New York Apparel Cluster

*The New York City apparel cluster has been a significant piece of the region’s history.*

*How can NYC make its apparel cluster more competitive and attractive?*
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Executive Summary

The United States, known widely as the world’s great superpower, touts a high GDP per capita and a myriad of strong clusters like information technology, finance, and business services. Yet in the past few decades, the US’s competitiveness indicators have been weakening. The country faces significant challenges as the political system becomes more tumultuous, labor productivity decreases, and the country works to stabilize after the recession. Additionally, the US’s apparel industry has faced significant challenges as manufacturing ships overseas and labor productivity decreases.

New York City, the largest city in the US, is now fighting to retain its relevance in the global apparel industry. Once a city producing 95% of the country’s apparel, NYC – due to the high cost of doing business, space constraints, and availability of cheaper options overseas – now produces just 3% of the total clothing in the US. Because the city can no longer compete in large-scale manufacturing, it has mobilized a host of industry players to strengthen non-manufacturing parts of the apparel cluster, namely design, fashion education, wholesale, fashion media, and sample-making. Quite successfully, NYC has executed bi-annual Fashion Weeks uniting buyers and the press, utilized media outlets to promote fashion, leveraged the Garment District network to connect designers with cut & sew professionals, specialized in small-lot niche sample-making, and strengthened its retail and wholesale market.

Though the NYC apparel cluster has effectively created a new value proposition irrespective of large-lot production, the city faces a new set of challenges, including funding new designers, managing an increasingly rising cost of doing business, attracting e-commerce tech talent, and retaining design students post-graduation. In order for the city to keep its strong foothold in the apparel industry, NYC should provide financial, educational, and strategic business support to designers, grow its e-commerce industry in partnership with media and tech industries, and build a comprehensive strategy to attract and retain talent in city. This will help NYC remain a fashion leader in both the US and global apparel industry.
US Competitiveness Overview

The broader context of the United States of America’s place in the global economy is an important foundational element for the success of the NYC apparel cluster.

Analysis of Endowments

The US is a very large country, both in terms of land and population. Geographically, the country is 3.5M square miles which makes it the world’s 3rd largest country in land mass. Similarly, with a population of nearly 319M, the US is the world’s third largest country in terms of population, just behind China and India (World Bank, 2014). The US’s geographic endowments bring access to many assets, such as raw material and agricultural resources, while the very large and growing population provides a massive local market for many goods, including apparel. (see Chart 1)

Analysis of Macroeconomic Competitiveness

Beyond the wealth of endowments in the US, the macro economy in the country sets the stage for competitiveness across regions and clusters. First, the US has a very high GDP of $16.8B and a strong GDP per capita of $26,708, which is third in the world (World Bank, 2014). The
Consumer Price Index (CPI) in the US continues to rise steadily and the inflation remains stable, a positive signal for local demand. However, the US GDP has undergone significant fluctuations, particularly during the years following the recession (Delgado, Ketels, Porter, & Stern, 2012) (see Chart 2).

The US is a strong innovation center, and is second only to China in Patent Applications, but the US has many more patents accepted per capita than China (see Chart 3). The labor participation rate is slowly dropping, especially after the 2008 recession, and has yet to rebound (see Chart 4). In all non-farm businesses the labor productivity is drastically falling. Unlike the US overall, the apparel related industries of retail, wholesale and textile mills’ labor productivity rates are rising, with only a slight downturn during the financial crisis. However, like the US’ overall non-farm trends, apparel manufacturing, on the other hand, have seen a constant drop in productivity (see Chart 5).
**Monetary and Fiscal Policy:** According to the Institute and Strategy for Competitiveness Comp Index 2013 Ranks (Delgado, Ketels et al. 2012), the US’s monetary indicators show a country with weakening status. In recent years, issues with government surplus, defects, and government debt have caused the US to drop from first to the bottom of the pack among other competitive countries. This ranking indicates a weak state of the country’s fiscal stability since the recession (see Chart 6).

Additionally, the country has a negative trade balance in comparison to other leading apparel countries (see Chart 7) indicating that exports from the US are significantly weaker than imports. US government debt as percentage of GDP is increasing at a rapid rate, especially after 2008 financial crisis, almost reaching 100% rate of debt to GDP (see Chart 7).

