Distl. Insight Report

〔〕 Insight №1 APRIL 2015

Make This City

The State of Urban Manufacturing

How urban manufacturing is reshaping an industry, changing cities, and building local economies



Executive Summary



We're in an urban manufacturing renaissance

The post-industrial economies of North American and European cities are still recovering from the off-shoring of manufacturing jobs, but smaller, niche producers are bringing manufacturing jobs back to city centres. Driven by the unique opportunities of an urban location, growing tastes for artisanal and boutique products, and new technology and applications for business development, these new manufacturers are capitalizing on the emerging trends in cities to drive their success.

Urban manufacturing is improving neighbourhoods and local economies

New manufacturers are identifying locations in cities across Europe, Asia, and North America that are providing direct benefits to local economies. The unique advantage of urban locations is allowing new manufacturers to prosper and in turn create high-paying jobs, stimulate local economic development, and grow interest in previously ignored areas of a city or entire city-regions themselves.

New development projects are incorporating urban manufacturing

Fuelled by the urban manufacturing resurgence, new development projects are building upon or incorporating new industrial production spaces within their projects. Forward-thinking developers are leveraging local assets including historic structures and feeding on local demand for manufacturing space. Meanwhile, municipalities are forging new policy directives and creating new investment tools to further stimulate local manufacturing within their borders.

Organizations are emerging to support and nurture urban manufacturing

The growth of the neo-urban manufacturing industry is sprouting new national and local organizations building awareness and strengthening marketing activities, supporting export development, and advocating for policy and investment tools to help grow urban manufacturing opportunities.

"City of Origin" is the new brand driver of urban manufacturing

Demand for socially-responsible products coupled with a buy-local attitude is shifting demand towards highly sought after locally-manufactured goods that not only tell the story of how they were made but where they came from.

New policy approaches are emerging to support urban manufacturing

Local and national governments are taking stock of the opportunity urban manufacturing represents, and building new policy approaches, programs, and investment vehicles to support its growth; from apprenticeships and a re-focusing of post-secondary education to grants and tax incentives.

Table of Contents

	2	Executive Summary
	3	Table of Contents
Distl 73 Bathurst Street Unit 403 Toronto, ON M5V 2P6 Canada 647.470.7021	4	We're in an urban manufacturing renaissance
	7	Urban manufacturing is improving neighbourhoods and local economies Case studies: Dogpatch, Greenpoint
info@distl.co www.distl.co	13	New development projects are incorporating
Authors: Christine Caruso, Mackenzie Keast,		urban manufacturing Case studies: Brooklyn Navy Yard, Pier 70
Justin Leclair Editor: Emma Tarswell	21	Organizations are emerging to support and nurture urban manufacturing
Photography: as credited		Case studies: Makers Row, CPHMade
Cover photo: courtesy Robert Clark	27	"City of Origin" is the new brand driver of urban manufacturing <i>Case study: Shinola</i>
Thanks: ManufactureNY, Shinola, SFMade, NYMade, Toronto Made, CPHMade, Viberg Boots, NYEDC, Pratt Centre, Makers Row, Urban Manufacturing Alliance, GMDC, BNYDC, OHNY, mihnyc.org Copyright Distl, 2015	30	Q&A: Toronto Made, Viberg Boots
	32	New policy approaches are emerging to support urban manufacturing <i>Case studies: Germany, NYEDC</i>
	36	10 keys to taking advantage of the urban manufacturing revival
	37	Further reading
Distl.	38	About Distl

We're in an urban manufacturing renaissance

Distl Takeaway: Cities provide the ideal environment for twenty-first century manufacturing of goods: flexible and adaptable peer-to-peer networks that promote spillover and knowledge sharing conducive to innovation, rather than the large, multi-tiered entities that dominated manufacturing prowess of the Industrial Era.

Because of global economic restructuring in the later half of the twentieth century, the industrial epicentres of North America and Western Europe gradually transferred the bulk of their production facilities further overseas. Advancements in logistics and cheap fuel prices allowed producers of goods to seek cheaper labour and factory space to maintain robust growth and maximize profits.

While beneficial, in some ways, for many of the developing countries producing goods for western markets, this monumental shift had a profound impact on the economies of western cities. What ensued could easily be dubbed the dark ages of the modern city — a perfect storm of economic disparity, poor planning decisions, separation of uses, a mass exodus to the suburbs, and the perception that the city was a haven for crime and salacious activity. Once the dust from mass globalization settled, however, the world was significantly different. In the post-Industrial Era, technology, design, entertainment and media, and arts and culture emerged as the drivers of economic growth and the entrepreneurs at the forefront of these industries spurred a return to the city, often repurposing the now affordable spaces left vacant by large traditional manufacturers.

These industries have always been present in cities and have always, to some degree, engaged in manufacturing activities, however, they now form the basis of the knowledge or innovation economy and the demand for their specialized output has increased significantly. This development combined with a recent uptake for artisanal goods that cater to a sophisticated market of urban dwellers has been a strong contributing factor to a renaissance in urban manufacturing.

Progressive city governments, recognizing this shift, have put many policy and program tools in place to lure companies and talent to their cities. Support for local urban manufacturing is one such economic development tool that has gained traction amongst policy makers. These producers support other key urban industries, create strong multiplier effects, drive innovation and economic diversity, and, ultimately, make urban economies more resilient.

Urban manufacturing today is a niche within broader industrial activities at national and international scales. It is an output of Richard Florida's creative class, a result of changing urban tastes, and



influenced by the need for new high quality jobs in our cities.

Urban manufacturing is small scale, micro-producers and creators that are utilizing twenty-first century technology and e-commerce capabilities to create viable production and design businesses. This includes:

- Additive manufacturing/3D printing
- Industrial designers
- Architects
- Furniture
- Clothing and textiles
- Web designers
- Food and beverage
- Artists
- Media and film
- Leatherworking
- Printing and publishing Restoration services
- Electronics
- Import and export
- Cabinetry

- Sculptures and ceramics
- Lighting
- Metal fabrication
- Housewares
- Jewelery
- Woodworking

These businesses, and the demand for their products, is giving rise to a new generation of city builders and shapers who are creating places and spaces for these activities to thrive. Savvy local organizations who are looking for new ways to drive investment and create jobs in their communities are finding ways to bring manufactures to their doorsteps, developers are integrating new uses within older structures and fostering local manufacturing businesses alongside them, and manufacturers are drawing on the strength of a local-first mentality to create high quality, small batch products with growing demand.

Why cities?

Once unwanted in dense urban areas, manufacturers are coming back because of changes in processes and goods produced. There are five key reasons why manufacturers see cities as new places of opportunity:

- 1. Cities are rapidly growing, led by highly educated echo boomer generation with a proclivity towards quality over quantity
- 2. Easy access to customers/ suppliers/investors
- 3. Access to high quality, skilled workers
- 4. Sustainability benefits reduced transportation and opportunity for locally sourced materials
- 5. Diversified local economy and ability to adapt to surrounding demand

Challenges and Barriers to Urban Manufacturing

Bringing back a historically undesirable use to city cores can, however, prove challenging for all parties involved. The five key difficulties that manufacturers face when coming to the city:

- 1. Scarce availability of space and urban industrial zoning
- 2. Competition from overseas manufacturers
- 3. Building owners don't always see return on investment to retrofit buildings
- 4. Municipalities lack resources to incentivize owners to prepare sites for manufacturers
- 5. Perceived as inefficient land use (land could go to building luxury condos and premium office space)



Scott R. Kline

Urban manufacturing is improving neighbourhoods and local economies

Distl Takeaway: New micro manufacturers are locating in inner-city locations, and bringing a number of direct and indirect economic multiplier effects that are strengthening their local neighbourhoods and their city overall.

