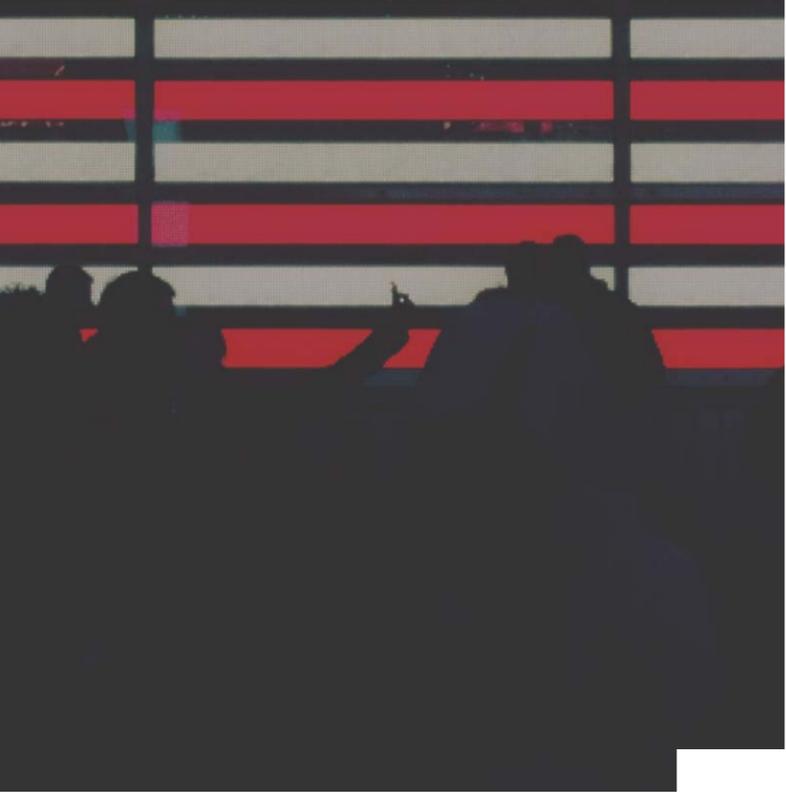


INNOVATION that MATTERS





1776

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INNOVATION **that MATTERS**

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EXECUTIVE SUMMARY

We are in the midst of a digital revolution that is radically transforming the way we live, work, move, and interact with the world. Across the country, innovative technology startups are changing the way we monitor our health, the way our children learn, and the way we power our cars, our homes, and our lives. This transformation will only accelerate in the years ahead.

In addition to reshaping the world around us, this digital revolution has the potential to make winners of some cities and leave others behind. The cities that embrace and capitalize on the shift to a digital economy by supporting technology startups and innovation will reap the rewards of economic vibrancy and an improved quality of life. Those cities that don't lean in and adapt may find themselves on the outside looking in.

The Innovation That Matters study examines the health of the startup communities in 25 American cities and assesses their readiness to capitalize on the shift to an increasingly digital economy, with a unique focus on what we refer to as "next-wave startups."

Next-wave startups are early-stage, technology-driven companies that are developing innovative solutions to some of the most complex challenges in such industries as health, energy, education, and smart cities. Because these next-wave startups, also referred to as civic startups, are tackling serious problems affecting broad public interests, they are likely to represent the most monumental societal and financial wins of the coming decades and bring prosperity and economic growth to their cities.



THE RANKINGS

All 25 cities ranked in this study are leading innovation centers. For the second consecutive year, Boston and San Francisco's Bay Area held the top 2 spots, respectively. Philadelphia, San Diego, and Austin round out the top 5.

Meanwhile, this year's biggest movers on the list were Atlanta, Dallas, and New Orleans.

CITY SELECTION

The 25 cities included in the rankings have well-established and consistently growing startup communities. Additionally, Innovation That Matters examined Tampa and Columbus, as we have seen an overall increase in startup activity in those cities. They were not included in the top 25 ranking, however, because they are new to the city list this year.

TOP CITIES

- 1 Boston
- 2 Bay Area
- 3 Philadelphia
- 4 San Diego
- 5 Austin

MOST IMPROVED

- +15 Atlanta (6th)
- +12 Dallas (7th)
- +6 New Orleans (19th)



THE TRENDS

The 2017 Innovation That Matters research revealed positive developments:

New startups are increasingly tackling next-wave challenges. The number of new startups in the energy, education, and smart-cities sectors is growing across the 25 cities featured in this study, signaling increased entrepreneurial activity in these key industries.

Capital is increasingly flowing into civic startups. The upsurge in next-wave startup activity has been met with increased interest from investors, with nearly half of all startup investment dollars in these 25 cities now flowing into next-wave companies. Between 2012 and 2016, investment in next-wave companies topped \$100 billion.



