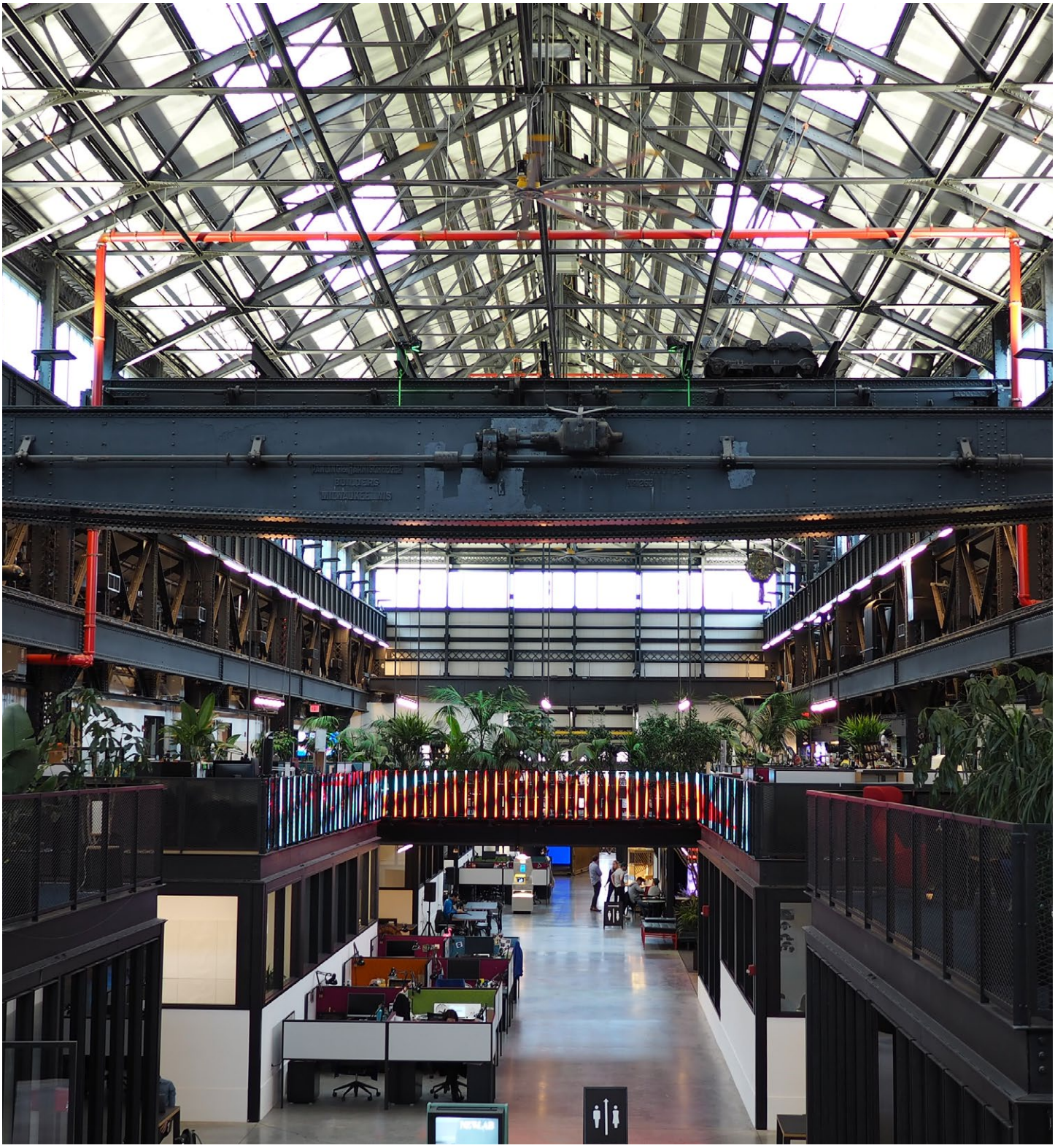
NEW LAB BROOKLYN

UNIVERSITY OF MARYLAND
COLVIN INSTITUTE OF REAL ESTATE DEVELOPMENT
2019 CASE STUDY CHALLENGE **TEAM# 30**



Executive Summary

Brooklyn New Lab Development is an innovative multi-disciplinary technology center that launched in 2016. Located in the Brooklyn Navy Yard, the development boasts an 84,000 sqft space in the southwest of the building 128. The development of translating the vision of encapsulating a new understanding of technology manufacturing and creating jobs for economic resilience, especially in New York City.

The idea of the development was started after the global financial crisis hit in 2008-09. The administration at that time determined to find a new source of economic growth. The technology sector was proven to be resistant to an economic shock. It was proven by the highest growth of jobs compared to other key industry sectors that support New York City economic growth.

The New Lab development is a Private Partnership Project between the New York City government and the private sector, Macro Sea. Up to this time, the New Lab Development has fostered more than 100 companies and attracted many venture capitalists. Without a doubt, the development has contributed to the NYC government's effort to achieve economic sustainability.

