas of relative strength include presence of innovation and entrepreneurial support organizations and commercial/client opportunities. However, considerable challenges exist in terms of expense and public-sector policy, such as healthcare and general living costs, regulatory environment, tax incentives, and general policies conducive to business. Other weaknesses included access to investment capital and lack of presence of mentoring.

The most evident economic uncertainty this year was from the aftermath of COVID-19 pandemic. Given the timing of the survey, we wanted to gauge the impact of the pandemic on the organizations represented in the survey. Fifty seven percent have been impacted negatively, and the pandemic has had a moderate to large positive impact on thirty three percent of the organizations, with little or no impact on ten percent of organizations in the survey. According to responses, for sectors expressing an emphasis on networking, limited in-person networking, due to pandemic, had a negative impact on their business expansion. Some businesses that relied on physical stores needed to drastically change their business model due to COVID-19. Massive shifts in the market due to the pandemic have had irreversible impact on some businesses. Although large companies are less prone to temporal changes, institutional challenges remain in adapting to possible changes and innovation.

Respondents recognize **the important role of higher education in the innovation ecosystem** as creating a pipeline of talent, knowledge dissemination through research centers, and providing university-based entrepreneurship centers for promoting entrepreneurial activity as well as seminars and workshops. The survey revealed the importance of a workforce skilled in data analytics and advanced technologies such as Big Data, AI, and Machine Learning. These top-ranked skills were followed by skills in communications, leadership, and general business and finance.

Diversity is a key driver of innovation and a critical component of success. Several important projects and initiatives exist in New Jersey for increasing the inclusive innovation talent pipeline. The recently awarded NSF ADVANCE Partnership: New Jersey Equity in Commercialization Collective (NJECC) project led by the New Jersey Institute of Technology (NJIT) in collaboration with Edge, Rutgers, and WEPAN, aims to address the significant equity issues in academic technology commercialization (patenting, licensing, and startup creation) working with institutional partners across New Jersey focusing on identifying and eliminating systemic institutional and entrepreneurial ecosystem barriers and increasing the diversity of STEM faculty researchers who participate in New Jersey's entrepreneurship and innovation ecosystem. This project provides an opportunity to address the disparities, raise economic competitiveness, resulting in increasing talent and contribution to the STEM innovation enterprise. In addition, the New Jersey state initiatives and programs, including the NJ Office of Secretary of Higher Education (OSHE) working group on Research, Innovation, & Talent, Golden Seeds, the Black and Latinx Seed Fund, are important to increasing participation of inventors and entrepreneurs advancing the innovation economy in NJ and beyond.

Findings

The survey asked respondents to rank characteristics of New Jersey's innovation ecosystem. These characteristics generally fell within categories related to human capital, public policy, market access, educational and other institutional partnerships, and quality of life. Respondents were also asked to prioritize characteristics in terms of importance to their businesses.

Chart 1

SELECTED TOP BENEFITS AND CHALLENGES OF DOING BUSINESS IN NEW JERSEY

Percent of Respondents Choosing a Characteristic of NJ's Innovation Ecosystem as a Top 5 Benefit or Challenge