THE OBSTACLES

We discovered two common barriers that are stunting the growth of next-wave startups and threatening the long-term success of innovation ecosystems in cities across the country.

Startups and local businesses lack strong bonds. Local economies thrive when established companies and startups collaborate. Startups in many cities across the country report a dearth of connections with and communication between their more established local counterparts.

Support for startups from other local stakeholders is waning. Startup founders feel a growing sense of disengagement from other key stakeholders, including mentors and local governments. Especially in next-wave sectors, startups depend on those groups for support.



THE OPPORTUNITIES

The need to develop new connections and strengthen existing relationships between startups and key stakeholders presents an opportunity for civic leaders looking to create a more attractive home for entrepreneurs and better position their cities as economic power players in the years ahead.

Our analysis yields the following recommendations for public- and private-sector leaders:

COMMIT

Embrace what makes your city special and look for opportunities to establish industry-specific startup clusters that capitalize on your city's distinct advantages.

CONNECT

Build connections between your city's startups and local investors, government officials, and business leaders; encourage and sustain open communication and collaboration between them.

CULTIVATE

Promote entrepreneurship and innovation in your city, encouraging local students and other inventive thinkers to solve big problems by joining your city's startup community.

CHAMPION

Share your city's startup story far and wide as a way to attract entrepreneurs, investors, and talent to your region, thereby fostering a robust local startup community.

INTRODUCTION

Over the past several decades, we have witnessed the first phase of the technological revolution, which largely disrupted consumer industries like retail, media, and entertainment.

Now we're in the early stages of phase two.

This next wave of the digital revolution will increasingly be defined by startups and technologies that address major problems affecting broad public interest in areas such as health, education, energy, and smart cities (the latter including industries like transportation, infrastructure, and construction).

Next-wave startups will fundamentally change the way people live, work, move, and interact with the world. These startups will likely represent the most monumental financial wins of the coming decades because they take on some of the most urgent and universal problems and disrupt sectors that represent a massive part of the global economy. But they won't do it alone. For next-wave startups, partnering with public- and private-sector leaders is absolutely critical.

As this second phase of innovation unfolds, it also has the potential to elevate some cities—and leave others behind—in terms of economic vibrancy and quality of life. Those cities that most effectively support next-wave startups and connect them to the right individuals and institutions will be best positioned to unleash the power of high-impact innovation, solve significant problems for their citizens, and foster vibrant, thriving communities.

With this in mind, it's important for city leaders to ask themselves: What are we doing to support these next-wave startups? Are we creating connections and fostering collaboration between local stakeholders? Compared with other metropolitan regions around the country, have we put our city in a position to win or lose in the digital economy?

Innovation That Matters offers insights into these important questions, helping civic leaders discover what they're doing that's working, where their cities' efforts are falling short, and how they can create stronger ecosystems that benefit startups, institutions, government, and citizens alike.



THE RANKINGS

Innovation That Matters examines the health of startup communities in 25 U.S. cities and assesses their readiness to capitalize on an increasingly digital economy. The study focuses on each city's level of support for next-wave startups in the health, education, energy, and smart-cities sectors. Our analysis and corresponding rankings, which are based on a survey of 413 startup founders and leaders as well as third-party data, take into account 6 factors:

CAPITAL: Are enough financial resources available to startups? Are cities unlocking hidden stores of capital? Are entrepreneurs being rewarded for their financial risks?

CONNECTIVITY: Are the city's main economic and support networks integrated into the startup community? Who are the key actors in the city, and are they engaged with the startup community?

CULTURE: Is the city open to newcomers and new ideas? What are the regulatory barriers to entry for new businesses, and how can those barriers be overcome? How is the quality of life?

DENSITY: What is the concentration of startups and next-wave startups? Does a city have enough activity to attract a critical mass of talent and capital?

INDUSTRY SPECIALIZATION: Is the city prepared for the transition to increasingly specialized sectors? Do city and civic leaders understand the need for industrial diversity?

TALENT: Is the necessary workforce available? Are startups able to fill roles with high-quality employees from around the world who will help carry their businesses into the future?