PROJECT OVERVIEW

Name
New Lab

Location
Brooklyn, NY

https://newlab.com/

Project Type
Office/ Co-working Space

Project Area
84,000 Sqft.

Development Cost
49.75 Million

Public Development Partner
Brooklyn Navy Yard
Development Corporation
Brooklyn, NY

https://brooklynnavyyard.org/

Private Development Partner
Macro Sea
Brooklyn, NY

http://macro-sea.com/

Architects/ Interior Designer
Marvel Architect
New York, NY

https://marvelarchitects.com/

Construction Consultants
DBI
New York, NY

http://cc.dbinyc.com/

Brooklyn Navy Yard were decomissioned and changed to be a industrial site focusing on light manufacturing and technology.

Context and Overview

In the aftermath of the Global Financial Crisis of 2008-2009, New York City began to rethink the over-reliance of its economy on the securities industry. The then Bloomberg administration realized the need for economic diversification to achieve economic resilience in the future. One of the sectors identified for promotion was technology, an industry that showed resistance to the economic downturn and posted robust employment growth both during- and post-recession. The technology sector umbrella included related industries of manufacturing, computer systems, software development, internet, and biotechnology.

After the recession, the administration acted with determination to step-up its strategic efforts and nurture a technology industry in the City. One of the major strategic decisions was to support the formation of Brooklyn Tech Triangle which was to be the new epicenter of growth for technology-related activity in the City. The Triangle was purported to answer one of the biggest challenges that technology start-up creation faces – the access to affordable workspace. In addition, it aimed to create the collaborative ecosystem of an agglomeration economy and help the industry flourish.

The Brooklyn Tech Triangle is formed by three business district areas – DUMBO, downtown Brooklyn, and an ex-naval shipbuilding facility, Brooklyn Navy Yard. The Navy Yard served as America's premier naval shipbuilding facility from 1801 for 165 years. This military industrial facility was decommissioned in 1966 and the 225 acres were sold to the City of New York. The City, through the Brooklyn Navy Yard Development Corporation, works with the private sector to kindle the tech industry while retaining the manufacturing and industrial nature of the area.

Brooklyn New Lab is developed as one of the most innovative real estate projects in the Yard. In addition to incubating tech-based start-ups by providing access to workspace, New Lab is committed to supporting entrepreneurship in emerging technologies by providing tools, mentorship, and a like-minded community. Housed in a revitalized warship machine shop, the Brooklyn New Lab is poised to contribute to the future growth of the technology industry and shift from "launching ships to now launching businesses".

Developer Team

Brooklyn Navy Yard Development Corporation

The Brooklyn Navy Yard Development Corporation (BNYDC) was established in 1971 as a non-profit corporation to serve as the real estate developer and property manager of the Brooklyn Navy Yard. It acts on behalf of the City of New York, the owner of the Yard, as the landlord, public partner of the development, and estate manager of the Navy Yard. The primary mission of BNYDC is to fuel New

York City's economic vitality by creating and preserving quality jobs, growing the city's modern industrial sector and businesses, and connecting the local community with the economic opportunities and resources of the Yard.

Macro Sea

Macro Sea is a real estate development firm established in 2009 that focuses on conceptual realms and the built environment. Based in Brooklyn, New York, Macro Sea designs, builds, and operates projects for people and places that it cares about, and has robust experience in historic preservation and adaptive reuse. David Belt, the founder of Macro Sea, initiates projects with interdisciplinary ideas through a variety of experts. The company serves as the entrepreneurial framework for his projects, not only in the United States, but also in Europe.

"Our core mission is to conceptualize and build creative interim use projects thattransforms and energizes our surroundings."

– David Belt, Founder & Executive Director, Macro Sea

Marvel Architects

The New York City based Marvel Architects is a solution-driven design practice that incorporates context and nature into their projects. It is dedicated to shaping public space, designing for institutional growth, and expanding economic and creative opportunities for a wide range of clients. Using interdisciplinary teams, Marvel creates spaces of engagement that are integrated with sustainability and technology across affordable housing, cultural institution, high-end residential, and hospitality projects.

DBI

Founded in 2002, DBI is a construction consultant and management company based in New York City that manages pre-development, entitlements, construction, and closeout phases. It engineered the Public-Private Partnership between the developer and public partner and led the ideation of the project from conceptual planning and financing through completion. DBI also secured grants from state and city agencies and EB-5 fund equity investments to finance the project.

" **The Navy Yard is clearly a hub for new, creative, and significant technology that seats New York at the forefront of high-tech job creation. This partnership and this new space will greatly benefit our community by utilizing the local talent pool and keeping Brooklyn on the forefront of the tech industry. "**

- Governor Andrew M. Cuomo

Building 128 was planned to be Green Manufacturing Center. It included New Lab and another major tenant.