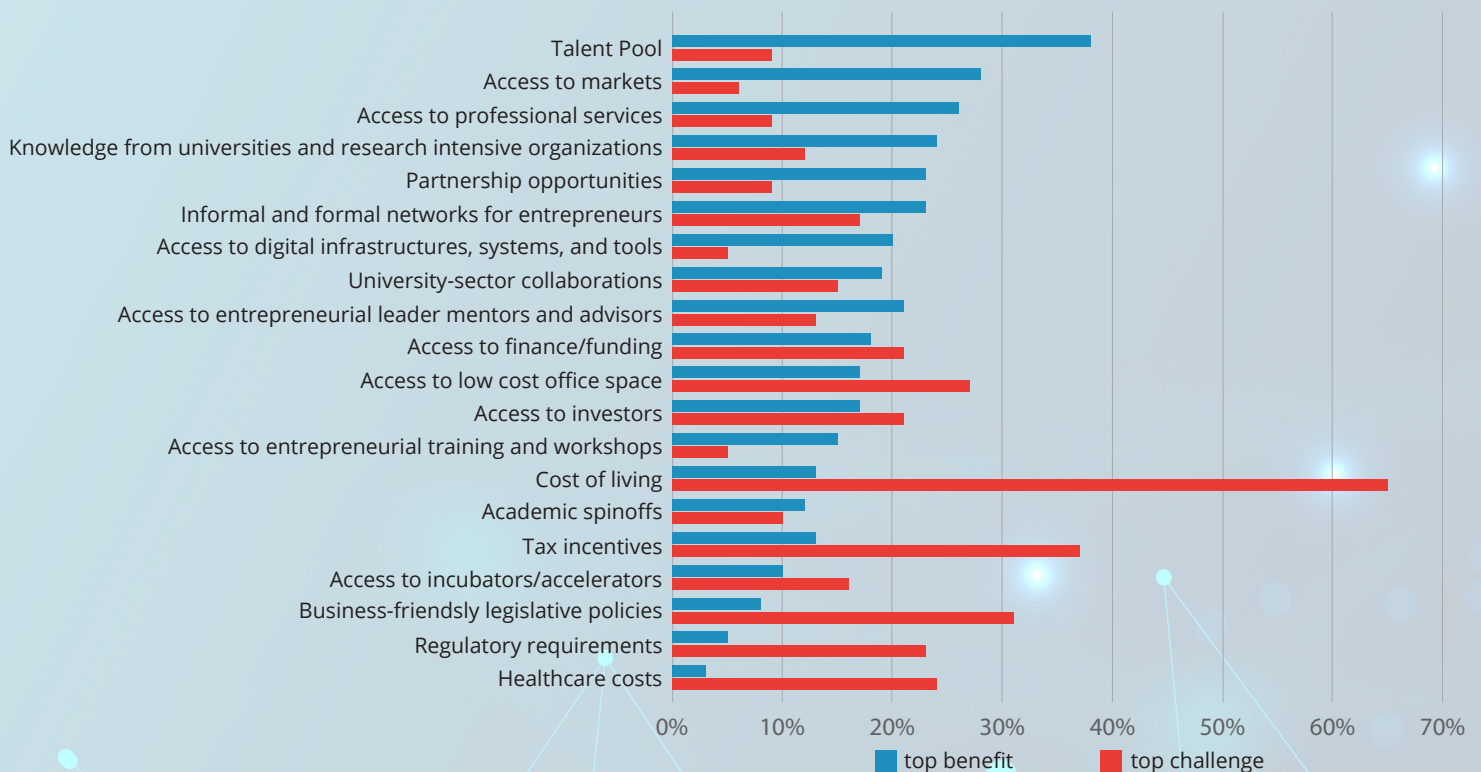


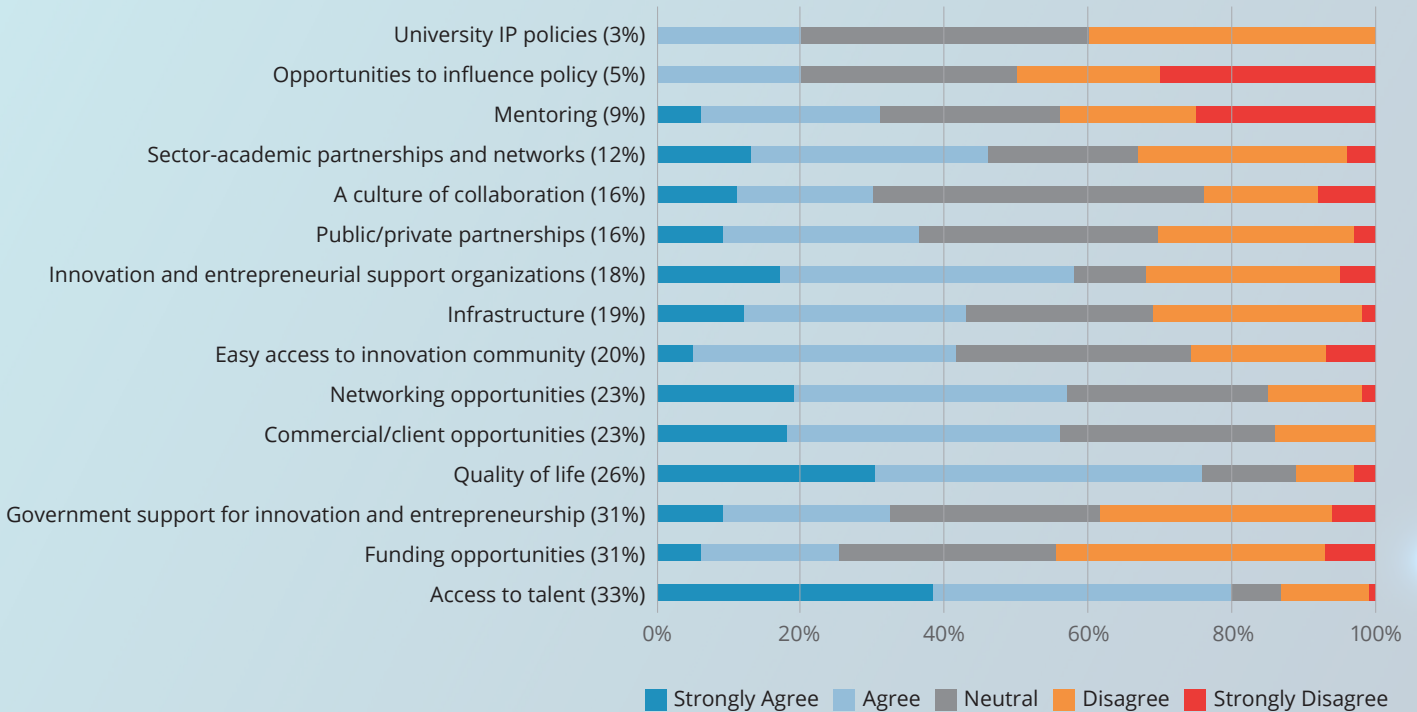
Chart 1 provides top-line results of what percent of respondents chose specified characteristics as either top benefits or top challenges of doing business being part of an innovation ecosystem in New Jersey. The most often selected (top five) benefits included access to a qualified or large talent pool, access to markets to sell their goods or services, access to professional services, access to a knowledge pipeline with universities and research organizations, and partnership opportunities. These chosen characteristics show respondents see a broad set of areas where New Jersey's innovation ecosystem has noted benefits. As access to talent is seen by respondents as one of the most important factors in promoting an innovation ecosystem (see Chart 3), high marks for this characteristic speaks to the value of doing business in New Jersey.

The top five challenges chosen by respondents included cost of living, availability of tax incentives, legislative policies, regulatory requirements, and healthcare costs. These challenges fall squarely into two categories -- perceptions of public policy's role in promoting an innovation ecosystem, and the perceived relative expensiveness of New Jersey.

Chart 2

ADEQUACY OF KEY ELEMENTS IN NEW JERSEY'S INNOVATION ECOSYSTEM

Agree or Disagree: New Jersey Has Adequate...



Respondents were then asked to select the top three innovation-focused elements they would look for in selecting their next location. Then, based on what each respondent chose, that respondent was asked to rate the adequacy of those innovation ecosystem elements in New Jersey. Chart 2 provides the results of this set of questions. The numbers in the parentheses next to each characteristic show what percent of respondents chose that characteristic as a top three innovation element. For example, 33% of respondents chose access to talent as a top three element. New Jersey scores well for this element, with 79% of respondents strongly agreeing or agreeing with adequacy in the state.

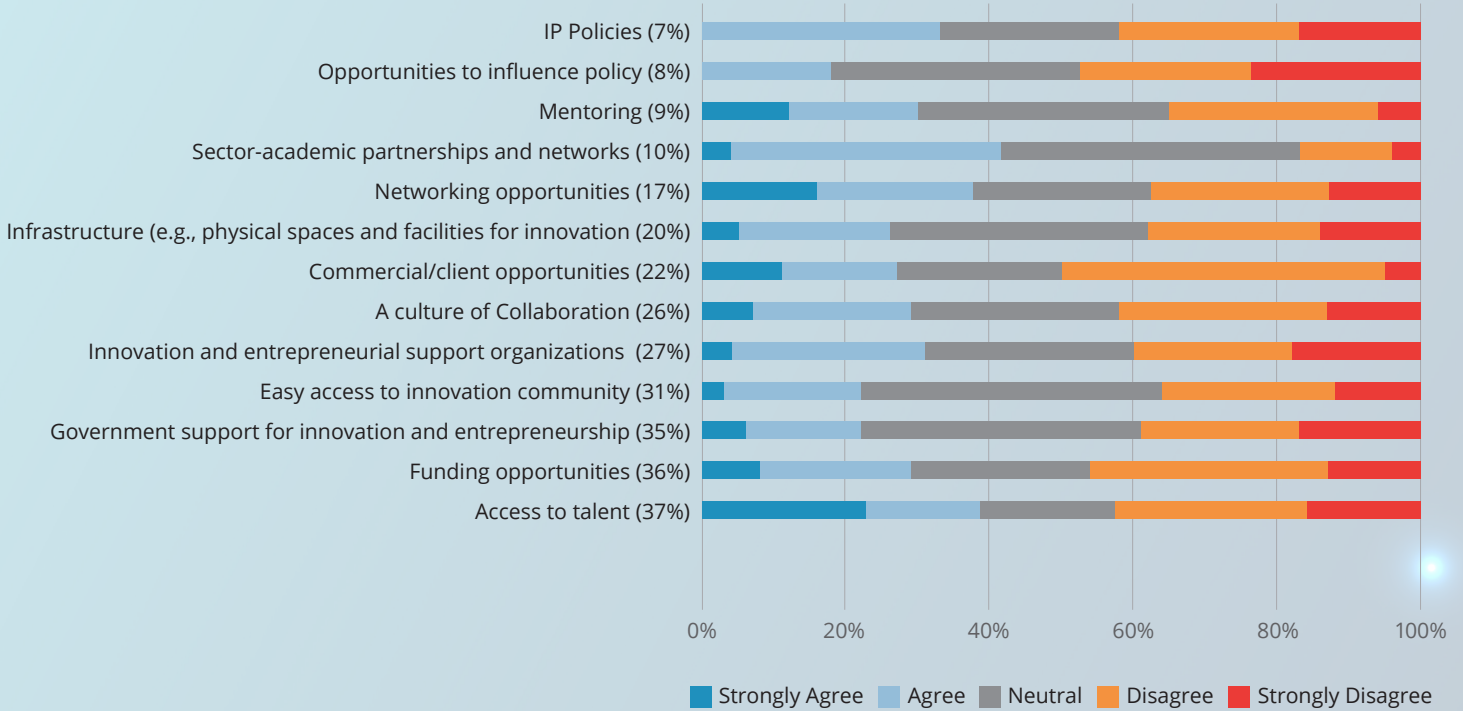
New Jersey did not rank well on the next two elements ranked by importance. Approximately 31% of respondents listed funding opportunities as a top innovation-focused element, and approximately 44% of respondents stated funding opportunities in the state were inadequate versus 25% finding them adequate. Approximately 31% of respondents listed government support for innovation and entrepreneurship as a top three innovation-focused element. Yet again, New Jersey's market was perceived as inadequate on net, with around 38% of respondents stating it as inadequate versus 32% stating it as adequate.