The 2017 Innovation That Matters overall rankings are as follows:

2017 RANKINGS

	2017 RANK	CHANGE SINCE 2016
Boston	1	0
Bay Area	2	0
Philadelphia	3	▲5
San Diego	4	▲1
Austin	5	▲1
Atlanta	6	▲15
Dallas	7	▲12
Seattle	8	▲3
New York	9	▲1
Portland	10	▲2
Denver	11	▼8
Pittsburgh	12	▲2
Raleigh-Durham	13	▼9

	2017 RANK	CHANGE SINCE 2016
Chicago	14	▼2
Los Angeles	15	▼8
Nashville	16	▼2
Baltimore	17	▲1
Salt Lake City	18	▼1
New Orleans	19	▲6
Miami	20	▲1
Houston	21	▼1
Minneapolis	22	▼6
Washington, DC	23	▼14
Kansas City	24	0
Phoenix	25	▼2
Tampa		RISING STAR
Columbus		RISING STAR



A CLOSER LOOK: THE TOP CITIES

BOSTON

Boston's innovation scene remains wicked hot. For the second consecutive year, Beantown nabbed the top spot in the Innovation That Matters rankings, narrowly edging out San Francisco's Bay Area. Drilling down into the numbers, Boston maintained the top ranking in terms of startup density and capital access (tied with the Bay Area) for next-wave startups, and it moved into the top 5 among all 25 cities with regard to talent access and connectivity (Boston ranked 8th nationally in both areas last year).

How has Boston climbed to—and now maintained—its next-wave startup crown? For starters, a constant inflow of capital has fueled the rapid growth of the city's startup ecosystem, while having some of America's top universities (including Harvard University, Boston University and MIT) in its backyard produces a steady stream of new tech talent. As one Boston entrepreneur said in our survey, there is "a good pipeline of human capital" running through Boston's economy. The startup ecosystem has become even stronger thanks to continued support from Mayor Martin Walsh, who two years ago worked with IBM to develop the city's StartHub, a centralized online platform built to connect and support the Greater Boston area's technology and early-stage startup community.

One area where Boston's startup ecosystem could improve, according to testimonials from local entrepreneurs, is its culture. The city slipped from 4th to 7th on that factor—the lowest it ranked on any of the 6 components of the study. In addition, despite the city's top ranking in terms of capital, several respondents suggested that there are still untapped sources of local capital that could help spark more startup activity in high-impact, next-wave industries.

SAN FRANCISCO'S BAY AREA

Celebrated around the globe as a startup utopia, San Francisco's Bay Area maintained a firm grip on the No. 2 spot in the 2017 Innovation That Matters rankings. The area ranked at the top in terms of industry specialization and access to talent, and it is just behind Boston as the most capital-rich area for next-wave startups. The Bay Area's investment in next-wave startups as a share of its GDP is eight times higher than that of the average city featured in this report.

The Bay Area's vibrant startup scene was built—and continues to be catalyzed—by renowned local institutions—namely, universities and industry-leading tech companies that help attract top talent and plenty of funding to the area. Elite research and technology programs at Stanford University and the University of California, Berkeley are big contributors on that front. One local entrepreneur noted that these universities are especially "effective at promoting entrepreneurship and working with industry and sources of capital to foster startups."

Even in the storied Bay Area, however, there's room for improvement. The region's famously high cost of living is a significant barrier to entry for entrepreneurs, some said, and this limits diversity within the region's startup culture—a culture, it's worth noting, that next-wave entrepreneurs ranked in the bottom half of cities analyzed in this year's report (14th).

PHILADELPHIA

Where our Founding Fathers once launched history's most remarkable startup experiment, a new generation of founders are now turning Philly into a bustling startup hub—and in the process, they are taking aim at many complexities inherent in next-wave industries. Philadelphia's ascent to the 3rd spot in the overall rankings (up 5 spots) was in large part due to a marked improvement in terms of perceived startup culture, on which the city moved up from 15th to 4th.

How did the City of Brotherly Love climb so high? Respondents told us that Mayor Jim Kenney has actively championed a startup culture and helped funnel more resources to local entrepreneurs through programs such as StartUp PHL, a partnership between the city's Department of Commerce and its public-private economic development corporation that provides funding and mentorship to entrepreneurs in Philadelphia. At the same time, Drexel University and Ben Franklin Technology Partners, a statewide economic development organization, have partnered to create a \$10 million early-stage seed fund to support spin-off companies from the university.

Meanwhile, Philadelphia-based media giant Comcast was ranked by CB Insights as the nation's 4th most active corporate startup investor, with stakes in 105 early-stage companies, including health care services startups Accolade and student lending platform College Ave. This support from local policymakers, academic institutions, and corporate leaders has helped Philadelphia emerge as a premier destination for startups, including those in next-wave industries.

Yet, connecting entrepreneurs to those champions and available resources remains a concern. Philadelphia ranked 11th in connectivity—proof that the city can do even more to facilitate engagement between its resident startups and local stakeholders.

SAN DIEGO

Sometimes overshadowed by Silicon Valley, San Diego has emerged as a major startup destination, especially for entrepreneurs looking to solve some of the world's greatest problems. Showing that last year's lofty ranking was no fluke, the city moved up from 5th to 4th in this year's overall rankings, propelled by upward movement on factors such as connectivity (up 5 spots).

