AON | Partnership for New York City

# New York City
## as a Destination of Choice for Talent

**About the Study**
Aon and the Partnership for New York City collaborated on this study
to identify actions that could sustain New York City's long-term
competitiveness. This study focuses on key drivers that assist in creating
an enabling environment for industry and talent, by comparing New York
City to other relevant global locations across specific drivers. The study
encompasses a wide array of information, including qualitative
and quantitative assessments.

# tal·ent
noun \ta-lənt\

1
a: any of several ancient units of weight
b: a unit of value equal to the value of a talent of gold or silver

2
archaic: a characteristic feature, aptitude, or disposition of a
person or animal

3
the natural endowments of a person

4
a: a special often athletic, creative, or artistic aptitude
b: general intelligence or mental power: ability

5
a person of talent or a group of persons of talent in a field
or activity
— tal·ent·ed \-lən-təd\ adjective

— tal·ent·less \-lənt-ləs\ adjective

# Introduction

A deep and diverse supply of talent has propelled New York City to its status as a global capital of business and finance. New York is well established as the destination of choice for professional, entrepreneurial and creative talent from across the nation and around the world. This reflects the strength of the City's "talent value proposition," a magnetic field powered by:

- A major local, national and global hub for commerce and culture;

- A global brand identity as a city of high achievers, creative innovators, and best-in-class employers across a dozen global industries;

- A large and growing job market that ensures career mobility and a wealth of entrepreneurial opportunities;

- An open and tolerant environment that embraces diversity, whether race, age, gender, or sexual orientation; and

- A rich and varied talent pool, with a concentration of world-class educational, arts, and research institutions.

Today, however, New York faces growing global competition for top talent and some new dynamics that could dilute its historic talent value proposition. The Partnership for New York City has observed that the City's talent supply is starting to fall short of employer needs. The Partnership asked Aon to conduct some research to determine why this was happening and what actions the City could take to sustain its "destination of choice" position. Through interviews and data analysis, Aon determined that, as technological innovation increasingly dominates the economy, there is a growing mismatch between employer needs and available talent. This research confirmed that New York's historical competitive advantage in the talent arena could be at risk.

Among the factors contributing to the potential erosion of New York's talent value proposition are the following:

- National immigration policies have seriously constrained what had long been a continuous flow of new foreign talent to New York. With 37% of its population foreign born, the impact of exclusionary immigration policies has resulted in a loss of some of the most promising students, skilled workers, and entrepreneurs.

- High costs of housing and private education are making it increasingly expensive to maintain a comfortable lifestyle and to raise a family in the City, or in the suburbs that once provided a low-cost "safety valve."

- Rapid job growth in the tech and creative industries is outpacing the supply of qualified workers available in the metropolitan region or coming out of regional educational institutions, particularly in engineering and computer sciences.

- Finally, millennial lifestyle choices are not necessarily consistent with the workplace culture and amenities that are typical of New York's corporate business environment. The "campus" atmosphere that many millennials crave is difficult to accommodate in a dense urban setting, sometimes putting New York employers at a competitive disadvantage to other locations.

From an employer standpoint, these recruiting challenges are exacerbated by other factors that limit the supply of qualified workers, including:

- Weak relationships between educational institutions and industry, so that many graduates are poorly prepared for rapidly changing industry needs, resulting in a mismatch between labor pool skills and employer needs.

- New York State imposes relatively strict and often outdated criteria for professional licensing and credentialing, resulting in legal and regulatory barriers to expanding the pool of qualified workers for many positions. For example, foreign and out-of-state professionals who are otherwise qualified are frequently barred from taking jobs due to parochial credentialing requirements.

Aon researchers took a deep dive on the talent supply in two sectors that are particularly important to New York's economic vitality: the financial services and high-tech sectors. Aon benchmarked New York against other global cities and found that only Singapore is currently competitive with New York when it comes to attracting financial and tech talent, largely due to its immigration policies and its relatively low-cost environment. This can change, however, as other financial centers around the world become better at recruiting talent, in recognition that talent is the most essential prerequisite for economic success in the 21st century.

New York is well positioned to renew its talent value proposition and sustain the right talent mix to bolster its competitiveness in the years ahead. Aon draws from its research a number of recommendations for how local government and employers can, collaboratively, do much to maintain a healthy balance between talent supply and demand, reinforce the City's attractiveness to global and homegrown talent, and sustain New York's competitive edge.

The Bloomberg administration has been aggressive about reinforcing the City's talent value proposition by advocating for national immigration reform, encouraging partnerships between industry and the public education system, creating an applied sciences initiative that will double the number of engineers graduating from New York institutions in the next decade, and investing in the amenities that contribute to the more "livable" city that millennials are seeking.

But research revealed other ideas that should be considered to build on these initiatives, including the following:

- Establish a Chief Talent Officer for the City who would be dedicated to coming up with policies and programs that continually enhance the talent value proposition.

- Expand public-private initiatives dedicated to the development of affordable workforce housing, including exploration of employer-assisted housing.

- Work with the Congressional Delegation to expand the visas available to skilled foreign workers, entrepreneurs, and graduate students who are headed to New York, with a focus on helping smaller employers compete for visa authorizations.

- Incentivize development of open workspaces with broadband connectivity in edgy settings that will result in transforming the City's older building stock into new, creative spaces and will help rebrand more of the City's neighborhoods as destinations for the millennial workforce.

- Market the City to young talent, perhaps in connection with industry college recruitment programs, to showcase local amenities and opportunities for aspiring entrepreneurs.

- Create an institution or agency dedicated to building and reinforcing partnerships between industry and academia, from secondary education through graduate school and continuing education, employing industry-specific strategies to meet current and future talent needs of New York employers.

# Facts About the Study

**50+** stakeholders interviewed from across all groups. They included industry leaders, industry associations, academic and research institutions, and representatives from the City government.

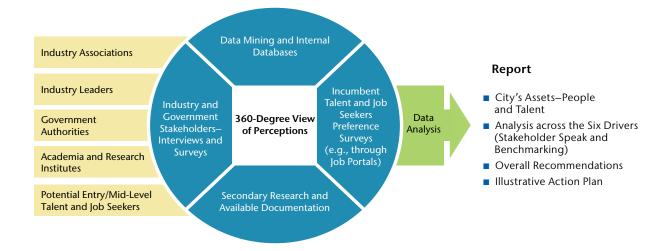**Key themes** addressed in the interviews included:

- Brand Positioning: New York City's value proposition to investors, the broader business community, and the talent pool.

- Demand for Talent: Emerging opportunities and their talent implications.

- Supply of Talent: Building "future-focused" talent capacity, ensuring diversity (of skills and competencies, ethnicity, gender, etc.), and attracting the right skills from within the U.S. and across the globe.

- Enabling Environment: Managing efficiency through the right balance of talent cost and quality, and creating an enabling environment that encourages businesses to scale and talent to thrive.

**500** respondents from current and future talent in the Talent Perception Survey contacted as part of the study. The survey focused on location preferences and geographic infrastructure needs, including housing and transportation.

**15** global cities with a strong presence in the financial services sector were used to benchmark New York City's competitiveness in the sector.

**12** global cities with a strong presence in the high-tech sector were used to benchmark New York City's competitiveness in the sector.

**Data** from highly regarded sources, including but not limited to Aon People Risk Index (www.aonpeoplerisk.com), the *Cities of Opportunities* report by PfNYC and PwC, and Radford and McLagan compensation databases were utilized. Secondary research from the UN population database and World Economic Forum reports were used to supplement the benchmarking study.

# Framework

Often referred to as "human capital," talent is the core engine that enables organizations and cities to function and compete in the global economy. Cultivating, attracting, and retaining talent is a fundamental necessity for New York City's continued economic success.

As we look at the issues and challenges of talent acquisition and competitiveness, we consider the following six talent drivers:

- **Capabilities.** Having the right portfolio of talent, with the right skills and capabilities, to match current and future demands.

- **Talent Diversity.** Organizations are considering diversity of skills and culture beyond the classic definition of diversity based on gender, ethnicity, and age.

- **Global Mobility.** Attracting and retaining international talent depends on flexible policies and programs to facilitate and attract foreign talent.

- **Talent Optimization.** Looking at the balance of cost versus quality of talent.

- **Ecosystem.** The interconnection and efficiency of a city's customers, organizations, markets, products, processes, stakeholders, and government/society.

- **Workspace.** Shifting from a place of employment to an environment that helps a person learn, grow, and contribute.

The overall economic, demographic, and political environment is shifting; for example, for the first time in 12 years the City will be undergoing a leadership shift with the fast-approaching mayoral race. This prompted the exploration of answers to the following question:

> *Given the economic, demographic, and political shifts—how can New York City sustain its position as a "destination of choice" today and in the future for business and talent?*

This study focuses on two sectors that are at the epicenter of New York City's changing environment.
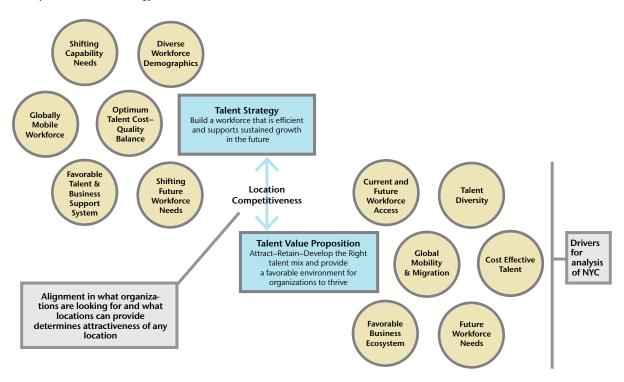
- **Financial Services sector**, which has undergone significant change over the past five years due to economic, regulatory, reputational, and compliance shifts.

- **High-Tech sector**[1], which has created economic growth and diversification and is creating emerging competition with other technology cities within the U.S. and globally.

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[1] In this report we have defined high-tech sector as those "engaged in the design, development, and introduction of new products and/or innovative manufacturing processes through the systematic application of scientific and technical knowledge." Technology, Innovation, and Regional Economic Development, U.S. Congress, Office of Technology Assessment, Sept. 9, 1982.

The City's continued competitive advantage in attracting talent is a significant component in keeping New York City a destination of choice for years to come. A location that can create a compelling talent value proposition by attracting, retaining, and developing the right talent mix improves its competitiveness. This value proposition focuses on the Aon Talent Drivers and how they attract businesses to invest and grow in the City, thereby fueling increased demand for more.

**Figure 1: Creating the Talent Value Proposition**

**To remain sustainable organizations need to have a well planned talent strategy**



**To remain competitive locations need to provide a solid talent value proposition**

# City's Asset—Its People and Talent

An employable workforce is critical to a city or region's economic health. The presence of the right skills and capabilities, the ability to retain the right talent portfolio, and a strategy to ensure a steady pipeline of highly-skilled talent are imperatives in determining the competitiveness of any location. At a macro level, this economic growth is fueled by population demographics and the presence of a working age population in a city or region. At the micro level, this translates into the availability of qualified and employable talent.

**New York City is no different.** Long considered the gateway to the United States, New York City has flourished with the help of an influx of talent from across the globe. Today, New York City is home to nearly 8.25 million people[2], making it the most populous city in the United States. As of 2011[3], approximately 37% of New York City residents were foreign born. New York City's population ranks amongst the most cosmopolitan in the country. The City is home to nearly 200 languages[4] making it, linguistically, one of the most diverse cities in the world. Additionally, it stands out as the center for commerce and industry; 45 of the Fortune 500 companies have their headquarters in New York. It is the world's financial capital and the second largest city economy on Earth.

New York City's access to a global talent pool is a key asset in continuing the City's economic progress. To determine what is needed for sustained growth and future success, it is important to understand the current state of the talent pool in the City.

## Working Age Population Shift

Broad changes in population demographics are one of the key factors that influences the way an economy operates. Aon Hewitt has studied the demographic shift of the working age population of countries in terms of their median age, the increase or decrease in working age population, and the overall size of the working age population. The data (as depicted in Figure 2) suggests that developed economies[5] are showing an increase in their median age and will experience a decrease in the size of working age population over the next 10 years. This is a trend that has been in progress for the last decade. Developing economies[6] have a younger working age population and the size of the population is also increasing.

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[2] U.S. Census American Community Survey, 2011
[3] American Fact Finder, U.S. Census Bureau, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
[4] NYC, Department of City Planning
[5] Developed economies are those with a high level of economic growth, defined by per capita income, GDP, economic security and industrialization, www.investopaedia.com
[6] Developing economies are those that are in transition but still do not have the same level of GDP, per capita income, economic security and industrialization as the Developed Economies, www.investopaedia.com

# The Arrival of eBay Inc.

New York City is quickly becoming an important part of eBay Inc.'s workforce worldwide. As a global technology company operating in a rapidly changing environment, eBay continually assesses talent needs and considers where it can make targeted investments to meet business requirements.

Just a few years ago, Wall Street was not high on eBay's consideration list for technology development centers. However, as market dynamics began to shift, the company saw an opportunity to build a "leader's vision" for technology in New York City. This approach led to a significant investment, expanding the company's access to innovative talent and technology on the East Coast.

In New York, eBay began expanding in 2011 with the acquisition of True Action, a digital marketing business that is a part of GSI Commerce, and Hunch, a recommendations platform startup. The expansion continued in 2012 with the acquisition of Svpply and a real estate investment in the Flatiron district to support the company's operations. With these steps, eBay has designated New York City as a formal Center of Excellence (COE) for data mining and machine learning. This has sent an important signal to the New York City tech community about the importance eBay places on this market to help it attract and retain top talent.
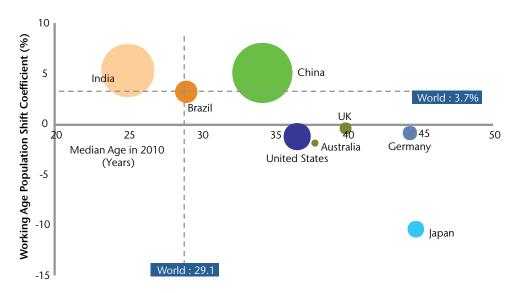
College recruiting plays a major role in eBay's New York City strategy. The company is building connections with leading local academic institutions—including NYU, NYU Polytech and Columbia University—to attract young talent.

While becoming part of the community, eBay is also creating a space in the company's facility called "Friends of eBay" where the technology community and startups can gather and work together. Finally, the company sponsors community events, such as "hack-a-thons" where technologists have the opportunity to develop new products and applications that will drive future innovation.

Like other global brands, eBay takes a serious look at infrastructure in making decisions about investments and expansions. Top considerations include whether a city is a place employees will want to raise a family; whether the City has a robust and vibrant technology ecosystem; and the cost of real estate. For example, a young technologist just out of college may start out single and working extensive hours in Manhattan. As his or her career progresses, affordable housing and a good family environment become increasingly important. Similarly, the availability and affordability of commercial real estate is critical for the company to expand and enhance its workspace.
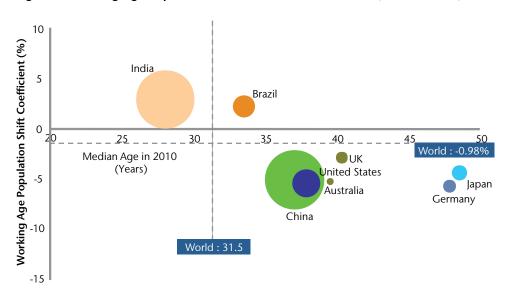
Along with its other development centers around the world, eBay has made a significant commitment to growing its operation in New York City to meet the needs of its global business. The company sees tremendous opportunity to tap into this vibrant city as it works to create the future of commerce.

**Figure 2: Working Age Population Shift in the Last Decade (2000 to 2010)**



*Source: Aon Hewitt Analysis, UN Population Division, World Population Prospects*

**Figure 3: Working Age Population Shift in the Current Decade (2010 to 2020)**



*Source: Aon Hewitt Analysis, UN Population Division, World Population Prospects*
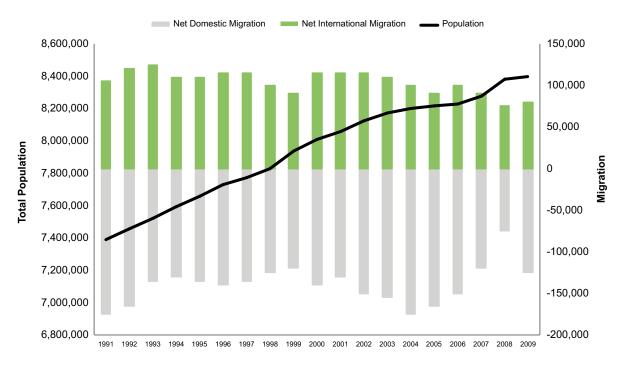
Working age population, defined by the United Nations as persons between ages 18 and 59, is decreasing in most developed economies. Aon Hewitt's research shows that the working age population in the United States decreased at a rate of 1.14%[7] cumulatively over the last decade (2000–2010). The size of the working age population is expected to decrease by 5.48%[8] from 2010 to 2020; this may pose serious challenges in the future with regard to availability of workforce.

Seventy percent of the 8.25 million New Yorkers (or 5.75 million people)[9] are in the working age population bracket, while the national average stands at 62%[10]. Among comparable cities globally, London has a working age population of only 49%[11] of 7.83 million (or 3.83 million people). This gives New York a competitive advantage, so long as enough jobs are being created to insure abundant employment opportunities.

## Migration: Domestic vs. International

Talent mobility into a location is critical to maintain a diverse and skilled talent pool. The U.S. has been able to maintain a steady supply of migrant talent; however, for New York City, the larger concern is net domestic migration. While New York City has been able to continue to attract international talent, the City has seen a net loss in domestic migration, as seen in Figure 4.

**Figure 4: Net Migration in New York City (Domestic and International)**



*Source: NYCEDC, 2011, NYC AT A GLANCE*

[7] Aon Hewitt Analysis based on UN population division data
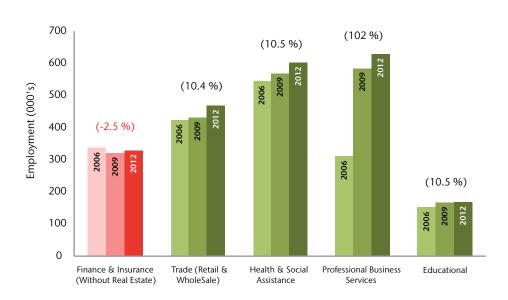[8] Aon Hewitt Analysis based on UN population division data
[9] http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
[10] 2010 Census Briefs – Age and Sex Composition: 2010, Issued in May 2011
[11] World Cities Culture Report

# Talent Landscape in New York City

**Figure 5: New York City—Key Sectors from an Employment Perspective**



*Source: NYCEDC 2006, 2009 and 2012 August reports.*

*Note: Figures in ( ) represent % change in employment numbers from 2006 to 2012 in NYC.*

The top three industries in New York City, in terms of employment, are Professional & Business Services followed by Health & Social Assistance and the Retail & Wholesale Trade sectors (see Figure 5). The Finance & Insurance sector shows a recovery from 2009 onwards, but is still below 2006 levels. One sector that has consistently added jobs is the Professional & Business Services sector with a 102% increase since 2006. Technology consulting and startups have helped fuel the increase in employment related to Professional & Business Services. A recent report from Center for an Urban Future[12] notes that 90,273 people worked at 7,147 "high-tech" companies in New York City in 2010, a 30% gain in sector employment compared to 2005.