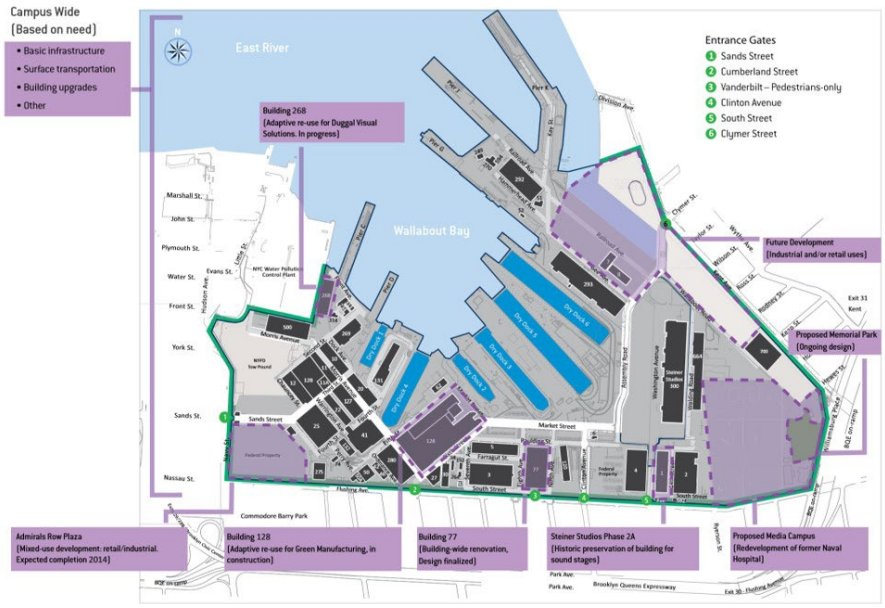
Development Vision

The Brooklyn New Lab development was inspired by the grand vision of the New York City government to foster advanced technology research and manufacturing thereby creating jobs for economic resilience. The empty shell of Building 128 became the canvas for the innovative developer Macro Sea to translate the vision into a state-of-art, interdisciplinary facility designed to nurture entrepreneurs working in emerging industries that meld together manufacturing and advanced technologies.

Macro Sea approached the project with the multidisciplinary ideals of famous schools such as Bauhaus and Black Mountain College to create a collaborative workspace that were not the typical Silicon Valley stereotype. The developer recognized that a makerspace or hackerspace could not provide for hardware-focused technology companies, especially given the complexity and resources required by such firms. Instead, they visualized filling this void and pioneering the concept of a collaborative space where such firms could have access to shared hardware resources such as prototyping shops and a range of advanced manufacturing tools that they could not necessarily afford to have on their own.

New Lab was to provide entrepreneurs with extensive technology and manufacturing resources, capital, and leadership. These resources were to support entrepreneurs to conceptualize, build, and deploy formative technologies within industries such as Artificial Intelligence, Robotics, Blockchain, Energy, Connected Devices, Urban Tech, AgTech, MedTech, and more. Another unique value proposition was that such a space would be a specialized hub for such companies and would be an ecosystem of its own. Incubated companies would be surrounded by their peers that could provide valuable connections and help pool knowledge across disciplines

Ultimately, the idea of this space was to not only support existing jobs, but to create many, many more by providing new companies the space to expand and survive post-startup growing pains. The City looked to New Lab to help it meet its lofty goal of creating 15,000 jobs in the Navy Yards by 2020.



Under Bloomberg Administration, redevelopment plan of Brooklyn Navy Yard was executed to create Eco-Industrial Park

"We want to be the catalyst for a whole range of industries that support the firms in New Lab – even design and advertising. New York is never going to be able to compete on cheap wages, but as manufacturing becomes more locally distributed we can absolutely compete in terms of innovation and design"

Market Analysis

This project was supply driven with the larger intention of diversification of the city's economy. In 2012, after recovery from the Global Financial Crisis, New York City jobs in the technology sector was less than 2.5% of its total job market. In comparison, the technology jobs in San Francisco and Seattle were 13% and 10.2% respectively of their total job markets.

However, even during the recession and recovery (2008-12), the technology industry in New York City grew by almost 30% while other sectors experienced just single digits, if not negative growth, while overall city growth was only 3.5% (see exhibit 1). This growth, supported by government's backing to spur the development of the sector, promised to provide adequate, if not more, demand for the project. In addition, the sector was in high demand as it is one of highest paid sectors with an average wage of $92,500.

In terms of workplace geography distribution, 80% of technology jobs in New York State are concentrated in the New York City across 7,600 technology and innovation companies. Of this, 86% are concentrated in Manhattan, while Brooklyn had a worker concentration of only 8% (see exhibit 2). However, the rapid tech industry growth in Brooklyn between 2011 and 2016 created 1,300 additional innovation and technology-based companies.

With respect to the real estate market, the tech sector has been a major driver for commercial space demand in Brooklyn. The needs for office space in the borough have increased sharply such that in 2015, the vacancy rate in Brooklyn was lower than that of Manhattan. Manhattan's vacancy rate was recorded at 4.7% in Midtown and 9.3% in Lower Manhattan, while Brooklyn recorded vacancy rates as low as 3.2%. With such high demand for space, the New Lab project could meet only 15% of the space inquiry and was assured a space in the market.