San Diego's startup ecosystem has benefited from many of the same developments observed in Philadelphia. Mayor Kevin Faulconer's office has become a local startup champion, commissioning studies to review the local business landscape and better understand the strengths and weaknesses of the city's innovation economy. Local corporations are stepping up, too. The venture arm of San Diego-based wireless giant Qualcomm sponsored the city's Seismic SD startup pitch event, awarding \$100,000 in funding to local tech company Guru, which provides immersive smartphone technology to museums and other cultural institutions.

While the city's startup ecosystem is certainly thriving, there's still room to grow. San Diego has made great progress in the area of connectivity but ranks 13th on that important factor. City leaders must continue to foster relationships between startups and investors, mentors, and other supporters if San Diego is to maintain its standing as a top spot for next-wave startups.

AUSTIN

Live music, good barbeque, and tech startups—that’s Austin. Over the past decade, the city has emerged as one of the country’s premier destinations for disruptive technology ventures, including next-wave startups. Austin’s move into the top 5 was fueled by a rankings bump in startup density (now No. 3, up from No. 9) and talent (now tied with the Bay Area at No. 1, up from No. 5).

Events like the city’s annual South by Southwest Interactive Conference have helped put Austin on the national startup scene, as has the presence of esteemed universities like the University of Texas at Austin, which has top-flight computer programming and other technology-related programs. Coupled with relatively low taxes and a low cost of living, that steady presence of talent and new ideas has rocketed the city to the top of some startup rankings in recent years. It also doesn’t hurt that Austin’s entrepreneurs have maintained a loud and proud startup culture that fiercely embraces the city’s “Keep Austin Weird” mantra.

Once again, connectivity looms as a challenge. Ranked 5th in terms of connectivity in last year’s report, Austin sank to 16th on that factor in 2017. Like Philadelphia and San Diego, Austin’s ability to sustain its recent momentum may hinge on how well it can build better bridges between local startups and the mentors, investors, and local institutions that can help them grow.



A CLOSER LOOK: THE MOST IMPROVED

ATLANTA

Things are heating up quickly in Atlanta's startup community. The city's 15-spot surge to No. 6 in this year's rankings was the largest year-over-year move for any city in either direction. That leap was spurred by an enormous improvement in the one area where so many other regions have struggled: connectivity (up 12 spots in that category). More specifically, Atlanta saw a significant increase in the number of entrepreneurs who reported strong connections between mentors and advisors.

Atlanta is using its local assets to build connections through targeted efforts, including Invest Atlanta, the city's economic development agency, which is increasingly focused on high-growth entrepreneurship. The department's efforts to close the divide between startup founders and city government and industry leaders seem to be paying dividends. Other positive developments include the launch of the Startup Exchange, a hub for student entrepreneurs at Georgia Tech, and the launch of Engage, a venture fund and accelerator founded by Mayor Kasim Reed's office.

DALLAS

In addition to Atlanta, this year's other meteoric mover was Dallas, which shot up from 19th in the 2016 Innovation That Matters rankings to 7th this year. The Lone Star State's 3rd-largest city took a big stride in the area of connectivity (up 10 spots), and it inched up from 2nd to a tie for 1st in the culture rankings.

Survey respondents said that the city has actively bridged the divide between Dallas startups and established corporations in some of the city's top industries, which has helped local entrepreneurs scale their companies and has attracted other startups to the region. "The bottom line is big business is already here, and additional businesses—startup businesses—will begin to look at Dallas as a more realistic option when they perceive Dallas to be what it actually already is, which is innovative," said Trey Bowles, co-founder of Dallas Innovation Alliance and CEO of the Dallas Entrepreneur Center.

NEW ORLEANS

Now 12 years removed from one of the costliest natural disasters in our nation’s history, New Orleans’ economy continues to bounce back, aided in a big way by local entrepreneurs. New Orleans made a 6-place jump to 19th in the rankings and nabbed particularly high marks on connectivity in this year’s report. One New Orleans entrepreneur applauded municipal leaders for “committing to entrepreneurship as something important for the region.”

The city also earned very high marks for its startup culture, ranking No. 2 nationally. Some local leaders said that Hurricane Katrina actually bolstered New Orleans’ innovative spirit. “Pre-Katrina, New Orleans was a very conservative business environment,” Michael Hecht, president and CEO of Greater New Orleans, an economic development alliance, said in an interview with CNBC. “Now, with necessity being the mother of invention and Hurricane Katrina being the biggest and baddest mama of them all, we have been forced to become more inventive.”

The chart below shows which factors were most responsible for the year-over-year upward movement of the three most improved cities for 2017.