**Human Development Institutions:** The United States gets a very high ranking in the UNESCO Human Development Index Ranking (see Chart 8), but according to the Institute and Strategy for Competitiveness Comp Index 2013 Ranks, the US gets mixed reviews in terms of Human Development (Delgado, Ketels, Porter, & Stern, 2012). First, the quality of the education system remains stable, but there is a large decline in primary enrollment. Similarly, US healthcare expenditures lead other countries and healthcare investments have
increased to improve healthcare access.

However, the quality of services in healthcare has been weakening over the last decade (see Chart 9).

**Political Effectiveness:** The US is a representative democracy, with three branches of government: the executive branch, the legislative branch and the judicial branch. (USA.Gov., 2015). The political effectiveness of the US is the weakest point in American macroeconomic competitiveness analysis because of the drastic decreases in the effectiveness of lawmaking, the loss of trust in politicians, the increasingly wastefulness of government spending, the favoritism in decisions of government officials, and the transparency of government policy making (see Chart 9). These issues make the political stability of the United States one of its biggest liabilities for competitiveness (Delgado, Ketels, Porter, & Stern, 2012).

**Rule of Law:** Similarly in rule of law, there are strong deteriorations in safety, judicial independence and property rights. Another concerning indicator is the waning of the ethical behavior of firms and tax payments (Delgado, Ketels, Porter, & Stern, 2012) (see Chart 9).
Analysis of Microeconomic Competitiveness

Company Operations and Strategy: Overall there is a weakening in company operations and strategy in the US, but firms are still highly ranked and globally competitive in many ways. American firms are highly sophisticated in their capacity to innovate and market, making them strong global players in their respective industries. Overreliance on professional management and a lack of deep staff training are some of the weaker areas. Additionally, there is a weakening in the nature of the firm’s competitive advantage and overall the companies are becoming less customer-orientated, signaling some concerning competitiveness issues within American companies (Delgado, Ketels, Porter, & Stern, 2012).

Quality of National Business Environment: The US’s business environment has been weakening over the last decade, with very few areas of improvement and very few areas of increased competitiveness. This is particularly true in two key categories: infrastructure (factor condition), and trade, subsidies, and taxes (context for strategy and rivalry) (Delgado, Ketels, Porter, & Stern, 2012).

Factor Conditions: Strengths in the US include good university-industry collaboration and a strong innovation infrastructure and good access to capital with VC funding and local equity financing. However, the US banks are less sound, especially after the recession. The US also has an overly burdensome administrative infrastructure that inhibits competitiveness, making it more difficult to start a business, with more procedures required and higher burden of government regulation. Finally, the logistical infrastructure, business logistic systems and the communications infrastructure are aging and getting outdated (Delgado, Ketels, Porter, & Stern, 2012).

Context for Strategy and Rivalry: Overall, there has been strong improvement in foreign direct investment, technology transfer indicators, and IP protection. Conversely, there is less cooperation in labor-employer relations, coupled with a decrease of pay and productivity. Additionally, there is less quality in the regulatory
system, a drop in intellectual property protection, more trade barriers and a slightly higher tariff rate, which all affect the country’s competitiveness negatively (Delgado, Ketels, Porter, & Stern, 2012).

**Demand Conditions:** According to the Institute and Strategy for Competitiveness Comp Index 2013 Ranks, demand conditions remain stable overall. There has been a vast improvement in the government procurement of advanced technology products, but degrading laws relating to ICT, a drop in buyers’ sophistication and falling-off in the stringency of environmental regulations (Delgado, Ketels, Porter, & Stern, 2012).


**Related and Supporting Industries:** The US has significant cluster diversity, though apparel is not a strength in the US relative to other clusters. Employment in US apparel is falling and the cluster overall is very small relative to growth clusters like business services and education & knowledge creation (see Chart 10). Overall trends in the US are also falling-off in terms of quality and quantity along the supply chain, and there is less availability of specialized research and training services, which all indicate a weakening of competitiveness. Positively, the US clusters show strong access to the latest technologies and there is still strength in the cluster development and collaboration (Delgado, Ketels, Porter, & Stern, 2012).
New York City Metropolitan Competitiveness Overview

New York City (NYC) is a very unique setting within the context of the US. First, the geographic land mass is only 303 square miles, with a population of 8.4M and a density of 27,013 people per square mile. This makes NYC sixty-six times denser than New York State, and three hundred times denser than the US (see Chart 11). NYC, though small, is endowed with access to one of the deepest and more accessible ports on the east coast and also access to the Hudson River (Porter, Ketels, & Vallejo, 2013). The extreme density of the city, limits available space for business, and drives up overall living and real estate costs, a significant obstacle for businesses in NYC (see Chart 12). NYC is also extremely diverse, with a majority of people being non-white, 37% foreign born, and half speaking a language other than English at home (US Census, 2015). With this population diversity comes a highly diverse set of tastes and needs in the local market which gives companies access to broader market knowledge, but also challenges companies to continue to be innovative, especially in apparel.