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[12] Center for an Urban Future, "New Tech City" - www.nycfuture.org/images_pdfs/pdfs/NewTechCity.pdf

# Education Landscape in New York City

New York City has approximately 1.1 million public school students enrolled in 1,700 K-12 schools[13]. New York City's higher education system supports a student population of nearly 500,000 at its 110 universities and colleges. The private higher education system contributes an estimated $21 billion to the City's economy[14].
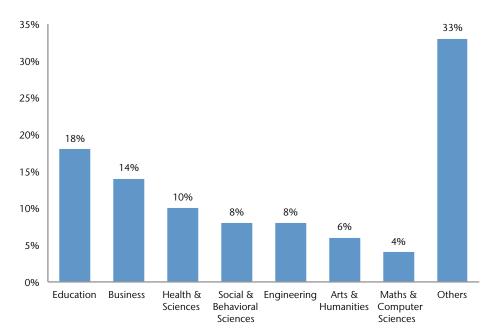
**Figure 6: New York City—Graduate Degree Concentration**



*Source: Graduate Enrollment and Degrees, Council of graduate schools.*

New York City's strong higher education system attracts global and domestic talent. The variety in the student pool is apparent from the distribution of academic concentrations of study, as seen in Figure 6. Relatively small numbers of students are enrolled in Computer Science and Engineering programs, which limits the supply of talent for emerging technology jobs. With the establishment of the new Cornell Technion campus, there is a clear focus to address this gap at the graduate school level. The campus will be built on Roosevelt Island with an investment of $1.5 billion by local government and partners. Once fully completed, two thousand students are expected to graduate each year. This project is estimated to boost the economy by $23 billion and contribute to a more diversified New York City economy.[15] Along with new Applied Sciences initiatives at NYU Poly and Columbia University, this will boost the City's competitiveness as a tech center.

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[13] http://schools.nyc.gov/AboutUs/default.htm
[14] NYC Higher Education, 2012, One Campus NYC, http://www.nyc.gov/html/ocnyc/html/home/home.shtml & New York Observer, 2006, New York College town
[15] Bureau of Economic Analysis—Regional Input-Output Modeling System (RIMS II); http://www.bea.gov/regional/rims/index.cfm

# Traditional Talent Pyramid

With the presence of multiple industries and students from an array of educational majors, organizations in New York City can tap into a diverse set of talent. For purposes of this study, a pyramid approach (seen in Figure 7) has been used to define the nature of talent and skill availability as it relates to technology talent, and can be used similarly across other industries as appropriate. The talent pyramid represents the level of skill present in the talent pool, derived from the education, qualification and nature of work performed. The four levels of skills used in the research are:
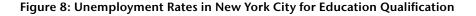
- **Highly-skilled talent**: Talent with a masters or equivalent degree and working in roles that involve complex analytics and quantitative research or managing teams performing these functions.

- **High-to-medium skilled talent**: Talent specializing in a specific area either through a master's degree or a bachelor's degree supplemented with additional certifications. Such talent is employed in roles requiring specific skills like data architect, technology product design or application development.

- **Medium-skilled talent**: Talent with broad skills in a specific area that can be trained to carry out specific tasks. Such talent would generally have a bachelor's degree and work in areas where they are expected to carry out specific tasks like programming or business analysis.

- **Low-skilled talent**: Talent with the skills to carry out administrative and operational roles. Such talent would generally have a high school diploma or equivalent and work in support functions like facilities, technology support or operations in an administrative capacity. For example, data entry and administrative support roles.
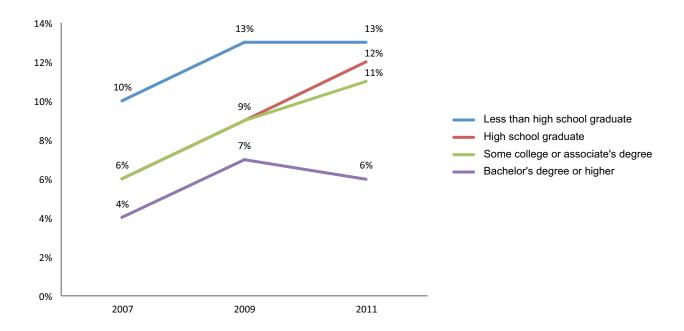
**Figure 7: Talent Pyramid**



Highly Skilled Talent

High-to-Medium Skilled Talent

Medium-Skilled Talent

Low-Skilled Talent

As businesses grow in size, they typically require talent in the medium-skilled level to support scaled-up operations and enhanced productivity. The talent pyramid illustrates how every job at the higher level is supported by multiple jobs at the mid and low-skilled level. Additionally, each direct job creates multiple indirect and induced jobs. The Bureau of Economic Analysis through its Regional Input-Output Modeling System (RIMS II)[16] helps estimate the number of direct, indirect and induced jobs for various levels of economic activity by sectors. These indirect and induced jobs are typically in the mid and low-skilled levels, compared to the direct jobs which are typically high and high-to-medium skilled levels.

As depicted in Figure 8[17], the unemployment rates for talent with a college degree or higher in New York City have improved. However, unemployment rates for talent with a high school, or less than high school, qualification have increased even during the post-recession recovery. It is the medium-skilled talent that has remained unemployed and is searching for jobs. Addressing the need for technology skills would create a large number of opportunities relevant to such medium-skilled jobs.

**Figure 8: Unemployment Rates in New York City for Education Qualification**



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[16] Bureau of Economic Analysis – Regional Input-Output Modeling System (RIMS II) ; http://www.bea.gov/regional/rims/index.cfm
[17] U.S. Census Bureau, American Fact Finder: "Educational Attainment by Employment Status for the Population 25 to 64 years"–
    Details: 2007, 2008, 2009, 2010, and 2011 American Community Survey 1-Year Estimates

# Summary of New York City's Current Position

**What we heard from stakeholders: What brings businesses and talent to New York City and what are their challenges?**

Initial discussions with stakeholders clearly laid out the reasons why businesses and talent are attracted to New York City:

- The business friendly policies of the current City administration and the focus in diversifying the City's economic portfolio have provided a boost to the economic scenario following the global economic recession.

- The diversity of the City, both economically and culturally, as well as the City's position as the global financial services hub, helps attract investors and businesses.

- Employment opportunities in the City attract more talent from across the U.S. and rest of the world; in addition, the presence of a large number of universities produces and attracts top talent to the City.

- The growing recognition of the emerging High-Tech sector and the presence of venture capitalists willing to invest in technology solutions and ideas are proving invaluable for the City. Initiatives around incubators and accelerators are building a culture of entrepreneurship and creating more opportunities.

However, there are challenges that the current economic scenario has brought with it:

- Cost of living is one of the main threats to the City's talent landscape; affordable living conditions are a must for talent to remain in the City for the long term.

- There are insufficient jobs available at the medium-skilled level for those who are unemployed or underemployed.

- Each sector needs to be treated differently as their support system requirements are unique. A clear strategy is required to ensure that emerging sectors like High-Tech are provided with the right kinds of support to help foster growth.

- There are challenges around cost of doing business, availability of affordable office space, and lack of a steady pipeline of high-to-medium and medium-skilled talent.

- Quality of education infrastructure beyond the top tier schools needs to be improved. A clear need has been expressed to restructure the existing primary and secondary education system to produce a steady pipeline of employable talent ready to take on emerging job opportunities as the City recovers and diversifies its portfolio of business sectors.

- The City has a shortage of flexible work space, or live-work, work environments.

People and skills are key "knowledge assets" for any city, country, or region, and New York City is no exception. Hence, it is imperative for the City to address the above challenges as it aims to remain a pre-eminent destination for businesses and talent.

This study aims to compare the attractiveness of New York City to other cities, both global and domestic, and to identify areas that need improvement to remain competitive in the future. The following sections detail the approach and findings, and conclude with recommendations from a talent attraction, retention, and development standpoint.

# The Study—Process and Methodology

As we worked to understand the factors that have made New York City a top destination for business and talent, we also looked at the factors that need to be addressed in the future to continue to attract investment and develop right-skilled talent. The framework used for this analysis is the Aon Hewitt 'Long-Term Sustainable Competitiveness of Location' model. The model draws inspiration from how organizations look at their own long-term sustainability.

## Aon Hewitt's 'Long-Term Sustainable Competitiveness of Locations' Model

The Long-Term Sustainable Competitiveness of Locations model is a derivative of Aon Hewitt's "Talent & Organizations Risks and Sustainability (TORS)" solution[18]. TORS looks at internal impacts within organizations of key external events. It aids in the diagnosis of the risks and opportunities for an organization, specifically on factors like demographic shifts, consumer need changes, loss of experienced workforce and emergence of new locations. The resulting analysis helps organizations develop a fact-based, robust 'Sustainability Action Plan.'

In addition to managing and adapting to economic and social trends, organizations need to preempt such trends to remain sustainable in the long run. For many organizations, a sustainability action plan translates into a need for a strong talent strategy. This requires businesses to build a portfolio of skills and capabilities for the future. As part of a sustainability action plan, organizations need to look at locations as an enabler for providing a steady supply of talent.

Businesses have specific requirements that need to be fulfilled in order to remain competitive. Locations need to deliver what organizations, industry, and potential investors are looking for in order to remain attractive. This is the premise on which Aon Hewitt's methodology is based.

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[18] TORS: Aon Hewitt's proprietary solution for the assessment of long-term sustainability of organizations (specifically global and international organizations).

The Aon Hewitt model is focused specifically on talent-related needs of organizations, and is based on six talent drivers.

**To remain sustainable organizations need to have a
well planned talent strategy**

Shifting Capability Needs

Diverse Workforce Demographics

Globally Mobile Workforce

Optimum Talent Cost–Quality Balance

**Talent Strategy**
Build a workforce that is efficient and supports sustained growth in the future

Favorable Talent & Business Support System

Shifting Future Workforce Needs

Location Competitiveness

Current and Future Workforce Access

Talent Diversity

**Talent Value Proposition**
Attract–Retain–Develop the Right talent mix and provide a favorable environment for organizations to thrive

Global Mobility & Migration

Cost Effective Talent

Drivers for analysis of NYC

**Alignment in what organizations are looking for and what locations can provide determines attractiveness of any location**

Favorable Business Ecosystem

Future Workforce Needs

**To remain competitive locations need to provide
a solid talent value proposition**

# Study Methodology: A 360 Degree Assessment of New York City

While the assessment methodology draws inspiration from Aon Hewitt's work with global organizations to help them remain sustainable from a talent perspective, the other key aspect of the study has been its coverage of various dimensions. The study was primarily based on two distinct areas:

- City's Inner Voice: 50 interviews with representative stakeholder groups in New York City. A Talent Perception Survey with 500 respondents focusing on New York City's current position and future challenges was also carried out.

- Location benchmarking exercise to understand how New York City compares with respect to global and local competition.

The study was conducted for both the Financial Services sector, where New York City needs to sustain its competitive position, and the High-Tech sector, where New York City is beginning to establish itself as a global competitor.

## City's Inner Voice

The stakeholder groups interviewed/surveyed were divided broadly into four categories:

### Industry

Industry forms the heart of a city and it is imperative to understand its view on how a city can remain attractive and competitive in the future.

- Financial Services sector – existing players in Banking, Securities, Insurance and other specialized financial services.

- The emerging High-Tech sector – startups, larger technology organizations, experts from the industry and investors. Representatives from the fin-tech, healthcare, retail and advertising sectors were interviewed.

### Government and Government-Funded Entities

Supporting the City's growth and leading initiatives to attract talent and industry, the state and local government and its associated organizations play a pivotal role in policy making and building an enabling ecosystem.

### Academia and Research Institutes

The primary supply of skilled entry-level talent to industry is through a city's academic and research institutes. Therefore, it was vital to identify the current trends in education and how these institutes are working with industry.

### Potential Entry/Mid-Level Talent and Job Seekers

Talent includes a city's existing workforce, pipeline created by educational institutions, and talent migration to a city. Focus groups and an online survey were used to gather information about what attracts talent to New York City, what deters talent from moving or staying here, and other locations this talent has considered. Discussions also provided a perspective on the Millennial workforce and their expectations from a city and workplace environment.

## Location Benchmarking Study

While the global economic recession brought about issues that New York City needs to address, the global economy is also witnessing a shift in the balance of power. This has been fueled by workforce demographic shifts (explained in the City's Assets section). A large group of developing economies (like countries in Africa and South East Asia) as well as emerging economies (like Brazil, India, and China) are looking for a share in the overall global talent pool. Therefore, issues specific to New York City and its competitiveness cannot be viewed in isolation.

**Relative competitiveness** across top global cities provides a holistic view on whether New York City can sustain its position; therefore, the study also compares New York City's competitiveness and attractiveness with other global cities in the Financial Services and High-Tech sectors. Comparing New York City with 15 other cities in Financial Services and 12 cities in High-Tech sectors (with a focus on technical products and design), using the Aon Hewitt 'Sustainable-Location Competitiveness Assessment Model,' helped clarify the relative strengths and weaknesses of the City. Studying other comparable cities provides insights into learning opportunities for New York City.

The benchmarking model also follows the six talent drivers in the overall study. The key parameters used to interpret the drivers are as follows:

| Talent Driver | How this is measured for each city? |
|---|---|
| **Future Workforce Access** | ■ *Existing Talent Supply:* Projected talent availability, presence of Global 500 organizations and percentage of working age population in a city.<br><br>■ *Availability of New and Advanced Skills:* Innovation capability and availability of talent with skills for the future. In the case of Financial Services, with the trend toward digitization, talent with programming and analytical skills is critical. Similarly in the High-Tech sector, with applications being developed to solve business issues, it is critical to have business management skills to understand and build on business needs as well as people management capabilities. |
| **Talent Diversity** | ■ *Demographic Diversity:* Gender diversity in the workforce, cultural vibrancy of a city and net international migration.<br><br>■ *Skill Diversity:* Quality of vocational training facilities and multi-lingual workforce.<br><br>■ *Multi-Generational workforce:* Retiring workforce and median age of workforce. |
| **Global Mobility & Migration** | ■ *Global Mobility Regulations:* Ease of entry into a city (number of countries with visa waiver), cost of living in a city, and employee regulations for expatriate workforce. |
| **Cost Effectiveness of Talent** | ■ *Quality Index:* Quality of education system, number of top universities in streams relevant for the sectors, workforce productivity (GDP per capita), and quality of math and science education.<br><br>■ *Cost Index:* Compensation levels from Aon Hewitt databases for identified entry-, mid- and senior-level positions for each of the sectors. |
| **Business Ecosystem** | ■ *Talent and Employee Regulations:* Wage inflation, flexibility of organizations to hire and fire talent, voluntary turnover rates, and quality of life.<br><br>■ *Business and Political Environment:* Ease of doing business, corruption index, functioning of Government agencies, and workplace safety.<br><br>■ *Cluster Support:* Access to opportunities, access to capital, ability to attract investment, and startup support.<br><br>■ *Infrastructure:* Real estate and office space, telecommunication and power infrastructure, connectivity and transportation, and healthcare infrastructure. |
| **Future Workforce Needs** | ■ *Talent Perception:* Based on Talent Perception Survey conducted as part of the study.<br><br>■ *Talent Aspirations:* Understanding the needs of the future workforce in terms of their expectations from a city and the workplace. |

New York City was compared against the following 14 cities in the Financial Services sector and 12 cities in the High-Tech sector, across the 6 drivers.

| Financial Services Sector | High-Tech Sector |
| --- | --- |
| Buenos Aires | Bangalore |
| Dubai | Boston |
| Geneva | Hong Kong |
| Hong Kong | London |
| London | Mumbai |
| Moscow | Munich |
| Mumbai | San Francisco |
| Rio de Janeiro | Seattle |
| Seoul | Seoul |
| Shanghai | Singapore |
| Shenzhen | Tel Aviv |
| Singapore | Tokyo |
| Tokyo | |
| Zurich | |

# Talent Driver 1: Capabilities to Meet Current and Future Needs

As consumer and business expectations change, the public and private sectors must adapt and coordinate efforts. The ability to successfully adapt and grow depends in large part on having the right portfolio of talent, with the right skills and capabilities, to match current and future demands of the City's employers.

## What We Heard from Stakeholders

Emerging from the global economic recession, employment figures have shown the City has been successful in generating jobs in particular sectors (Figure 5 of City's Assets). However, the City is still facing high unemployment and lower wages since the recession. According to estimates, the City would need to add about 434,500 jobs between 2011 and 2016[19] to reduce the unemployment level from 8.9% in 2011 to a projected 5.9% in 2016. Also, the wage brackets in which these jobs are created will have a significant impact. Stakeholder interviews provided us with further insights into the talent-related trends of the City.

- According to industry stakeholders, much of the high-skilled talent laid off during the recession have found alternate job opportunities. There are multiple instances of highly skilled talent shifting to the High-Tech sector, either to start ventures on their own, as independent contractors, or as employees in firms establishing a presence in the City.

- Low- to medium-skilled workers, on the other hand, remain underemployed or are still looking for the right opportunities. The belief is that more of these jobs have moved to low-cost locations or have been eliminated due to technology or process improvements.

As a result, there is an ample supply of talent available in New York City. However, skills and capabilities are not necessarily in line with employer demands—indicative of the skills mismatch seen as a national trend.

## Emerging Job Opportunities

Technology trends are transforming the way businesses operate. The dependence on technology is increasing at an exponential rate, generating unprecedented demand for technology skills. The broader impact of this is not just restricted to one vertical or industry, but spans across all industries and has a direct impact on the nature of future jobs. In our discussions with industry stakeholders, this emerged as the most pertinent driver in terms of developing needs across sectors, including Financial Services.

Based on interviews, the growth of the High-Tech sector in New York City can be attributed to:

1. Professional services jobs that require a mix of technology and business skills across multiple sectors.

2. The global economic recession impacted highly-paid and highly-skilled technical talent in the Financial Services industry and drove them to other sectors.

3. High-skilled talent initiating technology-based startups that are focused on specific domains such as Fin-Tech, Health IT, Digital Media and Advertising.

4. Technology companies on the West Coast looking at New York City as a potential hub to expand on the East Coast.

5. The intersection of healthcare and technology has created additional opportunities in one of the fastest growing sectors of the City's economy.

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[19] NYC IBO-Analysis of the mayor's preliminary budget for 2013  IBO's Reestimate, March 2012

# Growth in Industry: Driving the Expansion of Biotech in New York City

New York City is an ideal place to become the nation's hub for the biotech industry. It has a thriving environment made up of the highest concentration of academic medical research institutions of any other city in the country, attracting more than $2.3 billion in annual funding. Yet obstacles to starting and growing biotech companies do exist here and overcoming them requires collaborative and thoughtful strategies.