The loss of manufacturing in downtown cores left behind large swaths of abandoned industrial factories. Many cities found new uses for these buildings as lofts, offices, and tech industry operations. New York, San Francisco, Chicago, Toronto, and London among others transformed large, formerly derelict sections of their inner cities into thriving, economically vibrant neighbourhoods thanks to the re-use of these structures and the associated spinoff effects of new businesses and residents.

The re-use of the former manufacturing districts captured the ongoing trend of people and jobs moving back into the cores of cities, offering ever-increasing opportunities for new businesses.

The rebirth of urban manufacturing is made possible because of this same trend. The proximity of people and other businesses in 21st-century downtowns gives urban manufacturers a competitive advantage. Their success, in turn, improves the economic health and vitality of their neighbourhood and larger community. This is due to a number of factors:

- Small size and integration within the city means urban manufacturers are able to quickly identify and respond to changing customer trends and preferences.
- Ability to employ a highly skilled workforce from the surrounding population and offer middle-income job opportunities that wouldn't traditionally be available.
- Connections with other local industries to spur innovation,

leading to new products and new businesses.

• Re-use of older, large-scale building stock that would normally be too large or unsuitable for other tenants.

In San Francisco, these factors allow micro urban manufacturers like Rickshaw Bagworks to thrive and bring new opportunities to its local community. The company's small size and integration within the city allows it to tap into the unique San Francisco market for bicycle messenger bags and produce a product that is made with the local consumer in mind.

Rickshaw is part of a larger micro industry movement in San Francisco that is focused around the Dogpatch neighbourhood, which is becoming a major hub for local crafts, artisans,



66 You want to meet the guy who made it, connect with people."

and manufacturers. The growth of local industry in this area is catalyzing additional economic growth with local restaurants, cafes, and boutique stores serving the local employees. New residents are looking to relocate here, spurring the construction of dozens of new condos and townhouses in the neighbourhood.

This and other examples are creating jobs and driving local economic growth. In the US, the manufacturing sector has grown at twice the rate of the country's overall economic growth since the end of the recession. Manufacturing workers make approximately \$10,000 more than the average US worker. Between 2010 and 2012, the US added 400,000 new manufacturing jobs — and 98% of these are small, boutique operations.

The growth of 3D printing technology is also bringing new opportunities for urban manufacturers. Also known as "additive manufacturing," 3D printing gives a new competitive advantage to local, urban manufacturing businesses who employ the technology due to its low cost, small space requirements, and ability to quickly create products that are in demand.

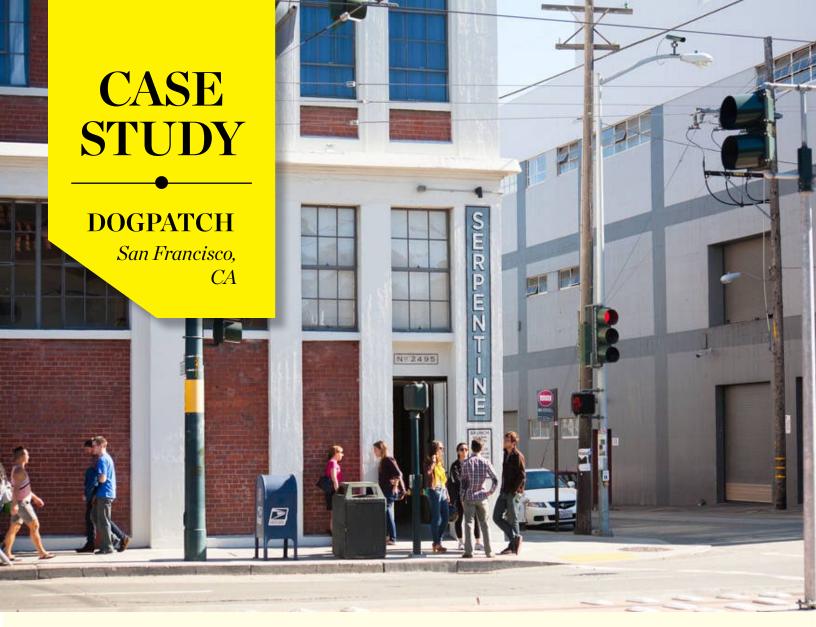
Because of 3D printing's intersection between technology and manufacturing, it's an industry that is choosing an urban, highly educated workforce and locating in urban areas that allow for both a diverse pool of employees as well as customers.

America Makes is comprised of over 100 companies, institutions, nonprofits, academics, and government agencies who are helping to grow opportunities for the 3D printing industry. The organization is helping to provide critical connections to job training resources that allow the next generation of manufacturing employees to acquire necessary skills for the industry.

According to Wohlers Associates, worldwide revenues in the 3D print-

ing industry are expected to grow from \$3.07 billion in 2013 to nearly \$13 billion in 2018. By 2020, this figure is expected to exceed \$21 billion. However, urban manufacturing can never compete with its large scale, globally-focused counterparts that mass-produce and deliver low cost products around the world. Urban manufacturing differentiates itself — and is successful — due to the fact that it is local and is producing high quality, design-focused products that are in tune with local demand.

Matthew Tuerk, Assistant Director of the Allentown Economic Development Corporation, is helping to foster growth in urban manufacturing the Leheigh Valley of Pennsylvania. In an interview with Fast Company, Tuerk says that "I think people would like to see stuff made for the market they're in — not the same deckchair in Phoenix and Portland, Maine. You want to meet the guy who made it, connect with people."



Making it by the bay

South of San Francisco's central core, Dogpatch has transformed from its traditional warehouse and heavy industrial history into one of the city's largest collection of small scale local manufacturing operations. Supported by the emergence of the adjacent Mission District to the west and the Mission Bay technology hub to the north, Dogpatch is mixing culinary hotspots, creative retail shops, renovated wood homes, and new development with the rejuvenation of local manufacturer spaces.

The formerly abandoned warehouses offer cheap rental opportunities for the

new manufacturing pioneers, who are repurposing the spaces into workshops and co-work spaces.

This includes the Noonan Building, a wood-framed former shipyard that has been transformed into a creative workshop space for artists and designers.

At the heart of the area's local manufacturing scene is the American Industrial Centre, a former cannery from 1929. As the large manufacturing operations moved out, the Centre reinvented itself as a micro manufacturer space for smaller businesses. Today, it's home to over 285 small businesses ranging from bookbinders, industrial design, architects, breweries, and more. The unique advantage of the Centre is that it is offering small scale manufacturing-ready spaces in an area that offers workers downtown, urban amenities and attractive local housing options.

Even more local manufacturing is planned. The massive Pier 70 redevelopment is slated to transform the waterfront of Dogpatch through proposals from two developers, including a \$100 million dollar rehabilitation of former industrial buildings into new office, Airbnb

artist, and manufacturing space. Two-thousand housing units are also planned -30% of which will be low-income oriented.