Analysis of Macroeconomic Competitiveness

NYC’s monetary condition is extremely strong. First, the city’s regional economy boasts a GDP of $1,281 billion, making this area the strongest in the US (Porter, Ketels, & Vallejo, 2013, p. 14). Additionally, NYC’s per capita income is $30,200, which is well above the national average of $26,708, with Manhattan

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ranking with the highest in the nation at $59,398 (Porter, Ketels, & Vallejo, 2013, p. 2). The labor force is highly productive, and the area is ranked 6th in the nation in terms of productivity. Similarly, NYC is ranked 12th for innovation, with a positive growth rate for utilities patents per 10,000 employees. In terms of exports, NYC is growing slowly at 3.69%, which puts it at 58th in the nation for exports (ISC 2014).

The city government has a strong budget with unique characteristics, indicating fiscal strength. NYC has a budget that is similar to the size of many state budgets, with revenues from real estate taxes, sales taxes, and income taxes. This is complemented with support from the state and federal government. In comparison to other cities, NYC raises more of its taxes from income and sales tax, allowing them to be less dependent on property tax (Porter, Ketels, & Vallejo, 2013, p. 2). The city government also boasts the largest public workforce in the nation in local (5,792 employed) and federal services (4,849 employed), with over 300,000 total employees of the city government (Porter, Ketels, & Vallejo, 2013, p. 3).

New York State ranks in the top five in the US on the Human Development Index and second in the US in education (Social Science Research Council, 2015). Though the number of people receiving a high school diploma has been rising, NYC’s rank in educated population is still very low. NYC ranks 7th in the country of residents with a Bachelor’s degree or more, and 14th in per capita healthcare spending (US Cluster Mapping, 2014; United Health Foundation, 2015). In terms of political institutions, the city has historically had very strong mayors, who are elected every four years. These leaders wield quite a bit of power in setting the direction of the city agencies and budget (Porter, Ketels, & Vallejo, 2013, p. 2). While NYC has been named a particularly safe larger city (Porter, Ketels, & Vallejo, 2013, p. 14), there are still high levels of inequality, with the current poverty rate of 18.5%, compared to 13.7% in NY State and 13% in US. NYC is also not strong in company spending in R&D per capita, ranking 54th nationally, indicating weaker company and operations strategy. In comparison, NYC is stronger in federal funding for R&D per capita, coming in 20th in the nation (US Cluster Mapping, 2014).
Analysis of Microeconomic Competitiveness

Quality of Business Environment

**Factor Conditions:** NYC is strong in innovation capability and funding, ranking 11th for venture funding with a 13% increase in funding over the last decade. (US Cluster Mapping, 2014) Additionally, the labor force is highly educated which adds to NYC’s innovation capability. Thirty-four percent of the population has at least a Bachelor’s degree, while the US average is ~28%. NYC is also has a large number of science and engineering doctorate degrees awarded relative to other states and regions (US Cluster Mapping, 2014). Finally, there is an increasing overall labor pool to access as the population continues to grow through immigration (Porter, Ketels, & Vallejo, 2013, p. 14). The weakest parts of the NYC’s factor conditions have to do with the physical space of the city and the logistics. First, limited physical space results in higher cost of doing business in region (CNBC, 2013). Limited space also drives the high cost of living for the population, making NYC less attractive to live in for some members of the labor force (Porter, Ketels, & Vallejo, 2013, p. 14). Second, NYC’s infrastructure needs significant investment and repair because of aging wear and tear, and the city has extremely long commute times (Porter, Ketels, & Vallejo, 2013, p. 15). Finally, NYC’s young population waning also signals potential loss of talent at younger levels (US Cluster Mapping, 2014).