*"New York City has enormous potential to grow its biomedical sector. It receives the second highest amount in grants from the National Institute of Health (NIH), the best metric for top-quality biomedical research institutes in the nation, behind first-placed Boston. The city also has more hospital beds than any other metro region in the country—more than the next two regions combined. This critical mass of both research and patient access should ideally equate to a large number of biotech startups. And despite the fact that the City is starting to see greater collaboration at the university level as a result of a drop in available NIH grants, it must also help the industry overcome obstacles by, for example, providing step-up space for growing companies and creating an incentive fund to meet infrastructure and capital needs."*

*Marc Tessier-Lavigne. Ph.D., President, The Rockefeller University*

The business community and research institutions have been working with the City to leverage its existing assets and create new partnerships to meet some of these challenges. In collaboration with the City, New York State and the major academic medical centers, the Partnership for New York City Fund spearheaded a public-private partnership to make targeted investments necessary to catalyze the development of a commercial bioscience sector. Starting in 2001, the Fund and the City focused on raising visibility around the depth and strength of its biomedical research with the goal of attracting a private developer to build critically-needed lab space. Between 2005 and 2010 these efforts resulted in a 74% increase in the number of jobs in the biotech and health sciences industry in the City. In late 2010, the first phase of the 1.1 million square-feet Alexandria Center for Life Science at the East River Science Park opened with ImClone/Eli Lilly as its anchor tenant.

The Partnership and its Fund continue to lead efforts to expand the bioscience industry. In 2009, the Fund launched a proof-of-concept funding program, the BioAccelerate NYC Prize, which provides funding to medical researchers and pairs them with an entrepreneur mentor. In another public-private venture, the City and the Fund launched NYC Tech Connect, focused on building a stronger entrepreneurial ecosystem in the hard sciences by providing educational and networking events for the academic community. Tech Connect also organizes a biannual conference that features university technologies for the business and investment communities. Recently the Fund launched a digital health accelerator in partnership with the NYS Department of Health in which eight finalists were selected from 250 applicant companies to receive funding and feedback on their products and an aggregated market of top healthcare providers to sell their products to.

Through Tech Connect, the Fund and the City brought on Melinda Thomas as the first Entrepreneur-in-Residence focused on bioscience. For two years Ms. Thomas met with inventors to help them think through their ideas and offer guidance along the path to company formation where appropriate. She also directed startups to the resources they need to get their companies going.

*"Some hurdles associated with growing a bioscience company in the City may be overcome by its universities backing the commercialization of staff research beyond drafting and adhering to policies that encourage startups, but also fostering a fundamental shift in the institutional culture to be more supportive. Department heads could liaise between the university and staff researchers in fostering more entrepreneurial pursuits. Tenure tracks could be modified to accumulate credit for following through on commercialization concepts as opposed to being penalized for time spent out of the lab or class.*

*Further, a portion of potential profits from successful bioscience companies could be allocated to fund teaching assistantships to instruct while researchers develop their products."*

*Melinda Thomas, Entrepreneur-In-Residence for New York City*

Overcoming the hurdles to commercialization of research within New York City's individual universities would contribute to a greater market share of the nation's bioscience industry; however, the added value of collaboration amongst the universities would set the course for the City to become the nation's premiere biotech hub.

Dr. Thompson of the Sloan-Kettering Institute, a state-of-the-art clinical investigation and cancer treatment center, shared what he sees as positive momentum for the potential of technology in healthcare:

*"Conglomeration breeds success and New York City is seeing an upsurge of collaboration amongst its research institutions which will prove to drive its immense talent and invention capacity. Applied science initiatives will attract more high-tech talent who will go into either Financial Services or move into other areas such as health IT. Adding to this force is the opportunity for talent to apply new algorithms, initially developed for the New York Genome Project, across multiple fields to aggregate and process healthcare data which will advance decision-making on multiple levels from individual patient care to national investment."*

*Craig Thompson, M.D., President & CEO, Memorial Sloan-Kettering Cancer Center*

From the interviews, we observed that tighter regulations are leading organizations to aggressively grow their risk management and compliance related resources.

Organizational needs in terms of skills and competencies are continually changing. These needs could be because of fundamental shifts in the way businesses operate or specific needs for a given context or situation. Examples of fundamental shifts as well as contextual requirements are provided below:

- Fundamental Shifts: The Financial Services sector now requires talent to have a blend of domain as well as technology skills given a constantly digitizing business model.

- Contextual Requirements: Tighter and more complex regulations in the Financial Services sector have resulted in an increased requirement for risk management and compliance skills.

A location should be able to cater to both kinds of requirements in order to justify its global competitive position. Fundamental shifts in business needs are mostly addressed through a formal change in curriculum of education institutions. Contextual, specific and specialized needs of the industry may best be fulfilled through career and technical training or specialized industry certifications.

It is fair to assume that organizations will look at fundamental skill sets as they recruit for the future, while wanting to fill current positions in case of contextual requirements. It is imperative that the City and academic institutions anticipate such needs and put the right talent development infrastructure in place to meet demand. The necessity for industry groups to assist in talent development to meet the new skill demands is critical.

## JP Morgan Chase & Co. Working to Train the Workforce of Tomorrow

According to Jim Cochran, global recruiting head at JPMC, the use of and dependence on technology in Financial Services has significantly increased, but the skill set in available talent has not kept pace. The gap lies in the skills to support the use of technology across the board, necessitating significant investment in "up-skilling" the current workforce while preparing the workforce of the future.

For example, in May 2012 across its 260 branches, JPMC had 500 open jobs, 125 of them being purely technical, 260 customer-facing and the rest in administration. To fill a position takes an average of 40–60 days. To help address the skills gap, JPMC has a number of efforts to assist military veterans to obtain the skills necessary to be successful. These include the Veteran Technology Program, a non-credit certificate program offered at Syracuse University at no cost to post-9/11 veterans with a high school diploma, and the 100,000 Jobs Program, a joint effort with other companies to collectively hire at least 100,000 veterans by 2020 through training and recruiting efforts.

## How Does New York Compare with Other Cities?

New York City's strength has been its ability to attract talent and businesses. This ability places New York City at the top amongst competing locations in terms of 'Future Workforce Access'[20] both in the Financial Services sector as well as in the High-Tech sector.

**Future Workforce Access**

Financial Services Sector

| | Overall rank |
|---|---|
| New York | 1 |
| London | 2 |
| Shanghai | 3 |
| Seoul | 4 |
| Singapore | 5 |
| Hong Kong | 6 |
| Tokyo | 7 |
| Mumbai | 8 |
| Shenzhen | 9 |
| Zurich | 10 |
| Dubai | 11 |
| Geneva | 12 |
| Moscow | 13 |
| Rio de Janeiro | 14 |
| Buenos Aires | 15 |

High-Tech Sector

| | Overall rank |
|---|---|
| New York | 1 |
| San Francisco | 2 |
| Boston | 3 |
| Seoul | 4 |
| London | 5 |
| Seattle | 6 |
| Singapore | 7 |
| Hong Kong | 8 |
| Munich | 9 |
| Tokyo | 10 |
| Bangalore | 11 |
| Tel Aviv | 12 |

[20] 'Future Workforce Access' is measured based on existing capabilities in the City as well as the potential in the City to produce talent with skills required for the future. Existing capabilities are measured through projected skills availability, availability of Global 500 organizations and percentage working age population in the City. Availability of new and advanced skills is measured based on the Innovation capability as well as availability of talent with skills for the future. In the case of Financial Services, with the trend moving toward digitization, talent with programming skills is critical. Similarly in the High-tech sector, with applications being developed to solve business issues, it is critical to have business management skills to understand and build on business needs as well as for people management as organizations grow in size.

Some key factors that help New York City provide the Financial Services industry with a well-trained future workforce include:

- The New York City metropolitan area has the highest number of people with CFA qualifications, which makes talent available for core finance jobs. London, Shanghai, Seoul, and Singapore are the closest competitors to New York City with respect to this.

- New York City ranks highest amongst all other cities in terms of literacy; however, the rate of enrollment at secondary and tertiary schools is less than that of London and Tokyo.

New York City currently rates best in terms of overall access to talent consistent with current and future employer needs. San Francisco has the right skills for today's High-Tech sector; however, New York City has a better mix of skills for application of technology innovation to business needs. New York City's challenge will be to promote math and science education in order to compete with places like Singapore and Hong Kong[21].

In summary, New York City has a strong talent ecosystem. The growth of the High-Tech sector will have a symbiotic effect on the Financial Services sector, where the push is toward digitization and big data analytics. Areas of focus for New York City include math and science education and aligning the curriculum across all levels of education to meet industry needs. This will help New York City sustain its top position and defuse Singapore and Hong Kong's advantages in education.

## Key Takeaways

— Skills mismatch needs to be addressed in order to foster the employability of mid-level talent.

+ The influence of technology and other business dynamics is creating a new demand for specific skill sets.

+ Need to foster industry and academia linkage for talent development that ensures availability of future-ready talent to meet this demand.

[21] OECD PISA scores—World Economic Forum—Global Competitiveness Report 2011

# Recommendations

## Future Skills Program

This program should act as a centralized platform with the mandate to coordinate various talent attraction, retention, and development activities across sectors in the City. The program would aim to achieve the following:

- Identify future skills requirements in key sectors through the establishment of a forum where stakeholders from industry, academia, and government participate on a periodic basis.

- Based on the identified skill requirements, define a talent strategy and roadmap for the City with support from stakeholders.

- Influence universities that form part of the program to use inputs from the above to enhance their curriculum. Encourage industry to participate in university activities and programs.

- Develop a database of future skill requirements from a short, mid, and long-term perspective and drive talent supply to meet these requirements.

- Work closely on an ongoing basis with an identified agency that manages the definition of skills standards and certification in a centralized manner.

Such a program should be driven by the City through a central agency or association with support from industry and academia. The agency would also need to support the development of a database of skills required and skills available, and carry out analytics on the same to provide the City with direction in terms of a talent strategy. This type of program would help the City remain at the forefront of global industry needs and forecast future requirements well in advance.

*The Monetary Authority of Singapore*[22] recently started a program to address skill development needs of the Financial Services sector and is supported by global universities. The program, the Financial Network for Excellence in Training (F-NExT), intends to bring together local institutions of higher learning and renowned global institutes. The program aims to define future skills required in the sector and their level of competence as suggested by industry. Also, the program plans to establish synergies in terms of training resources between participating institutes.

In New York City, the Academy for Software Engineering[23] is a high school that aims to train local talent to meet the future demands of the industry. This is a career and technical education 9-14 high school model focused on software engineering using a curriculum designed to involve practical education with extensive industry interactions. The aim of the program is to develop an ecosystem that allows industry to influence the nature of training that students receive in school, thereby making them employable in the industry. This is an industry-led initiative supported by the government. In order to scale, there needs to be a greater public-private partnership in this area.

Success of any such program is in its ability to scale to the needs of the industries they serve. From the City's perspective, scale could also be defined in terms of the variety of industries that need to be served. Multiple such programs, with a common agenda of identifying future skills and delivering training to build capabilities, should be established to achieve desired and sustained results.

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[22] MAS Announces New Initiatives for Enhancing Financial Sector Expertise (www.bis.org/review/r010712d.pdf)
[23] http://afsenyc.org

## Skill Standards and Certification Agency

New York State imposes relatively strict and often outdated criteria for professional licensing and credentialing, resulting in legal and regulatory barriers to expanding the pool of qualified workers for many positions. For example, foreign and out-of-state professionals who are otherwise qualified are frequently barred from taking jobs due to parochial credentialing requirements. Focus should be placed on accelerating existing initiatives currently under way.

Licensing requirements should be more flexible to allow qualified talent coming to the City to use or leverage existing licenses from other states and countries.

Another effort that should be accelerated to meet the demand of current employers is stackable credentialing programs mostly aiding lower skilled talent. The state education system should take the lead on working with industry to build programs that allow talent with limited time and/or resources to increase their skill sets by reducing some of the major hurdles they currently face in today's economic realities.

Stackable credentialing programs allow individuals to move up the career ladder by gaining additional certifications through education and receiving "credit" for the skills they have achieved along the way. Providing a stackable program valued by the industry would allow those who otherwise wouldn't "up-skill themselves" due to financial and other obstacles to grow professionally. It would also allow the City to reap the benefits of higher skilled talent and eventually help fill the gaps for middle-skilled talent in the City.

# Talent Driver 2: Talent Diversity

As organizations expand globally and diversify their business interests, the workforce they employ should reflect this diversity. "Diversity" has historically been thought of in terms of gender, ethnicity, and age; however, organizations today have broadened their definition to include skills diversity, educational background, and cultural diversity. For a location to be attractive to investors and firms, it must provide a talent pool that is diverse beyond the traditional lenses.

## What We Heard from Stakeholders

Stakeholder discussions have made it apparent that diversity is a critical workforce aspect. New York City has a diverse talent pool in terms of culture, demographics, and skill. This is one of the City's key value propositions for attracting businesses and future talent. Organizations are typically looking at diversity across three distinct aspects:

- Diversity of gender and ethnicity – the classical diversity paradigms.

- Diversity of skills – a demand generated by industry needs.

- Diversity of age – emerging multi-generational workforce.

*"Organizations' ability to actually select talent is becoming more and more challenging in today's market. The upcoming generation entering the workforce wants to choose the organization they work for. They are very particular about the firms they will start their professional careers with and the nature of work they will be doing. As Financial Services compensation decreases, there is greater motivation for those who would otherwise be seeking jobs in the Finance arena to consider alternate careers that may provide for a better work-life balance. We are seeing much interest in this tradeoff between Compensation and Lifestyle and are beginning to adjust our recruitment strategies accordingly."*

*Elizabeth Crain, Chief Operating Officer, Moelis*

## Gender and Ethnicity

The classical elements of gender and ethnic diversity continue to remain important for the City. About 36% of New York City's population is of international origin. According to stakeholders, this is a large advantage for New York City. The ability to attract the best talent and make them feel comfortable in a cosmopolitan environment is critical to the success of these firms. Many stakeholders also spoke favorably about gender diversity in New York City's workforce and initiatives taken to promote female participation higher up in the organizational hierarchy.

## Current Need for Skill Diversity in the City

New York City is also impacted by trends that are very specific to the City. For example, the global economic recession has meant that the City has had to encourage growth in multiple emerging sectors while sustaining its leading position in Financial Services and other foundational sectors like fashion, media, and design. This has resulted in the need for talent across all sectors and levels. While Financial Services companies are still hiring primarily highly-skilled talent, the High-Tech sector will require talent across all levels as they scale—medium-skilled and high-to-medium-skilled talent. It is not only the City's responsibility to help make the right kind of talent available through its public education system, but also ensure that this talent wants to stay in the City, and is continuously developing to remain relevant for the industries' future needs.

**Addressing the Macro Trend: Coping with a Multi-Generational Workforce**

| Group | Born Between |
|---|---|
| Classics | 1900-1920 |
| Baby Bust | 1921-1945 |
| Baby Boomers | 1946-1964 |
| Gen X | 1964-1976 |
| Gen Y | 1976-1994 } Millennial |
| Gen Z | 1995-2009 } |

*Source: http://www.demodirt.com/index.php/about/demographic-trends; US Census Bureau.*

Changing demographics have led to multiple generations working together as part of the same team. A firm could have a Millennial working alongside a Baby Boomer and a Gen X-er, resulting in the need for each to be empathetic to others' needs and aspirations. Engagement and retention drivers of different generations are quite distinct. It is widely believed that the younger generations have a greater need for collaboration, creativity, and freedom of thought. The younger generations also bring enthusiasm and energy to the workplace. On the other hand, the Baby Boomers, who are retiring from the workforce, have a plethora of experience and expertise gained over decades. Harnessing and preserving this experience for younger generations could be a process that organizations focus on developing, too.

In the Financial Services sector, the appeal to a younger workforce used to be favorable salaries, bonuses, and benefits packages. Since the global economic recession and the consequent wage compression, there is immense pressure for organizations to use alternative methods, outside of compensation, to attract and retain high-quality talent. This is countered by a growing trend of young talent moving toward other occupations that might not be as high paying, but provide flexible working hours and a creative and innovative work environment. The High-Tech sector offers a culture in line with the needs of the younger generation in terms of an open and collaborative work environment, and is a good example of a sector that is catching the attention of Millennials.

This post-Baby Boomer workforce has very distinct aspirations. According to a recent study by Aon Hewitt[24] to understand Millennial's workplace preferences, organizations that provide an open and flexible culture and opportunities to work globally are preferred over others. Another key aspect that has come from this study is the interest in opportunities that test their creative and innovative abilities.

A city that can provide talent with these facilities and enable organizations to engage their new workforce in multiple ways will remain competitive in the future.

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[24] http://www.livemint.com/Leisure/P8VRbm1fb6UjSrUtewsgZK/What-i-want-at-work.html

**Talent Diversity**

Financial Services Sector

| | Overall rank |
|---|---|
| **New York** | 1 |
| **Singapore** | 2 |
| **London** | 3 |
| **Hong Kong** | 4 |
| **Dubai** | 5 |
| **Zurich** | 6 |
| **Geneva** | 7 |
| **Tokyo** | 8 |
| **Rio de Janeiro** | 9 |
| **Seoul** | 10 |
| **Mumbai** | 11 |
| **Shanghai** | 12 |
| **Shenzhen** | 13 |
| **Buenos Aires** | 14 |
| **Moscow** | 15 |

High-Tech Sector

| | Overall rank |
|---|---|
| **New York** | 1 |
| **San Francisco** | 2 |
| **Boston** | 3 |
| **London** | 4 |
| **Singapore** | 5 |
| **Seattle** | 6 |
| **Hong Kong** | 7 |
| **Munich** | 8 |
| **Tel Aviv** | 9 |
| **Tokyo** | 10 |
| **Seoul** | 11 |
| **Bangalore** | 12 |

New York City tops the list of the most diverse workforces, which is mainly due to the high percentage of women in the workforce and the City's cultural diversity. San Francisco and Boston are close in terms of overall diversity. Singapore has a better skill diversity mix, primarily due to its focused immigration policies and high-quality education system. London's gender diversity is also high.

A diverse workforce provides a greater mix of talent for employers to access and is important for building a workplace for the future. With the demand for talent in emerging sectors like High-Tech, the need for a multi-skilled workforce is high. Sectors like financial technology, health IT, education technology, social networking, e-commerce, and digital media will be able to leverage New York City's talent diversity today and in the future.

## Key Takeaways

+ New York City has an opportunity to maintain its top position for providing a diverse pool of talent, and has a workforce that aligns with the skill, culture, age, and gender diversity demands of organizations.

— The City has a need for entrepreneurial talent that can harness the potential opportunities emanating in the High-Tech sector. Initiatives, such as the incubator and accelerator programs or NYC Tech Connect, are critical to not only supporting young entrepreneurs, but also in marketing their successes. Successful entrepreneurs from these programs should be positioned as ambassadors, thereby getting more young talent interested in ideating, collaborating, and eventually venturing into entrepreneurship.