The rise of the new creative working community is bringing new investment. Centred around 3rd and 22nd Streets, the heart of Dogpatch is accessed by the newly constructed 3rd Street tram line which offers easy access to downtown and brings in outside visitors (and their dollars), allowing Dogpatch's much-hyped restaurant scene to thrive. It's also bringing a surge of new housing developments as more workers and creative professionals look to move closer to work.

KEY TAKEAWAYS & SUCCESS STRATEGY

Utilize existing resources in new ways — an old building doesn't have to mean old use.

Transit is a must — great transit accessibility brings the best and brightest (and the tourist dollars.)

A mixture of uses can catalyze one another - local manufacturing needs local housing and retail to truly thrive.

NOTABLE NUMBERS

882% growth in population since

2000

1,448 people per km² **2007** completion of new light rail line

\$102,287 average household income





From big industry to small

Once one of America's great manufacturing centres, Brooklyn's big industry has largely disappeared as it did in most cities over the last few decades. But the sprawling buildings that once housed large-scale industrial powerhouses have given way to smaller, more nimble, and more high-end manufacturers that produce primarily for local consumption.

At the heart of this is the Greenpoint Manufacturing and Design Centre (GMDC), a non-profit corporation that owns four individual buildings with over 100 businesses and over 500 employees. The GMDC team and the businesses it houses are picking up on the trend of local urban manufacturing shifting towards an artisanal approach to production.

GMDC are finding success in Brooklyn and generating local economic benefit due to their proximity and ability to act quickly for their clients. Designers in Manhattan, for example, can come into the factory for an afternoon and reshape how their product is being produced, and distribution can take place in a matter of hours, rather than weeks as is the case with manufacturers in China. Over 15,000 manufacturing jobs are located in the area, and the growth of micro urbanism here has spurred many to rethink zoning and development to allow for more mixed-use environments. New York's planning department is now studying how to integrate residential, commercial and industrial uses into single blocks or buildings, which the City recognizes is in line with the way Northern Europe and other forward-thinking urban economies are now approaching development and density.

KEY TAKEAWAYS & SUCCESS STRATEGY

Don't stop evolving: local manufacturing needs to continue to adapt to changing urban needs.

Leverage local connections: Manhattan's designer industry provides a ripe client base for Brooklyn's local manufacturers

Recognize pressure from other uses: GMDC and other Greenpoint-Brooklyn manufacturers were able to insulate themselves from conversion to other uses through city-supported investment in their buildings.

NOTABLE NUMBERS

500,000

square feet of space available across GMDC's four buildings

15,000

local manufacturing jobs in the west-Brooklyn area

\$12-\$15

average GMDC rent per square foot

\$20M funding made available to Greenpoint manufacturers by the City to help with rehabilitation projects

employees walking, biking, or taking transit to the GMDC

70%



Dpera House NY

New development projects are incorporating urban manufacturing

Distl Takeaway: Progressive municipalities, well-organized non-profits, and savvy developers are creating and managing manufacturing spaces in both new and old spaces. By picking up on prevailing trends, integrating neighbourhood assets, and leveraging public investments, owners are finding success with manufacturing spaces and spurring local economic development along the way.

As new manufacturers have moved into neighbourhoods, bringing with them people and jobs, a new wave of property developers are jumping on the opportunity to both revitalize old spaces for industrial uses and create new purpose-built manufacturing centres. With governments looking for new ways to attract investment and jobs to cities, public support for urban manufacturing projects are increasing — and in return these developments are paying dividends for their community.

The new urban manufacturing tenants are usually small (less than 20 employees, requiring less than 1,000 sq ft) and can't afford rent in traditional industrial spaces. Successful development for the current urban manufacturing landscape requires careful consideration to the needs of smaller tenants — as the success of the Brooklyn Navy Yard shows. With publicly-owned urban manufacturing spaces or a non-for-profit ownership model, the incentive to align with the needs of the new production landscape is paramount.

Smart Growth America, a research and policy development organization, has outlined five steps that cities can take to successfully foster urban manufacturing development:

1. Zone for it

Areas where industrial uses are already permitted should be maintained. The modern nature of small-scale micro manufacturing should also be recognized and added as a permitted use to residential or retail mixed-use areas where it makes sense.

2. Provide financing and incentives

Support private developers with

financial tools that will encourage positive redevelopment that results in new local manufacturing operations and new jobs. This can include direct investment, grants, tax incentives, permitting/entitlement fast tracking, and other instruments that reduce upfront development costs.

3. Connect local history to new technology

Leveraging a community's existing production or manufacturing networks can help grow new small scale operations. Harness the skill and knowledge that already exists and connect that with new manufacturing businesses.

4. Support business development

Partnerships between manufacturers can help strengthen their marketing efforts and reach. As we explore further in this report, local alliances like SFMade can connect businesses together and promote the local sector.

5. Provide Job Training and Outreach

Developing skills for future employees can help connect lower income populations to better paying jobs with new local manufacturers, and provide the businesses with an adequate workforce. Apprenticeship programs such as Germany's Dual Vocational System, which is explored further in this report, can offer young people a connection with high paying manufacturing

66

Successful development for the current urban manufacturing landscape requires careful consideration to the needs of smaller tenants..."

Nonprofit Real Estate Development Toolkit: An Overview

The **Urban Manufacturing**

Alliance has produced a toolkit to support non-profit real estate development for manufacturing operations. The toolkit helps developers understand the needs of manufacturers, and vice versa so they can work together on development opportunities, and informs public agencies on the challenges for manufacturers and how to promote and support their operations.

Download the full toolkit at <u>http://</u> prattcenter.net/research/nonprofit-real-estate-development-toolkit-stable-affordable-space-manufacturing

The Development Process

- 1. Land acquisition
- 2. Assembly of consultant team architects, engineers, contractors
- 3. Acquire financing
- 4. Obtain approvals
- 5. Marketing, sales, and leasing
- 6. Construction

Different Markets Mean Different Challenges

High Demand Market Challenges:

- Space usually more valuable for non-manufacturing uses (i.e., residential, commercial)
- Rezoning of industrial land is common
- Porous uses (i.e., hotels, storage)
- Speculation prevalent in anticipation of more valuable, non-industrial uses

Low Demand Market Challenges:

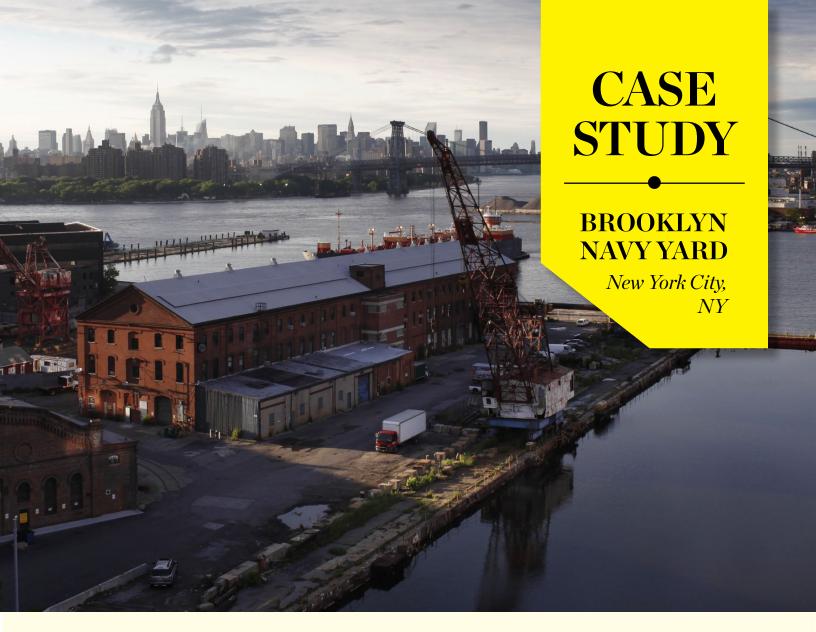
- Less available opportunities for smaller manufacturers
- Owners of buildings can rent to less demanding, lower costs users (i.e., storage)
- Building owners typically lack the knowledge of potential value of their properties and/or lack the skill to develop them for higher value users

What Are Non-Profit Developers?