Reported areas of relative strength included presence of innovation and entrepreneurial support organizations and commercial/client opportunities. Reported areas of relative weakness included presence of mentoring and opportunities to influence policy.

Chart 3

HOW NEW JERSEY RANKS RELATIVE TO OTHER STATES

How NJ Ranks on Innovation Factors



Respondents were then asked to select the top three elements in promoting innovation.

Then, based on what each respondent chose, that respondent was asked to rank New Jersey on that element relative to other states. Chart 3 provides the results of this set of questions. The numbers in the parentheses next to each characteristic show what percent of respondents chose that characteristic as a top three innovation element. For example, 37% of respondents chose access to talent as a top three element. New Jersey scores, on net, neutral relative to other states, meaning that respondents selecting relatively weak versus relatively strong was about the same. Aside from sector-academic partnerships, respondents see New Jersey's innovation ecosystem as weak relative to other states.

Figure 1
FOCUS ON PUBLIC POLICY

	Current + vs -	Expected + vs -	Nj vs Other States + vs -
Ease of starting a business	5%	14%	-7%
Incentives	-21%	16%	-34%
Taxes	-55%	-30%	-49%
Legislative policies	-17%	-11%	-25%
Contract enforcement	-6%	-3%	-7%
Property rights	3%	-6%	-5%
Labor laws and administration	-13%	-5%	-9%
Institutions (e.g.: investments and support)	-3%	16%	-22%
Registration and licensing	-1%	1%	-11%
Public-private dialog	-1%	12%	-16%

These next three figures take a deeper dive into three areas of innovation ecosystem health -- public policy, investments, and human capital.

Figure 1 shows results from three sets of questions related to public policy. On each characteristic listed in the first column, respondents were asked to rate areas of policy as positive, neutral, or negative currently, expected (will it get better or worse), and relative to other states. The percentages listed in the figure show the net balance of better-worse responses for all the characteristics. What clearly stands out is taxes are seen as an overwhelming negative factor, with net 55% of respondents reporting it as a negative factor in the current environment, net 30% expecting it to get worse, and net 49% reporting it as negative relative to other states. Although most other areas of public policy were seen as negative currently and relative to other states, most respondents expected many factors to improve over time, including public-private dialog, availability of incentives, and ease of starting a business.

Figure 2
FOCUS ON INVESTMENTS

	Current + vs -	Expected + vs -	NJ vs Other States + vs -
General access to investment	-30%	13%	-23%
Angel investment	-34%	5%	-29%
Venture capital investment	-28%	8%	-29%
Private equity investment	-20%	9%	-22%
Public capital market investment	-15%	3%	-17%
Debt investment	-16%	-3%	-13%
Corporate investment	-31%	4%	-18%
State government investment (grants or direct investment)	-47%	3%	-23%

Access to funding opportunities was listed by respondents as a key element for a thriving innovation ecosystem. Figure 2 shows responses to characteristics related to investment. All areas are sharply negative currently and relative to other states, although all areas are expected to improve. It is clear innovators see access to investment and funding as a significant challenge of being located in New Jersey.

Figure 3

FOCUS ON HUMAN AND INSTITUTIONAL CAPITAL

	Current + vs -	Expected + vs -	NJ vs Other States + vs -
Human capital/talent	22%	#N/A	14%
Mentors/advisors	-8%	17%	-9%
Entrepreneurship promotion	-16%	14%	-26%
Business plan competitions	-20%	7%	-20%
Conferences	-13%	2%	-23%
Sector associations	-9%	6%	-14%
Corporations	7%	-2%	-2%
Educational institutions	14%	8%	4%
R&D	0%	5%	-1%
Training programs	-10%	10%	-12%
Professional services	21%	10%	-1%
Incubators/accelerators	-28%	9%	-30%
Network of entrepreneur peers	-19%	12%	-23%
Online communities	-8%	12%	-18%

Questions related to human and institutional capital generated mixed responses. While New Jersey was seen as strong on human capital and some types of institutional capital, the state was seen as weak on entrepreneurial-specific organizations and communities. On a positive note, almost all elements are expected to improve, which speaks highly of the groundwork being laid in New Jersey for the innovation and entrepreneurship ecosystem. With the exception of human capital and talent, results indicate poor comparisons to other states in the region across the board for New Jersey .