Exhibit 1: NYC Job Growth by sector

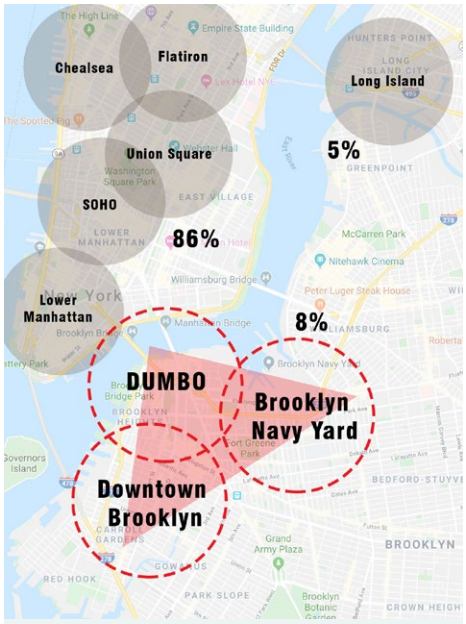


Exhibit 2: Tech Triangle

Functional spaces in New Lab consists of Flexible desks, Co-working spaces, conference rooms, open-private studios, private studios, fabrication lab, event space, and cafe.

Project Description

The New Lab adaptive reuse project is a public-private partnership between BNYDC and Macro Sea. The project uses 51,000 square feet on the southwestern part of Building 128 to create 84,000 square feet on multiple levels to cater to incubator spaces for new start- ups involving with manufacturing technology.

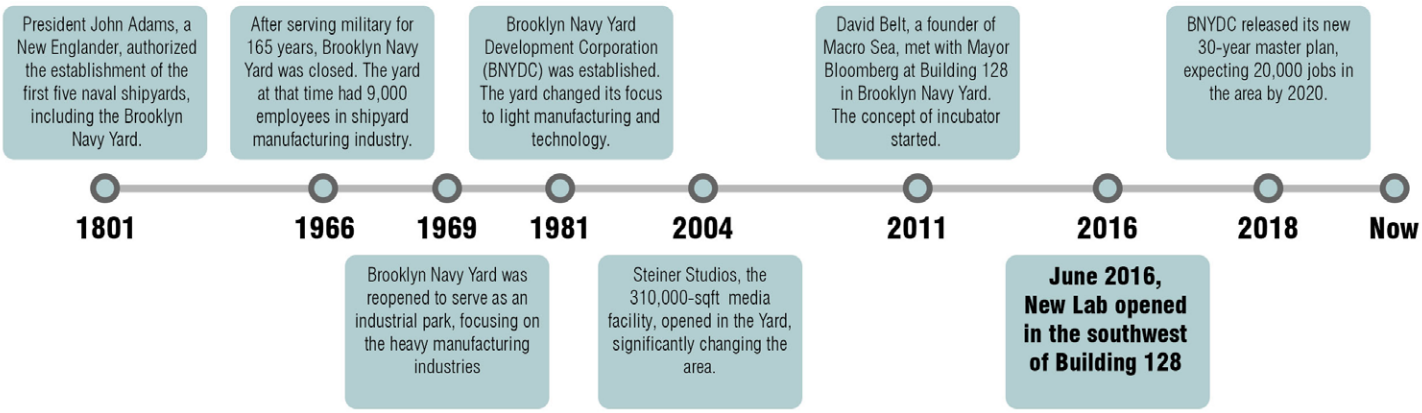
As per the visioning of the project, the spaces provided in New Lab are to encourage people and firms to communicate and exchange their opinions thereby creating an agglomeration of talents in manufacture and technology. Various types of workspaces, from flexible desks to private offices, are provided to support specific needs of each tenant. The most important facility of New Lab, that would make it different from any other co-working space, is the Fabrication Lab – a facility to help start-ups build physical prototypes. An event area was also needed to assemble people for conferences, receptions, or inspirational talks from CEOs of other successful start-ups.

Macro Sea concluded that New Lab would consist of **8 functional spaces**:

- **Flexible spaces**: hot seats with fully flexible desks that anyone can use at any time
- **Co-working space**: enclosed working space open to anyone that was convenient to focus on work, while also being available to discuss and collaborate
- **Open private studios:** open private spaces for specific companies that need private desks
- **Private studios:** enclosed private spaces for specific companies that need private offices
- **Conference rooms:** private spaces for team discussion
- **Café:** recreational space where people from different companies can break-out
- **Event space:** suitable for conferences, receptions, and inspirational talks from internal and external speakers
- **Fabrication lab:** shared fabrication facilities such as laser cutting, 3D printing, wood and metal workshops etc.

New Lab helps incubate high-potential start-ups and connect them with high-profile companies to provide them with future financial support. The building is open 24/7 to tenants without any additional fee, providing flexibility to the start-ups to take full advantage of the various spaces.

Site Description



Timeline of Brooklyn Navy Yard

The Brooklyn Navy Yard has a long history that evolved over the past 218 years. The 225-acre yard started serving as a key defense facility back in 1801 and was considered the greatest naval shipyard manufacturing facility during the World War II. It hosted 70,000 employees at the time and actively provided a significant number of manufacturing and industrial jobs even after the war. The Brooklyn Navy Yard was decommissioned in 1966 and sold to New York City.