- Successful developers combine access to capital, knowledge of markets, understanding of property management, and the willingness to take risks
- Non-profit developers have emerged to overcome many of the challenges described above
- Can operate as simply an owner/developer of a single building or collection of properties, or have a broader mission such as technical support, government relations, and marketing
- Can also include public-private hybrid that combines a non-profit with a government entity to support municipal policy goals
- Developer will commonly form spin-off corporations which are also non-profits.

Consideration **Public Model Option Private Model Option Property acquisition** Publicly-owned property Developer Land assembly of vacant/foreclosed Municipal land offering properties Financing Federal, regional, and local govern-Private financing • ment investment Banks/other lenders **Economic Development Corporations** • Tax-incremental financing (TIF) opporprovide backing tunities Federal, regional, and local govern-Social Impact Bond opportunities ments to provide tax incentives, grants, investment, or other support **Economic Development Corporations** provide backing **Final ownership** Non-Profit Corporation Corporation/landlord with ownership of Non-Governmental Organization the facility(s) Freehold landowners Co-Op **Municipal Government Economic Development Corporation** Where it can work • Public investment requires large, Private developers can look for smaller ongoing returns and therefore typically urban manufacturing opportunities or larger scale projects obtain a larger complex of properties Large, vacant former industrial sites with adequate financing Areas of municipal disposition of prop-Brownfield/greyfield redevelopment • areas erty Research/university partnerships Typically large former industrial sites Individual buildings with large, flexible space Pros Opportunity to provide below market Incentives from local, regional, and • ٠ rents federal governments to support rede-Enhance local tax base velopment and investment Reinvest returns into the community • Growing interest in local manufacturing Grow local employment and stimulate • Development for small scale urban economic development in the area industrial remains niche Revitalization of vacant areas Pent-up demand in major urban cent-Utilize public funding earmarked for job res for space growth Can leverage local supply chains and retailers Cons Often requires large up-front public • Usually long development timeframes Financing more difficult to obtain than capital investment Ongoing public investment is needed typical ICI or residential projects to ensure growth Often require extensive environmental Success dependent on ownership orremediation ganization's ability to attract stong, long Often critical to obtain public grants/tax incentives to create profitability term tenants Pendulum of public support Tenant attraction requires careful attention

Considerations for Public and Private Urban Manufacturing Development



From ships to soaps

The Brooklyn Navy Yard (BNY), in the heart of hyper-dense Brooklyn between the Manhattan and Williamsburg Bridges, has emerged as one of North America's most successful models for publically-led urban industrial redevelopment projects. Its transformation from former shipyard to modern light industrial hub has brought billions in annual economic activity and provides over 10,000 direct and indirect jobs.

In the early 1990s, after years of decline at the BNY, the Brooklyn

Navy Yard Development Corporation (BNYDC) chose to focus on smaller, light industries and tenants rather than larger manufacturers. This resulted in a boom of new businesses moving into the BNY, with over 4 million square feet of space fully leased by 1998. Based on this success, public money was invested into the BNY to allow it to modernize and grow.

The BNYDC operates as a non -profit corporation, allowing it to develop and lease space with much lower returns than private developers or landlords would require. This offers lower rents and easier initial market entry opportunities for new and small businesses.

The success of the BNY has led to a large multi-year expansion project, the most ambitious of which is the redevelopment of Buildings 28, 124, and 128. New York State has invested \$46 million into the project, which is turning 200,000 square feet of former shipbuilding yards into the "Green Manufacturing Centre." Once complete, the Centre will house 300 permanent jobs to a diversity of manufacturing and technology tenants including Macro Sea. Macro Sea will lease 84,000 square feet of the Green Manufacturing Centre to create "New Lab," a state-ofthe-art design and prototyping centre that will house additive manufacturing, biotech, advanced robotics, architecture, and industrial design businesses. Research facilities, co-working spaces, and education components will also be incorporated into New Lab.

Previous: A portion of BNY's complex on the East River.

Below: Rendering of Macro Sea's New Lab complex, currently under construction at the BNY.

KEY TAKEAWAYS & SUCCESS STRATEGY

Use your assets in creative ways: what can your vacant industrial spaces transform into?

Get out ahead of the trends: fewer large manufacturers means BNY had to pivot to small and medium-sized enterprises.

A strong non-profit corporation can be an effective developer, owner and operator of urban manufacturing spaces

NOTABLE NUMBERS

\$4 Billion total direct and induced economic output of BNY

3000 total acres on the BNY site

\$140 M amount of recent NYC investment

5,800 number of local employees





Mixing residents & industry

Also a former shipbuilding site, Pier 70 just south of central San Francisco is slated for redevelopment as a thriving community of urban manufacturing spaces mixed with artists, retail shops, and residents.

Sprawling over 69 acres along San Francisco Bay, Pier 70 was a major shipbuilding facility during World War II, employing over 18,000 people during its peak. As the shipbuilding industry declined in San Francisco, so too did Pier 70. While several ship-related businesses continue to operate on the site, Pier 70 sits mostly vacant today; its multiple centuries-old structures are largely unused and restrict public access to the waterfront.

Forest City and Orton, the major developers behind the Pier 70 project, are now in the process of transforming the area into a new manufacturing hub that will house up to 10,000 new jobs. Over 250,000 square feet of historic buildings are being rehabilitated as well, which will be incorporated into a 'main street' space for the project including local shops, cafes, and restaurants. 2,000 new units of housing are also planned – bringing thousands of new residents directly into the mixed-industrial space. Nine acres of parks on the site will also reconnect local residents with the waterfront and allow for outdoor recreation for both local residents and employees.

The development's proximity to the thriving Dogpatch neighbourhood has allowed the project team to draw on the area's existing success. Before shovels hit the ground, the developers created an open air arts and makers market on the site, brought in local community festivals, and hosted open houses to generate input on the future development plans. According to Alexa Arena, a Senior Vice President with Forest City, the key is to "extend the Dogpatch neighborhood into the development. We want to provide interior streets and alleys to create a neighborhood center."

KEY TAKEAWAYS & SUCCESS STRATEGY

Mix uses: local manufacturing today isn't the dirty, smogproducing industry of yore.

Plan for everyone - not just industry. Create gathering spaces, bring in retail, and make it a desirable to linger in. NOTABLE NUMBERS

250,000 square feet of renovated

historic buildings



Be proactive, start now: begin transforming the area with unique programming to develop interest and local buy-in

10,000 number of planned jobs 30%

percentage of planned lower income housing **66** We want to provide interior streets and alleys to create a neighborhood center."





Organizations are emerging to support and nurture urban manufacturing

Distl Takeaway: With few national frameworks in place to guide the growth of the urban manufacturing industry, local organizations and businesses are stepping up to advocate, support, and connect small-scale manufacturers with local resources.