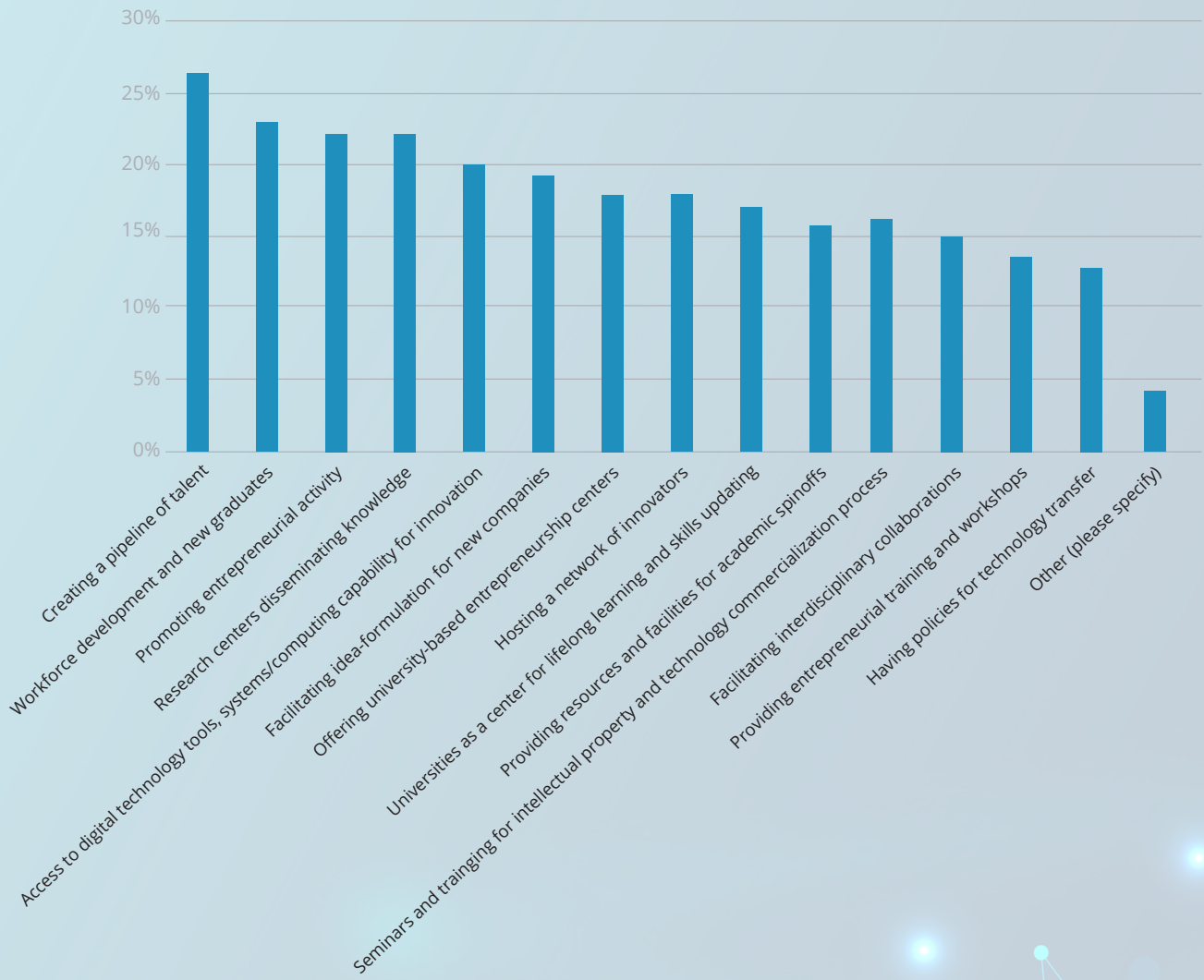
Role of Higher Education

The role of universities in innovation and economic development has been widely documented. The most valuable role of universities in innovation for the private and public sector primarily are in five main areas: (a) contributing to fundamental research; (b) combining existing knowledge through publications in the technical literatures, patents, software and hardware prototypes; (c) education and training (curriculum development); (d) creating space for open exploration of ideas; and (e) community involvement. Academics look to their tech transfer offices for training on technology commercialization. Some key drivers to innovation include university policies, the search for additional funding resources for research and development, and potential collaborators and industry connections. In addition to training, information, and resources, mentors, role models and networking opportunities are all important in the innovation ecosystem.

The most important role of the university in the innovation ecosystem, as identified by respondents, includes **creating a pipeline of talent and workforce development**, and knowledge dissemination through research centers. The following additional important top contributions of universities were identified: university-based entrepreneurship centers promoting entrepreneurial activity and idea-formulation for new companies, resources and facilities for academic spinoffs, providing access to digital technology tools and computing capability for innovation, entrepreneurial training and seminars for intellectual property and technology commercialization process.



Chart 4 - provides respondent results to the question about the role of the University in the innovation ecosystem.



Skill Requirements

ROLE OF UNIVERSITY IN THE INNOVATION ECOSYSTEM

Respondents ranked training to increase Knowledge of digital technologies (includes Big Data, AI, Machine Learning), identifying funding sources, and leadership skills **as most important** for entrepreneurs followed by steps for growing business, general business skills, and business analytics.

Chart 5 - includes respondents' ranking regarding the most important training for entrepreneurs.
MOST IMPORTANT TRAINING FOR ENTREPRENEURS

