

4 INNOVATION STRATEGY EXAMPLES from Thriving Innovation Ecosystems



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THE INNOVATION ECONOMY IS GAINING STEAM

It will take years to fully understand the impact of the coronavirus on the public and private sectors. But, for better or worse, the pandemic has ignited an economic transformation. More accurately, it's accelerating a transformation we've been undergoing for decades—at an extremely gradual pace and put the old model's flaws into especially sharp relief.

Traditional economics, built on labor efficiency and profit margins, have dominated our understanding of progress for a long time. While the concept of an "innovation economy" isn't new (Joseph Schumpeter introduced it in 1942), it's only been over the last two or three decades that his ideas have started gaining steam.¹

WHY DO I NEED AN INNOVATION STRATEGY?

Today we know that the most successful businesses in our innovation-focused, knowledge-based economy don't merely refine what has come before; they take a proactive role in fostering creativity that will lead us to whatever comes next. After all, without true innovation, we'd still be upgrading ever-faster steam engines rather than chartering private jets. What worked in the industrial revolution is no longer appropriate to our technologically advanced economy of ideas.

Economic growth—for an innovation economy—is not reactive, as in some invisible hand of supply and demand beyond our control, but proactive. At the heart of progress are conscious efforts of institutions and entrepreneurs to adapt, mutate, and innovate. Schumpeter's notion of capitalism as a "gale of creative destruction"—or a fundamentally evolutionary process of incessantly destroying the old and creating the new—has finally gone mainstream.

Businesses must adopt forward-thinking strategies as we hurdle into our new innovation economy at breakneck speed. Waymaker Group is here to help. Our nationally-renowned team has a long track record of supporting private businesses, cities, and nonprofit organizations with data-driven macroeconomic insights and a one-of-a-kind strategic experience.

A bustling local innovation cluster is a rising tide that raises all ships. We'd like to take you behind the curtain and share several of the most successful strategies we've used to support thriving innovation ecosystems in Wisconsin and Texas. Taken together, these four tactics will align your local innovation assets for a thoughtful economic transformation. Full steam ahead!



Across nearly all industries, the most promising growth in the 21st century has been technology-related. Every city is now on the verge of becoming a tech hub—if only the public and private sectors will take the time to analyze their tech assets, measure the tech job market, build on strengths, and minimize roadblocks in the broader business ecosystem.



WHAT'S A DIGITAL IMPACT ANALYSIS?

Performing a digital impact analysis means studying the economic value of technology jobs and tech infrastructure in your region or community. This means asking and researching questions like:

- » What assets does your region have that support digital growth?
- » What does your regional tech workforce look like?
- » What is the local demand for tech talent (roles, skills, total openings)?
- » Which (and how many) local industries rely on technical talent?
- » How much do "Tech Talent Dependent Industries" contribute to your regional economy?

The answers to these questions can pave the way for long-term success. By quantifying the existing market, you can shine a light on opportunities and liabilities for cluster growth. Our clients leverage this data to target investments, prioritize partnership plans, and align the innovation endeavors among key entrepreneurs and employers.

CASE STUDY: THE MILWAUKEE, WI REGIONAL TECH HUB

The Milwaukee region found itself at a crossroads. On the one hand, it featured a sizable technology talent ecosystem with over 76,000 workers across over 140 tech-dependent industries. On the other, there were signs of lagging tech talent growth compared to neighboring regions and similar tech hubs elsewhere in the country. This spelled potential trouble for businesses in an area that relied on that talent for more than \$27 billion in regional economic output—unless perspectives and investment strategies shifted.

FIGURE 1. TECH TALENT CLUSTER HIGHLIGHTS



\$27.6 BILLION

Contribution to M7 Region economy from industries that rely on the Tech Talent Cluster

75,900 Number of workers in the Tech Talent Cluster in 2017 in M7 Region.

31,000

Estimated openings in Tech Talent Cluster over the next five years.

Source: Emsi 2018.1 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Waymaker Group conducted a rigorous Digital Economic Impact Analysis to establish the above figures and offer data-driven recommendations on what it would take to stay competitive.² Businesses in the region would need to collaborate to strengthen their talent pipeline and other assets that fueled the entire emerging tech hub.



FIGURE 2. OVERVIEW OF TECH TALENT STUDY METHODOLOGY



What does M7's tech workforce look like?

- The "Tech Talent Cluster" encompases 89 individual occupations across 11 major groups.
- Three occupational groups-computer & mathematical, engineering, and business & financial-acount for 75% of the total cluster.



What is the demand for Tech Talent?

- The Tech Talent Cluster is projected to have more than 31,000 job openings.
- Many of the occupations with the highest number of openings are advanced skill positions.



What industries rely on this talent?