Urban manufacturing is an important economic driver in cities. Despite this recognition, few national strategies have been put in place to fully support this growing sector. And, with cities left to develop their own frameworks, many lack the tools and policies to properly support and develop the urban manufacturing sector to successfully build a stronger economy.

As a result, homegrown organizations, private businesses, and member associations have formed in cities across the United States and Canada to advocate, mentor, create networking opportunities, and connect urban manufacturers to local resources.

Most notably, two pioneers have set precedents for other cities. When San Francisco's SFMade first formed, they had a dozen established companies to boost civic pride and encourage people to "shop local." As of 2014, their membership reached nearly 500 members. Its coastal counterpart, Made in NYC, an initiative of the Pratt Center for Community Development, formed to support the nearly 7,000 small manufacturers and 65,000 employees in New York City. Since their formation, both organizations now offer complex programming including education, business courses and more. These models have since spurred similar initiatives all over the world.

Role and functions of supportive organizations

In addition to working with businesses and advocating with public sector leaders to shape and champion new policies and frameworks, the organizations also advocate to strengthen public awareness. Through public-facing programming, such as factory tours, pop-up shops, demos, workshops, and other publicfacing campaigns, they encourage people to take pride in buying products that are made in their locale.

For members, the organizations provide:

- Access to production spaces and local suppliers (SFMade is also a licensed real estate broker)
- Business and strategy advising
- Education, training, and workshops
- Access to branding, marketing tools, and local certification
- Networking events and partnership opportunities
- Workforce hiring assistance and youth apprenticeships
- Online promotion of their business to the public

Towards a National Voice: Urban Manufacturing Alliance (UMA)

In 2012, recognizing the need for a unified approach to accelerate the growth of urban manufacturing, organizations, spearheaded by SFMade and Pratt Center for Community Development, came together to launch UMA. Comprised of more than 20 member cities, not-for-profit, and private sector organizations, they work to develop their respective urban manufacturing clusters. The alliance was set up as a collaborative platform to exchange tools, models, and to determine best practices that cities can use to catalvze and leverage their industries. Reports, toolkits, and regional initiatives have since been developed as resources for other cities.

Fashion Enter

Many private initiatives have also formed to support urban manufacturing. In the UK, Fashion Enter is a manufacturing and training enterprise in North London. CEO Jenny Holloway founded the company as a response to retail giants choosing to offshore their production. She offers seminars to local designers and accredited apprenticeships to unemployed youth, building up a new generation of skilled workers. She also enlisted the support of her local council to lobby for large retailers to manufacture locally. As of 2014, department stores John Lewis, Marks & Spencer, and online retail giant ASOS have lent their support. Fashion Enter currently produces over 7,500 garments a week – and counting.





Making it easy to buy local

For small businesses, sourcing suppliers can be a daunting and often lengthy process. Old methods are out of date, traditionally relying on referral, trade shows, and even catalogues to source suppliers. And, with so many offshore manufacturers, it is often easier to find overseas suppliers than finding a supplier in your own city.

This poses many challenges for small businesses that often manufacture smaller batches and lack the resources and/or time to spend finding a local supplier. Any resource makes business a little easier. Founded by Matthew Burnett and Tanya Menendez, Maker's Row is an online directory of American manufacturers that makes factory sourcing a little easier. Designers and businesses can easily search for manufacturers by region, by category, and even by design stage.

But it's much more than that. Think of it more as a matchmaking site. By personalizing each manufacturer's profile on the site with strong descriptions, real stories, high-quality photography, and a direct messaging tool, businesses can easily identify and find suppliers they trust and want to collaborate with. Designers are even encouraged in the early idea stages to send sketches to suppliers for feedback to really optimize the finished product.

Maker's Row adds another layer to the resources and support provided by regional associations to small-scale urban manufacturers. Making it easier to find and maximize local resources, the site has the potential to create more jobs and contribute to healthy, strong, and vibrant cities.

KEY TAKEAWAYS & SUCCESS STRATEGY

Makes it easier and more cost-effective to source local suppliers

Addresses the growing need for businesses to produce smaller batches

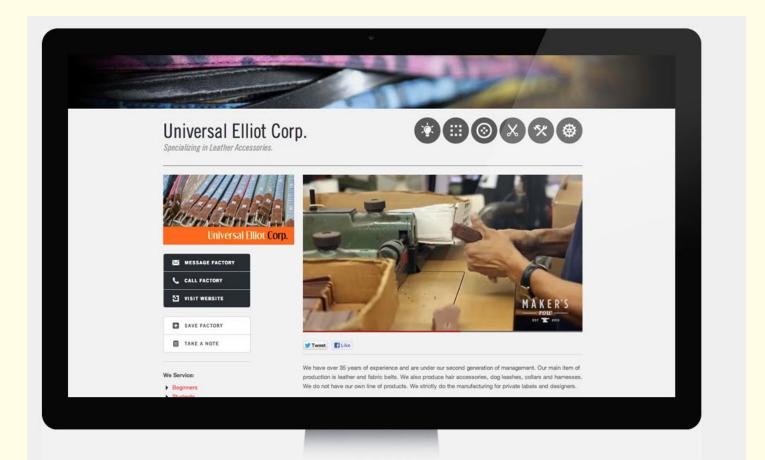
Gets products to market faster, reduces delivery, and overhead costs NOTABLE NUMBERS

4000 American manufacturers listed

> 900,00 products created

> 45,000 individual brands

66 Designers and businesses can easily search for manufacturers by region, by category, and even by design stage."



CPHmade v Craftsmen

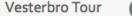
Webshop Tours F Like < 642

Engl



Copenhagen Bike Tour 🗸







CASE

Taking local to the globe

Copenhagen is officially the happiest place on earth. Not surprisingly, it's also a "design nation" that values quality architecture, craftsmanship, and design. Denmark's identity is uniquely synonymous with design; even creating a national design policy to accelerate innovation, promote design education, and brand Danish design internationally.

Building on this established identity, business partners Brian Engblad and Asger Daugbjerg formed CPHMade to promote

and support Copenhagen-based manufacturers. Members are local companies who create their goods right in the heart of the city. The membership-based network celebrates the highest values of true craftsmanship in many areas, including bicycles, motorcycles, apparel, and chocolates.

For members, enrolment is riskfree and good for business. In addition to being listed on the website, CPHMade provides many additional benefits:

Sales platform

The initiative links to members' profiles, includes a comprehensive map of retail shops and even hosts an online store that curates the best selection of products from each member (and, yes, it ships internationally).

Brand platform

Many of the companies are small and lack the resources to build a marketing plan, the organization makes it easier by grouping the manufacturers together under one CPHMade brand umbrella of quality, authenticity, and history.

• Public promotion

Promoting Copenhagen-made products means promoting the city. CPHMade offers guided tours of the city to manufacturing workshops and storefront shops. CPH-Made also hosts markets and events to "meet the maker" as putting a face to a product strengthens its value.

KEY TAKEAWAYS & SUCCESS STRATEGY

Leverages Denmark's design policy to strengthen product export.

Encourages sales of locally-made products, which, in turn, bolsters jobs.