— The Millennial workforce approach their professional careers with a distinct set of priorities. There is a need for organizations to provide an appropriate workplace and lifestyle-related amenities, as well as ensure avenues for career development. This is important for organizations to attract talent to New York City.

— Diversity is emerging as a key driver for organizations. Hence, it is important that diversity-related objectives and initiatives are adopted at all levels within an organization.

# Recommendations

## Branding the City as a Millennial Workforce City

The city's ability to put forward a value proposition that attracts Millennials is critical. Apart from addressing cost-of-living issues, the City would also need to significantly enhance the standard of living in line with expectations of the Millennial workforce. Such an initiative would have multiple aspects:

- Continue to focus on 'quality of living' drivers that are important to Millennials, such as green spaces and cultural opportunities.

- Support building programs that promote workspace flexibility – described further in Driver 6 "Future Workforce Needs."

- Design the layout of the City to include more connectivity between boroughs and information linking all facets of commuting (e.g. bus stops to subway stations) for easier commuting. These would also be in line with the concept of promoting low-carbon and sustainable living.

- Greater connectivity of internet and broadband, Wi-Fi zones, and other high-tech interventions that increase the City's accessibility.

## Leveraging the Multi-Generational Workforce

The younger generation is looking for enhanced workplace flexibility. We have observed that some of the Millennial workforce is keen on exploring opportunities to carry out interesting work and projects without being tied to an organization. For those retiring and leaving the workforce, freelancing and alternative employment models can retain resources and minimize loss of experience and knowledge. Encouraging formal, yet non-traditional styles of mentorship can ensure the transfer of knowledge and experience between generations.

*"Retirement has shifted both due to the financial crisis as well as people who were wishing to retire who now need to work longer; 401ks becoming more like 101ks. One example being used to retain knowledge is "semi-retirement," whereby an employee works half-time at half-salary, still being eligible for benefits for a year or two prior to full retirement. This is a win for the employee, who can ease into retirement, as well as the organization to ensure that during this time, formalized knowledge transfer and mentorship can occur."*

*Seymour Adler, Ph.D., Partner, Aon Hewitt Talent Solutions*

In this context, encouraging freelancers and creating access to opportunities will help New York City attract talent across the spectrum. The High-Tech sector is one such industry that has the ability to create multiple jobs for freelancers and project-based contractors. This establishment of a web portal for high-skilled freelance opportunities, as well as communicating and building awareness of such a platform, can provide exposure to exciting projects. This would help provide talent with access and exposure to some of the best and most intriguing projects available in the City.

With high demand for High-Tech skills, working as a freelance consultant can provide premium rates for Millennials on a project basis, rather than being permanently employed with an organization. Many niche job portals have created solutions for just such need. For example, oDesk (www.odesk.com) is a company that helps organizations identify freelance consultants for specialized project requirements. If the City, in collaboration with industry leaders, could create a similar staffing model, it would be a unique proposition that could satisfy the needs of the High-Tech sector as well as the Millennial workforce.

## Promoting Diversity of Talent at Executive Levels

Encouraging diversity on boards can help percolate and promote the need for diversity at all levels. To this end, the City's administration could provide recognition to companies that have taken efforts to create diversity on their boards, be it in terms of gender, race, or ethnicity. Diversity and inclusion is a critical area of focus for organizations, and recognizing organizations for their diversity policies and practices can influence the broader stakeholder community to look at incorporating leading diversity practices into their work culture.

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## Gender Diversity on Corporate Boards

*The Bottom Line: Corporate Performance and Women's Representation on Boards (2004–2008)* is the fourth in Catalyst's Business Case series. The business case for women in management contends that companies that achieve diversity and manage it well attain better financial results, on average, than other companies. In this report, Catalyst used three measures to examine financial performance: return on sales (ROS), return on invested capital (ROIC), and return on equity (ROE).

Previous studies in the series found that there is a connection between gender diversity on corporate boards and financial performance. Among others, findings in this report include:

■ Companies with the most women board directors (WBD) outperform those with the least on ROS by 16 percent.

■ Companies with the most WBD outperform those with the least on ROIC by 26 percent.

■ Companies with sustained high representation of WBD, defined as those with three or more WBD in at least four of five years, significantly outperformed those with sustained low representation by 84 percent on ROS, by 60 percent on ROIC, and by 46 percent on ROE.

# Talent Driver 3: Global Mobility and Migration

As organizations expand globally in search of new markets, resources, and talent, it is imperative that they have the ability to move talent between locations. The ease of this mobility depends on immigration policies, quality of living conditions, and employment regulations relating to expatriate workers. Attracting and retaining international talent depends on flexible policies and programs that facilitate ease of induction and stay in the new location.

## What We Heard from Stakeholders

The global footprint of many organizations is driven either by a diversification of the organization's consumer base or because its talent pool is drawn from multiple countries. Organizations are also responding to the aspirations of young employees by providing international experience and global exposure. In such a scenario, an organization's workforce needs the ability to move across locations with ease. In addition to global mobility, important factors include employee regulations for expatriates, standard of living, and ease of adapting to a new environment.

Though New York City does not determine its own immigration policy, efforts like the Partnership for a New American Economy (PFNAE)[25], which the Partnership for New York City helped establish, ensure that relevant stakeholders at the national level hear the City's voice. PFNAE is a coalition of mayors and business leaders from all sectors of the economy and all 50 states launched by Mayor Michael Bloomberg and Rupert Murdoch, CEO & Founder of News Corporation, to build awareness and communicate to the public and policy makers the impact that immigration reforms would have on the U.S. economy. The coalition, with help from the Partnership, produced a report last year titled "Not Coming to America" which made an economic case for immigration reform. The U.S. in general and New York City in particular has long been a magnet for global talent – a fact confirmed by the net international immigration into the City (as depicted in Figure 4).

Programs that attract global talent to the U.S. have been extremely successful. One such example is EB5, a unique program undertaken by the U.S. government to improve the economy with investments from immigrants. Under this program, 10,000 green cards are made available to foreigner investors who provide $500,000 or more in funding to create/preserve at least 10 full-time jobs in the U.S.[26] Mayor Bloomberg has acknowledged the fact that the EB5 program has been very useful for New York City. In his own words, the program has "been used to attract over $250 million of dollars to public-private, job creating projects . . . It will help recharge the economy and create jobs that our workforce needs so badly.[27]"

However, as expressed by many stakeholders, immigration policies are getting more restrictive, adding pressure to organizations with a global footprint. The high cost of living adds to the challenges organizations face when trying to retain top talent in the City.

One way to mitigate risks arising from stricter immigration policies is to analyze how the City could attract domestic talent. To do so, organizations must be able to expand within the City. According to stakeholders, this cycle (as depicted in Figure 11) will help attract domestic talent to the City. Issues related to cost of living, however, still exist for domestic talent and need to be addressed collaboratively by all stakeholders.

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[25] www. renewoureconomy.org
[26] U.S. Citizenship and Immigration Services; www.uscis.gov.eb-5-investor
[27] www.nycrc.com, NYC Regional Center - What people are saying about the EB-5 Regional Center Program

*"Given the fact that Pfizer is a large company with expansive geographic reach, it is critical that we recruit talent with the willingness to be globally mobile. Further, we believe international exposure provides our top-level talent the necessary skills to fully understand what makes an international organization run. This tends to translate into our executives' feelings about being in a global hub such as New York City and once they locate here they tend to stay. However, it is paramount that quality of living, low crime rates, and investments in academic and cultural institutions continue in the City in order to preserve its global preeminent status."*

*Tanya Clemons, Senior Vice President - Chief Talent Officer, Pfizer*

**Figure 11: Economic Success Attracts Talent into the City**

# How Does New York Compare with Other Cities?

Though New York City has been able to attract the best talent from across the world, visa and immigration rules are not very favorable for American cities to continue to compete as an international destination. For instance, many countries outside of the U.S., such as Australia, Canada, the UK and Singapore, have dynamic immigration policies that flex on visas as demand for particular talent changes.

## Global Mobility & Migration

Financial Services Sector

| | Overall rank |
|---|---|
| **Singapore** | 1 |
| **Hong Kong** | 2 |
| **Seoul** | 3 |
| **Dubai** | 4 |
| **Mumbai** | 5 |
| **New York** | 6 |
| **Buenos Aires** | 7 |
| **London** | 8 |
| **Zurich** | 9 |
| **Geneva** | 10 |
| **Rio de Janeiro** | 11 |
| **Tokyo** | 12 |
| **Shenzhen** | 13 |
| **Moscow** | 14 |
| **Shanghai** | 15 |

High-Tech Sector

| | Overall rank |
|---|---|
| **Singapore** | 1 |
| **Hong Kong** | 2 |
| **Tel Aviv** | 3 |
| **Seoul** | 4 |
| **Bangalore** | 5 |
| **New York** | 6 |
| **San Francisco** | 7 |
| **Boston** | 8 |
| **Seattle** | 9 |
| **Munich** | 10 |
| **London** | 11 |
| **Tokyo** | 12 |

New York City is ranked sixth amongst peer cities in global mobility and migration[28], both in the Financial Services and High-Tech sectors.

■ New York City is ranked well below some of the benchmark locations for visa regulations and immigration rules. A cap of 65,000 on H-1B[29] visas (20,000 for academics) restricts the ability to move talent into the U.S. On the other hand, Singapore and Hong Kong are on top of the list for having the best global mobility policies. Singapore and Hong Kong are advantaged by having flexible visa regulations that allow them to properly adjust for the number of immigrants permitted into the City/Country as needed.

■ For measures of employment regulations (the ease of hiring, firing, and working hours requirements), New York City ranks the strongest for employers amongst the set of locations studied.

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[28] Global Mobility and Migration looks at ease of immigration (visa waivers and processing time), employment regulations for expatriates, standard of living and net international migration.
[29] U.S. Citizenship and Immigration Services; www.uscis.gov

# Key Takeaways

— Immigration policies are not under the purview of the City. However, a tighter immigration regime affects talent mobility into New York City.

— The City's ability to attract domestic talent can help mitigate some of the risks of the broader international immigration challenge in the interim. However, New York City has seen a negative net domestic migration over the last 10 years (as shown by the figure in City's Assets section) negatively impacting the talent availability in the City.

— Cost and standard of living were cited by stakeholders as key issues in attracting and retaining domestic talent into the City.

+ Emergence of new sectors and the creation of jobs will help New York City attract domestic talent. The ability of the ecosystem to ensure ease of doing business, regulate cost of doing business, and support new ventures will help domestic talent move into the City.

+ New York City is rated best in terms of employment regulations (ease of hiring and firing, flexibility in working hours, etc.).

+ The City's vibrant culture plays a positive role in the introduction of expatriates to the City's workforce.

# Recommendations

## "New to New York" Program

As mentioned by many stakeholders, the City can be overwhelming for a first-time New Yorker, whether domestic or international. The Mayor's Office of Immigrant Affairs (MOIA) already has a website that acts as a one-stop information portal on various topics such as education, employment, housing, social services, health and safety.[30] The city could build on existing efforts run by MOIA to further support migrant talent as it settles by providing an enhanced web portal that supplies distilled information, particularly what may be most relevant for a Millennial workforce, about living and working in the City. The portal can help build awareness of services, provide a single-window helpdesk, and enable availability of information on all platforms like smartphones, tablets and websites.

Singapore and Toronto have implemented such initiatives with success.

■ Singapore's National Integration Council (NIC)[31] has created a $10 Million community integration fund to promote integration of immigrants. The NIC seeks to achieve the following outcomes:

—Design of social integration initiatives;

—Managing a sustainable, active network for effective social integration;

—Enable immigrants to internalize core Singaporean values.

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[30] http://www.nyc.gov/html/initiatives/initiatives.shtml
[31] Singapore National Integration Council; www.nationalintegrationcouncil.org.sg

- Toronto has initiated a time-limited project named "Toronto Newcomer Initiative"[32], funded by Citizenship and Immigration Canada (CIC), whose charter is to work on social and economic inclusion of immigrants. They do this through two broad initiatives:

  —Enhance city service systems focused on settlement of immigrants, recreational activities targeted at newcomers, and family reunification and adaptation.

  —Enhance the broader system through research and coordination focused on neighborhood well-being and organization of local-immigrant partnership round tables.

This type of program could also be used as a marketing tool to attract potential talent, thereby alleviating some concerns about the City, such as information access, affordable housing, and information on basic needs like food and community.

## Attracting Domestic Talent

Many stakeholders agree that attracting domestic talent is critical to the growth and success of companies in New York City. While the "New to New York" program could work toward integrating first timers into the City's culture, a strategy to attract additional domestic migrants is also important.

This might be achieved by branding the City to attract a certain sector or group of sectors. For example, branding the City as a vibrant, tech-friendly location could attract more startups along with a young, talented High-Tech workforce. More of this can be found in the Infrastructure section of this report.

## Assisting New Businesses

Similar to the "New to New York Program," there is also a need to support new businesses in the City. A platform that provides a one-stop interface can help businesses navigate the initial startup process and also provide the required support services. While many similar initiatives exist in the City, there is a need to build uniformity and scale. The objective of the "New to New York Program" would be to achieve consolidation and centralization of these services. This program could build on initiatives currently underway, some of which are mentioned below:

- The Empire State Development (ESD), New York State's chief economic development agency, has a program[33] that provides a centralized interface for all new businesses wanting to setup in the state.

- The city's Department of Small Business Services (SBS)[34] aims to achieve the same objective for New York City as the ESD does at the state level. As the name suggests, SBS helps small businesses with setup and ongoing support services. However, as has been articulated by various stakeholders, there is a need to build awareness of these services, communicate the mandate and ensure a centralized interface for all services.

- The New York City Economic Development Corporation's (EDC) programs for entrepreneurs[35] and their focus on incubators assist new businesses. While the EDC has specific industry desks, there is a need to build broader services that support all types of businesses.

There is insufficient awareness of city and state support programs and a need to strengthen partnerships with industry associations to promote them.

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[32] Citizenship and Immigration Canada; www.CIC.gc.ca
[33] www.bighappenshere.com
[34] www.nyc.gov/html/sbs/html/home/home.shtml
[35] www.nycedc.com/service/programs-entrepreneurs

# JetBlue: "New York's (Official) Hometown Airline"

In 2010, JetBlue made the decision to keep their headquarters in New York and open at a new location in Long Island City, Queens. During the deliberation, many cities were initially considered, with the final choices coming down New York City (Brooklyn and Queens) and Orlando, Florida. While New York City, through its Economic Development Corporation (EDC), and NY State presented a very compelling package, the business case for remaining in New York City was enhanced by significant relocation costs that would have been associated with Crewmember (employee) departures and relocation tied to the 1,000 person footprint in the New York City and Connecticut area. (JetBlue's culture supports a no furlough/layoff policy, so taking care of its Crewmembers no matter the decision was part of its approach to the relocation.)

All locations offered unique and interesting proposals to JetBlue, but in order for New York City to prevail, the duty was on the City to offer a package that defrayed costs of doing business in New York City. With the City initiative being difficult to navigate, Joanna Geraghty, the Chief People Officer (CPO) stated, "We wanted a single point of contact that could pull all of the City's multiple departments together and pitch us on a holistic basis." Given the complexity of New York City's government, JetBlue was concerned it would be difficult for the City to put its best foot forward without streamlining its resources.

Since its decision to remain in New York City, JetBlue has been pleased with the City's and state's fulfillment of its promises to JetBlue. However, attracting top-level talent in New York City, particularly if it involves relocation from outside the Northeast, is a concern. Joanna expressed, "you really need to sell New York City because it's expensive - homes, commuting, taxes, schools. New York City is a daunting place for some." Although these challenges will continue to exist, the EDC's and the State's commitment to JetBlue, investment in understanding and delivering a package that leveraged everything New York City has to offer for the only airline based in New York City (traditional incentives, marketing incentives, trademark rights and license agreements, assistance navigating certain regulatory hurdles, bringing the public and private community together) makes JetBlue confident that it made the right decision to be New York's official hometown airline based in Long Island City.

Since JetBlue's decision to stay in New York, the EDC has considered building a dedicated department to assist future business investors in an effort to more easily navigate and bring together the City's multiple resource channels.

## Visa Policies for Skilled Occupations

National immigration policies have seriously constrained what had long been a continuous flow of new foreign talent to New York. With 37% of its population foreign born, the impact of exclusionary immigration policies has resulted in a loss of some of the most promising students, skilled workers and entrepreneurs to the City.

Ensuring talent supply with critical skills in high demand and low local/domestic supply is a key objective of immigration policies. Many developed countries use flexible immigration policies to assist industries in attracting the right blend of foreign talent. A common practice amongst countries like UK, Canada and Australia is to use a system of points or credits to meet relevant and timely demand of employers.

For applying under the visa policy, each application is assessed though a points system which considers parameters such as age, occupational industry, skills, qualifications, language proficiency, etc. The flexibility is achieved by ensuring weights are attached to each parameter. By adjusting weights to these parameters, the immigrant flow can be regulated to ensure the required talent mix enters the country. The skills in demand are identified through a registry or, in many cases, a National Skilled Occupation List as available[36].

Aligning the talent and skill gaps in the City with a program that also aids small businesses and entrepreneurs in accessing what limited visas do exist would be incredibly beneficial to driving growth for a city built on foreign talent. Having this abundance of talent and skills within arm's reach only to lose them to inadequate or inflexible policies puts the U.S., and New York City, in an uncompetitive position versus many of our global competitors.

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[36] As in Australia (www.awpa.gov.au) and Canada (www.canadavisa.com/immigration-eligible-occupations.html)

# Talent Driver 4: Cost Effectiveness of Available Talent

The cost of quality talent is an important consideration to businesses when evaluating a location. Given the global nature of businesses, organizations look at cost in conjunction with talent quality. Ultimately, businesses are looking for the most cost-effective talent.

## What We Heard from Stakeholders

Stakeholders endorse the growing competitiveness and attractiveness of New York City versus other cities.

Infor, a software company which recently relocated operations to New York City from Atlanta, viewed talent quality and availability as a strong reason for its decision.

*"Infor selected New York City for its global headquarters after evaluating many locations. We were looking for creative talent in a high-energy environment to revolutionize our software. The wealth of technical design talent, as well as easier access to customers, began paying off immediately. The entire energy level in the company went up after we moved to New York and the momentum continues. We're also developing deeper relationships with our customers, partly because they find New York a convenient, desirable, and efficient place to visit."*

*Charles E. Phillips, Jr., Chief Executive Officer, Infor*

Top companies from Silicon Valley like eBay, Google, and Facebook have also set up operations in New York City, making it their East Coast hub.

Stakeholders also had a few words of caution:

- Plenty of mid-skilled technology jobs in Financial Services firms are currently vacant (as expressed by Jim Cochran from JPMC in Talent Driver 1) due to the lack of availability of 'right-skilled' talent. Highly-skilled talent in the City is not willing to take up these open positions at a lower salary level. We need to ensure that this dichotomy is managed.