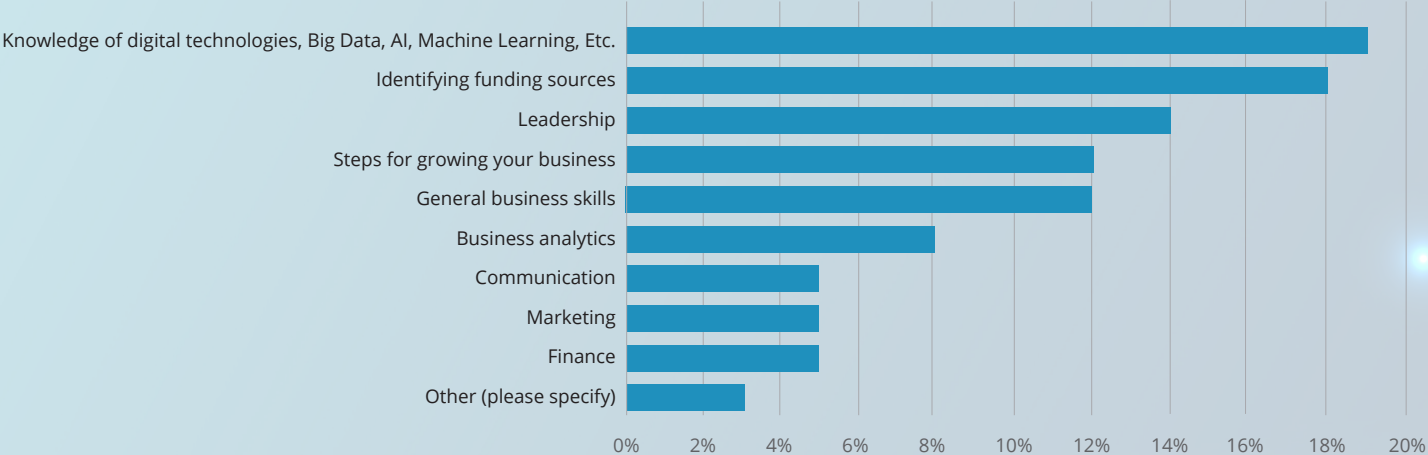
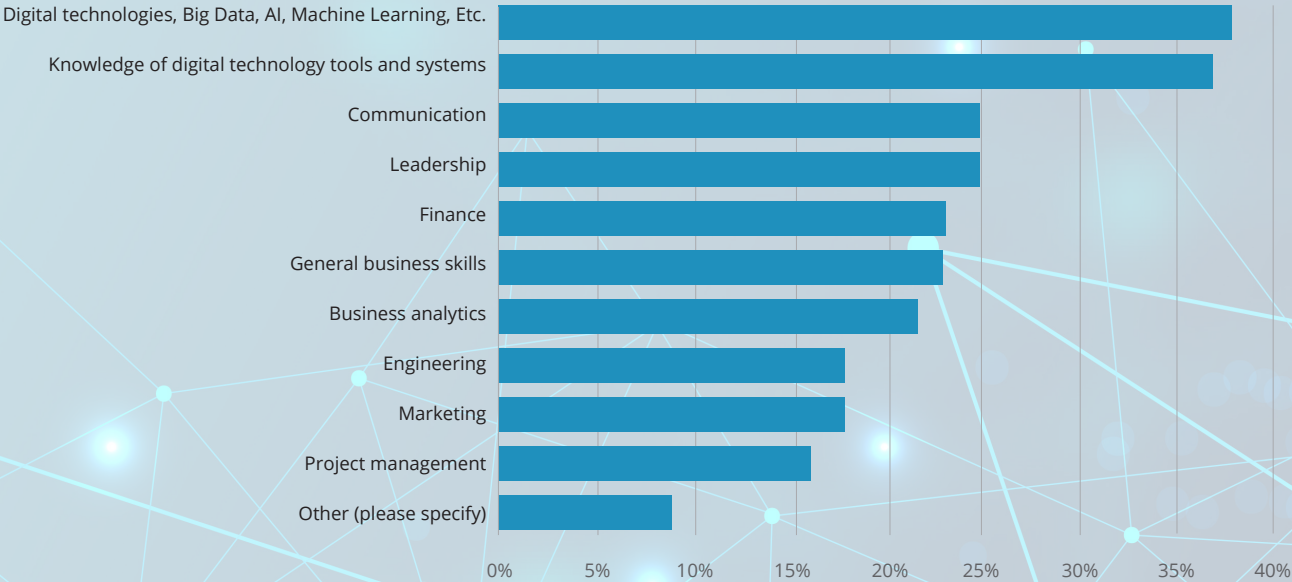


Chart 6 - provides additional details
SKILLS LACKING FOR SECTOR IN NEW JERSEY



Top set of skills that are in high demand with low supply include digital technologies and tools (ex: data analytics, big data, AI, machine learning, cloud computing, coding), communications skills, leadership, finance and general business skills.

Diversity

Diversity is a key driver of innovation and a critical component of success on a global scale, countries that deploy strategies to foster greater inclusion will ultimately be best positioned to maximize their GDP and ensure economic prosperity. **Diversity, Equity, and Inclusion is crucial for further innovation and growth in New Jersey.** Per Charts 7 and 8 below, gender and ethnic diversity in leadership is more evident in small and medium businesses. Leveraging the opportunity to promote diversity, equity, and inclusion, and empowering under-represented minorities for leadership roles as size of company grows is important. **Seventy-three percent of respondents indicated that their company has implemented Diversity, Equity, and Inclusion (DEI) policies.**

Chart 7

GENDER DIVERSITY IN LEADERSHIP BY COMPANY SIZE

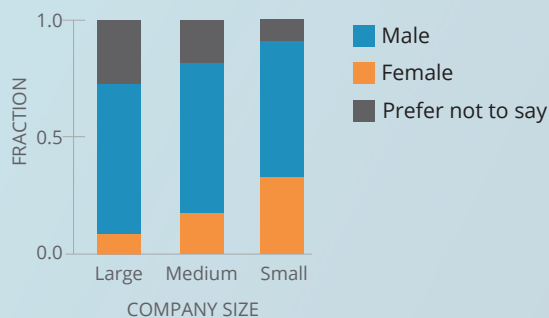


Chart 8

CEO ETHNIC DIVERSITY IN LEADERSHIP BY COMPANY SIZE

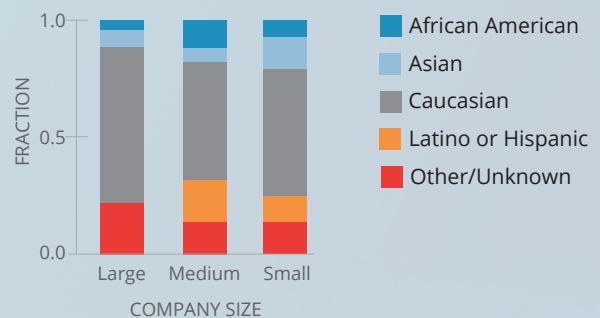
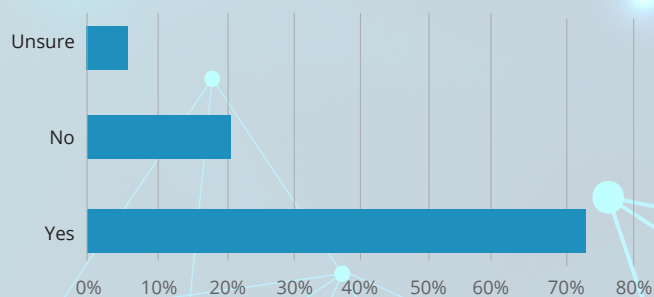


Chart 9

DIVERSITY, EQUITY, INCLUSION POLICIES



Impactful and prolific innovation is increasingly critical to company success. Some companies are learning that lack of diversity and inclusion in their ranks is inhibiting innovation. According to a recent Forbes study, 84% of executives say that innovation is important to their growth strategy. Industries, technologies, and economies are changing at exponential rates, making a company's ability to innovate more important than ever. Workplaces that are both diverse and inclusive are associated with higher individual performance because employees are better able to innovate and maintain engagement. Sustaining the state's prosperity requires us to make effective use of the talents and abilities of all our citizens, in work settings that bring together individuals from diverse backgrounds and cultures.

The role of universities in innovation and economic development has been widely documented. The culture of a university influences its success in producing innovation and can influence the culture of a region. Education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic society; it fosters mutual respect and teamwork; and it helps build communities whose members are judged by the quality of their character and their contributions. Diversity enriches the educational experience, challenges stereotyped preconceptions; it encourages critical thinking; and it helps students learn to communicate effectively with people of varied backgrounds. It strengthens communities and the workplace.