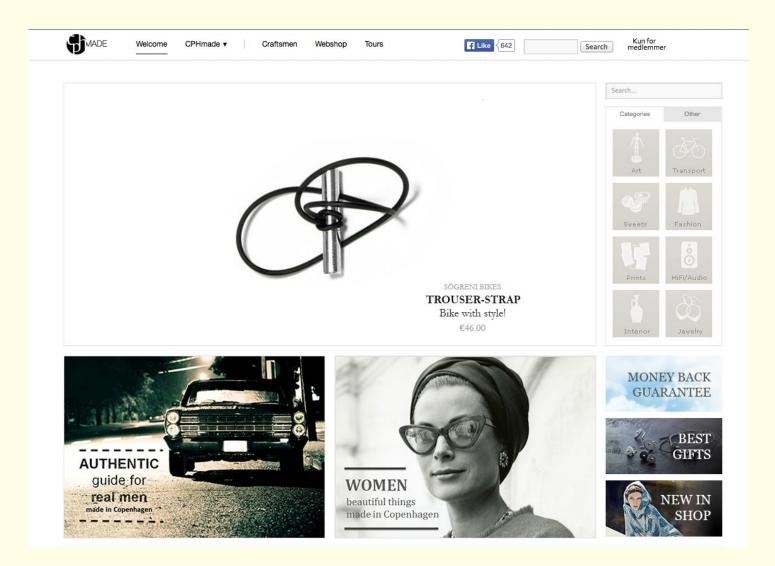
Creates a new narrative for Copenhagen, a story and identity that international visitors may not be aware of.

NOTABLE NUMBERS

386 Mil. in inventory turnover

> 512 employees

> > 116 members



"City of Origin" is the new brand driver of urban manufacturing

Distl Takeaway: 'Made in' now implies much more than a place. Today's consumer demand has shifted towards more socially-responsible practice; authenticity (i.e., the story of where and how products are sourced, produced, or manufactured) is equally as important. For cities, this has big implications to capitalize on this new consumer demand for locally-sourced, locally-designed, and locally-manufactured goods.

Country of origin has long been an influencer in consumer buying decisions. Associating a product with a place builds brand affinity and leverages emotional associations. In short, you can experience the country without needing to visit.

At the same time, global consumer demand is shifting. Today's consumer values social impact, work ethic, and sustainability. Online sharing platforms make companies ethical practices more transparent than ever, so corporate social responsibility is a key factor. According to a 2013 study, 50% of global consumers are willing to pay more for goods from socially responsible companies.

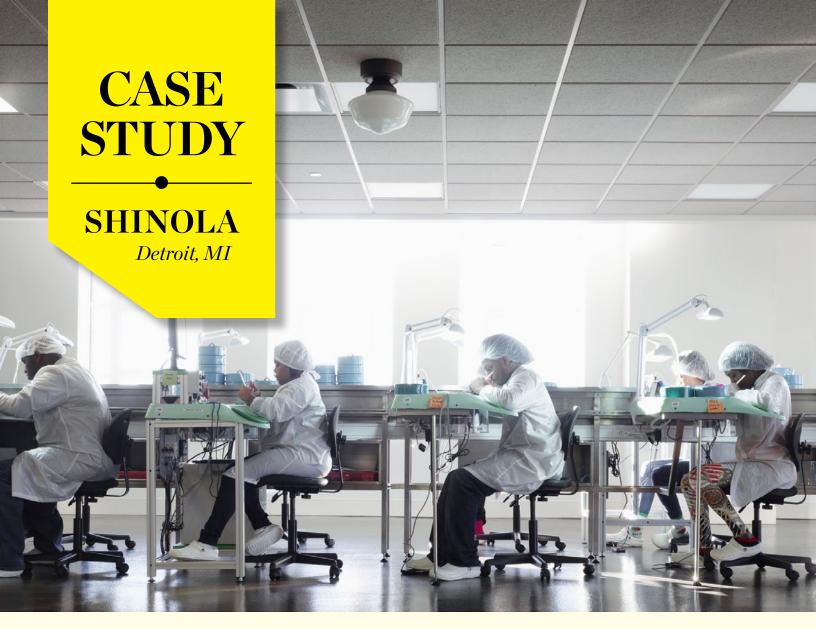
With this shift also comes the demand for authenticity (i.e.,

connecting with a place's history, people, and geography), differentiation (i.e., tapping into unique regional attributes) and expertise (quality production). This demand for authentic and local production or 'anti-mass market' manufactured goods has led to the rise of niche brands of origin. According to FutureBrand, "where something is physically made is now one of the significant influencing factors in consumer choice."

Redefining 'Made In': the power of city brands

As consumer demand narrows down to niche brands, this means that regional and city identity will be the new niche. "Made in the USA" has less cachet and brand association than "Made in San Francisco". In the 21st century, the city is the dominant "meta landscape," with countries slowly losing their brand narratives to powerful cities like New York, Paris and Tokyo. With cities as the new brand differentiator, companies and cities can harness the unique regional identities and hone in on unique heritage, stories, authenticity and regional craft to boost sales.

For cities, the economic implications of urban manufacturing can be significant. It will be up to cities and neighbourhoods to foster and leverage regional identity, to encourage authenticity by keeping all aspects of production local, and to capitalize on today's undisputed new consumer demand.



The Detroit Effect

Where American is made. That's how Shinola, a luxury watch company, leverages one the most resilient cities in America. It's this Detroit story that led to Shinola's strategic decision to set up their manufacturing studio in Midtown. Based in Texas, they worked closely with the Detroit Economic Growth Corp to choose the location, which has since seen tremendous growth.

Shinola's mission was simple: to create jobs, employ and train Detroiters, and make handmade luxury goods at an affordable price. They brought in Swiss watchmakers to train local craftspeople, many with little to no employment history. In 2014, the company reached nearly \$80 million in gross sales and expanded manufacturing to bicycles, stationery, and premium leather goods. While Shinola is not singlehandedly transforming Detroit's economy, it's giving the city a sense of possibility; and an invitation to others to do the same.

It's the city itself that has led to the company's success. Detroit was the perfect backdrop for the brand –a city with a rich history in manufacturing at the heart of the American industry. Even Shinola's location is weaved into the narrative, strategically positioned on the fifth floor of General Motors' old research lab in the Argonaut building. Collaborations are often with other Detroit brands like Detroit Denim and the College for Creative Studies. In short, when you buy Shinola, you're not buying a watch, you're buying a story.

"Built in Detroit" is stamped into every piece that leaves the shop, a reminder about its authenticity. While Shinola's done a lot for Detroit, Detroit has done a lot for the brand.

KEY TAKEAWAYS & SUCCESS STRATEGY

Leverages Detroit's strengths, identity, and history.

Employing local workforce builds pride and contributes to the overall brand story.

Partnerships with local brands and schools has a multiplier effect on the revitalization of the neighbourhood.

NOTABLE NUMBERS

1.2 Mil. watches produced annually

\$1.8 Billion

debt acquired by the City of Detroit

200%

percentage of the minimum wage that employees are paid

66 We know there's not just history in Detroit, there is a future."





Derek Brunelle is the Director and Founder of Toronto Made, a manufacturers association that helps promote locally-made products in the city and abroad.

Why are city brand platforms important to municipalities and small businesses?

Local brand platforms like Toronto Made promote manufacturing as an important part of the local economy. Our organization is particularly useful for small manufacturers, as we offer a free online directory for consumers to find products made in the city. For new businesses, we provide information on grants, loans, and distribution methods to encourage a local supply chain.