- In the longer term, in order to attract talent into technical and applied science majors, the quality of math and science education in primary school needs to improve. This is one critical initiative to creating a sustainable pipeline of talent with technology skills.

To retain New York's high-quality talent, industry leaders and government officials should work to develop programs to train and re-skill talent for in-demand job opportunities that are currently unfulfilled.

# How is cost effectiveness of talent determined?

'Cost Effectiveness of Talent' evaluates the quality of talent available at a given cost to determine the competitiveness of locations. The parameter tells an organization whether the premium it pays for better quality of talent is actually justified. This evaluation is carried out by calculating the Cost Index (CI)[37] and Quality Index (QI)[38] for each benchmark location. This correlation between cost and quality provides businesses an analysis of the effectiveness of talent available in each location within their consideration set.

- Cost Index: The cost index was based on median salaries of specific job roles and levels across the benchmark locations. These job roles were specific to the two sectors being analyzed as part of this study, namely Financial Services and High-Tech. The job levels were indicative of entry, mid- and senior-level positions in these two sectors. The Aon Hewitt compensation databases were used to obtain this information.

- Quality Index: The quality index was determined basis specific parameters that forecast the quality of talent in a particular location. These parameters include:

  —Workforce productivity measured by GDP per capita of the City obtained from the Aon People Risk Index ratings

  —Number of top universities in defined streams relevant to the two sectors as obtained from specific university rankings

  —Quality of Math and Science Education obtained from the 'World Economic Forum Global Competitive Report 2010-2011'

  —Quality of Management and Leadership Development Programs as obtained from Aon People Risk Index[39]

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[37] The Cost Index (CI) is arrived at based on the median salaries for a location, for specific job roles and levels. For the purpose of this study, Aon Hewitt compensation databases for Financial Services and High-tech sectors were used as a basis
[38] The Quality Index (QI) is determined based on a combination of parameters reflecting workforce productivity and quality of education available in a location. GDP per capita is the measure used for assessing workforce productivity. The quality of education system, on the other hand, is determined through publicly available information relating to: quality of math and science education, number of top universities in defined streams and the quality of management education available in the location. (Please refer to figure XYZ for further details on the parameters)
[39] Financial Times Top 110 universities, Economist Top 99 MBA schools, WEF Global Competitiveness report 2010– 2011, IMD World Competitiveness Yearbook 2010)

## Financial Services

**Figure 12: Cost Effectiveness of Available Talent**



*Source: Aon Hewitt Analysis, Cost Index based on McLagan Investment Banking Database.*

For the purpose of the study three job roles were studied, indicative of entry, middle, and senior-level talent. A ratio indicative of the business hierarchy in an organization was used to arrive at a common cost index. The job roles used in the study are as shown below:

| Level | Job Role |
|---|---|
| Entry Level | Analyst |
| Middle Level | First Line Managers |
| Senior Level | Senior Executive |

Observations from our Financial Services study were substantiated based on discussions with key stakeholders. The overall observations were as follows:
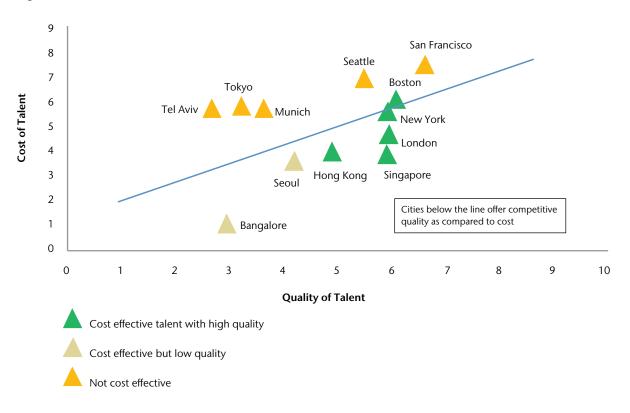
■ Cost of talent should not be looked at in isolation. It must be correlated to the quality of talent available so that a complete picture of location competitiveness emerges.

■ Compensation levels in the sector have decreased since the global economic recession.

■ As the global financial hub, the quality of talent is highest in New York City compared to all benchmarked locations. London, Geneva/Zurich, Singapore, and Hong Kong are its closest competitors. The current cost of talent in New York City, though high, is competitive for the quality provided. This makes New York City competitive from a quality per unit cost perspective.

■ In terms of entry-level talent, New York City displays significant cost effectiveness – driven by its high Quality Index differential.

■ On the other hand, cities such as London, Singapore, and Hong Kong are closing the gap on New York City in terms of quality of mid- and senior-level talent. The improving quality of talent can be attributed to global exposure and an increase in the scope of roles being delivered from these locations.

## Key Takeaways for the Financial Services Sector

+ The cost of talent in New York City is higher than other cities studied, though stakeholder discussions show higher salary was justified as they are seen as more 'global' than jobs delivered from locations such as Singapore and Hong Kong, which are primarily 'regional' and restricted to the Asia/Pacific region.

+ Compared to other benchmark locations, New York City is well ahead in terms of providing 'Cost Effective Talent' to organizations in the Financial Services sector.

− Other cities are closing the gap in terms of mid- and senior-level talent. To remain on top, New York City needs to put in place policies and initiatives that continue to grow, attract and retain high-quality talent at an affordable cost.

## High-Tech Sector

**Figure 13: Cost Effectiveness of Available Talent**



*Source: Aon Hewitt Analysis, Cost Index based on McLagan Investment Banking Database.*

For the purpose of this study, three job roles were used as indicative of entry, middle and senior-level talent. A ratio indicative of the business hierarchy in an organization was used to arrive at a common cost index.

The job roles used for the purpose of the study are based on the nature of jobs New York City is likely to create. These are specifically roles related to high-end product development and technology architecture design; and not usual IT services jobs. The roles studied are as shown below:

| Level | Job Role |
| --- | --- |
| Entry Level | Analyst Engineer |
| Middle Level | Product Development Expert |
| Senior Level | Senior Executive at Country Level |

Observations from our High-Tech study were substantiated by discussions with key stakeholders. The overall observations were as follows:

- Cumulatively, San Francisco has the highest quality of talent in the High-Tech sector amongst all benchmark cities. Boston, London, and New York City are clustered together in terms of quality, next to San Francisco.

- However, the talent in San Francisco comes at a higher cost. The premium in compensation is not justified by the incremental quality of talent.

- In such a scenario, other locations possess a competitive advantage. Amongst benchmarked cities, New York City has the highest quality per unit cost. New York City should leverage this opportunity and stake its claim as an attractive location for the High-Tech sector.

- Initiatives such as the Applied Sciences initiative were cited by various stakeholders, and will provide the City's High-Tech sector and traditional industries looking for technology skills a big boost by providing high-quality talent in the future.

- Stakeholders also mentioned the mushrooming of technology startups in New York City in recent years. This underlines the competitive position of New York City for this sector. Apart from startups, many companies, such as Facebook and Google, are also moving into New York City to take advantage of this talent pool at comparably more reasonable salary levels. These salary levels are driven by the positive supply – demand scenario of a large highly-skilled talent pool and a growing yet smaller demand.

## Key Takeaways for the High-Tech Sector

+ New York City is the most cost effective location amongst all benchmarked locations and is well positioned to become an attractive location for the High-Tech sector. This is a trend already prevalent in the City, with a large number of High-Tech start-ups being incubated over the last few years.

— Given the nature of jobs likely to be created, New York City needs to ensure that the available talent is adequate in terms of quality and quantity. Identification of specific segments within Technology that are likely to succeed in New York City is critical to ensure this talent supply.

— High-Tech sector jobs are also being created in various verticals like Financial Services. There is a need to build an ecosystem that helps job seekers match their capabilities to positions open in this sector.

— The city, for its part, needs to ensure that talent with the right skills and competencies are available at the right cost for growing sector needs.

# Recommendations

### Identify Niche Sectors and Develop a Talent Strategy for the City

Both in Financial Services and High-Tech sectors, New York City should identify the nature of jobs being created. This can be accomplished using the Future Skills Program detailed in Talent Driver 1.

Specifically, in the High-Tech sector, the City should identify segments on which to focus. From current trends, Fin-Tech, Health IT, Digital Media and Advertising, and Social Media are likely sectors where New York City can succeed. A talent strategy should be built for these niche sectors. By doing so, New York City would be able to control the availability and quality of talent, thereby keeping the cost-quality balance favorable.

In terms of the Financial Services sector, the world is becoming even flatter and global cities are catching up to New York's dominance of the industry. The roles, and hence the capabilities required for those roles, is also changing. New York City should constantly recalibrate the quality of talent available. Current available skills may or may not remain relevant in the future, creating an imbalance in the cost-quality equation.

### Market New York City's Cost Effectiveness in the High-Tech Sector to Attract More Entrepreneurs and Businesses

New York City has all the ingredients to become a technology hub, including the optimum balance between cost and quality of talent. This trend, coupled with initiatives such as the Cornell NYC Tech campus and government efforts to promote High-Tech startups in the City, could be more effectively marketed to create greater opportunities in the sector. If these initiatives are marketed well, under one overall city branding initiative, this could help attract many more businesses and talent.

*"New York City is emerging as an interesting option for technology companies. The downturn has meant availability of high-caliber talent on the job market, which technology businesses can leverage to create value. If we are to grow New York as a technology hub, the City must provide an enabling environment for businesses that are considering starting up in the City, or expanding. The City administration should work together with firms to demonstrate focus on the sector and establish a clear agenda for growth."*

*Russ Fradin, Chief Executive Officer, Sungard*

The objective of this program would be to promote New York City as a cost-effective location for quality talent, specifically in the High-Tech sector. This could be done by encouraging research, publications, or simply by spreading the message through various channels about the Cost-Quality balance that New York City offers. A collaborative approach spearheaded by the City administration, but equally supported in one voice by industry and academia, will help communicate this value proposition.

### Shifting the Skills Development Paradigm to Ensure Adequate Supply of Talent for the Demand Created

The Future Skills Program can help identify promising niche sectors and the skills required. Similarly, marketing initiatives will help promote the City's growing High-Tech sector. Together these initiatives will create demand for talent. However, to remain the top Financial Services destination and become a competitive Technology center, New York City must ensure that skills and competencies of the talent pool available are in line with industry requirements at any given point in time. This can only be achieved by creating a robust workforce development initiative on the supply side that concentrates on building capabilities for today and the future. These initiatives should be focused at all levels of education in order to create a steady, sustainable pipeline of talent.

The initiative should be based on a robust industry-academia linkage. In most cases, organizations 'Hire to Train.' By flipping skill development programs to 'Train to Hire,' we can achieve greater collaboration between industry and academia. Such a model will ensure that education is outcome focused and the curriculum being taught is industry aligned.
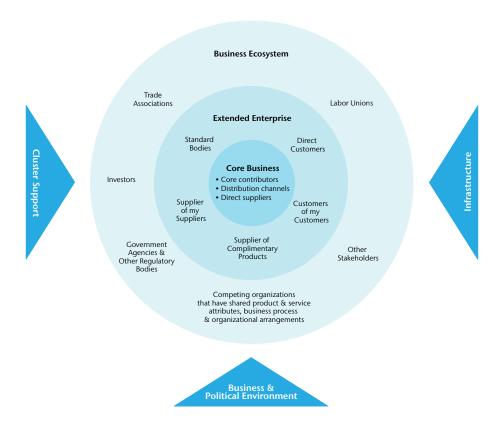
There are independent cases of programs where industry groups partner with thematic schools such as the Pathways in Technology Early College High School (P-TECH) program[40]. P-TECH was in large part created through the IBM International Foundation, which helped develop the curriculum, and offers a unique six-year (9-14) high school where students can earn a diploma and an associate's degree in a computer-science-related field, and provides graduating students with direct connections to IBM for future employment opportunities. However, there is a need to scale these programs and incentivize industry to collaborate on these types of public-private initiatives. New York City can provide support by developing an 'adopt-a-school' program sponsored by industry champions to build curriculum and heavily recruit from those schools, whether a traditional high school, career and technical program, or university. This would provide specific skills training geared toward filling industry demands, which could ultimately help narrow the skills gap. This type of program would also provide for direct recruitment opportunities for participants as well as greater awareness of available opportunities across the industry.

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[40] www.ptechnyc.org

# Talent Driver 5: Thriving Business Ecosystem

A thriving business ecosystem is at the heart of the City's ability to drive long-term economic health. This ecosystem includes the broader interconnections that occur on a daily basis and enable an organization to thrive. See Figure 14.

**Figure 14: The Business Ecosystem**



While the above framework provides a holistic view of the entire business ecosystem, the following are the components/parameters of an enabling environment that organizations consider most often when evaluating locations:

- Business and Political Environment: Policies which are favorable for doing business, political stability, efficiency, and transparency in government functioning, corruption, workplace safety, and low crime rates.

- Cluster Support: Support for businesses to start up, grow and mature and includes factors like access to capital, access to opportunities, ease of starting a business, and availability of incentives.

- Enabling Infrastructure: Office space, healthcare infrastructure, telecom infrastructure, transportation, and connectivity.

# What We Heard from Stakeholders

The business ecosystem is an important evaluation point for organizations in selecting a location. While the specific needs of organizations differ by their stages of evolution, the City must strive to fulfill business demands in a holistic manner to remain competitive.

A successful support program needs to cater to start-ups, businesses striving to expand their footprint, and established businesses that are well placed in the City. Addressing each group's specific needs in the most effective manner is definitely a challenge, but one that New York City is familiar with overcoming. The Brooklyn Navy Yard[41] is a case in point.

The Brooklyn Navy Yard Development Corporation (BNYDC) is a prime example of the type of investments that attract and grow new businesses in the New York City area. Such programs can be replicated up and down the East River and Hudson River. The BNYDC has over 40 buildings with nearly 4 million square feet of leasable space available for a shared-industry style office park. Tenants include movie studios, furniture manufacturers, ship repairers, architectural designers, electronics distributors, and jewelers. The BNYDC itself is a non-profit organization and manages all aspects of the property, owned by the City of New York, including leasing, developing and securing the site for optimal use.

As we delved into the specific aspects of the ecosystem, we gathered additional insights on New York City's strengths and challenges:

- **Business and Political Environment**. All stakeholders praised the current City administration and its pro-business policies, which they hope will continue into the future. Cited examples include reduction in crime rates and the emergence of new sectors. However, stakeholders also mentioned the high cost of doing business and the difficulty in starting a new business venture—like access to information, availability of office space, and need for support—in New York City as challenges that need to be addressed.

- **Cluster Support**. The City's vibrant economy provides opportunities for stakeholders to network and find interested investors. The incubator–accelerator programs created through private and public initiatives have helped multiple businesses in their startup phase and provided growth to new businesses through venues and opportunities to collaborate.

The NYU Innovation Venture Fund, created in 2010, was developed to invest in startups founded by NYU students, faculty, and researchers and/or new technologies developed by them. In the last two decades, over 100 startups have been built on NYU discoveries and innovations. The recent affiliation with the Polytechnic Institute, NYU's school of engineering, brings a raft of capabilities that are important to product commercialization. And New York City's burgeoning venture capital culture now offers tech startups an environment conducive to growth. But startups need early-stage support in terms of access to talent and connections to prospective customers, as well as the entrepreneurial and venture community. The Fund is designed to fill that role.

Frank Rimalovski is always on the lookout for new talent to invest in:

*"In my position I see business ideas come through every day, but an idea not only needs to be sound, it needs a strong team to prosper. Finding a range of talent and skill is key to developing a business. I believe New York City has this strong skill diversity that lends itself to successfully supporting developing businesses."*

*Frank Rimalovski, Managing Director, NYU Innovation Venture Fund*

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[41] www.brooklynnavyyard.com

■ **Infrastructure.** New York City must focus on modernizing its infrastructure. Tropical Storm Sandy tested the resiliency of this infrastructure and uncovered a few weaknesses the City could address for future stability. New environmental conditions such as climate change, suggest that alternative designs and plans for the City's infrastructure should be explored to mitigate the effects of future events. There is also a need to incent organizations to move office space into outer boroughs, thereby easing office space and infrastructure pressures on Manhattan. Office space, transportation, telecommunications/internet connectivity, airports, and healthcare infrastructure have all been cited as clear improvement opportunities for New York City.

*"One of the concerns about updating antiquated infrastructure, such as shifting from copper to fiber, is it can displace skilled workers even as it makes that infrastructure more efficient and reliable because it has less downtime and needs fewer repairs. Simultaneously re-skilling this talent to the new technology while updating the infrastructure is crucial to keeping this talent in the City."*

*Jim Gerace, President, New York Region, Verizon Communications, Inc.*

Stakeholders agreed that this is a complex problem to solve and needs multiple moving parts to work in unison. An interesting discussion on this subject during our stakeholder meetings has been captured below.

## Model City of the Future

Private equity executive, Steve Denning, tried to explore how multiple aspects of the Ecosystem could be connected to make New York City a model city of the future.

*"What could we do to make New York City a model city of the future? There is technology at our fingertips that can be implemented to push New York City ahead. What if the City teamed with a leading technology company to improve our overall transportation system? New York City could further explore dynamic congestion pricing for automobiles, like Singapore and Stockholm, and then coordinate it with other forms of [passenger] transportation so that the City is the most efficient city in the world. We could overhaul and streamline the City's supply chain by studying patterns, dictating best times for deliveries into the City or leaving the City, and possibly even create hubs in the City around which its supply chain is re-imagined and re-engineered. We have the technology; now we need to re-create the City of the 21st century, and thus not only make New York City a global leader, but also a model that could be applied worldwide and, thereby, creating the export-oriented businesses and employment we so desperately need."*

*Steve Denning, Chairman, General Atlantic*

# How Does New York Compare with Other Cities?

**Business Ecosystem**

Financial Services Sector

| | Overall rank |
|---|---|
| **Zurich** | 1 |
| **Geneva** | 2 |
| **Hong Kong** | 3 |
| **Singapore** | 4 |
| **London** | 5 |
| **Tokyo** | 6 |
| **New York** | 7 |
| **Dubai** | 8 |
| **Seoul** | 9 |
| **Shanghai** | 10 |
| **Shenzhen** | 11 |
| **Rio de Janeiro** | 12 |
| **Moscow** | 13 |
| **Mumbai** | 14 |
| **Buenos Aires** | 15 |

High-Tech Sector

| | Overall rank |
|---|---|
| **New York** | 1 |
| **San Francisco** | 2 |
| **London** | 3 |
| **Hong Kong** | 4 |
| **Singapore** | 5 |
| **Tokyo** | 6 |
| **Tel Aviv** | 7 |
| **Seattle** | 8 |
| **Seoul** | 9 |
| **Munich** | 10 |
| **Boston** | 11 |
| **Bangalore** | 12 |

Efficient physical and technological infrastructure is essential for a city to attract investments, which in turn leads to job creation and talent attraction. New York City stands 7th in providing a favorable business environment for the Financial Services sector.

New York City's scores are low due to the lack of access to opportunities that allows the City's talent to sustain themselves (i.e., access of a region and its talent pool to information from outside the region and vice versa)[42]. This is also a reflection of the global economic recession. The City's quality of living index is also relatively low compared with competing cities.