The Navy Yard reopened as an industrial park that was managed by the Commerce Labor and Industry in the County of Kings (CLICK) but failed due to the closures of two major tenants. In 1987, the yard, led by Brooklyn Navy Yard Development Corporation (BNYDC), began to diversify the tenant base to small-to-mid-sized businesses. Infrastructure and public transportation were gradually incorporated into the area to allow it a continued growth and expansion since then.

Before the decommission, the industrial neighborhood around the Navy Yard, from its boundary right up to DUMBO, had substandard worker housing. This mixing of uses was due to the lack of a zoning plan that separated the residential neighborhoods and industrial sites. Furthermore, the failure of the first redevelopment project in the 1980s, in addition to the generally poor state of the area, resulted in extreme social unrest, crime, and poverty. The potential redevelopment led by BNYDC in the 2010s was, therefore, fully supported by the neighborhood.

Brooklyn neighborhood is one of the loactions which have the highest growth in technology.

Building 128 was a one-story 250,000 square feet machine and erecting shop, with heavy machinery and movable cranes for ships. The building, located at Morris Avenue and Sixth Street, near the Cumberland Street entrance, was built with a steel structure and a double-level high gable-roof with glass openings in-between. The steel structure of the former shipyard building provided a flexibility of design, as it could bear the heavy load from additional structures and mechanical work. The high ceiling gave an opportunity to build and addition floor and mezzanine level. The high quality of interior space provided a great potential to change uses.

The building, however, was on the brownfield land with most parts of the original building contaminated. During World War II, the use of asbestos, lead paint, solvents, and other heavy metals like chromium that were in use in the ship building and repairing process contaminated the area. The redevelopment of the building needed a stringent remediation process to get rid of heavy metals in the original floors and interior walls. BNYDC, as the master developer and public partner of the development, took on this task and provided Macro Sea with a new core while preserving and remediating the outer shell and metal crane inside the building thereby facilitating historical preservation tax credits for the private partner.

Entitlement Issues and Approval Difficulties

Brooklyn Navy Yard is located in the manufacturing zone M3 that permits development from offices to heavy industrial buildings. BNYDC wanted to retain this flexibility and specialty of this zone although other industrial sectors in New York City were changed to residential zones that generate higher rent for spaces. The original zoning was therefore aligned with the proposal of the redevelopment. Furthermore, as previously mentioned, surrounding neighborhoods supported the redevelopment of the Brooklyn Navy Yard as an employment hub since its success would consequently raise the living quality of the entire area.

Despite the ease of the zoning issue, the New Lab development had several approval difficulties for both the public and private sides. The original building was built during the rapid expansion of the shipyard under naval and federal control and did not comply with building codes. Moreover, the ship manufacturing and assembly process caused significant heavy metal contamination of the building. The public-private partnership between BNYDC and Macro Sea needed to work together to remediate the building and create a safe environment for future users.

Public partner approval process

BNYDC facilitated the redevelopment by taking responsibility of the contaminated core and shell of Building 128. The complex remediation process typically took two to three years and needed involvement of multiple governmental agencies, including the City and State of New York, as well as private consultants and testing labs. The process was more complicated in this redevelopment, as the building was designated for the landmark preservation for the use of historic preservation tax credits, and therefore needed approval from the New York City Landmark Preservation Committee. BNYDC ended up cleaning the building by removing all floor and exterior walls, leaving only foundation, structural frame, and historical crane. The corporation re-cladded the wall, change all MEP systems, and handed the completed core and shell over to Macro Sea.

Private partner approval process

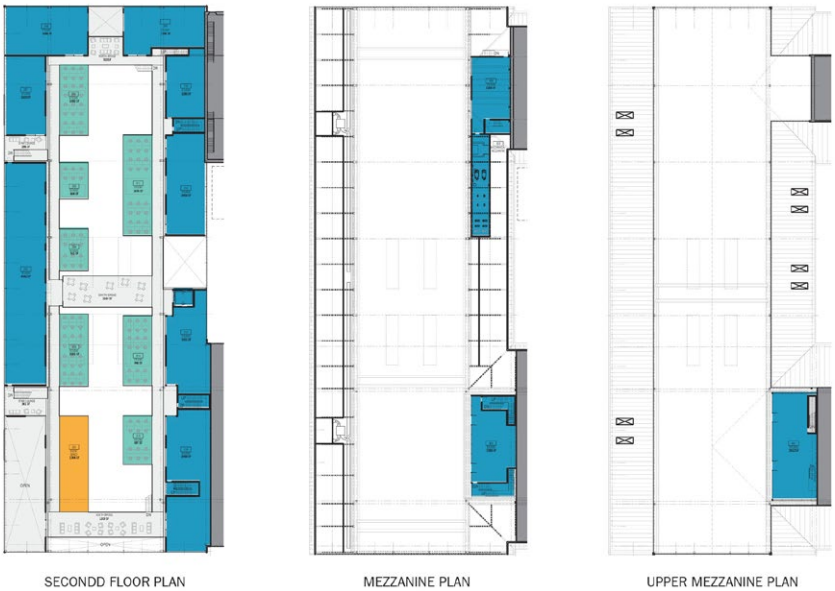
Macro Sea also faced challenges in getting approval from the Department of Building Code, Landmark Preservation Committee, and Small Business Services (SBS). Building codes from Department of Buildings (DOB) intended to ensure the safety of users in the building and necessitated fire protection system and basic design aspects. This approval was relatively straightforward. However, the fact that New Lab would include members from many small companies in many subcategories created the difficulty to file the approval for SBS, which controls business districts in the five boroughs of New York City. Furthermore, all the changes of the building had to be approved by the Landmark Preservation Committee. Macro Sea complied with this by establishing a general contracting arm of the company to go through the sophisticated process and completely holds New Lab's building permit.