Culture change is necessary to have as many people as possible to become successful innovators and entrepreneurs. Women and people of color have made some of the most significant inventions in history, yet as studies show, women and minorities are grossly under-represented in our patent system, given their representation in the population. According to a recent USPTO Report, Less than 13% of all US inventors are women, and African American and Latina college graduates patent at 50% of the rate of their counterparts. Everyone should have the opportunity to invent and patent, closing the gaps would offer benefits to society as a whole. It is important to address this gap and to increase diversity in our innovation economy, not just because it is the right thing to do, but because New Jersey and America needs the skills and talents of all of our people if we want to maintain a leadership position.

Education and training about available resources and communities is important. The technology commercialization pathway is viewed as complex and daunting. Academics look to their tech transfer offices for training on technology commercialization. Professional development for Intellectual Property (IP) training is necessary. There are numerous programs that exist across the region and the country to engage under-represented populations in the technology commercialization process. Unfortunately, most of these programs exist singularly in the specific office where they were created. Identifying the most successful of these programs and creating turnkey templates to scale them on a state-wide level would increase their accessibility and impact. Identifying "best practices" for outreach to these populations and making the outreach methodologies readily available to technology transfer offices would ensure greater engagement in their programs.

Promising practices for advancing aspiring and current entrepreneurs can provide insights on how stakeholders in the innovation ecosystem can address various structural barriers facing entrepreneurs from diverse backgrounds.

It should be noted that several important projects and initiatives exist in New Jersey for increasing the inclusive innovation talent pipeline. The recently awarded NSF ADVANCE Partnership: New Jersey Equity in Commercialization Collective (NJECC) project led by NJIT in collaboration with Edge, Rutgers, and WEPAN, aims to address the significant equity issues in academic technology commercialization (patenting, licensing, and startup creation) working with institutional partners across New Jersey focusing on identifying and eliminating systemic institutional and entrepreneurial ecosystem barriers and increasing the diversity of STEM faculty researchers who participate in New Jersey's entrepreneurship and innovation ecosystem. This project provides an opportunity to address the disparities, raise economic competitiveness, resulting in increasing talent and contribution to the STEM innovation enterprise. In addition, the New Jersey state initiatives and programs, including the NJ Office of Secretary of Higher Education (OSHE) working group on Research, Innovation, & Talent, Golden Seeds, the Black and Latinx Seed Fund, are important to increasing participation of inventors and entrepreneurs advancing the innovation economy in NJ and beyond.

Summary

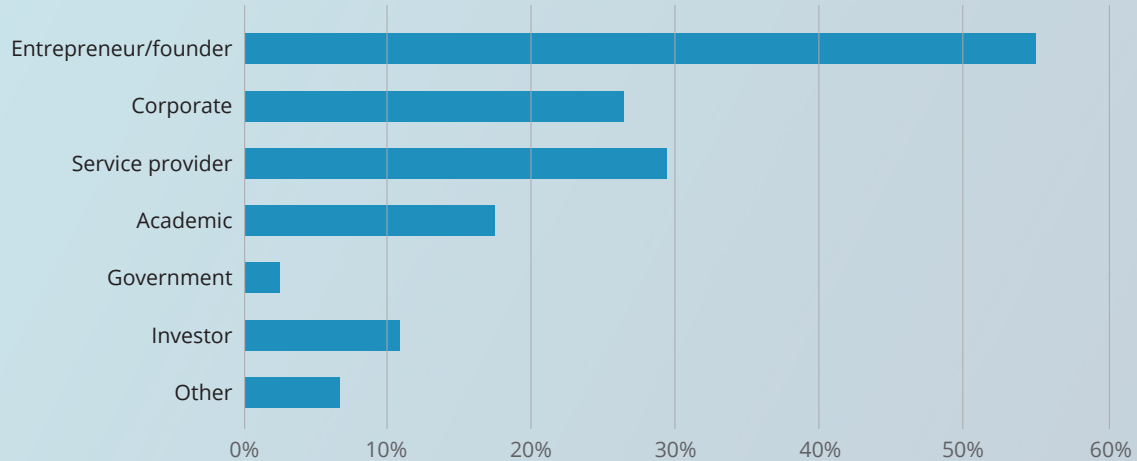
New Jersey must lean into the strengths of the region and showcase the State as a beneficial place to start and grow a business. One of the biggest challenges is a lack of funding. Universities' role in workforce development, research, and providing entrepreneurial support organizations are all very important. Building an innovation community, encouraging entrepreneurial spirit among the next generation of leaders, and increased access to funding will help create inclusive opportunities for New Jersey's Innovation Economy. Information from this survey provides a narrative that's backed by data and gives a starting point for leaders to begin discussing where the need for improvement exists. From a state policy perspective, we are able to leverage these data driven results to shine a light on the region's top challenges and hopefully work toward finding solutions. For the academic member institutions, this valuable information provides insight into what is needed to bring to New Jersey in terms of skilled employees. New Jersey's public and private sectors include talented individuals with necessary skills that are helping to build a strong innovation ecosystem and culture. As the focus to build the necessary talent pool is increased, significant strides will be realized. The hope is that a greater number of entrepreneurs who are building businesses choose New Jersey because of the strong and vibrant innovation ecosystem, including the community of people who want to see them succeed and are committed to helping that happen. There is not a large community of investors in New Jersey. As the business community and relationships within the region continue to grow, New Jersey, in turn, will attract additional investors.

Appendices

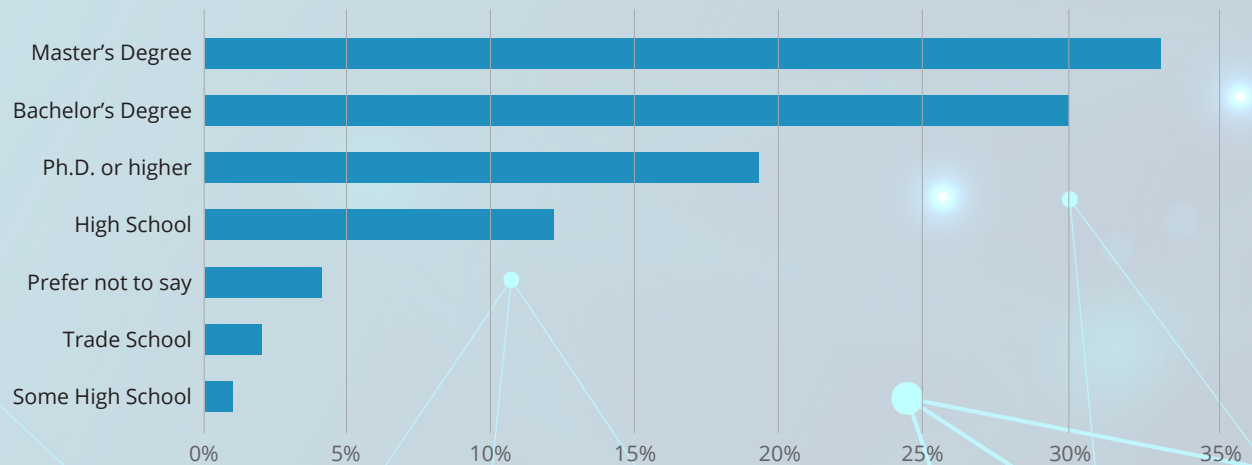
A - CHARACTERISTICS OF RESPONDENT AND ORGANIZATIONS

A-1 Individual Respondent Characteristics

How do you describe your personal role in the innovation community?

