

INTRODUCTION

Genuine crises almost always exploit longstanding systemic vulnerabilities. With an economy larger than many nations, New York City's reliance on its status as a global financial center has always created substantial economic vulnerability to large scale, systemic shocks to those financial markets. Those challenges became, once again, obvious in the aftermath of the financial crisis of 2007. However, unlike its reactions to previous market upheavals, which the city tended to shrug off

as economic cycles over which it had no influence, this time New York took action. Using the focus provided by crisis environments, the City has emerged with a more diversified economy due to preparations made before the economic crash and strong leadership in response to the crisis. The City exploited the crisis as an opportunity to promote economic diversification, particularly in the growth of the technology sector.

Overreliance on a single industry, no matter how large, makes urban economies susceptible to adverse shocks. The financial crisis that led to the collapse or sale of New York City-based financial institutions including Bear Stearns, Lehman Brothers, and Merrill Lynch could have devastated the New York City economy; when the crisis hit in 2007, the financial services industry made up 40% of Manhattan's payroll. However, as the American economy remained sluggish in 2009-2011, the City emerged from the crisis stronger than before, with a **diversified economy and growth in new sectors** that will continue to drive long-term economic growth.

The City's need for diversification was discussed long before the economic crisis. Mayor Michael Bloomberg, a tech entrepreneur himself, recognized the need for the growth of new industries. **The financial crisis provided the impetus for the City to promote systemic change, energize entrepreneurship, and attract new companies and talent.** While federal financial recovery programs helped prevent total collapse of the financial sector, Mayor Bloomberg's "Five Borough Economic Opportunity Plan" in 2009 included the **NYC Economic Diversification Program**, described as "a comprehensive, long-term strategy to build a local economy that provides a wide array of opportunities to New Yorkers with varied skills and backgrounds, while simultaneously lessening dependence on the performance of any one sector." Among other initiatives, the City has implemented the following:

- **Applied Sciences Campus:** New York City partnered with

Cornell University and Technion University to establish an applied sciences campus on Roosevelt Island. The \$2 billion campus will further solidify New York as a leader in science and engineering and develop 21st century talent.

- **Tech Competitions:** The New York City Economic Development Corporation's BigApps NYC Competition and Take the H.E.L.M. Competition provide cash prizes to tech innovators.
- **NYC Entrepreneurial Fund:** The \$22 million fund provides New York City startups with early-stage capital.
- **Tech Incubators:** The New York City Economic Development Corporation has supported incubators and other co-working spaces, such as the DUMBO incubator and Varick Street Incubator, which offer affordable space and services to start-ups.

New York City startups including Foursquare, Gilt Group, Kickstarter, Tumblr, and Etsy have grown rapidly. Around 2010, New York City surpassed Massachusetts in venture capital funding for internet and tech start-ups, and is now second only to Silicon Valley. Well-established tech companies, including Google and Facebook, have also recognized New York City's strategic importance and greatly expanded their presence. In 2010, Google purchased a New York City office building for almost \$2 billion.

The effects of economic diversification and the growth of the tech sector have been far-reaching. As of 2013, there were 291,000 workers in the New York City tech ecosystem, earning over \$33 billion in wages and representing 7% of total New York City employment.



18% of growth in the New York City tech ecosystem since 2003

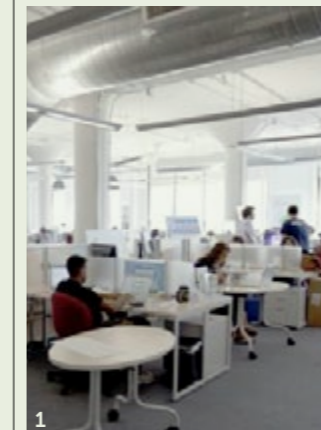
Since 2003 the **New York City tech ecosystem grew by 18%** with the addition of 45,000 jobs. Comparatively, over the same time period, the finance and insurance industry grew by only 1%, adding only 3,100 jobs.

At the same time, the financial sector has not turned its back on New York City. The securities industry has continued to be a strong driver of the New York City economy, accounting for more than 20 percent of earnings in the City, higher than any other single industry. In a striking synergy between old and new, over half the jobs comprising **New York's tech ecosystem are integrated within other sectors**, such as finance, where tech continues to modernize business operations and inspire the creation of new goods and services.

CONCLUSION

New York City is not unique in its efforts to promote economic diversification nor is it the only city experiencing a digital renaissance. However, the City channeled the financial crisis into an opportunity to invest in new industries and implement large-scale economic development initiatives rather than panicking into large-scale local financial support for the securities sector. Such a response required careful planning, targeted investment, and visionary leadership.