Building Analysis and Design Features

Collaborative spaces

The main concept of planning New Lab building was to create supportive spaces for collaboration. The core circulation in the middle plays a significant role in encouraging tenants from different firms to see others' activities happening in the building. The full height glass doors and windows, linking the main circulation to event spaces and co-working spaces, help create the close connection among these shared spaces. High ceiling cathedral-like spaces and mezzanine with a void on second and third floor allowed people to look through the vertical spaces, creating an environment of agglomeration in the center of the building.

Moreover, various functions of working spaces supported different kinds of collaboration. Tenants could use flexible desks when they wanted to work in an open environment. They could choose co-working desks in an enclosed room to be more private when they needed to discuss with their team members. Meeting rooms and common spaces also allowed tenants to use freely. They could show their new prototypes in the common area and gain comments from other talents in other firms.



SECONDD FLOOR PLAN

MEZZANINE PLAN

UPPER MEZZANINE PLAN

Private spaces

While the collaborative spaces are the main feature of the building, private spaces are necessary to provided. Contrast to the public spaces in the middle of the main hallway, the private spaces are located at the outer edge of the building on all three floors. The multi-level of privacy creates the opportunity for the tenants to use the space flexibly based on their needs and activities.

High Quality of working spaces

Double-level gable roof of the shipyard building provided indirect natural light through the gap between levels, increasing quality of working spaces in New Lab. With this feature, plants could be added to all common spaces to create a green natural environment and liveliness. Besides, partitions and walls in New Lab were all anti-sound reflecting materials, which prevented echo and disturbing sound although many people assembled in one big space. Thus, New Lab intended to make the best quality of the environment for working together by using proper space planning and materials.

Historical Preservation

Characteristics of the original shipyard provided opportunities to design new interior space flexibly. Heavy-duty cranes, which could bear loads of ship more than 4 tons, held mezzanine floor linking left and right sides of the building together without additional columns on the first floor. Furthermore, high ceiling spaces allowed the development team to add second floor and mezzanine, increasing more usable spaces.

As it was a heavy industrial building, the contaminated building elements needed to be removed and replaced with new clean floors and walls. The original steel-structured building was re-cladded with new materials and IGU glass.

New Lab took advantage of attributes of this historical building efficiently. The new interior helps add value to the old shipyard building, and the historical preservation tax credits benefit the developer.

Sustainability features

New Lab is one of the LEED Silver-certified Green Manufacturing Centers in Brooklyn Navy Yard. The main sustainability features in the building include:

- Historical preservation: Adding value to an unused historical building helps reduce the energy consumption and waste from tearing down the old building and rebuilding the new one.
- Environmentally friendly materials: The building's shell was re-cladded with environmentally friendly materials and the IGU glass, which can reduce heat conduction by using double- layer glass with Argon gas in-between and Low-E coating inside. The insulating feature of the materials results in energy saving in the long run.
- Energy-efficient MEP system: Floor heat radiance system helps the building use energy efficiently, as it provides warm radiance from the floor where people stick to and ignores unusable space below the high gable roof.
- Environmental awareness: The main focus on green manufacturing and urban technology, such as urban farming and shared bikes, creates awareness of the environmental effects to community. Those effects would be applied to the thoughts of future technology and manufacturing.

Project Financing

The project's total cost was $50 million, a significant portion of which was financed through New York State and local government funding packages, local development organizations, city council grants and tax credits. Financing for the project was complicated because Most of these financial benefits came in at different times, which required the developer to use bridge loans intermittently.

Financing was also particularly challenging as most of the tenants were startups and had no credit history. Typically, regular commercial projects try to lease their space to the highest credit rated tenants, so that they can fulfill the financers requirements. In this case, however the developer also resorted to raising half million dollars through crowdsourcing (Fundrise) at one point of time.

The Brooklyn Navy Yard (BNDYC) developed the core and shell of the iron skeleton, which costed about $17 million. The Brooklyn Navy Yard then handed over the project to Macro Sea Developers, which put in equity of $6 million and raised additional capital through grants and credits. BNDYC financed the balance of the construction through the federal EB-5 program, arranging $12 million.