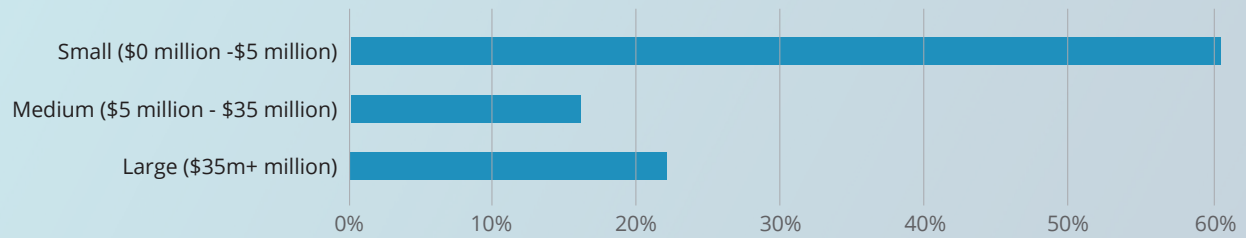


Highest Degree Completed

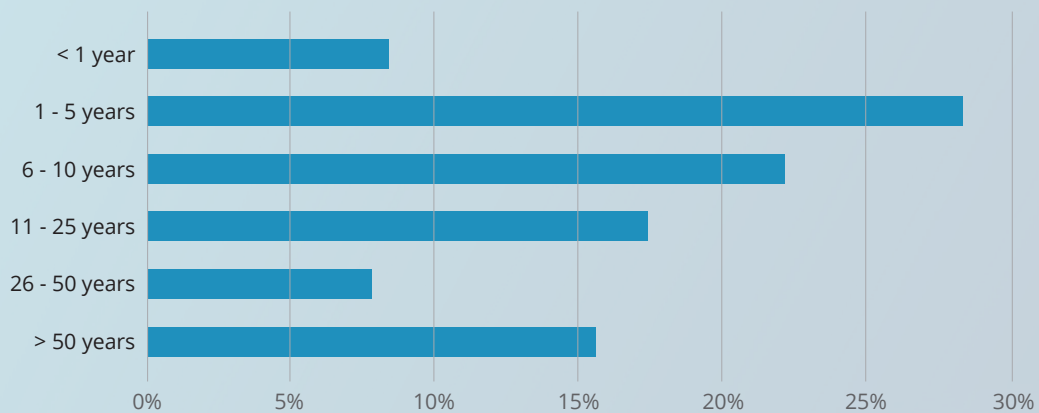


A-2 Organizations Represented in Survey

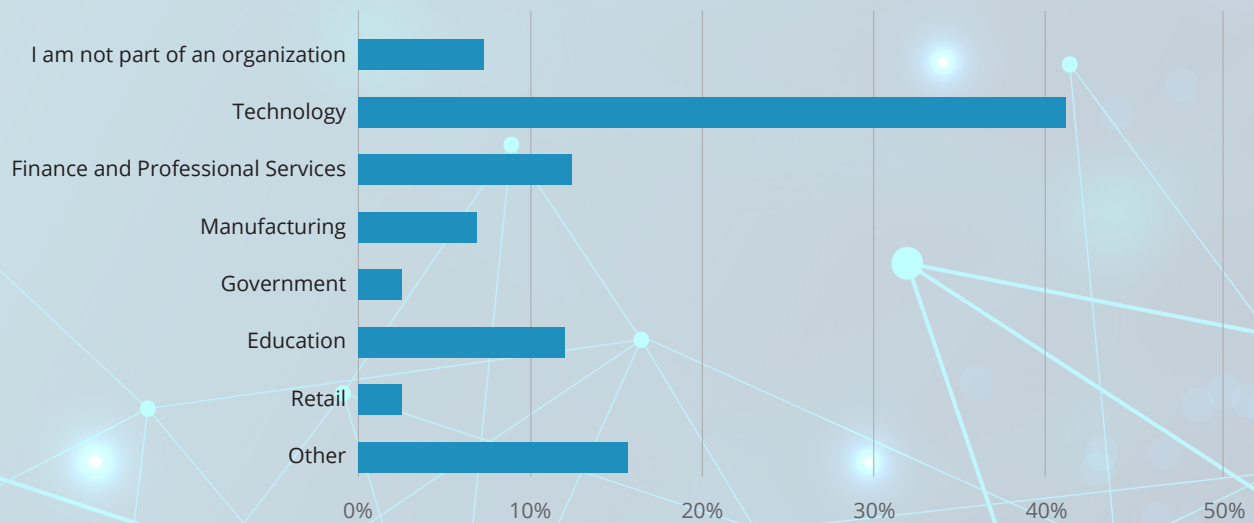
Which of the following categories best represent your organization's annual sales revenue?



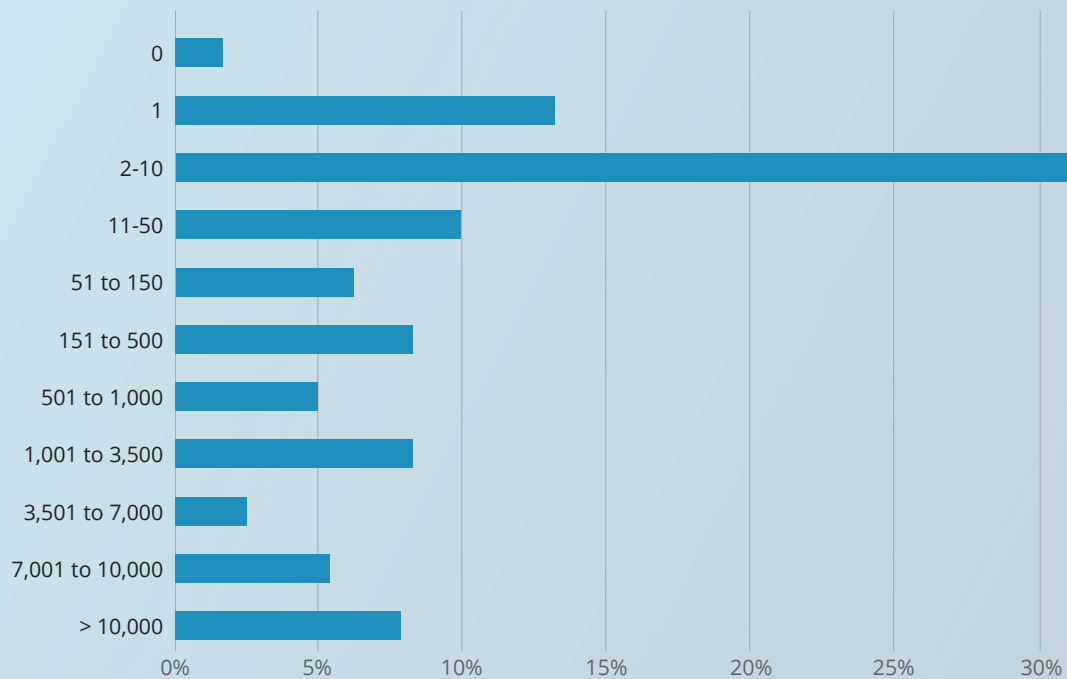
How many full-time employees does your organization employ?