- The Tech Talent Cluster as a group accounts for 15% or more of total employment in 141 industries.
- These "Tech Talent Dependent Industries" include many of the region's largest employers.



What role do "Tech Talent Dependent Industries" play in the M7 economy?

- The 141 industries contributed a combined \$27.6 billion to the M7 Region's GRP in 2017 (23% of the total).
- The Tech Talent Dependent Industries employ more than 145,000 workers.

Among our key findings were the following:

- » Nearly a quarter of the region's economic output came from tech cluster occupations.
- » Advanced skill levels were in demand for roles such as market research analysts, software developers, mechanical engineers, and information systems managers.
- » Each tech position supported another 1.75 jobs in the region.
- » Most cluster occupations featured hourly wages above the median levels for other occupations in the area.
- » The pace of job growth and the median hourly wages for technical workers outpaced the average rates for other occupations in the area.

Milwaukee business leaders used these findings to construct a clear understanding of their modern-day economy. With over \$27.6B in annual digital impact, <u>our analysis supported a total shift in perception</u> <u>of the market as a nascent tech hub.</u>³ This reality provided justified grounds for focused innovation investments and calculated collaborations between large and small businesses in a regional coalition. Together, their strategic leadership helped the innovation ecosystem thrive.

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Waymaker's foresight and expertise helped our biggest stakeholders get comfortable about creating a tech coalition. They helped us understand the importance of marrying the grassroots efforts of entrepreneurs with the innovation endeavors of key employers and set us up for long-term success.

—Tim Schaefer, Strategic Technology Advisor



#2. WORKFORCE GAP ANALYSIS —AUSTIN, TX

Visionary leaders need hard numbers to garner support for transformative changes in the workforce pipeline or business ecosystem at large. However, any misalignment between supply and demand in the talent pool limits a region's potential for growth. All that remains is to gather data that proves it.



WHAT'S A WORKFORCE GAP ANALYSIS?

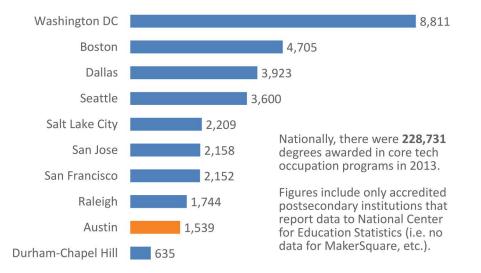
First, we identify the occupations that are most critical to regional growth, based on their slice of the regional economic product and known growth rates. Then, we identify supply-side and demand-side factors (wages, cost of living, alignment with education, funding for career development opportunities, HR standards, etc.) that promote or inhibit that growth.

The results of a workforce gap analysis provide quantifiable, urgent justification for high-impact shifts in tactics around each factor. We've used this method of analysis to support innovation ecosystems for clients all over the country.

CASE STUDY: ATC WORKFORCE ANALYSIS FOR AUSTIN, TX

Waymaker Group (via Civic Analytics) worked in conjunction with the Austin Technology Council (ATC) to establish a growth path for the rising Austin regional technology center. Our <u>Tech Talent Study</u> uncovered several crucial supply-side and demand-side issues for local employers⁴:

- » **Misalignment with schools:** Certifications earned through Austin area school districts were significantly mismatched with those desired by Austin tech firms (none of the top ten overlapped).
- » Lower numbers of tech graduates: In 2013, Austin's degrees awarded from core tech programs substantially trailed other leading regional tech markets.
- » Inability to satisfy labor demand: The Austin area's annual degrees awarded in tech fell far short of Austin's annual job openings for core tech positions.
- » Salary gap: Austin presented a lower cost of living, but also a significant salary gap with many other leading regional markets.



Austin trailed other leading regional tech markets in # of degrees awarded from core tech programs in 2013

Nonetheless, employers were rightfully confident in their ability to grow in Austin. The city was among the five fastest-growing tech markets in the US with an 11% growth rate, and 11.1% of local jobs were in tech (compared to a 4.4% national average).

The takeaways were clear. Austin needed to invest more in itself to prevent the growing number of companies from outsourcing local jobs to candidates from other regions. Among other strategies, we recommended that business leaders engage schools in two primary ways:

- 1. Convene with K-12 and post-secondary education allies to work towards greater alignment with the hiring needs of local tech companies.
- 2. **Explore partnerships with higher education institutions,** including the creation of a Tech Talent Institute and privately-driven initiatives to boost the number of Austin employers who can invest in work-study experiences.