New York City ranks at the top on favorable business environment for the High-Tech sector. San Francisco is ranked the best city for startups; it has considerable commercial real estate investments and other enabling infrastructure factors.

In our study, New York City ranks ahead of other benchmarked cities in terms of access to capital, availability of the venture capital community, and the presence of support programs to help incubation. Though the City and academia are doing a great job of attracting research funding, it has been noted that its ability to commercialize on those programs and feed them back into the ecosystem has been lacking. Comments from multiple stakeholders point to this lack of commercialization in the City as a hindrance to growth in the High-Tech sector as well as to not scaling up to its full potential. Internet bandwidth, office occupancy cost, and cost of doing business emerge as areas that need to be addressed for New York City to sustain its position.

[42] How greater access is changing the world, SRI International

## Key Takeaways

**+** By focusing on pro-business policies, the City can continue to help businesses start and grow here. The current focus on maintaining quality of life factors, encouraging new sectors, and building an ecosystem favorable to businesses needs to continue.

**—** Both the cost of doing business and cost of living for talent are very high in New York City. These factors should be addressed to ensure sustained growth in economic activity, job creation, and retention of skilled talent. The City's infrastructure needs upgrading to meet the demands of the emerging High-Tech sector as well as the future workforce. The City needs to project itself as the workplace for the Millennial workforce, and telecommunications, transportation, and city infrastructure are critical elements for this initiative to succeed.

**+** New York City has one of the most favorable business ecosystems for the High-Tech sector, according to Aon Hewitt's benchmarking study. Building on these positives will help the City continue to attract High-Tech startups. Other cities have initiated specific programs to promote a favorable business environment, thereby attracting investments and talent. New York City should identify the types of programs that can be implemented in the City.

## Recommendations

### Learning from Other Cities

As global cities continually look to improve their competitiveness, they design and implement specific programs to promote the economy. Many of these programs are focused on creating a favorable business ecosystem. New York City should study these programs and identify examples that are appropriate for implementation and could be amended to align with the City's unique challenges and assets.

Some of the initiatives undertaken by London, Hong Kong, and Toronto have been researched and highlighted below. However, a scan of all benchmarked cities would provide a holistic picture in terms of key initiatives, critical success factors, and challenges of implementation.

■ **London.** London has embarked on many important city building initiatives in order to remain competitive. Many of these programs were carried out for the 2012 London Olympic Games, thereby helping further their goals of building a city for the future. One of the prime focus areas for London has been infrastructure. There has been widespread discussion on how to plan for future roads, neighborhoods, workplaces, community facilities, parks, and transportation. The Crossrail project—a major transportation infrastructure undertaking—will provide London and the South East with a world-class, high capacity, affordable rail option, while also easing congestion on London's public transit system. The project is estimated to provide £42bn (USD 67bn) in benefits by increasing the connectivity and ease of doing business across what is already a global commercial hub. London-based businesses have contributed £4.1bn (USD 6.6bn), more than half of the total funding requirements, as they see the economic value that a project of this nature brings to their local stakeholders as well as those outside London, which they do business daily.

■ **Hong Kong.** Hong Kong has embarked on a digitization drive, post consultation with citizens and business stakeholders. The "2008 Digital 21 Strategy"[43] contains five key action areas: Facilitating a digital economy, promoting advanced technology and innovation, developing Hong Kong as a hub for technological cooperation and trade, enabling the next generation of public services, and building an inclusive, knowledge-based society.

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[43] http://www.digital21.gov.hk/eng/strategy/2008/foreword.htm

■ **Toronto.** The city has taken a business view to its own performance. Toronto plans to adopt a set of key performance indicators (KPIs) that reflect critical success factors and will define and measure how well it is performing in relation to its strategic goals and objectives. In 2009, the city established Build Toronto[44] as an arm's length corporation (an independent corporation with a specific mandate and decision making powers) to generate revenue by maximizing the value and economic development potential of properties under its management.

**Common Desk with Development Ambassadors**

A key aspect to promoting a city is to share its success stories. Due diligence of similar businesses in a location is a critical part of any organizations decision to locate/re-locate. In such a scenario, New York City could promote its value proposition through identified "Business Ambassadors" for specific sectors. The City could leverage these ambassadors to proactively reach out to potential investors and organizations that are evaluating New York City. This would allow the City to create a positive impact on investors and firms and also send a positive message about collaboration between industry and government.

*"New York City has long been considered the land of opportunity. Even now, as the digital media sector is growing here in the City, a new breed of talent and entrepreneurs is looking toward New York to establish themselves and their businesses. However, business is becoming increasingly competitive and many cities in the U.S. are effectively competing with New York for the same talent, the same businesses, and the same investors. As successful New York organizations, we need to be more attentive to maintaining our businesses and talent right here in New York, while continuing to attract new and innovative ones. New York's value has always been its unique "sparkle" and we need to focus on training our workforce to develop enhanced skills in areas such as engineering and advertising, creating mentoring and support networks to nurture growing businesses, and proactively selling New York's strong value globally to attract the best talent. By being cognizant of these needs, we as stakeholders could have a substantial and positive impact on helping New York City remain at the forefront of a changing global economy."*

*Strauss Zelnick, CEO and Chairman of the Board of Directors, Take-Two Interactive Software, Inc.*
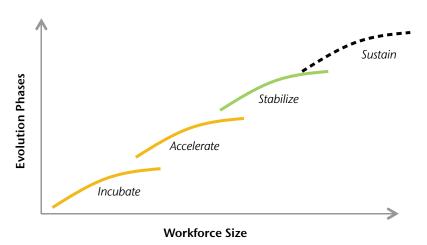
**The Startup Stabilization Program**

The City should aim to attract and retain startups by leveraging its strong business friendly ecosystem for the High-Tech sector. By retaining startups longer into their evolution cycle, the City can ensure greater job creation at the medium-skilled level of the talent pyramid.

There are already multiple incubation programs that help organizations start up in the City. As these startups mature and grow, they face challenges of renting office space, hiring the right talent, and retaining talent in the City. Several accelerator programs have supported organizations through this phase. The City needs to build on these programs and support organizations further into their business development evolution.

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[44] Toronto Prosperity Initiative

**Figure 15: Sustainability Model**



In order to do so, there needs to be a standard process by which ventures are evaluated for maturity. Depending upon their stage of maturity, the City could then provide the required support in terms of access to talent, capital, infrastructure, peer network, and incentives. The program must also emphasize the need for these organizations to grow in New York City, thereby retaining the benefits of new job creation. The City could enable the creation of a collaborative environment for peer organizations to network. This would also help the City address needs of specific sub-sector groups in a collective manner.

*"NY Tech Meetup was founded in 2004 to build a community to support the upsurge of tech startups in the City. Membership has seen exponential growth over the past 12–18 months, mirroring the growth in the tech sector overall, but this growth has been met with some challenges as well. NYTM recently held a small forum of 20 key members to discuss key challenges faced by tech startups in New York City. In terms of infrastructure, one core challenge is the lack of high-speed Internet access in multiple areas throughout the City, including in the central locations where startups would most like to be based. Companies often have to piece together subpar solutions to deal with the challenge because the alternative many landlords offer them is to spend the money themselves to get the proper connection from the street to their building. Another challenge for the sector is a small pool of talent compared to the available jobs and lack of educational opportunities for young people to help them receive the necessary training to work in the sector. Expanding high-speed internet access for students across the City, specifically in low-income neighborhoods, could help this group have better access to necessary and employable technology skills that are needed by high-tech firms."*

*Jessica Lawrence, Managing Director, NY Tech Meetup*

## Employer Assisted Housing (EAH)

Many stakeholders suggested access to affordable housing was a top priority. Employer Assisted Housing (EAH)[45] is a "double bottom line" strategy as it helps talent secure affordable housing near their workplaces while helping employers find and keep qualified workers, improve community relations, and revitalize neighborhoods. Universities and medical centers in New York have long used EAH as a recruitment and retention tool, although the state's rent regulations complicate efforts to withdraw housing when an employee leaves their job. Many U.S. states and cities have tried various programs to promote subsidized housing for employees. Similarly, Chinese cities have been able to invest heavily in creating such subsidized housing plans for talent migrating to work or study. These programs are detailed below for reference.

**EAH Program Examples**

- **Illinois.**[46] The Metropolitan Planning Council in Illinois plays a hands-on role in working with employers and communities to design and implement customized EAH programs. The program is also connected to the transportation project thereby helping the community with options for housing as well as transportation. Bringing employees closer to their workplace not only increases their quality of life and other personal benefits but also provides the City with reduced traffic and congestion.

- **Pennsylvania.**[47]  The Pennsylvania Housing Finance Agency (PHFA) has an EAH initiative. Homebuyers working for a participating EAH employer receive an interest rate of one quarter percent (.25%) lower than the qualifying program rate.

- **China.**[48] The IT industry in China has been growing rapidly over the last 5 years, with large multinational companies setting up operations there. This has lead to an influx of talent - both domestic and international - into cities such as Chendgu and Suzhou. Both cities have plans for rapid expansion - Chengdu aims to double its population from 14 million to 28 million over the next 10 years. Such phenomenal growth needs to be backed by availability of talent as well as infrastructure. With this in mind, both cities have begun creating subsidized housing that will be rented out to software employees and their families. Chengdu is creating 227,000 such subsidized service apartments in the vicinity of the Tianfu Software Park. Similarly, Suzhou has created different grades of apartments catering to single persons and families ranging from RMB 700 (~USD 110) to RMB 1,700 (~USD 270) per month. Through this program, the cities hope to attract the best talent, not just from China, but from around the world.

New York City may be able to apply some of these concepts in order to provide affordable housing to medium-skilled talent for whom the cost of living may be a deterrent.

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[45] http://www.policylink.org/site/c.lkIXLbMNJrE/b.7977773/k.7189/Employer_Assisted_Housing/apps/nl/newsletter2.asp
[46] http://www.metroplanning.org/work/project/8
[47] http://www.phfa.org/consumers/homebuyers/employer_assisted_housing.aspx
[48] Aon Hewitt analysis, Information from primary interviews with stakeholders in Chengdu

# Talent Driver 6: Future Workforce Needs

Generational shifts in the workforce are a macro trend that organizations need to continually cope with; however, as we saw in Talent Driver 2: Talent Diversity, the needs of the younger workforce (Gen-Y and Gen-Z) are different from earlier generations. Organizations have had to respond to the aspirations of this Millennial workforce and adapt their talent management practices. The scope of 'talent management' has evolved and today includes not only skills, roles, and careers but also workplace environment, work-life balance, and quality of life that a location offers.
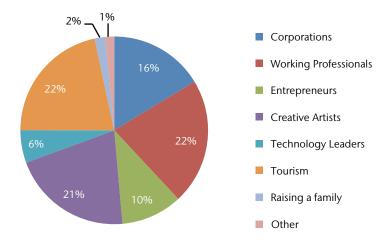
Cities therefore need to ensure that their value proposition is aligned to the needs of the future workforce. This makes 'Future Workforce Needs' an important driver for location competitiveness.

## What We Heard from Stakeholders – Talent Perception Study

To understand the perceptions of New York City's current and future workforce, focus groups were conducted and a 'Talent Perception Study' was administered online to nearly 500 participants. The group included working professionals (current workforce) and students (future workforce). Provided below is an analysis of the key themes that emerged.

■ 88% of survey respondents agreed that New York City is an attractive location for the young workforce.

■ When asked who would consider New York City a destination of choice, the majority responded that 'Working Professionals,' 'Creative Artists' and tourists were more inclined to find New York City a destination of choice.

**Figure 16: New York City is the Destination of Choice**



- Corporations
- Working Professionals
- Entrepreneurs
- Creative Artists
- Technology Leaders
- Tourism
- Raising a family
- Other

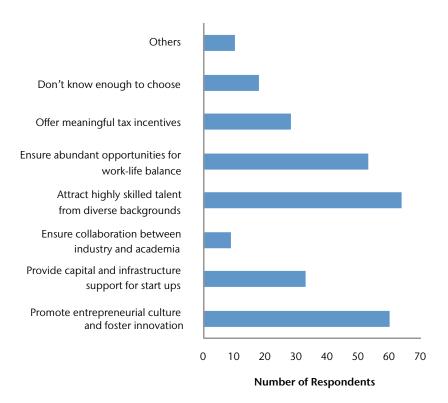■ Participants expect New York City's future growth to come from Financial Services and the Professional & Business Services sectors, followed by technology jobs (includes High-Tech sector and similar types of jobs in core sectors).

**Figure 17: New York City's Future Growth Sectors**



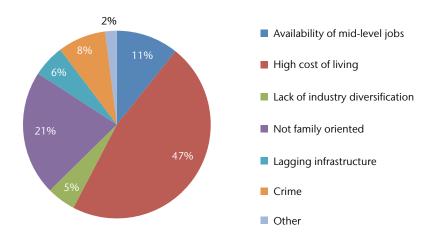| Legend |
|---|
| ■ Financial Services |
| ■ Healthcare |
| ■ Professional and Business Services (Consulting) |
| ■ Technology |
| ■ Local Start-ups |
| ■ Expansion by non-local business |
| ■ Other |

■ Survey participants considered London, Hong Kong, and Singapore as the top three destinations competing with New York City for Financial Services talent. In the High-Tech sector, San Francisco was the preferred choice in the U.S., with New York City taking the number two spot; Tokyo and Hong Kong were the preferred destinations outside of the U.S.

■ The hypothesis of highly-skilled and diverse talent being a critical driver for New York City's competitiveness was confirmed by participants, who agreed that the "Most effective way to ensure commercial growth of New York City is" 'to attract highly-skilled talent from diverse backgrounds.' It is important to note that 'promoting entrepreneurial culture and fostering innovation' and 'work-life balance' were consistently rated high as well.

**Figure 18: Most Effective Methods of Commercial Growth for New York City**



Number of Respondents

- Aligning what was heard from various stakeholders, the participants in the survey also confirm that 'High cost of living' is the single most important challenge for the City in attracting skilled talent. New York City has been developing ways to increase value in light of the high cost of living, such as park space, community events, and even quality workspace.

**Figure 19: Challenges in Attracting Talent for New York City**



- Availability of mid-level jobs
- High cost of living
- Lack of industry diversification
- Not family oriented
- Lagging infrastructure
- Crime
- Other

While survey participants still consider New York City a top destination, they do point out critical challenges. Many of the talent participants echoed findings from our stakeholder interviews and have reiterated the interest in creating the perception of the City as a 'Millennial workforce city.'

# What We Heard from Stakeholders–Workplace Needs of the Future Workforce

There is a paradigm shift in the way talent perceives their work location. The view has changed from the place of employment posing as a workplace to an environment that helps a person learn, grow, and contribute, and thus offers a 'workspace.' This shift has forced organizations to look for locations most suited to the nature of the workforce they plan to employ today as well as in the future.

*"Climate change, swelling populations, emerging technology, generational differences, financial necessity, and a host of other factors are causing employers and employees to think differently about the nature of work and how, where, and when they are doing it".*

*The Green Workplace: Sustainable Strategies that Benefit Employees, the Environment, and the Bottom Line, by Leigh Stringer*

Delving deeper into this shift from workplace to workspace, stakeholders clearly highlighted the need for a more collaborative work environment. With organizations looking to keep overhead cost down, average workspace per employee in New York City is constantly shrinking. The typical usable square foot per employee has gone from 250 in the 1990s to 120 for today's current companies. As space becomes limited and employees become more mobile, walls and offices are slowly disappearing and more communal areas are being integrated into the workspace, thereby giving rise to the trend of open floor plans, flexible group working areas and meetings that occur whenever, wherever, and however needed on any given day.

Offices around New York City, whether new building or renovations, have been developing communal spaces to cater to the desires of today's workforce and to include amenities extending from libraries, kitchens, and solariums, to bars and game rooms. Whereas the typical meeting places of the past were offices and conference rooms, today's talent prefers to gather in more casual and open work spaces. Some organizations have taken this new workspace concept a step further to structure some interesting programs around commuting to work and office space design.

There are many ways to provide flexible and collaborative space:

■ Draw employees to your space. Provide highly collaborative and interactive environments within the company's space. Usually these collaborative spaces—cafés, conference centers, 'airport lounge' environments, high-definition video conference rooms—take precedence over large, individual office space. Google is well known for providing everything from free food and electronic libraries to creative 'living room' settings specifically designed to draw bright, young minds into their space to collaborate.

■ Go where your employees live. Encourage the use of co-working environments closer to employees' homes. Co-working environments appeal to start-ups, work-at-home professionals, and independent contractors who prefer in-person collaboration. Some companies are taking co-working to the next level by helping owners or tenants sublease space, one cube at a time, to other organizations or individuals for any various periods of time (could be an hour, a day, etc.). These companies offer a good solution for organizations that need flexibility to offload or acquire new office space in a city.

■ Go where your employees travel. Regus, another provider of managed office space, is rolling out drop-in business centers in train stations across the Netherlands. In collaboration with NS, the Dutch railway operator, Regus will open several workspaces directly on platforms, in converted shops, and offices, so that passengers with little time and long commutes can quickly and conveniently use the facilities.

■ Go where your customers live. State Farm's Next Door Café is the next generation of its local retail offices. State Farm's new coffee shops around Chicago offer a place for individuals to ask questions about finances and insurance, with expert-led coaching and classes. These cafes also offer free Wi-Fi, a library, and meeting rooms. Everything is free "except the coffee," says the company, which also offers up the space for local events.

■ Provide tools that connect. Companies are investing aggressively in technology to enable employees to collaborate across the organization and with partners and customers. This includes tools like Cicso's Telepresence and PolyVision's media:scape, as well as social media platforms. Social media has proven to be a powerful tool to connect people in virtual and real-life communities. Generation Z, also known as Digital Natives, are highly adept at using social media tools, which they believe are essential for connecting with others.

Strategies like these provide for cost efficiencies and corporate social responsibility while catering to employees and employers needs.

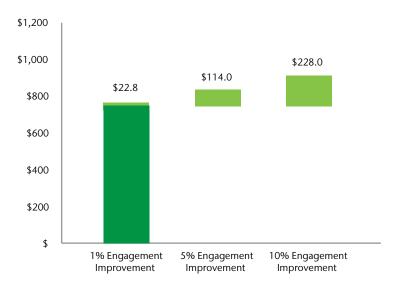Benefits that have developed as a result of these changes are:

■ Increased collaboration among employees.
■ Renewed sense of belonging and fellowship.
■ Shorter commutes and more productive workdays.
■ "Green" initiatives built into flexible, adaptable workspace.

In collaboration with the private sector, the City could incentivize the creation of 'workspaces' that encourage certain businesses to co-locate in a neighborhood or along specific transit lines, encouraging talent from specific sectors to live and work in the same place. Co-location accelerates the exchange of ideas and talent, and builds economic strength to New York communities on multiple levels.