**Context for Strategy and Rivalry:** NYC is a financial epicenter with strong international business partners and an overall high percentage of FDI allowing easy access to capital for firms. The high density of company headquarters also allow for both increased direct rivalry for labor and demand, and quick dissemination of best practices. However, the network of unionized workers (22% of current employees) is a large portion of the workforce, limiting labor flexibility and innovation due to strict hiring and firing policies. NY is also ranked one of the lowest states in the region for business climate in the US (CNBC, 2015), making it harder for new firms to settle in the region and compete with established firms. New York’s state and local taxes are also particularly high at 15%.
**Demand Conditions:** NYC’s population continues to grow which gives firms, especially apparel firms, access to a larger local market. As mentioned earlier, there is a highly sophisticated and prosperous population. The per capita GDP has increased by 1.44%, and this overall wealth also drives increase in features and expectations from firms (high demand bar). NYC is the most linguistically diverse city in the world, encompassing 800+ languages, which results in highly diverse set of tastes and also drives increased expectations from firms. (Porter, Ketels, & Vallejo, 2013).

**Related and Supporting Industries:** There are a large number of Institutions for Collaboration (IFCs) in the region that address both economic and industry specific priorities. In addition, NYC has a strong portfolio of clusters that are good complements. Specifically, there are a strong set of clusters in the region (e.g. tourism, entertainment & media, fashion, and financial/business services) that strengthen the brand, improve access to demand, and heighten the learning and innovation in the apparel cluster: (see Chart 13). Unfortunately, the strength of the clusters has been declining, putting NYC at 58th in comparison to other cities in the USA (US Cluster Mapping, 2014). Similarly, manufacturing employment has been massively decreasing in the region over the past decade (US Cluster Mapping, 2014).
Global Apparel Industry

Overview

The global apparel industry size was approximately $600B USD in revenue in 2014 (see Chart 14). While the apparel market saw declines during the post-recession period in 2009, with increased consumer confidence, global apparel has grown year over year since 2009 (see Chart 14). The industry is forecasted to accelerate, with an anticipated CAGR of 5.1% (Market Research, 2014) for the five year period 2013-2018 (Statista, 2015).

Most of the apparel market growth is estimated to be driven by emerging countries like China and India. As Chart 15 illustrates, while traditional leaders such as US and the EU will still be large markets, China is expected to outpace and outgrow both US and EU by 2015. Key external drivers of the overall apparel industry and market size include global per capita income, global population and population growth, consumer confidence, world price of cotton, and competition across manufacturing markets (e.g. emerging low labor cost regions like China for sourcing (IBIS Global Apparel Report, 2014).

Participants

The apparel industry is a buyer-driven commodity supply chain where global buyers (here, defined as the retailers who own the brand and overall design for apparel) determine what
needs to be produced and where it should be produced. Retailers
often control the highest value added pieces in the value chain,
which are comprised primarily of design, branding, and overall
product marketing (Fernandez-Stark, Frederick, & Geref, 2011), the
elements that come before and after apparel manufacturing. It is
these high value added activities that drive the profits in this
industry. Top brands by sales globally include Nike, H&M, Zara,
and Ralph Lauren (Brown & Optimor, 2012, p. 50).

Most retailers in the apparel industry outsource
manufacturing. Today, many look to emerging markets for a
network of
contract manufacturers to optimize the outsourced
supply chain by both speed and cost of production.

Within this production network, there are two primary
players: textile companies (fiber production and textile
manufacturing) and apparel manufacturers. Textile
companies are focused on taking raw materials, like
fiber, and creating sheets of raw textile for apparel
construction. Apparel companies own the cutting,
sewing, and overall construction of the final piece of
apparel to be shipped (see Figure 1).

In addition to the construction of the garments,
there is also considerable growth in the distribution of

![Figure 1: Apparel cluster value chain, Source: (Hammond, 2015)](image)

the apparel goods, in both wholesale and retail. Over the past decade, we see growth particularly in the global retail, as well as strong growth, in the years besides the recession, in the US wholesale market. Both wholesale and retail are distributions trends that are important to the NYC apparel cluster (see Chart 16).

**Key Trends**

Several key trends in the apparel industry have begun to shift success criteria for players in the apparel industry. Specifically, growth of technology and increased consumer expectations from fashion and apparel are increasingly pushing all apparel companies to innovate.