CITY	FACTOR ELEMENT	CITY MOVEMENT	25-CITY AVG. MOVEMENT
Atlanta (+15)	Support from local established companies	+33%	-10%
Dallas (+12)	Support from local cheerleaders	+16%	-11%
New Orleans (+6)	Support from local citizens	+18%	-2%



PROMISING DEVELOPMENTS

By zooming out to examine the data in aggregate, several promising developments emerge from this year's study.

Trend: More startups are tackling next-wave challenges

As mentioned, startups in the next-wave industries that this research examined will likely be responsible for some of the most massive financial and societal wins of the coming decades. That's because they are (a) tackling problems that most broadly impact public interest and (b) disrupting some of the biggest industries in the economy.

With that in mind, it bodes well for the cities in the Innovation That Matters study—and the U.S. economy more broadly—that the number of new startups launched in three of the four next-wave industries (energy, education, and smart cities) increased this year.

Most notably, the number of energy startups founded surged by more than 87 percent, from an average of 31 new energy-tech companies founded in each Innovation That Matters city in 2016 to an average of 58 new entrants in 2017. Meanwhile, in the only industry that saw a small dip in new startups, the health sector, the average city still welcomed an impressive 118 newcomers (down slightly from 122 in 2016). That's nearly equal to the combined number of new startups across the other 3 sectors. The bottom line: Tech entrepreneurs are flocking to these next-wave industries.

Trend: Capital is flowing much more heavily into next-wave startups

The boom in next-wave startup activity appears to have been met with increased interest from investors, at least in the national aggregate (more on that later). Between 2011 and 2015, only 38 percent of the total investment in startups in Innovation That Matters cities flowed into next-wave startups, as reported in last year's study. Shifting our time frame forward by one year (2012-2016), next-wave startups accounted for nearly half (43 percent) of all startup investment dollars in those cities. During that 5-year period in these 27 cities, total investment in next-wave technology startups topped a staggering \$100 billion.

This rising tide of investment in next-wave startups has the potential to power world-changing innovations and deliver massive economic wins. However, it isn't happening universally across the country, as several cities on this list are still seeing less than a quarter of startup capital going to next-wave startups, while others are reporting more than 75 percent of investment dollars going to startups in these industries. That disparity from city to city may help explain some of the common barriers and concerns that emerged in this year's report.



PERVASIVE OBSTACLES

While Innovation That Matters focuses on what's working and not working in each city, the resulting data also provide a unique window into the prevailing challenges that are holding back startups in next-wave industries across the country. Even in cities that fared relatively well in the overall rankings, there is ample room to improve in the following areas, all of which revolve around startup founders' perceived support from critical local stakeholders.

The cities that most effectively address the challenges below will be the ones best positioned to support successful next-wave startups and thrive in the digital economy.

Challenge: Startups and local businesses lack strong bonds

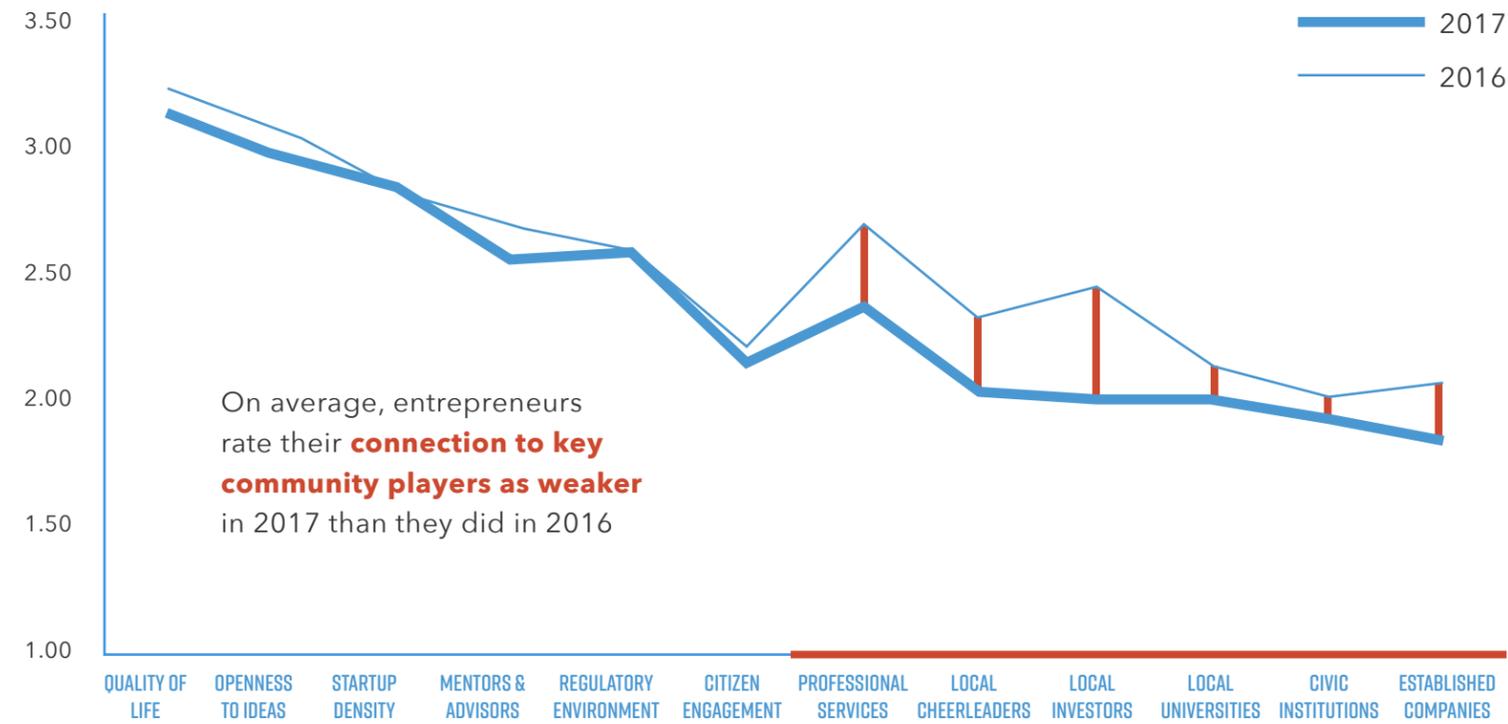
In the Innovation That Matters survey, next-wave startup founders were asked to rate on a 4-point scale (1=no support, 4=strong support) the level of support they receive from the following groups: universities, mentors and advisors, investors, civic institutions, professional