According to Aon Hewitt's engagement surveys[49] and from stakeholder interviews, persons that feel a strong sense of belonging to a community typically find more joy in their work and have greater respect for their fellow employees. This ultimately leads to better alignment to an organization's mission, objectives, and goals. Organizations' ability to focus on building relationships across the workspace can instill deep loyalty and satisfaction, which in turn develops a more productive workforce overall and drives bottom line results.

[49] Aon Hewitt Global Employee Engagement Database

**Figure 20: Incremental Engagement Impact on Operating Income ($M)
for a $5B Company with 15% Operating Margin**



*Source: Talent Perception Study*

Attracting, retaining, and developing top talent is a priority for most organizations. Done correctly, adapting the workspace to meet current and future expectations of top talent can lend itself to increased productivity and engagement and ultimately contribute to the bottom line.

## Making Employee Engagement Happen: Best Practices from Best Employers

**Engagement Drivers**

**Engagement Behaviors**

Physical Work Environment ▪
Work/Life Balance ▪

**QUALITY OF LIFE**

**WORK**

▪ Work Tasks
▪ Work Processes
▪ Resources
▪ Sense of Accomplishment

People/HR Practices ▪
Managing Performance ▪
Brand Alignment ▪
Organizational Reputation ▪
Diversity ▪
Communication ▪

**COMPANY PRACTICES**

**ENGAGEMENT**

**PEOPLE**

▪ Senior Leadership
▪ Manager
▪ Co-workers
▪ People Focus
▪ Customers

Pay ▪
Benefits ▪
Recognition ▪

**TOTAL REWARDS**

**OPPORTUNITIES**

▪ Learning and Development
▪ Career Opportunities

**Say**

**Stay**

**Strive**

*Engagement matters. It matters both in terms of employee perception of the organization, and in how that perception can lead to higher levels of worker performance. Our employee survey data indicates four key areas for attention: leadership ownership of improvement in engagement capability; building a strong employee value proposition; strong total rewards; and enabling performance of employees. These all point to holistic solutions and processes that become embedded in company culture. It begins with leadership and is delivered through people, processes, technology, and programs across the company.*

*Ken Oehler PhD, Partner, Global Engagement Practice Leader, Aon Hewitt*

## Key Takeaways

+ New York City is still considered a top destination for future talent.

+ The City administration and incumbent organizations have worked on specific initiatives that help create a collaborative work environment, in line with the needs of its current and future workforce.

− There is a mismatch in how the future workforce views their ideal work environment and what is available to them in the City. The shift from perceiving the workplace as a single location to multiple workspaces (i.e. the office, home, train, airport, coffee shop) has a direct impact on how companies are accommodating their workforce. The City administration could assist organizations to implement more of these initiatives in order to attract future talent.

# Recommendations

## Brand and Market New York City as the "Millennial" Workforce City

To attract the future workforce, the City should create a plan to implement key initiatives that can help project it as a 'Gen Next Workforce City.' As this builds on the concept of location branding, a collaborative approach could be taken by various stakeholders to design, implement and monitor such a program. Key aspects that the program could consider are:

- Improve the infrastructure and broadband connectivity in the City in general and public spaces.

- Programs like "New Energy Symposium for Cleantech Innovators"[50] and "NYC Public Schools Green Cup Challenge"[51] address the issue of Green Energy and appeal to Gen Y and Gen Z. The city should leverage these types of programs to encourage green initiatives and ensure organizations are recognized and rewarded for such initiatives. Consider expanding reward programs that integrate economic, social, and environmental measures, thereby impacting the triple bottom line.

- Market, communicate and brand New York City as the 'Gen Next Workforce City' through an extensive social media campaign and outreach efforts. Create virtual communities that connect to physical New York City.

Such a program will help the City attract a young workforce and could be used to re-brand and re-position New York City from a global financial hub to a diversified global knowledge/talent hub.

## Create More Efficient and Greener Workplaces in the City

While telecommuting is not new, many offices have unused space (up to 40-50%) while telecommuters aren't in the office, which can come at a tremendous cost and waste of resources. As mentioned in the co-working example above, an innovative way some organizations are responding to this excess space is to rent/lend it out to other professionals/clients without corporate offices in the City. This not only reduces the cost impact by filling out the vacant space, but could also be used to promote client/industry collaboration and networking opportunities.

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## Millennial Values

According to Leigh Stringer at HOK, *"Many people in the post-boomer demographic....are very savvy about environmental and social issues, and increasingly insist on working for companies that pay attention to these issues."*

The top talent is also looking for companies that support a sustainable lifestyle—allowing them to work at home or at a satellite office, to work flexible hours that will reduce their commute, and maximize personal time. They are also interested in being connected to their community; social responsibility is just as important as the environment.

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[50] http://www.nycedc.com/industry/clean-technology-energy
[51] http://schools.nyc.gov/community/facilities/sustainability/News/Green+Cup+Challenge+FY13.htm

Considerations include:

- Allow co-working and café centers in government buildings, libraries, schools, or community centers. Offering these in neighborhoods throughout the City will reduce commute times, congestion, and carbon emissions.

- Allow co-working and café centers adjacent to transit hubs, reducing the commute and connecting communities.

- Elevate New York's standing as a green city that attracts green companies by providing more meaningful tax and other incentives for green roofs, walls, and landscaping to reduce storm water run-off and heat-island effect. Access to daylight and views of nature has also been shown to increase worker productivity. The High Line and the Bank of America tower's "green room" adjacent to Bryant Park are excellent, creative examples of this, but they are few and far between.

- Continue to increase bike lanes and provide rentable bikes that can be picked up and dropped off in several locations across the City. Consider "bike concierge" services in public spaces to encourage the use of bikes or scooters over cars. Some of this work was already in progress late 2012 but experienced some setbacks due to Tropical Storm Sandy.

With the increased expectations of today's Next Gen workforce, corporations are developing innovative ways to incorporate programs that satisfy the needs of its employee base and yet provide for corporate and social responsibility. Ogilvy and Mather did just this when they launched their corporate bike share program, OgilvyBikes, at their new headquarters on 11th Avenue in New York City.

## Ogilvy and Mather – Where Employee Frills Intersect Corporate and Social Responsibility

*"When we moved to our current building three years ago, we purposefully incorporated as many green elements as possible, not only because we wanted to be environmentally responsible and reduce our carbon footprint and be LEED certified, but also because our employees were asking to be part of efforts that would drive environmental change in their work place. They were doing it at home so why not extend it to the office. It was the perfect time to introduce our bike share program. The City was just beginning to open up streets for bicycles, so we thought what a great way for our staff to be part of our sustainability efforts while getting fit and having fun. Today, programs like these are the norm if you want to attract talent...they are looking for ways to make a difference even while at work."*

*Shelly Lazarus, Chairman and former CEO of Ogilvy & Mather*

# Recommendations and Conclusions

New York City's current and future competitiveness is clearly linked to its ability to address the needs of the industry, investors, stakeholders, and current and future talent. In identifying ways to help New York City remain a 'Destination of Choice' for businesses and talent, inspiration was drawn from existing models and frameworks used by organizations to evaluate their long-term competitive position. Aon Hewitt has successfully used these models with global organizations to address long-term, sustainable strategies. Aon Hewitt's model puts particular emphasis on building a portfolio of talent skills and capabilities for the future.

## How Organizations Approach Sustainability

Global organizations continue to be in a 'War for Talent[52].' Talent is widely dispersed and more globally mobile than ever, leading to greater options and alternatives for organizations when employing talent. Organizations remain competitive and sustainable by having a clearly defined "Talent Strategy" that is focused on building a workforce (right people, right skills, and right time) and leveraging current market situations while exploring future opportunities. How can New York City replicate this approach to remain competitive? New York City should view itself with a similar lens as global organizations. Cities around the world are competing to attract talent and investments and strengthen their economy. To succeed, cities must attract, retain, and develop a talent pool that best suits their economic growth plan.

## Building a Compelling "Talent Value Proposition"

A clearly articulated talent vision is an important starting point for the City. This vision can then be translated into a talent strategy and roadmap, thereby helping to build a credible "Talent Value Proposition." This is akin to what organizations typically call an 'Employee Value Proposition.'

Identifying a custodian for this umbrella initiative that would bring all recommendations together and define a clear direction for them is critical. Like the onus of creating an 'Employer Brand' lies with the Chief People Officer or the Head of Human Resources in an organization, we recommend a 'Chief Talent Office / Officer' (CTO) for the City. The mandate of the CTO would be to focus on policies and programs that continually enhance the Talent Value Proposition of the City. The CTO would be the custodian of the Talent Strategy of the City and would need to ensure that all initiatives are driven toward set objectives. The CTO would also be the central body for many industry-wide and city-wide initiatives.

Continuing with the metaphor of the Head of HR, we have put together a broad description for the CTO role.

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[52] Ed Michaels, Helen Handfield-Jones, and Beth Axelrod, Harvard Business Press, 2001 ISBN 1-57851-459-2, ISBN 978-1-57851-459-5
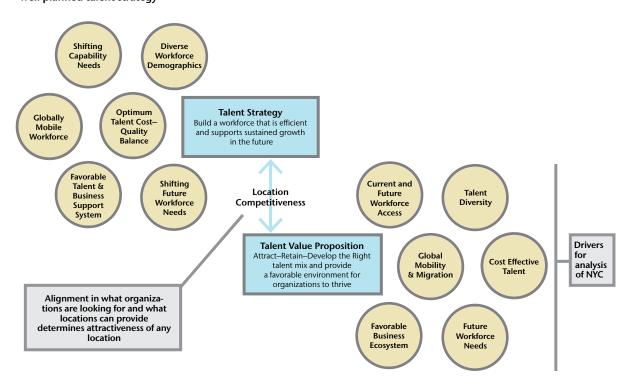
**CTO's Roles and Responsibilities**

| Competencies Defined by Aon | Head of HR for an Organization | CTO for NYC |
|---|---|---|
| Trusted Advisor and Business Partner | ■ Align talent strategy to business needs<br>■ Partner with business leaders to help achieve business results<br>■ Create trusted relationships | ■ Develop and own the Talent Value Proposition for the City<br>■ Understand the changing economy and ensure talent needs are identified and addressed in response<br>■ Develop a collaborative relationship with all stakeholders: Industry, Academia, Mayor's Office, workforce development agencies, other government departments |
| Owner of HR Portfolio | ■ Understand all HR programs and align their objectives<br>■ Monitor and evaluate the efficiency and effectiveness of the HR programs<br>■ Technical HR knowledge | ■ Create and maintain an inventory of talent development initiatives; collate objectives for each<br>■ Identify and fill gaps in initiatives<br>■ Identify and assign roles and responsibilities on each initiative<br>■ Understand talent attraction, development and retention needs<br>■ Understand leadership development needs and create business ambassador network for the City<br>■ Monitor and evaluate impact of each program and its achievement of objectives |
| Change Agent | ■ Educates and influences leaders to adapt quickly to organizational and segment specific shifts<br>■ Consults with leaders on reorganizations and re-alignments to meet business objectives | ■ Design sustainable processes to forecast future trends and needs based on interaction with relevant stakeholders<br>■ Define and communicate future talent needs for the City to work on<br>■ Obtain buy-in from stakeholders for the defined objectives<br>■ Ensure expectations from all stakeholders are set in defining programs and their objectives |
| Business Judgment | ■ Understands business strategy<br>■ Able to anticipate and plan for impact of market on employee population | ■ Understand the underlying economics for the portfolio of industries in the City<br>■ Collaborate with stakeholders to understand the impact of external factors on industry needs and hence their talent needs |
| Leadership | ■ Visionary<br>■ Thought leadership and research<br>■ Best Practices identification and implementation | ■ Visionary<br>■ Thought leadership and research<br>■ Collaborate with other cities in U.S. and globally and share practices that can help build talent bridges in the global economy |

Creating an attractive 'Talent Value Proposition' is a three step process and should take into account broad conclusions drawn from the overall analysis across the six drivers.

**Figure 21: Creating the Talent Value Proposition**

**To remain sustainable organizations need to have a well planned talent strategy**



**To remain competitive locations need to provide a solid talent value proposition**

The three steps are:

**Step 1**: Planning for the future based on consolidated inputs

**Step 2**: Prioritization of initiatives based on cost and complexity and sustainable benefits

**Step 3**: Design and implementation of each initiative

This section articulates how a vision, strategy, and implementation plan may be created for New York City. It also provides a suggested Talent Strategy framework for the City based on the results of this study. The following pages expand on the three steps above and use two initiatives as examples of how the recommendations may be put into action. The goal is to keep recommendations real and practical, while underscoring the need for collaboration, the importance of monitoring and evaluation, and the need for absolute clarity on outcomes to be achieved.

## Step 1: Planning for the Future Based on Consolidated Inputs

New York City's future vision and strategy should be built using many of the basic tenets of location branding[53]. A few critical tenets are mentioned below:

- **Effective image formation** to help define New York City's talent brand and positioning. Using marketing techniques like the 6C's of Branding[54] would help address each component of the image to be formed in a comprehensive way.

> ## 6C's of Branding
>
> **Character** – What we indubitably are
> **Culture** – What we feel we are
> **Communication** – What we say we are
> **Conceptualization** – What we are seen to be
> **Constituencies** – Whom we seek to serve
> **Covenant** – What is promised and expected

- **Defined role of the central stakeholder**, which is the City government or one of its departments. A single structure should be considered that can have decision-making power on all matters pertaining to the value proposition.

- **Engage a wide range of stakeholders** in discussions using a collaboration framework. Build on this collaboration to engage all stakeholders in implementation of specific initiatives.

- **Meet the needs of investors, current and incumbent organizations, and current and potential talent.** The City needs to build on what investors, talent, and industry stakeholders want and need.

- **Diplomats with a success story to promote the City's promise and value proposition**. Positive experience of incumbent businesses, investors and current talent helps potential investors and talent to view the City as a destination of choice.

- **Sustained effort in effective implementation** to enhance the value proposition is critical for long-term value generation. The focus needs to be on a coordinated implementation which includes all stakeholders involved both within and outside the City administration.

These inputs, along with the six talent drivers described throughout this report, form the basis of the talent vision and strategy for New York City. Once the vision and strategy are in place, the next step is laying out a strategic framework and linking initiatives to the overall objective. The following framework can help the City establish a comprehensive talent roadmap.

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[53] 'Selling a small state to the world, Place Branding and Public Diplomacy Vol. 5, 1, 67–84, Ausra Park
[54] "6C" Framework for Branding - Balmer and Greyser, 2006

The framework addresses a central theme – 'How can New York City remain a destination of choice for talent and businesses?' The following enablers are linked to both business and talent objectives:

- Business Objective
  —Sustain leading position in Financial Services sector
  —Grow emerging High-Tech sector

- Talent Objectives
  —Retain high-skilled talent in the City
  —Attract high-skilled technology professionals to the City
  —Develop medium-skilled talent in the City
  —Enhance the City with the Millennial workforce in mind

**Figure 22: Creating the Talent Value Proposition**

| Business Objective | Recommendations | |
|---|---|---|
| **Sustain** leading position in Financial Services sector | **Implement a "future needs program"** to identify future needs in each sector from a talent and business ecosystem perspective. | |
| | **Position New York City as a global knowledge hub** to help maintain New York City's position as the global financial services hub. | |
| | **Encourage cross-functional research** to leverage the presence of other sectors like health care and High Tech as well as to encourage cross-industry application of data and research models. | **Enables Diversification of the Economic Portfolio** |
| **Grow** emerging High-Tech sector | **Build and market a strong Silicon Alley brand** to help communicate the attractiveness of New York City to the High-Tech sector. | |
| | **Target and focus on niche sectors** to help build a strong High-Tech presence in sub-sectors with the highest probability of success like fin-tech, health IT, digital media, and advertising, as well as social media—sectors where New York City has a distinct advantage. | |
| | **Conceptualize a "stabilizer program" to retain start-ups,** thereby helping create more jobs in the City. | |

**New York City's "Talent Value Proposition" to Attract, Retain, and Develop Industry-Aligned Talent**

| Talent Objective | Recommendations | |
|---|---|---|
| **Retain** highly-skilled talent in the City | **Institutionalize a "future skills program"** to help build a strong industry-academia link across the education system, thereby ensuring a steady pipeline of employable talent. | |
| | **Build a City for the new-age workforce** that focuses on assisting highly-skilled talent with cost of living issues like education, accommodation, and transportation. | |
| **Attract** highly-skilled technology professionals to the City | **Make entrepreneurship aspirational** through a coordinated intervention to make young talent aware of the possibilities, communicate possible support options the City provides, and celebrate success stories. | |
| | **Establish a certification for start-ups and offer support** to emerging ventures based on their need. The certification would help create a database of start-ups in the City as well as track their evolution. | |
| | **Collaborate with industry to create "incubator-accelerator"** programs, thereby encouraging large organizations to provide financial, infrastructure, and mentorship support to start-up ventures. | **Alleviate Demand-Supply Gaps** |
| **Develop** medium-skilled talent in the City | **Incorporate a cooperative agency for skills standards** to help define specific foundational skill requirements of industry and ensure appropriate curricula and vocational education interventions to meet the demand. | |
| | **Establish a technology skill development fund** to help create and sponsor public-private partnerships focused on developing technology skills in the City. | |
| | **Design industry-aligned middle management programs** to help build middle-level managerial capabilities to oversee growth in emerging sectors. | |
| **Enhance** the City with new-age workforce in mind | **Implement a "New to New York" program** to help induct migrants to the City and its vast array of services and amenities. | |
| | **Brand New York City as a Millennial workforce city** that focuses on creating the right environment of open and collaborative working to foster productivity. | |

**New York City's "Talent Value Proposition" to Attract, Retain, and Develop Industry-Aligned Talent**

Building on the strategic framework, all initiatives must be coordinated and focused on specific outcomes. These outcomes will help New York City establish the desired Talent Value Proposition.

To illustrate how the above enablers take shape, two of them have been expanded below as examples. The following examples show how each enabler comprises of a set of key focus areas and a list of initiatives to drive these focus areas.

**Figure 23: Business Objective – Grow the Emerging High-Tech Sector**

**Focus Areas**

| Define a Silicon Alley and related propositions | Identity niche segments for focus with High-Tech sector | Attract tech startups through collaborative industry development approach | Create an ecosystem for tech startups to flouish | Ease growth–startups in New York City longer through their evolution |

**Key Initiatives**

| Build and market a strong Silicon Alley brand | Target and focus on growth in niche sectors | Conceptualize "Stabilizer" programs to retain startups |

The focus of this enabler is to help New York City attract and retain High-Tech startups. To achieve this, the City would need to create and market a value proposition that attracts startups as well as mature companies to evaluate New York City as a possible location for new operations. From our analysis, New York City has the right ingredients in terms of cost-effective talent and business ecosystem for the High-Tech sector, and should market NYC's advantages to both startups and mature companies on the West Coast.