What's your primary role?

We are advocates for local manufacturing. We want to empower small and medium sized manufacturers to have a say in how the city relates to them, how zoning affects them, and how they are part of a broader trend toward urban manufacturing.

Why should people get behind this?

Protecting and creating manufacturing jobs is the at the core of Toronto Made. Speaking specifically about neighbourhoods, we've worked to draw attention to existing manufacturing areas that are under threat by nearby residential development. Manufacturing in Toronto is always contentious, even though there is a growing understanding of the importance of urban manufacturing.

What's notable in Toronto manufacturing?

What we've learned so far is that manufacturing in Toronto is quite diverse. There are certain small-scale operations that have been on the rise, these include breweries, food and beverage, apparel, and jewellery. There are also stable, longstanding manufacturers that are large employers and require ongoing attention from the city and the province in order to ensure that they remain here. Our local brand platform works to develop a sense of local pride for all manufacturers, with the goal of having them become key players in determining how our city moves forward.

How important is partnership and collaboration with other organizations?

The Urban Manufacturing Alliance (UMA) has been a major inspiration for Toronto Made. We have strong partnerships with Made in NYC and Made in Montreal — seeking advice in setting up our directory, as well as providing input on collaborative projects.



Brett Viberg is the third-generation owner/operator of Viberg Boots, a boot manufacturer in Victoria, Canada with loyal customers around the globe.

How does operating in Victoria tie in to Viberg?

Since Victoria is a smaller city and we have been here for over half of the life of our company, we have a good support in the trades community. It's still tough since our product is very expensive in regards to what you can buy from say Walmart or Marks. It's really more of an educated consumer buying our industrial products; knowing that they are a long term investment.

Why do you think manufacturers are returning to the city?

There are many reasons, one being the investment to meet minimums offshore compared to learning the craft first hand and doing it all yourself. Second, I think we are better educated and tired of what's been presented to us. We have a strong vision of what we want and are willing to learn a skill to be able to obtain that goal. In my mind there are three types of people who manufacture: the people who love the product (the purist), the people who love money, and, the last, is a mix of both those.

What are the advantages of operating in a city?

The major advantage is that you get the local support. Like I said above for us, we have City of Victoria trades, and local trades supporting what we do. Also, since we are established they are trusting of our advice and of what we produce.

What's your global approach? What channels do you use to tap into other markets?

For the past year or two, we have been doing more online. Not really participating directly other than our online shop, but it's been more about placing the product where it needs to be seen to make it more viral. I think it's the best way to do it as it's cost effective. The downside is that it's hard to control and it really takes away the element of surprise. But most of the relationships that we have globally and online included, started with face to face. And even now most success we have is just from networking and travel. Meeting people/ brands / stores which all hold the same values and ideals. I think it's more about the lifestyle, if someone gets it, that's what will make any relationship. I think the importance of face-to-face will never be replaced.

New policy approaches are emerging to support local manufacturing

Distl Takeaway: Effective policy support to urban manufacturers will only come if governments at all levels collaborate and share best practices, meet the 21st-century needs of these businesses and exercise a great deal of creativity when developing new policy tools.

The recent resurgence of urban manufacturing has thrown the issue into the public policy spotlight as urban pundits across the globe trumpet the virtues of light industry as a key contributor to a diverse urban economy. As a result, city mayors battling high unemployment levels are looking at ways to attract small manufacturers to create new jobs, partnerships are being forged with developers to transform existing industrial assets to accommodate modern manufacturing operations, and national and sub-national governments are beginning to invest in skill advancement for new generations of workers.

Nevertheless, significant obstacles remain. For example, the healthcare provision costs and the time and resources necessary for permit and subsidy applications are difficult to manage for smaller operations. Only the larger manufacturers are able to meet the reporting needs required by such programs, despite the potential benefit value tax credits and subsidies hold for these emerging companies.

Developing Strong Policy Support for Small Manufacturers

Many advocates of urban manufacturing have pointed to the need for increased financing designed to meet the unique needs of businesses employing fewer than ten or twenty people. In the United States, for example, there are many resources available for getting a businesses off the ground such as developing a business plan and sourcing seed financing. But more tangible benefits such as tax incentives necessary for sustaining a new business only kick in once a business expands to employing more than five or ten people.

At all levels of government, the policy narrative around urban manufacturing is still being developed. Manufacturing, whether in cities or on their periphery, is widely recognized as a major contributor to economic development and governments have begun exploring a number of policy instruments to help support the sector. Yet to successfully develop a robust policy framework, it is critical to understand just how radically the sector has changed in the past several decades, to adapt elements that have been successful in other jurisdictions to their localities and, most importantly, to exercise a great deal of creativity in developing new policy tools.



Connecting training with jobs

Germany has proven that it is still feasible to base a modern economy on making things. Exports of German goods provided nearly all of Germany's growth from 2001 to 2007.

Germans tout this success as the result of an education policy that places a strong emphasis on vocational training (both at the secondary and post-secondary level) in a wide variety of occupations (about 350 different professions). This training can range from developing more sophisticated skill sets such as industrial mechanics to more accessible skills such as retail sales. German students from age 16 to 18 have the option to enter Germany's "dual system" education program (of which more than half of all German students opt to enter) where they can apply for training contracts with a wide range of employers. In this program, students spend 2 to 3 years training directly as an apprentice with a company while receiving government subsidized education designed to meet a particular industrial need. Under this system educators base their programs on company needs and employers, in turn, accept some degree of state involvement in their business.

As a result, German manufacturing employees are highly trained, highly skilled, and adaptable to the most recent innovations and technologies. In a time of mass youth unemployment and growing economic inequality, manufacturing in Germany employs more than 20% of the workforce and contributes over 20% of GDP. German manufacturers continue to contribute significantly to employment growth and real income expansion to an urban youth population that would otherwise fall into low wage retail and hospitality jobs. However, there have been mixed results when other countries have attempted to adopt the German system. Governments looking to adopt a dual training system must consider which elements best suit their own educational, economic, and social circumstances and objectives.



Industrial modernization initiative

The Industrial Modernization Initiative (IMOD) was initiated by New York City's Economic Development Corporation (NYCED) together with New York City Council to spur growth in the City's manufacturing sector. IMOD provides incentives to owners of private industrial facilities to reimagine and transform their assets to accommodate small manufacturing businesses (one of the fastest growing components of the City's industrial economy).

To date, NYCEDC has made \$8 million available under this program, \$3.5 million of which is committed to the creation of a new fashion hub called The Manufacturing Innovation Hub for Apparel, Textiles and Wearable Tech located in the soon to be repurposed Liberty View Industrial Plaza in Sunset Park, Brooklyn. The money will be used to redevelop 110,000 sq. ft. of the 160,000 sq. ft. space which will include a training centre, a research and development centre, a small-run factory specializing in sample making, a design accelerator "to create an educated pipeline of fashion and manufacturing talent", and an incubator space with 12 private studios, classroom space, conference rooms, a computer lab, an industrial sewing room, storage, and work areas for 50 designers.

What's more, this initiative marks

a unique private/public partnership between Manufacture NY, an organization created to bolster garment manufacturing in the City, and Salmar Properties, a real estate developer committed to locally made goods. This initial investment and partnership is anticipated to generate approximately 300 jobs in 20 to 30 businesses of independent designers, small manufacturers, and other related industries. Not only will it create jobs but it will also foster a strong mentorship network offering hands on training and support.