**Shorter production cycles:** Over the past decade, many retailers have begun to increase the number of fashion cycles throughout the calendar year. These increases keep consumers engaged in the next fashion trend, but drive shorter production cycle pressures on the global supply chain e.g. shorter lead times, rapid delivery, wasted inventory costs, etc. (Bédat, 2015; Pagano, 2015)

**Online retail and growth of technology in apparel:** Technology has driven significant changes on two main fronts. First, technology has given consumers instantaneous access and knowledge about new brands and trends, driving a need for faster and more tailored or customized apparel. Over 66% of apparel sales are estimated to be influenced by online sources by 2016. Second, technology has opened the online retail channel, making e-commerce an increasingly important channel for all players. E-commerce is currently ~6% of total retail sales, and continuing to grow in share of the retail market. In addition, emerging markets like China are seeing faster overall online retail growth as a percent of total retail (US 1.1% growth from ‘09-’12, while China saw 4.3% growth in the same period). This increase in utilization of e-commerce makes it easier for strong brands to access new markets of demand, but also opens up the local market to new competition from foreign and niche players. (E-Marketer, 2013)

**Tailor to tastes and customization:** As we saw in the growth of technology, segmented or customized fashion is becoming a more important driver of consumer purchases - an expectation from consumers to tailor to tastes,
which are varied and change dynamically. This trend has led to growth of new niche apparel brands (e.g. Bonobos, Warby Parker, Lululemon, etc.) that have utilized technology to sell directly to consumers. There is also a bifurcation of the market which has an effect on demand, presently the high end of the market and luxury brands are doing well, and fast and affordable fashion is also at an all-time high (Pagano, 2015; Strauss, Sundjaja, Johnson, Gandhi, Wong, & Yoo, 2010; The New York Times, 1911).

NYC Apparel Cluster Competitiveness

History

The New York City apparel cluster has had a storied history of 215 years, categorized into four key stages: the birth, the growth, the decline, and the reinvention (The Municipal Art Society of New York, 2011; The Garment District NYC, 2015; Zady, 2015).

*The Birth (1800-1900):* The birth of the NYC apparel cluster began in the early 1800s when an influx of German and Central European immigrants arrived to the US by way of the New York Port. The Port, the most important natural endowment for the NYC apparel cluster, was crucial for two reasons. First, it brought in a surplus of cheap European immigrant labor looking for low-skilled employment. Second, it provided a quick and reliable shipping option for apparel exports to other states and nations. The boom of labor supply came at an opportune time, as there was growing demand of clothes for Southern slaves, sailors, businesspeople, and Civil War soldiers. NYC quickly leveraged the recent invention of the sewing machine to produce a high volume of clothes at affordable prices for consumers (The Garment District NYC, 2015; Zady, 2015).

*The Growth (1901-1970):* For the majority of the 20th century, the NYC apparel cluster was thriving. Labor unions were strengthening, IFCs were being created, fashion media companies were being founded and manufacturing was at an all-time high. By 1910, NYC was producing 70% of the country’s women’s clothing and 40% of the men’s clothing. By 1931, the Garment District had the highest concentration of garment manufacturers in the world. And by the 1960s, the Garment District was at its economic and cultural peak,
producing 95% of the clothing in the US. New York Fashion Week also began during this booming time for fashion (The New York Times, 1911; Zady, 2015; Municipal Art Society, 2011; The Garment District NYC, 2015).

**The Decline (1971-2000):** The start of the 1970s became a trying time for American production, and the NYC apparel cluster was no different. Overseas sites, particularly China, became attractive places to do business due to their cheap wages and production capacity to manufacture large lots of clothing. For these reasons, NYC manufacturers began to ship production abroad, and soon the capital to reinvest in the cluster’s facilities, talent, and technology depleted. This was around the same time, however, that other parts (e.g. design, wholesale) of the cluster began to develop (Municipal Art Society, 2011; Zady, 2015) (The Garment District NYC, 2015).

**The Reinvention (2000-Present):** With just 3% of the apparel sold in the US being manufactured in the Garment District, the NYC apparel cluster gradually loss significance and competitiveness in the large-lot production arena. NYC began to leverage the “slow fashion”\(^1\) trend hitting the scene, showcasing the city as a hub for ethical clothing creation. Yet in order to keep the cluster intact, NYC focused on building value propositions in other parts of the cluster, namely education, design, media and sample making (Bédat, 2015; Municipal Art Society, 2011; NYCEDC, 2015).

**Cluster Map**

The New York City apparel cluster map is comprised of several key actors. At the core of the cluster are three primary players: the designers, sample-maker and small-lot manufacturers (comprised of pattern/sample makers, cut & sew shops, accessory sources, and textile importers), and the distributors (comprised of

\(^1\)“Slow fashion”, a term coined by Dr. Kate Fletcher in 2007, is a new model of fashion that focuses on the ethical sourcing and production of clothing.
wholesalers, in-store retailers, online retailers, and buyers). The strength of this cluster comes from the ability of these three core actors to interact with one another in the NYC ecosystem.