Organizations from sectors within High-Tech might have varying needs. Therefore, the City would need to identify the sectors where it has a greater advantage and probability of success. The value proposition will need to be fine-tuned and targeted at such companies to help create focused interventions.
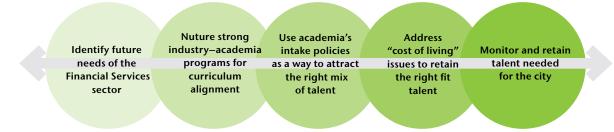
The ability to attract and nurture startups would depend on the ability of various stakeholders (private sector, government, and academia) to collaborate. A key concern is retention of startups in New York City when they reach a particular scale. The City's ability to help startups through the critical growth and stabilization phases would also help retain more jobs in the City. Additionally, as these startups grow, they would create more jobs in the middle of the talent pyramid, thus addressing one of the key concerns identified in our research.

To achieve these objectives, three key initiatives identified are:

- Further strengthen 'Silicon Alley' brand (build on High-Tech sector Value Proposition)

- Target and focus on growth in niche sectors (identify sub-sectors within High-Tech where the City can succeed)

- Conceptualize 'Stabilizer' programs to retain startups coming out of New York City (nurture successful, new ventures through their growth and sustainability phases to keep them in New York City)

**Figure 24: Talent Objective – Retain Highly Skilled Talent**

**Focus Areas**



Identify future needs of the Financial Services sector

Nuture strong industry–academia programs for curriculum alignment

Use academia's intake policies as a way to attract the right mix of talent

Address "cost of living" issues to retain the right fit talent

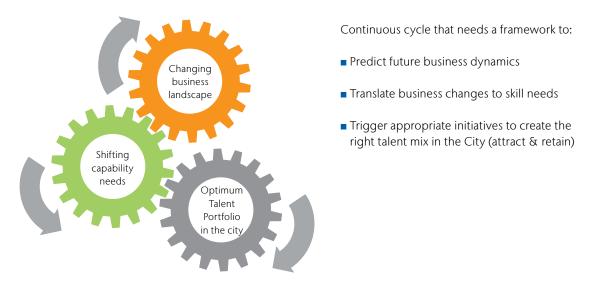Monitor and retain talent needed for the city

**Key Initiatives**

Institutionalize a future skills program

Buils a Millennial workforce city brand–cost of living

The focus of this enabler is to help New York City build a steady pipeline of industry-aligned talent. Organizations' talent needs evolve with time and economic changes. As a result, it is not enough to approach building the right capabilities in the City as a one-time exercise. The goal must be to create a framework for ongoing collaboration between all stakeholders (industry, academia, government, and current/future workforce). This collaboration will build a mechanism to predict future needs of the industry and act in a coordinated manner to adjust the City's skill mix to meet these needs (as depicted in figure 25).

**Figure 25: Talent Continuum**



Changing business landscape

Shifting capability needs

Optimum Talent Portfolio in the city

Continuous cycle that needs a framework to:

■ Predict future business dynamics

■ Translate business changes to skill needs

■ Trigger appropriate initiatives to create the right talent mix in the City (attract & retain)
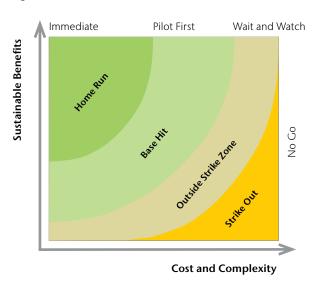
While many locations focus their efforts on attracting the right talent, retaining top talent is equally critical. Stakeholders identified the high cost of living as a top reason for why highly skilled and experienced talent is leaving the City. To achieve these objectives, two key initiatives identified are:

■ Institutionalize a Future Skills Program (identify and build the right skills and capabilities on an ongoing basis)

■ Build a Millennial workforce brand for the City (attract future talent to the City by meeting their needs and aspirations)

## Step 2: Prioritization of Initiatives Based on 'Cost and Complexity' and 'Sustainable Benefits'

Once all individual initiatives are identified, each initiative should be assessed along a cost and complexity and sustainable benefit continuum in order to effectively prioritize efforts. This exercise will reveal the relative complexity and value to the City if implemented effectively. The framework in the figure highlights how high priority initiatives are identified and implemented in full or pilot mode.

**Figure 26: Prioritization Grid**



**Cost and Complexity** provides an estimation of the scale of investments, the effort involved, and the number of stakeholders that would need to be convinced or would need to collaborate. The following parameters could be used to estimate this factor:

- Cost of Implementation — Investments estimated over a period of time;

- Time to Implement — The time from kick off through design to implementation on the ground. This provides an estimate of the number of resources required and the scale of the initiative;

- Stakeholder Buy In — The number of stakeholders involved, influence over their buy in, and need for collaboration provides an estimate of complexity;

- Regulatory Permission — The level of regulatory approvals and policy changes and whether they depend on city, state, or federal legislation are also factors that determine complexity;

- Implementation Risks — The probability of successful implementation also provides an estimate of the complexity.
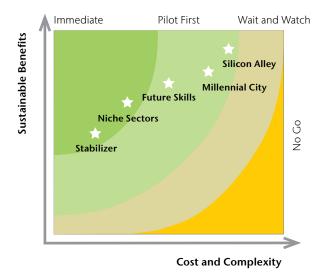
**Sustainable Benefits** provides an estimation of outcomes from the initiative. The following parameters could be used to estimate this factor:

- Improving Competitiveness – The ability of the initiative to drive competitiveness of the City and sustain its position vis-à-vis other comparator cities is critical to the long-term position of New York City;

- Attracting Investments – Whether the initiative can help attract investments into the City and to what extent it would help create demand for talent in the City, a key driver to economic growth;

- Creation/Retention of Jobs – The end objective of the talent strategy is to create and retain jobs in the City to fuel economic growth. The extent to which the initiative can support this will determine the benefits to the City;

- Improving Quality of Living – Ensuring the right talent pool is attracted to and retained in the City is determined by the quality of life the City can promise to its workforce;

- Infrastructure Development – The ability of the initiative to drive development in infrastructure is critical as these are long-term benefits the City can derive;

- Branding and Positioning – Whether the initiative can create a sustained and compelling value proposition that helps attract talent and businesses to the City.

Continuing from the enablers detailed in Step 1, the initiatives under each are evaluated and placed on the Prioritization Grid as show in Figure 27. Each initiative is assessed relative to the other initiatives for Cost and Complexity as well as Sustainable Benefit. The tables beside the grid illustrate how each of these initiatives stack up against the rest. A similar exercise needs to be carried out for all initiatives in Strategic Framework.

**Figure 27: Prioritization Grid with Initiatives**
Key takeaways from the prioritization exercise are:

■ Two initiatives that are in the 'Home Run' section and could be easily acted upon are:
   — Conceptualize 'Stabilizer' Programs to retain startups
   — Target and Focus on Growth in Niche Sectors

■ The 'Stabilizer' program is low on Cost and Complexity primarily because it is an extension to the existing incubator –accelerator programs. The program has a base platform from which it can be catapulted. Also, the benefits of this program are reasonably high because retaining startups in the City is one of the key means to create jobs across the talent pyramid.

■ Target and focus on niche sectors can also easily be acted upon because the City has a well-established business ecosystem for the High-Tech sector. Also, there are clear advantages New York City can provide for specific sub-sectors such as Financial Technology, Health IT, Digital Media and Advertising among others.

■ The Future Skills Program offers huge benefits. However, the program is slightly more complex to execute when considering multiple sectors' needs. As a solution, the program could be piloted with one sector like Financial Services or even a sub-sector like Big Data Analytics. This will help the City learn and fine tune the program before scaling up.

■ The two branding initiatives have the highest benefit but are long-term programs. The success of these programs depends to a large extent on the effectiveness of other programs. For example, the 'stabilizer' programs as well as the focus on niche sectors would help build a strong 'Silicon Alley' brand. While the brand has been spoken about for many years, there is need for a formal organization to build and promote the brand in a sustained manner. Based on stakeholder feedback, New York City lacks a High-Tech trade body for established companies that can represent the industry, enable a collaborative business environment and advocate for initiatives that benefit the broader industry in New York City and in the nation. Industry bodies of this construct exist on the West Coast as well as globallyand have been instrumental in enabling High-Tech sector growth. Given that a large number of High-Tech companies are smaller in scale and require support across areas such as infrastructure, marketing and business development, talent access, access to funds, government relations, etc., an industry association can enable an ecosystem to help member organizations through their growth journey. Examples of similar efforts are listed on the following page.

■ The long-term initiatives could be broken down into smaller projects that can be accomplished in a shorter duration with fewer investments.

Overall, the prioritization grid helps determine the right set of initiatives on which to focus. Additionally, the assessment across Cost and Complexity helps define key risk areas that need to be monitored while initiatives are being implemented.

# Examples of Technology Industry Associations

Following are two examples of very effective industry associations from India and Brazil that have worked extremely well.

**National Association of Software and Services Companies (NASSCOM)[55]**
NASSCOM is a premier trade body and chamber of commerce of the IT-BPO companies in India representing over 1300 members – including Indian companies, multinational companies and in-house back office centers of global companies.

NASSCOM's key objectives:
1. Set strategic direction for industry
2. Policy advocacy for industry growth
3. Best practices, sharing & collaboration
4. International partnerships & affiliation
5. Workforce development
6. Sustainability

**The Brazilian Association of Information Technology and Communication Companies (BRASSCOM)[56]**
BRASSCOM represents some of the most important and influential companies in the Brazilian ICT industry, and has over the past few years served as a link between the private and public sectors.

BRASSCOM's key objectives:
1. To promote and support the use of Information and Communication Technologies (ICT) as an engine of growth, innovation and competitiveness in Brazil;
2. To represent and develop the ICT sector in Brazil, acting as an interlocutor with governments, NGOs and other representatives of civil society;
3. To participate actively in the process of getting Brazil on the global IT market, facilitating trade relations, promoting the sector to attract new investment, and supporting international negotiations by the Brazilian government.

There is potential to build a High-Tech industry association or interest group, either under the aegis of an existing business organization or as a separate entity, that would help set the strategic direction for the industry, provide policy advocacy, assist in workforce development and act as a bridge between City Administration and the industry.

Regardless of the approach taken, our research indicates that a major focus of this industry association should be in conjunction with our recommendation for the stabilizer program. A focus on organizations that have successfully exited the start-up phase but have not yet become a mature organization would greatly benefit established but small firms going through the growth phase.  As for benefits to the City, these firms are constantly assessing their competitive landscape and use location as key criteria for obtaining and retaining top talent to fuel their growth. Having industry involved in creating and supporting an organization to help companies through these growing pains is essential to the competitive advantage and long-term success of an overall industry within a city.

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[55] www.nasscon.org
[56] www.brasscom.org.br

**Cost and Complexity (Relative Assessment)**

| Enablers | Initiatives | Cost of Implementation | Time to Implement | Stakeholder Buy In | Regulatory Permissions | Implementation Risks |
|---|---|---|---|---|---|---|
| **Business Perspective– Grow the Emerging High-Tech Sector** | Build and Market a Strong Silicon Alley Brand | Medium | High | High | Medium | High |
| | Target and Focus on Growth in Niche Sectors | Low | Low | Medium | Medium | Medium |
| | Conceptualize 'Stabilizer' Programs to Retain Startups | Medium | Low | Low | Low | Low |
| **Talent Perspective– Retain highly Skilled Talent in the City** | Institutionalize a Future Skills Program | Medium | Medium | High | Low | High |
| | Build a Millenial Workforce City – Cost of Living | High | High | Medium | Medium | Medium |

Note: Each initiative is assessed relative to other initiatives on the parameters mentioned.

**Sustainable Benefits (Relative Assessment)**

| Enablers | Initiatives | Improving Competitiveness | Attracting Investments | Creation/ Retention of Jobs | Improving Standard of Living | Infrastructure Development |
|----------|-------------|---------------------------|------------------------|----------------------------|------------------------------|----------------------------|
| **Business Perspective– Grow the Emerging High-Tech Sector** | Build and Market a Strong Silicon Alley Brand | High | High | High | Medium | High |
| | Target and Focus on Growth in Niche Sectors | High | High | Medium | N/A | Medium |
| | Conceptualize 'Stabilizer' Programs to Retain Startups | Medium | Medium | Medium | N/A | N/A |
| **Talent Perspective– Retain highly Skilled Talent in the City** | Institutionalize a Future Skills Program | High | Medium | High | High | N/A |
| | Build a Millenial Workforce City – Cost of Living | Medium | N/A | Medium | High | High |

Note: Each initiative is assessed relative to other initiatives on the parameters mentioned.

## Step 3: Design and Implementation of Initiatives

Once the most impactful initiatives are defined, project charters for each initiative and involvement of relevant stakeholders follows. Each charter would contain:

- Objectives
- Outcomes
- Investments
- Resources
- Activities
- Owner
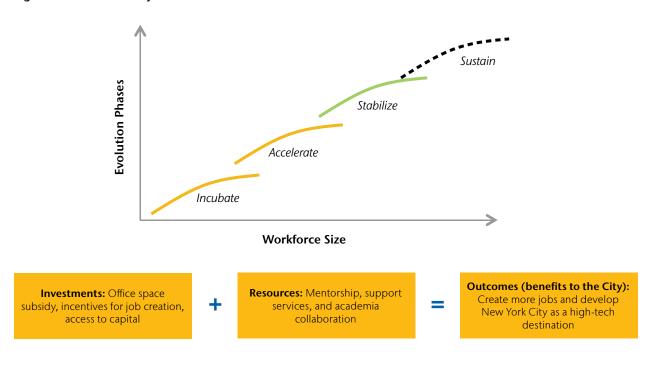- The role of other stakeholders

Picking up two examples from the grid in Step 2, an indicative plan of action is provided for the initiatives.

### Initiative 1: "Stabilizer" Programs to Retain Startups

The City has been successful in attracting start-up ventures. A greater challenge is stabilizing and sustaining these start-ups longer into their evolution cycle. The objective of the program should be to retain start-ups in New York City longer into their evolution cycle in order to create and retain more jobs at high to medium and medium levels of the talent pyramid.

By establishing a stabilization framework for these organizations to clearly identify the needs and challenges they face, develop a policy framework that could include incentives and subsidies, and ensure they can navigate existing resources, we believe these start-ups have a greater chance for success. With proper support, these organizations would be poised to contribute positively to the talent value proposition and, ultimately, the success of the City as a whole.

**Figure 28: Sustainability Model**



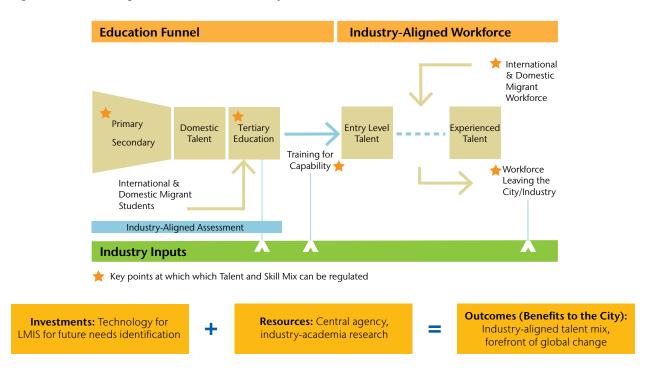| **Investments:** Office space subsidy, incentives for job creation, access to capital | + | **Resources:** Mentorship, support services, and academia collaboration | = | **Outcomes (benefits to the City):** Create more jobs and develop New York City as a high-tech destination |

## Initiative 2: "Future Skills" Programs

A centralized platform established by New York City could coordinate various talent attraction, retention, and development activities across sectors within the City to address the talent supply and demand gap. This program would benefit by including stakeholders from industry, academia, and the administration. The mandate could include building on the work of the Labor Management Information System (LMIS), currently housed at the CUNY Graduate Center. Our recommendation is that this database of skills available in the City and future skills requirements be augmented to be more demand-driven to build industry relevancy in the City's labor market. It is important to note that having data that includes career progression is critical in order to understand where job seekers and movers migrate.

This will help drive talent supply to stakeholder demand on both a short- and long-term basis. Aon has done studies using our labor databases of over 20 million participants to track job migration and career progression to help organizations understand both talent supply and demand needs. We understand that expanding access to the Wage Reporting System is an initiative currently underway and supported by many stakeholders. This expanded access will provide that important demand data. We believe this is an important component in moving workforce development/education-aligned initiatives forward.

**Figure 29: Talent Alignment for Future Industry Demand**

# In Summary

New York City has an opportunity to meet the growing talent and skill demands of today's organizations, position itself to maintain its preeminent status as a global leader, and far surpass the global cities that are competing for share of talent and businesses.

Key inputs to the study came from what stakeholders alluded to as strengths, weaknesses, opportunities, and risks for New York City. It is fair to assume that issues unearthed are known to many stakeholders and some of the recommendations have been discussed, piloted, and/or implemented in some shape or form. However, what sets this study apart is:

■ Coverage of the study.

■ A unique model used to consolidate and evaluate the City's competitiveness.

■ Linkages drawn between how organizations view sustainability and what New York City can learn from this.

The recommendations, frameworks, and examples summarized throughout the final report have been used successfully, time and again, to build effective talent strategies for some of the most complex global organizations. By applying these methodologies to solve the City's skills gap, New York City can work to retain its top competitive position into the future.

Building on these points, we believe the key imperatives for consideration are:

■ Holistic Vision and Focused Initiatives: The needs of every sector are unique. A vision that helps address all needs is critical. However, implementation must be focused on driving specific outcomes for a sector or stakeholder group.

■ Collaborative Thinking and Role-based Execution: Consensus in design and clarity in terms of roles and responsibilities.

■ Monitor Progress and Evaluate Outcomes: A central agency to own the City's talent value proposition with the mandate to manage all initiatives, monitor their progress, and evaluate outcomes against predefined parameters.

■ Iterative Improvements and Constant Upgrades: Business dynamics and the macro environment change constantly. Understanding future needs and recalibrating initiatives to address these will help build a sustainable model.

The ability to stay ahead of the curve will depend largely on coordinated actions between city government, industry, and academia. To remain a "destination of choice" for years to come, the City should continuously evaluate its position and align its talent value proposition to the needs of stakeholders.

We encourage you to think about the six talent drivers, our findings and recommendations, and how they apply to your team, your organization, your association, and the City of New York. Together we can work to strengthen our solid resource base and make New York City an even more vibrant and desirable destination for businesses and talent for years to come.

**AON** | Partnership for New York City

## Acknowledgements

We would like to thank the following individuals for their contributions to the development of this report:

## Contact Us

If you have questions or would like more information about this report please contact:

## About the Partnership for New York City

The Partnership for New York City's mission is to engage the business community in efforts to advance the economy of New York City and maintain the City's position as the center of world commerce, finance, and innovation. Through the New York City Investment Fund, the Partnership contributes directly to projects that create jobs, improve economically distressed communities, and stimulate new business creation.

## About Aon

Aon plc is the leading global provider of risk management, insurance and reinsurance brokerage, and human resources solutions and outsourcing services. Through its more than 61,000 colleagues worldwide, Aon unites to empower results for clients in over 120 countries via innovative and effective risk and people solutions and through industry-leading global resources and technical expertise. Aon has been named repeatedly as the world's best broker, best insurance intermediary, reinsurance intermediary, captives manager and best employee benefits consulting firm by multiple industry sources.

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