The analysis led to many changes, including a first-ever partnership between 300 small to mid-sized Austin tech companies and St. Edward's University—a development that connected students with internship programs and tech companies with talent. By July of 2019, Business Insider was reporting that <u>"Silicon Valley tech talent is flocking to Austin, Texas, trading sky-high rent costs for live music and a newer tech scene.</u>"⁵

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The workforce gap analysis Julie completed for Austin led to an increased focus on talent development and political engagement which led to a partnership with the City of Austin.

—David Altounian, Associate Dean, St. Edward's University (Bill Munday School of Business)

Waymaker's ability to bring industry players into the university fold enabled Austin companies access to undiscovered talent and St. Edward's students an introduction to tech companies desperate to hire locally.

—Nancy Schreiber, Dean, St. Edward's University (Bill Munday School of Business)



#3. PUBLIC-PRIVATE PARTNERSHIPS —MILWAUKEE, WI & AUSTIN, TX

The St. Edward's University partnership is an example of the incredible value of pairing private businesses with educational institutions, nonprofits, or public organizations. Higher learning partnerships empower large employers to invest in closely-aligned training for incumbent workers. At the same time, smaller and mid-sized employers can benefit from developing (or expanding) paid internship, co-op, and apprenticeship programs in conjunction with the school.

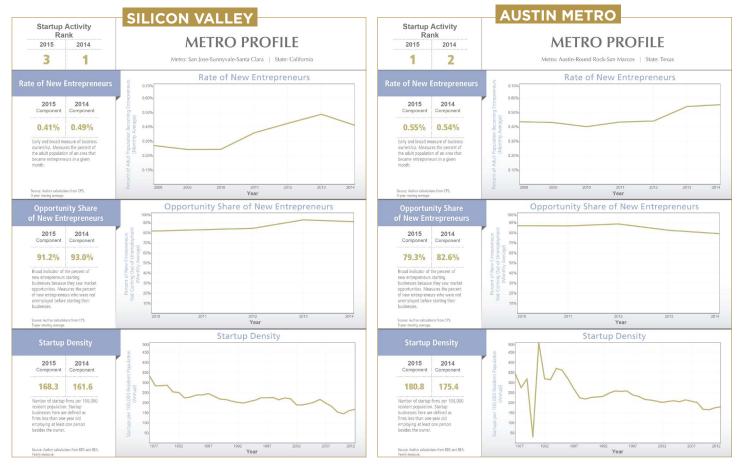
Not all public-private partnerships focus on the workforce pipeline, however. It's equally important to support business needs through proactive policy and public campaigns, as in the example below.

CASE STUDY: ATC & CHAMBER OF COMMERCE PARTNERSHIP, AUSTIN, TX

Austin's entrepreneurs held deep concerns over their lack of access to investment capital. Hearing these, the ATC had Waymaker Group work with St. Edward's University to study and quantify the volumes and types of investments actually reaching Austin companies.

The results of this analysis led to another partnership, this time between the Austin Technology Council and the Chamber of Commerce. Together, the public and private sectors collaborated on initiatives to increase growth-stage investor awareness for Austin tech entrepreneurs. Every thriving innovation ecosystem needs support from a continuous influx of entrepreneurs, creators, and new ideas. In Austin's case, deliberate partnerships focused on drawing fresh talent and produced incredible results.

<u>The Brookings Institute has stated</u> that, although Austin initially lacked a base of investors and venture capitalists, purposeful cluster development led angels and ventures to "set up operations in Austin."⁶ This shows how productive public-private partnerships can lift an entire regional tech cluster. In 2013, technology was driving \$21B into the Austin economy and supporting one-third of local jobs. <u>By 2017, economic impact neared \$30B.</u>⁷ <u>CultureMap</u> went on to write in November 2019 that "Austin's unstoppable tech sector explodes with 10,000 new jobs in just 2 years."⁸



Source: The Kauffman Startup Index, The Kauffman Foundation, 2015

A macroeconomic, big-picture innovation strategy—that partners public institutions with big and small businesses—multiplies growth and amasses long-lasting forward momentum. In the end, the cluster becomes greater than the sum of its parts.







#4. AN INNOVATION DISTRICT —KENOSHA, WI

Waymaker understands the value of a dedicated space that allows an interconnected series of related businesses and groups to collaborate and cocreate. Thriving innovation ecosystems rely on these innovation districts to help dozens of networks overlap and interact.

WHAT'S AN INNOVATION DISTRICT?

An "innovation district" is an environment in which many people in knowledge-based or innovation-centric industries work and cohabitate. Amenities, housing options, and public spaces are all supplementary—and critical—to these well-integrated workspaces.

The most successful districts promote networking across three dimensions:

- 1. Workforce (collaboration among individual workers)
- 2. Organizations (business-to-business networks)
- 3. Physical environment (an urban space conducive to collaboration)

We often advocate for the creation of innovation centers and assist in the planning (or re-engineering) of these New Economy spaces. Many times, existing assets can be repurposed into more relevant, intentional space that will unlock latent potential and facilitate 21st-century innovation.