services firms, local startup advocates (e.g., chambers of commerce), the media, and established companies within their respective industries.

For the second year in a row, the group that garnered the lowest average score was established companies, this year dropping to an average rating of 1.94 (down from 2.15 in last year's survey). No other group scored less than a 2.0 on the 4-point "connectivity" scale, and not one city scored above a 3.0 on that question. In other words, next-wave entrepreneurs in every city reported a dearth of support from established companies in their respective industries.

For startups in next-wave sectors, where navigating regulatory hurdles and engaging with the public sector are often critical, support from corporations and other established companies in the same industry—ones that have learned the tricks of the trade and have connections to key industry stakeholders—can make the difference between success and failure. Civic leaders who foster better ties between local industry leaders and up-and-coming entrepreneurs will see those partnerships pay lasting dividends for their economies and their citizens.

MACRO TREND: DISENGAGEMENT



Obstacle: Support for startups from other local stakeholders is waning.

Local businesses aren't the only ones that have pulled back their support for local startups, at least in the eyes of next-wave entrepreneurs. Alarming, the perceived level of support from every one of the aforementioned groups diminished between 2016 and 2017. More alarmingly, the biggest dip in perceived support came from local investors, including venture capital firms and individual angel investors. This suggests that even the recent increase in total investment in next-wave industries across the country has left many startup founders feeling as though they aren't getting the full support they need from their local investors.

The divergence between the data and our survey results may also be partly explained by greater amounts of capital flowing to a smaller number of next-wave startups, as has been reported in the technology industry more broadly, though more research would be required to confirm this. Either way, this perceived lack of support from local investors poses tremendous risk to the success of regional innovation ecosystems,

as early-stage capital is the lifeblood of technology startups.

Next-wave entrepreneurs also reported substantial drop-offs in support from their local citizens, startup advocates, and professional services firms. The only stakeholder groups that respondents rated above the midway point (2.5) on the scale (signaling good connectivity and support) were mentors and advisors. Nevertheless, the average rating across all 25 cities slipped from 2.79 last year to 2.60 in 2017.

Developing thriving startup ecosystems is as much about community building as it is about fostering innovation and technological disruption. For all startups, but especially for next-wave startups, connections to and support from influential stakeholders—from mentors and investors to universities and government leaders—can be a game changer. The cities that manage to reverse this disengagement trend by fostering connections between entrepreneurs and local leaders will be the ones best positioned to prosper as the next chapter of the digital revolution unfolds.



RECOMMENDATIONS

The challenges outlined in this report cannot be tackled overnight, and they cannot be addressed in isolation.

Providing a resource-rich environment for next-wave startups and positioning cities as leaders in the digital economy will require public officials and private-sector leaders to more actively pursue opportunities to work together to nurture new and innovative companies. Those municipalities that manage to sow the seeds of connectivity and collaboration will see increasingly vibrant, prosperous startup ecosystems take root and flourish in the decades ahead.