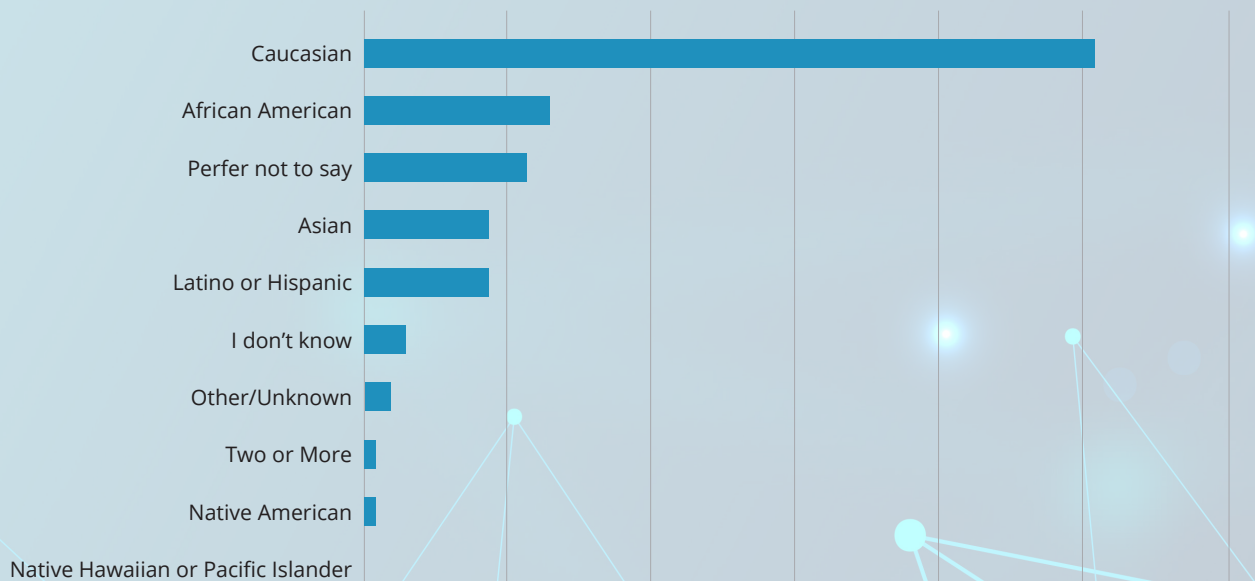
Which of the following categories best represent your organization's sector?



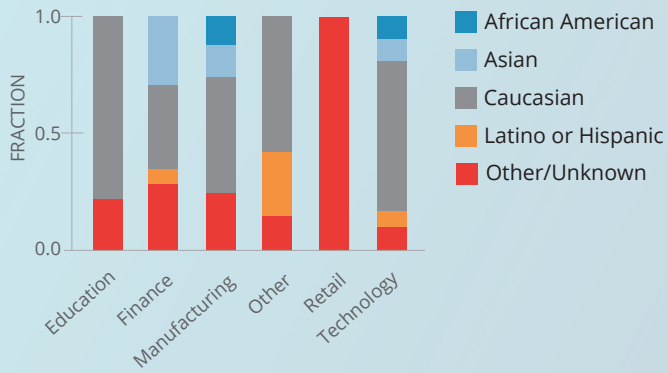
How many full-time employees does your organization employ?



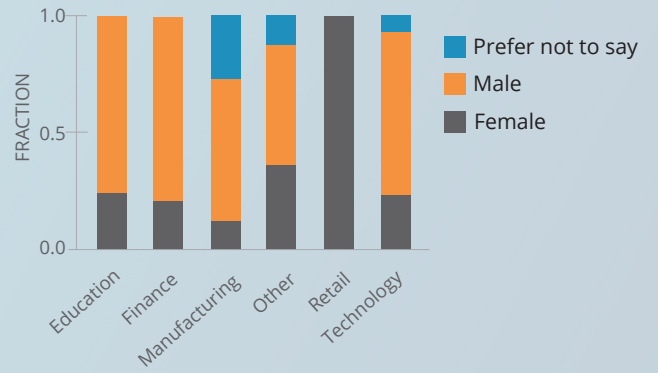
CEO Ethnicity



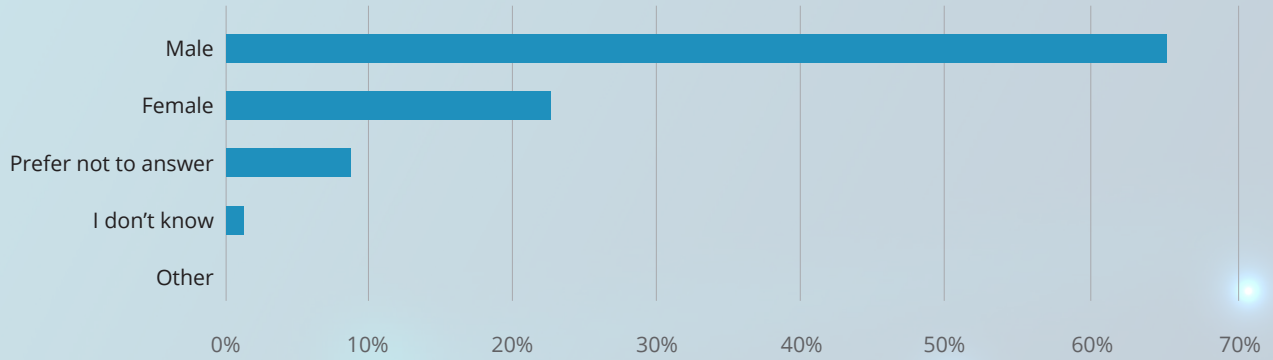
Ethnicity Diversity in Leadership



Gender Diversity in Leadership



CEO Gender



Appendices

B - PANDEMIC RESPONSE

Coronavirus Pandemic Impact on Organization