CASE STUDY: KENOSHA INNOVATION NEIGHBORHOOD, KENOSHA, WI

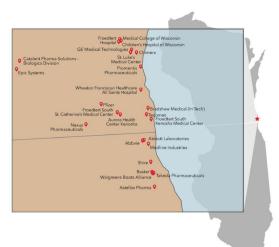
The county of Kenosha is nestled between two vibrant urban centers—Chicago and Milwaukee—and features a strong economy. However, the urbanization of the workforce, declining birth rates, and slowing job growth made forward-thinking economic action a priority. Nonetheless, Waymaker noted a growing concentration of life science and major medical firms in the region, which positioned Kenosha to emulate the success of healthcare innovation communities like those in Boston, San Francisco, and Atlanta.

Construction of the Kenosha Innovation Neighborhood

(KIN) aimed to reverse the negative trends, recapture high-paying jobs, and attract workers from outside the market.⁹ The KIN was designed to create an attractive hub for businesses and workers in the healthcare niche. The project redeveloped a 107-acre urban tract (used for over a century in auto engine manufacturing) that had been demolished in 2013.

By 2018, our assessments showed significant progress towards the goals of coalescing industry players and aligning the community. We found:

- » Enthusiasm among local employers
- » A strong track record of university-industry partnerships
- » A wide range of demonstrated employer investments in technology and innovation
- » Demand for a strong industry player with existing or future investments in research
- Opportunities for local partners to participate in KIN initiatives



A SNAPSHOT OF MAJOR LIFE SCIENCE LEADERS IN THE REGION



Today, the KIN project continues to unite businesses and public institutions while providing a sure future to the thriving healthcare innovation ecosystem of the Chicago-Milwaukee corridor.



Waymaker Group has become a trusted partner to Kenosha industry and civic leaders and helped us quicken the pace on a critical project that will transform our community's economy. They push our market to position from our strengths, to think bigger about the region's future and are sensitive to our community's dynamics.

—Mark Jaeger, Sr. Vice President, Jockey International, Inc.

Waymaker is uniquely qualified in pulling together business, higher education/research universities, government, financing and developers for creating the build-out of the City of Kenosha's innovation center (district). The organization's leadership is superbly qualified and networked in the innovation development space ensuring that our partners and we will be successful in developing a deliberate innovation ecosystem.

-Randy Hernandez, City Administrator, City of Kenosha

DIVERSIFY YOUR INNOVATION STRATEGY

No single tactic solves for every variable in your innovation ecosystem. A comprehensive innovation strategy takes a multi-pronged approach. Waymaker always starts with data—conversations with leaders, industry surveys, and a thorough review of economic figures. After assessing the state of the market and seeking critical insights, we work together with cities and business leaders to develop a bold plan that will strengthen the regional talent pool and inspire business growth.

We believe there has never been a more urgent time to lead courageously. Clients count on Waymaker to bring vision, a national network of technical experts, and the ability to cultivate trust among disparate stakeholders. With the combined power of insight and collaborative leadership, we'll give you the tools to transform your innovation ecosystem with confidence.

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As an investor, there's no better group to have in my corner than Waymaker. Their ability to grasp long-range technology trends, along with their uncanny ability to read individual talent makes picking market winners that much easier.

—Blair Garrou, Managing Director, Mercury Fund

If your goal is to position your market for success, Waymaker is your fastest way forward. People value their ability to combine data with soulful insight and organically follow their lead.

—Larry Warnock, Investor

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ABOUT WAYMAKER

WAYMAKER GROUP HELPS LEADERS AND THEIR COMMUNITIES POWER SUCCESSFUL INNOVATION ECONOMIES.

We believe innovation-based economies are the key to stable and sustainable communities. We are passionate about reshaping economies and remaking places to optimize community prosperity. We partner closely with city leaders (government, corporate and academic) to develop data-driven plans that add economic hope and confidence. We believe in leveraging the existing assets and network intelligence of cities to support the creation of a new vision. We believe there has never been a more urgent time to lead courageously. Waymaker brings vision, a national network of technical experts and the ability to cultivate trust among disparate stakeholders.

WHO WE SERVE

- » **Government Leaders:** Elected officials or city managers seeking a new approach to economic development.
- » **Corporates:** C-suite leaders, board directors or general managers of headquarter companies seeking to make their market more competitive.
- » **Non Profits:** Tech councils, associations, chambers of commerce or philanthropic organizations seeking to make their communities better.
- » **Higher Education:** Presidents, provosts and commercialization officers looking to forge strategic innovation partnerships with government and private companies.

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