In total, $15 million were funded through capital grants and credits. The city and local government planning board were incentivized to assist in the permitting process and wanted to help the project develop into a high-tech center as it would generate jobs for the local economy and tech industry. The New York City Council funded $6.5 million The New York Regional Economic Development Council awarded $1.25 million in ESD grant assistance in Round II of the CFA, and later awarded an additional $2 million in ESD assistance, bringing the total grant to $3.25 million.

The Navy yard building 128 was originally built in 1899 and served the purpose of a machine shop for naval equipment. Since the project involved preserving a historic building and attracted private capital into low-income communities, it raised $5 million through Goldman Sachs Urban Investment group as part of their impact investing against New market and Historic Tax credits. Higgins Quasebarth was the consultant firm for obtaining tax credits.

Lastly, the project received $2.5M from NYC EDC as a grant to support the Urban Tech initiative. The grant was to house the Smart Cities Innovation Center at New Lab that offers facilities and services to support companies that are designing and building hardware for smart cities. The Center is New York's first smart cities incubator and is part of an advanced manufacturing project that can expand export activity through the Governor's Global NY program. It offers opportunities for collaboration, new access to specialized equipment, mentoring and direct connections to government agencies that are potential clients and beneficiaries of new products. The Smart Cities Center also provides new opportunities for companies to pilot and test products in urban environments.

$ 3.25 Million	ESD Grants	Grants
$ 6.50 Million	NYC Council Grant	
$ 5.00 Million	Historic Preservation Tax Credits	
$17.00 Million	BNYDC (as core & shell)	Equity
$12.00 Million	EB-5	
$ 6.00 Million	Macro Sea	
$49.75 Million	Development Cost	

Operating Issues

Given the fact that New Lab is a first-of-its-kind co-working space that houses both industrial manufacturing space as well as office space, some challenges were expected.

Execution of Unique Business Model
The biggest challenge with the project is the execution of its unique business model. Execution of such operations demanded skilled staff and one major challenge was to find and retain talent, especially when there is a steep learning curve associated. Screening tenants and guiding them through the process also involves a lot of manpower.

Apart from housing these startups, New Lab's concept is to foster a community of startups to work together and build products. This often requires leadership with prior entrepreneurial experience, who can provide additional support to the startups. In 2018, New Lab hired a new CEO, Shaun Stewart, to execute the concept. Since New Lab also launched their own fund, this transition was essential.

Tenant & Shared Facility Management
Occupancy rates for New Lab have remained 100% since the site first opened. Acceptance rate for the tenants is as low as 15%, and there are many tenants on waiting list, which needs to be updated regularly. Existing tenants have a high likelihood to move out as they grow in size. Such a model requires extensive tenant management due to the unique circumstances.

Another challenge is the management of shared facilities such as the prototyping labs. There is prototyping equipment worth $6-7 million – 3D Printers, lathes, CNC mills, woodshops, and metal shops- and they need to be monitored. Moreover, cost allocation of the operations and common expenses is a gray area.

Limited Space
With the limited amount of space at New Lab and a high level of competition to get in as a member, the designers had to think of innovative ways to maximize the usability of the area. This was achieved largely by taking making use of shared facilities such that each member in the space does not require their own bathrooms, conference rooms and cafeteria areas. In addition to the obvious facilities that can be shared, New Lab additionally shares various machine shops containing equipment like 3D printers and laser cutters to maximize the number of members that can be housed. The limited space also poses a challenge in case any startup wants to expand in numbers and space. In such a case, the tenant would eventually have to move out.

Access to Food
With not a lot of shops or restaurants in the Yard area at inception, New Lab saved some space for a café with a cafeteria space in order to mitigate this issue.
With the Yard rapidly being redeveloped and retrofitted into a modern area where many people work, more and more lunch and dining options became available. Wegmans, the popular grocery chain known for its large store and trendy food courts, recently opened a 74,000-square-foot location in the Yard.

Development Impact

Brooklyn now has transformed into one of the leaders in the innovation economy not only in New York City but also the country. This has happened because the acceleration in the creation of the borough's tech starts-up, and advanced-technology manufacturers. In 2018, Brooklyn placed second, after San Francisco, as a tech-hub with the highest start-up growth creation in the nation since 2008. Brooklyn itself, with a growth rate of 356%, topped New York City (308%), and Los Angeles (279%).

Undoubtedly, Brooklyn New Lab has been a catalyst and instrumental in supporting the tech sector growth in Brooklyn. Today, New Lab nurtures over 100 tech start-ups, builds partnerships with forward-thinking corporations and civic entities, and has attracted investment from over 270 venture capitalists, and the support of domain experts – all working together to scale frontier technologies. Up until now, Brooklyn New Lab has supported its member companies in raising over $450M in capital, with over $350M of successful exits, and a collective valuation of over $1.7B.

The success of tenants also showed that quality working spaces, manufacturing facilities, and operational supports from New Lab paid off. JUMP, for example, was an Electric-Bike sharing startup occupying a space in New Lab since it first opened. With support in many ways provided by this development, the firm was acquired by UBER with a more than $100 Million deal. Besides, many innovations created in New Lab were purchased for use in the manufacturing and military industries.