1. New York City Varick Street Incubator



CREDITS AND LINKS

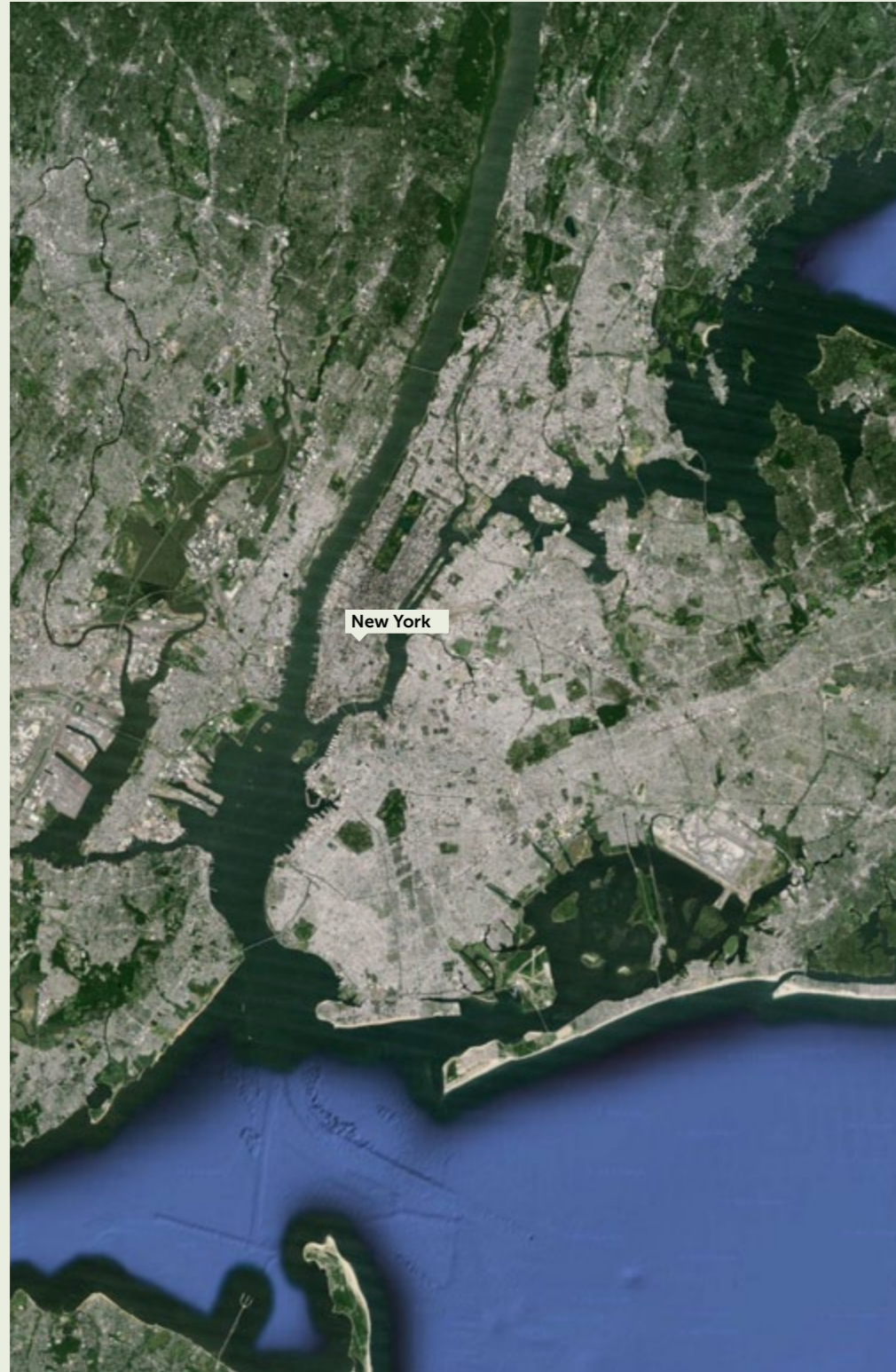
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The New York City Tech Ecosystem



NEW YORK CITY



COORDINATES
40°40.2'N 73°56.4'W
 ELEVATION
33 ft
 AREA
468.5 sq mi
 POPULATION
8,336,697
 DENSITY
27,550/sq mi
 SETTLED
1624

The City exploited the crisis as an opportunity to promote economic diversification, particularly in the growth of the technology sector

2. Cornell Technion rendering

3. Google New York City headquarters



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45,000

new jobs were created in the New York City tech ecosystem since 2003

\$2

billion is the price paid by Google to purchase their office building

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NEW YORK CITY, USA

ECONOMIC RECOVERY THROUGH DIVERSIFICATION

In collaboration with MIT

SA+P

senseable city lab:::