How do you as a leader in your city sow those seeds? What steps can you take today to best ensure the future economic vitality of your community? Based on the past three years of Innovation That Matters research, we offer the following recommendations:



1. COMMIT

No two cities are exactly alike, and you likely already have a strong sense of what makes yours unique—that special sauce of industry specialization, local university talent or major corporate residents that make your community’s economy and business landscape stand out. Embrace your city’s strengths and look to establish your town as the destination for high-impact startups that want to disrupt a given industry or solve a given problem. By developing like-minded startup clusters in your city, you can accelerate innovation and foster a thriving technology ecosystem.



2. CONNECT

Once again, the most alarming observation from this year’s research was the growing sense of disengagement and the dearth of support next-wave startups perceive from critical stakeholders including investors, mentors, citizens, universities, and local businesses. Every city and town across the country—from the most bustling metropolises to small and midsize municipalities—could do more to build connections and strengthen the relationships between their local entrepreneurs and those key stakeholders.

Start by organizing dynamic networking events that bring players together, and actively look for opportunities to make meaningful introductions between startup founders and the influencers and investors who could help them along their paths. From there, continue to create regular opportunities for conversation and collaboration that keep your community engaged.



3. CULTIVATE

Research shows that millennials have a strong desire to be entrepreneurial and tackle the world’s big challenges. But when push comes to shove and it’s time to make career decisions, that desire doesn’t necessarily lead them down the startup route. While it can be tempting to focus on luring startups and their founders from one place to another, the cities that develop successful, sustainable innovation ecosystems will be those that find ways to leverage the talent and pent-up entrepreneurial potential in their own backyards.

Set aside time and resources to celebrate the city’s startup successes so that local residents and would-be entrepreneurs know what’s possible within the community. Also, look for opportunities to partner with local universities, community colleges, nonprofits, chambers of commerce, and other institutions in your area to develop programs or incentives that encourage entrepreneurship, particularly in high-impact industries.



4. CHAMPION

Today, capital, talent, and expertise flow from place to place more freely than ever—meaning that startup energy is no longer geographically locked in place. Keeping in mind your city’s special sauce (first recommendation above), you should be your startup ecosystem’s most vocal proponent, letting aspirational entrepreneurs and well-heeled investors know that your community has something special going on that they should come check it out for themselves.

Look for industry-specific conferences, startup events, or technology forums where you can insert your city and its startup community into the conversation, and invite entrepreneurial influencers to come see what’s taking root in your city.



FOUNDERS' VOICES

During the course of our research, we heard directly from next-wave startup founders across the country about the challenges they're facing and what they need from their city leaders. Consistent with the recommendations in this report, the following provides a sample of what we heard:

"We need big companies to foster and support cultures of innovation."

– New Orleans health entrepreneur

"Provide tax incentives or recognition to those who choose to help startups."

– Phoenix education entrepreneur

"Integrate startups in community organizations. Partner with startups to solve local community problems."

– Washington, D.C., health entrepreneur

"For the early-stage startups, we need investment, connections, and partnerships."

– Dallas smart-cities entrepreneur

"Foster collaboration between large organizations and local startups to help them start and grow their ideas here."

– Philadelphia health entrepreneur

"Support pilot projects, specifically in the development of new microgrids and transportation."

– New York City energy entrepreneur

"Incentivize existing successful companies to work with promising startups in both an advisory and an advocate role."