Moving forward to scale the impact, New Lab has partnered with Antler – an early stage venture capitalist and the world's biggest start up generator – to bring their program "startup generator" to Brooklyn, after Antler launched nearly identical generators in six other cities on four different continents.

In 2018, when the new 30-year BNY's master plan was released, there were a total of 8,500 people working in the traditional manufacturing, innovative manufacturing, food manufacturing, and media. The corporation aimed to reach 20,000 jobs in 2020, as new creative office spaces and several more office and expansions are planning to open. The significant job growth in the Navy Yard has increased the wealth of people in the nearby neighborhoods. It boosts supportive businesses, and has created a key commercial district, thereby considerably improving quality of living.

The next step of Brooklyn Navy Yard focuses on future high-value manufacturing, technology and innovation. New Lab will keep incubating start-ups, creating new start-up unicorns, and boosting manufacturing and technology sector in New York City.

References

Interviews

Belt, David (2018, November 19th). Telephone interview.

Horowitz, Shaina (2018, November 30th). Personal interview.

Tuchscherer, Amanda (2018, November 30th). Personal interview.

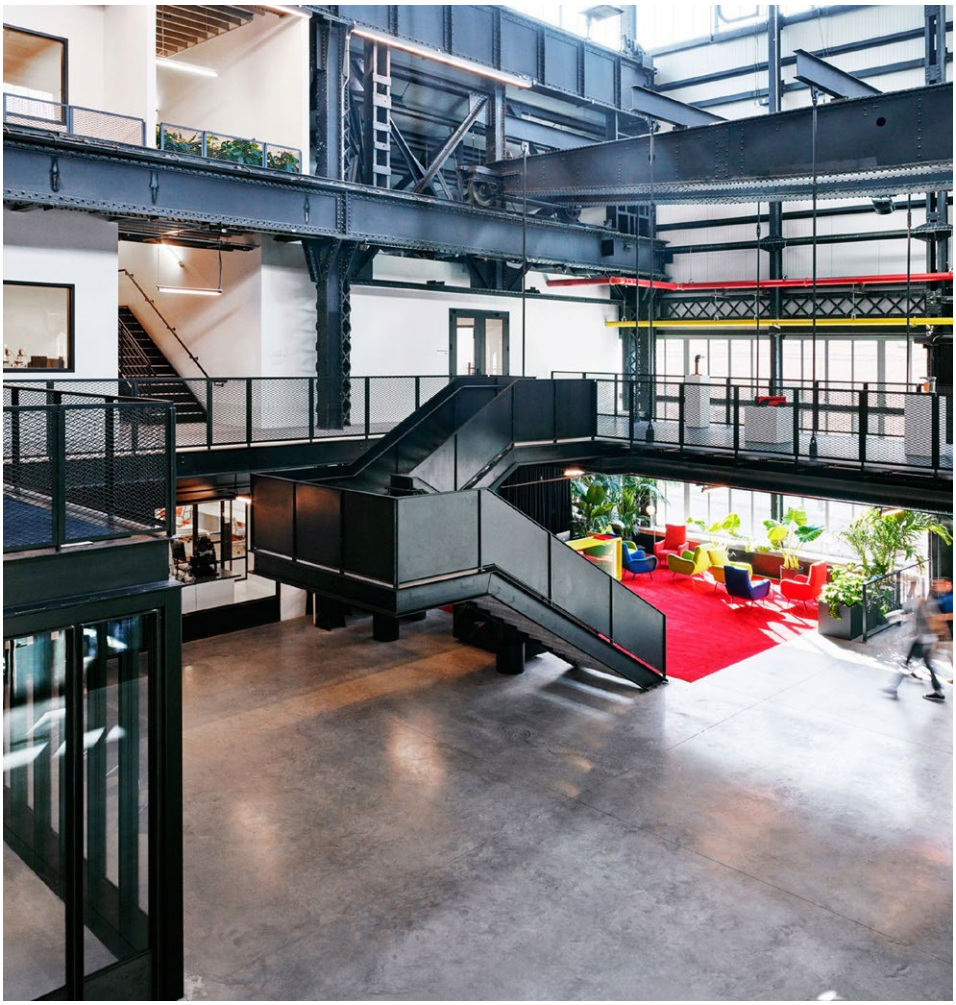
Balder, Robert (2019, November 8th). Telephone interview.

Literature & report

DiNapoli, Thomas P. (2014 April), New York City's Growing High-Tech Industry, retrieved from https://www.osc.state.ny.us/osdc/rpt2-2015.pdf.

DiNapoli, Thomas P. (2017 September), The Technology Sector in New York City, retrieved from https://www.osc.state.ny.us/osdc/rpt4-2018.pdf

Brooklyn Navy Yard: An Analysis of Its Economic Impact and Opportunities for Replication. Pratt Center for Community Development. 2013 February.



New Lab is open to visitors from around the world. It also holds many public events. Please check the link below.

https://newlab.com/events-calendar/