Equally important to the landscape are the government entities such as New York City Economic Development Corporation (NYCEDC) and IFCs, such Council of Fashion Designers of America, and the related and supporting industries, such as tourism, shoes and accessories. Additional assets in the NYC cluster map are the high fashion related entities that are extremely important to the apparel industry, such as the fashion schools, media companies, photographers and models (see Figure 2).

**Apparel Cluster Performance**

The apparel cluster is a key economic driver for NYC. The cluster is a $98 billion industry that pays out $10 billion in wages and generates $2 billion in tax revenues (NYCEDC, 2015; CNBC, 2013). That said, there are
significant declines in apparel manufacturing, with employment dropping from over 86,000 employees to just over 15,000 in the last decade and a half (see Chart 17). In comparison, there are other parts of the cluster that remain strong, remain steady or are growing. Apparel retail has been steadily growing its employment. The publishing industries, textile mills and wholesale have declined, but not as drastically at apparel manufacturing (see Chart 17). Overall, the wages in the apparel cluster have been growing over the last decade and a half. The strongest growth is in publishing, wholesale and textile mills (see Chart 18). Retail is the lowest paid in the cluster map, and apparel manufacturing is similarly weak as it is the only part of the cluster that has seen a decline in wages (see Chart 18).

### Analysis of New York City Apparel Cluster

The microeconomic competitiveness of the NYC apparel cluster exists in the macroeconomic and human development context of NYC and the US as discussed in previous sections of this analysis. There are additional unique factors of the cluster that both add to and detract from its competitiveness. In order for the cluster to be most competitive, the focus should be on changes to the elements that challenge the cluster and enhancements of the strengths to allow the cluster to capture the most value.

**Factor Conditions:** There are two strong factor conditions for NYC’s apparel cluster. First, there is an abundance of knowledge resources, such as the Fashion Institute of Technology (FIT) and Parsons School of Design, which produce high-quality designers and pattern makers (Strauss, et al., 2010). This is a key asset for the cluster, generating talented workforce that leads the value creation in this industry. Second, NYC’s long-held reputation for being a “fashion hub” attracts world-class designers from around the globe (Pagano, 2015).
Conversely, there are also factor conditions that detract from the apparel cluster’s competitiveness. First, there is a lack of affordable living and workspace for designers, as well as small-and medium-lot manufacturers. There are a few co-working spaces, but there is opportunity to create additional space for the cluster (Pagano, 2015). Second, there is a lack of short-term financing for up-and-coming designers (Matsumoto, Rosman, Johnson, & Rowell, 2015; Matsumoto, Rosman, Johnson, & Rowell, 2015). Third, there is a low-skill labor force, with 71% of production workers without a high school diploma (Fiscal Policy Institute, 2003). This is particularly detrimental as the city transitions from a heavy manufacturing-focused cluster (where low-skilled labor is demanded) to a heavy design-focused cluster (where high-skilled labor is demanded).

**Context for Firm Strategy and Rivalry (CSR):** The NYC apparel cluster’s strength is the density of fashion companies (over 900) headquartered in the city (Strauss, et al., 2010). In addition to the benefits of shared talent and resources, this density also creates numerous opportunities for collaboration and networking among industry players. (Bédat, 2015; Pagano, 2015). Additionally, NYC’s strong connections with local and global suppliers allow for fast and flexible shipping of small-lot clothing (Municipal Art Society, 2011).

The labor laws of NYC, on the other hand, provide both a blessing and a curse to the cluster. While NYC’s highly-regulated environment and unionized workforce provide sound safety nets for workers, it also incentivizes the city to outsource its manufacturing to cheaper less-regulated, non-unionized hubs in Asia and LA. This ultimately weakens the city’s link between designers and manufacturers (Doeringer, 2012).