– Raleigh-Durham area health entrepreneur

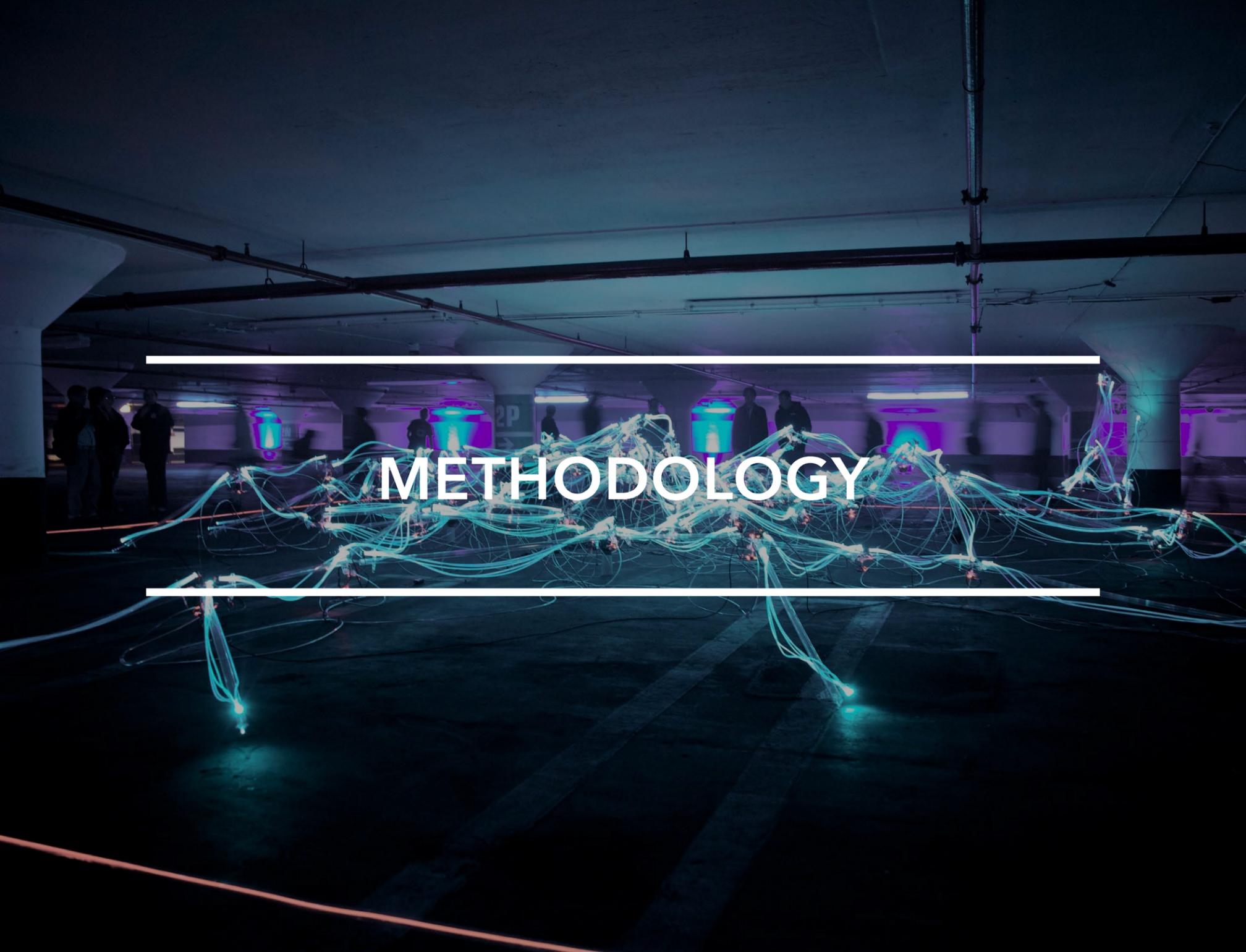


CONCLUSION

The question isn't whether the digital revolution will reshape our economic landscape. The question is which cities will rise and which will fall when that shake-up inevitably takes place.

The 2017 Innovation That Matters report provides a snapshot in time, revealing which cities are currently in the best position to emerge on top. But it is by no means a final prognosis. What matters is what civic leaders and startup champions in your community do with this insight and information.

Every city on this list and every other community across the country can learn from this research and take steps to develop stronger startup communities. Those that fully embrace this next chapter of technological disruption, that actively and aggressively support next-wave startups, and that cultivate vibrant, well-connected innovation ecosystems will be the cities best positioned to lead in the decades ahead.



METHODOLOGY

The Innovation That Matters rankings, observations, and recommendations are based on a combination of new and updated economic data and an online survey of 413 startup founders and leaders, which was conducted by Brunswick Insight. The survey questions examined the culture and level of connectivity in each city. The additional data—which inform our capital, talent, startup density, and industry specialization rankings—were drawn from sources including Mattermark; the Young and Restless report by City Observatory; and the U.S. Cluster Mapping Project. All 25 cities included in the rankings are home to vibrant and growing startup ecosystems.

More specifically, the rankings—which examine 25 cities with vibrant and growing startup ecosystems—are based on the following factors and subcomponents:

Capital

Are enough financial resources available to startups?

- Total investments in all startups and next-wave startups
- Unlocked capital ratio for all startups and next-wave startups
- Exit count of all startups and next-wave startups

Connectivity

Are the city's main economic and social support networks integrated into the startup community?

- Support from universities, mentors and advisors, local professional services firms, investors, local established companies, local cheerleaders, local civic institutions, and local citizen engagement

Culture

Is the city's mind-set attractive to entrepreneurs?

- Openness to new ideas
- Quality of life
- Regulatory environment

Density

What is the concentration of startups?

- Number of startups and percentage of startups to total population
- Number of next-wave startups and percentage of next-wave startups to total startups
- Percentage of millennials in urban areas and percentage change of millennials in urban areas from 2000 to 2016

Industry Specialization

Is the city prepared for the transition to increasingly specialized sectors?

- Number of startups, exits and acquisitions (as well as acquisition value) by industry (e.g., education, energy, health, and smart cities) for both startups and established businesses in the city

Talent

Is the necessary workforce available?

- Domestic and international population inflows
- Percentage of educated millennials and percentage year-over-year change in educated millennials