With the common belief that most industrial economies have transitioned away from a reliance on manufacturing as an economic stalwart, many of the manufacturers that remained have essentially been left on life support, redefining their business models or closing up shop altogether. However, it is becoming more evident that competitive and robust urban economies are those with a diversity of small to medium size firms with a capacity to innovate. Small urban manufacturers fit that bill and initiatives such as IMOD demonstrate that progressive city governments and their local economic development corporations are beginning to recognize the renewed interest and economic potential of urban manufacturing and are putting policies in place and making strategic investments to make the sector more globally competitive.

NOTABLE NUMBERS



made available through IMOD to date

\$3.5 M

committed to

fashion

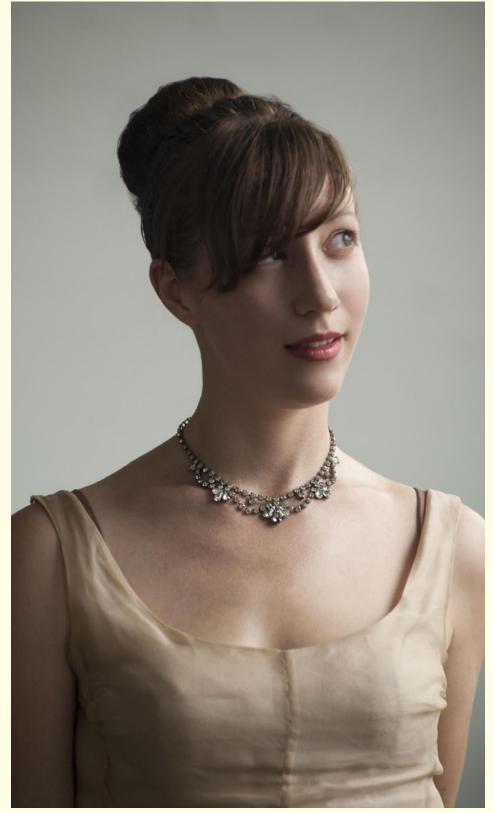
manufacturing hub **300** anticipated jobs

110,000

square feet of redeveloped space for a new fashion hub

Previous: The repurposed Liberty Industrial Plaza in Sunset Park, Brooklyn.

Left: Bob Bland, CEO and Founder of Manufacture NY.



10 keys to taking advantage of the urban manufacturing revival

1. Preserve urban industrial areas

Manufacturers have to compete with residential, retail, office, and other highvalue land uses. Rezoning areas away from industrial uses may provide shortterm gain, but eliminates their potential for new types of urban manufacturing. Land needs to be affordable, accessible, and available to allow for 2st century urban manufacturing options.

2. Focus on the niche

Manufacturing in Europe and North America is likely never going to look the same as it did during the industrial boom times. Find the smaller opportunities that can make your city, development or product successful, and leverage the local brand identity. Show the market why you're special – and why they should choose you over your more cost effective offshore counterparts.

3. Public investment is a good investment

Governments can help fuel local manufacturing growth by providing grants or loans, investing in industrial economic development or non-profit entities that develop and lease manufacturing spaces at accessible rental rates, and providing necessary infrastructural upgrades such as high-frequency transit.

4. Think mixed-use

The most successful local manufacturing is taking place in areas where other activ-

ities and uses can catalyze and support production. Local suppliers, nearby customers, and access to high-skilled employees is increased when manufacturing is surrounded by commercial high streets, dense residential areas, and proximity to colleges or training centres.

5. Diversify learning

The sophisticated nature of manufacturing goods in cities today requires skills that are now in demand. More than ever, public as well as private investment is needed to ensure that education programs are in place for people to develop these skills. Doing so will lead to good paying jobs, a thriving manufacturing sector with export potential, and an overall healthier and more diverse urban economy.

6. Redefine industrial assets

Moribund industrial properties that pock our cities provide opportunity for productive reuse. Having once served a manufacturing purpose, these spaces can be reconfigured into multi-purpose spaces (production studios, classrooms, conference rooms etc.) to meet the needs of 21st-century urban manufacturers.

7. Connect supplier & retailer

Independent retailers are thriving in the hot neighbourhoods of many of the large urban areas of North America and Europe. Take advantage of their proximity and customer base by connecting them with local producers. Co-marketing activities between both can expose product and retailer to broader markets, and create local and international buzz.

8. Leverage your city's brand

For today's consumer, authenticity is more important than ever. They want socially-responsible, locally-sourced, and locally-manufactured goods. Regional identity is the new brand currency, to be woven into a strong narrative that leverages the "Made in" story – including the people who make the products.

9. Form supportive organizations

New resource models are forming to support and foster urban manufacturers. This knowledge exchange, networking opportunity, and new service model will help advocacy for urban manufacturing, shape best practices, and help garner public support for "buying local."

10. Leverage partnerships with both the private and public Sectors

In this sharing economy, collaboration is key. Pooling funding, resources, and knowledge together is the best path forward to create new frameworks, establish new policy, and support urban manufacturing in our cities and neighbourhoods.

Further reading

Made In: The value of Country of Origin for future brands, FutureBrand http://www.futurebrand.com/images/uploads/studies/cbi/MADE_IN_Final_HR.pdf

Long Live the Industrial City http://wilsonquarterly.com/quarterly/spring-2011-the-city-bounces-back-four-portraits/long-live-the-industrial-city/

Makers: The New Industrial Revolution - Chris Anderson, 2012, Crown Business

Economic Opportunity: Small Scale Manufacturing http://www.smartgrowthamerica.org/2014/06/23/economic-opportunity-small-scale-manufacturing/

America's New Industrial Boomtowns http://www.forbes.com/sites/joelkotkin/2014/06/19/americas-new-industrial-boomtowns

Where Manufacturing is Gaining http://economix.blogs.nytimes.com/2012/05/09/where-manufacturing-is-gaining/

The Silver Bullet to a US Manufacturing Revival http://blogs.wsj.com/experts/2014/06/06/the-silver-bullet-to-a-u-s-manufacturing-revival/

How to Make an Urban Manufacturing Boom http://www.huffingtonpost.com/adam-friedman/how-to-make-an-urban-manufacturing-boom_b_864849.html?

US Manufacturing: Understanding its Past and Potential Future http://www.brookings.edu/research/papers/2014/02/us-manufacturing-past-and-potential-future-baily-bosworth

Make What You Sell: A New Breed of Manufacturers http://www.inc.com/magazine/201306/mark-dwight/a-new-breed-of-manufacturers.html

Urban Manufacturing Alliance 2nd National Convening Summary Report http://prattcenter.net/research/urban-manufacturing-alliance-2nd-national-convening-summary-report

San Francisco as a Lab for US Urban Manufacturing http://www.sfmade.org/new/wp-content/uploads/2014_SLMReport.pdf

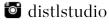
About Distl

Distl.

Distl is an urban strategy and real estate development consulting firm. Through our global lens, we help to create amazing urban places that people love. We work with private sector partners, governments and agencies, and local investment organizations to deliver strategic support for urban development projects from inception to completion.

Learn more at www.distl.co

🎔 distlstudio





Christine Caruso Partner christine@distl.co



Mackenzie Keast Partner mackenzie@distl.co



Justin Leclair Partner justin@distl.co



647.470.7021 info@distl.co www.distl.co @distlstudio

Copyright Distl, 2015