**Demand Conditions:** Presumably the NYC apparel cluster’s strongest part of the Diamond, there are three primary demand conditions that build the industry’s competitiveness. First, its reputation of the “Fashion Center” of the world spurs local consumer demand. This is evident in the city’s annual Fashion Week events, which attract 232,000 attendees each year (Municipal Art Society, 2011). It is also the world’s largest fashion retailer and wholesaler, attracting more than 578,000 buyers annually (Municipal Art Society, 2011). The wholesale and showrooms are considerable assets for the NYC’s demand conditions. Second, the cluster’s
proximity to fashionable New Yorkers allows designers to get instant feedback on new designs, and iterate quickly (Matsumoto, Rosman, Johnson, & Rowell, 2015). This is an advantage that non-New York designers do not necessarily have at their disposal. Third, the city’s focus on the new trend of “slow fashion” attracts niche high-end consumers looking for sustainably produced clothes, which works with the niche manufacturing capabilities of the NYC cluster (Zady, 2015).

Perhaps the only potential detracting demand condition is the growth of online shopping, as NYC residents’ access to online options from fashion competitors such as Paris and Milan could decrease local purchases. The increase of online shopping (i.e. the opportunity to tap in an entire global market), however, if managed strategically, is more likely to contribute to stronger, not weaker, demand conditions for the cluster.

**Related and Supporting Industries:** The competitiveness of the NYC apparel cluster is in large part due to the strong network of related and supporting industries. First, there is a burgeoning media cluster, comprised of major fashion publications (e.g. Vogue), fashion PR firms (e.g. HL Group) and TV shows (e.g. Project Runway) that complement the apparel industry. Second, there is a density of related apparel materials (e.g. leather, buttons, and zippers) and services (cut & sew shops, trim shops, and jobbers) within easy reach of designers. Tourism is also important to the fashion cluster, as it supports both the retail sales and wholesale visits (Municipal Art Society, 2011).

Tech companies and other start-ups are quickly infiltrating the Garment District, a patch of Midtown Manhattan historically dedicated to apparel companies. This move could have potential benefits for the apparel cluster, if the relationships and connection are cultivated properly, as there is quite a bit of opportunity in apparel e-commerce. On the other hand, the diffusion of the apparel network (at least in the physical sense) could be a detriment to the district if the region is unable to truly integrate these tech companies into the apparel cluster (Gorsuch, 2015) .
Today, NYC has a diverse set of IFCs supporting the apparel cluster on both a city and national level. On the city level, the Garment District Alliance is a 501(c)3 not-for-profit that improves the quality of life and economic vitality of Manhattan’s Garment District (The Garment District NYC, 2015), the NYCEDC (NYCEDC, 2015) is a non-profit that recently launched Fashion.NYC.2020, a strategic study to examine the challenges and opportunities facing the fashion industry (NCYEDC, 2010), and the Municipal Arts Society (MAS) NYC is a non-profit that is committed to promoting New York City’s economic vitality, cultural vibrancy, environmental sustainability and social diversity (Municipal Art Society, 2011). On the national level, the NYC apparel cluster receives additional industry support from IFCs such as the Council of Fashion Designers of America (CFDA), the American Apparel & Footwear Association (AAFA), and the United States Fashion Industry Association (NYCEDC, 2015).

Competitors

New York City has many competitors both within the United State and globally. These cities are competitive not just for their production capabilities, but for their competition in terms of reputation, design, media and other strengths important to the New York City cluster.

Los Angeles, US: Los Angeles is the largest apparel competitor in the US. Its non-unionized workforce makes it possible to employ a large number of unskilled labor in its large-lot manufacturing factories. Compounded with the fact that land is much more reasonably-priced than in NY, LA is an attractive place to do large-scale clothes production (see Chart 19). The city is also advanced in certain technologies, such as the machinery needed to

![Chart 19: LA NYC Establishment Comparison, Source: (US Census, 2015)](chart19.jpg)
produce labor- and capital-intensive denim. Yet while LA is quite competitive in manufacturing, LA is not as competitive in the other parts of the apparel industry, such as design and wholesale (Doeringer, 2012). The city’s lack of fashion schools, media, IFCs and skilled labor result in a manufacturing-only strong apparel cluster (Pagano, 2015; Bédat, 2015) (see Chart 20).

**Milan, Italy:** Milan, one of the world’s most important fashion capitals, is home to various fashion designers (Giorgio Armani, Stefano Gabbana, and Donatella Versace), labels (Prada, Versace, and Valentino), and fashion institutions (Style Design College, Beatrice International Models Agency) (Milano24ore, 2015; Made_In_Italy.com, 2015). Milan also hosts two Fashion Weeks each year. Unlike NY, Milan specializes in pret-a-porter, or “ready-to-wear” fashion, meaning the clothes sold are often factory-made and untailored to the final consumer. From 2009 to 2012, Milan went from #1 to #8 in the “Fashion Capital of the World” rankings by the Global Language Monitor (The Global Language Monitor, 2015).

**Paris, France:** Paris, a prominent fashion city since the 15th century, is home to many designers (Chanel, Chloe, Dior), labels (Louis Vuitton, Burberry), and a host of related and supporting industries (cosmetics, tourism) (bio., 2015). It also touts the Avenue des Champs-Elysees, an avenue of high-end shopping comparable to NY’s 5th Avenue. Paris focuses on “haute couture,” or high-quality hand-man clothing, which will compete with the NYC higher end of the market (Dixon & Media, 2015).
**Key Strengths**

As seen in the Diamond Analysis, there are numerous strengths of the NYC apparel cluster; this section will highlight the five most important factors behind the continued power of the industry.

1) **Reputation:** NYC has held a long-held reputation for being a leader in the fashion industry, drawing in fashion institutes and headquarters of leading apparel companies to the area. Its success is due largely to the number of years it has built up its name and expertise, including 215 years of clothing production, 150 years of fashion magazine publishing, 110 years of fashion institutions, and 70 years of Fashion Weeks (Zady, 2015; NYCEDC, 2015; Fashion Week, n.d.). These Fashion Weeks, events where fashion collections are shown to buyers, the press, and the general public, are particularly important for generating “buzz” for the NYC apparel cluster. In fact, the Fashion Week attracts approximately 232,000 attendees each year and generates $532 million in direct visitor spending, leading to a total economic impact of $865 million (Fashion Week, n.d.).

2) **Media:** NYC is home to strong fashion media outlets that greatly bolster the city’s apparel cluster. Local magazines such as Vogue, Harper’s Bazaar, InStyle, and Women’s Wear Daily are particularly importantly, as they write about the latest trends, designers, and companies in the city (The Municipal Art Society of New York, 2011). TV shows focused on NYC fashion, such as Project Runway and America’s Next Top Model, help to create the cultural cachet that is invaluable to the cluster. Tech companies, as of recently, have also played a crucial role for both the existing brick-and-mortar companies that are launching e-commerce sites, and for new startups like Zady and Bow & Drape that are fully online (Bédat, 2015) (Pagano, 2015).

3) **Proximity & Network:** The proximity of the supply chain is truly clustered in the Garment District: within blocks, designers can purchase raw materials; cut, sew and assemble garments; and sell product in local stores. This allows for a great deal of speed and operational efficiencies (Municipal Art Society, 2011). Additionally, the closeness of the industry players allows strong professional and personal networks to form. (Pagano, 2015) The NYC cluster has strong industry events that bring together journalists, designers, and CEOs of e-commerce
businesses, as well as the competitive advantage gained with the luxury to speak to a journalist face-to-face instead of via email or Skype. This network is critically important, for example, when looking for models in the city to promote a new fashion line (Bédat, 2015) (Pagano, 2015).

4) R&D & Sample Making: Though NYC no longer competes in large-lot apparel manufacturing, the city has a strong competitive advantage in sample-making and small-lot production, defined as production of less than 50 pieces (Municipal Art Society, 2011). Because the NYC apparel cluster is close to fashion consumers, industry players can test out new styles, get fast feedback, and quickly iterate on the design. This quick turnaround is possible thanks to NYC’s highly-concentrated network of apparel experts that allows a designer, for example, to draw a sketch of a dress and walk it to the office across the street to a skilled sample-maker who can bring the design to life in a matter of days. The speed and flexibility that NYC offers in serving smaller markets of highly-differentiated and higher-priced fashion product is a key strength of the cluster (Gorsuch, 2015).

5) Demand Conditions: NYC stands out globally for its concentration of wholesale and showroom establishments. Each year, about 578,000 individual wholesale buyers and fashion event attendees visit NYC, with the wholesale market alone contributing $16.2 billion in direct spending annually. The Javits Center is a particularly important place, as it is the hub for a series of trade shows and holds approximately 5,000 showrooms. The effectiveness of the region as a place for convening is evident in NYC’s re-visit rate. The
average buyer visits NYC 4.2 times a year to attend fashion trade shows (Municipal Art Society, 2011). This has been a very important for the cluster, and must remain strong and adapt in the future in order to keep the cluster competitive.

**Key Challenges**

Despite its strengths, there are five significant challenges facing the NYC apparel cluster that NYC will have to address in order to strengthen the business environment and improve the apparel cluster’s competitiveness.

1) **Funding:** While there is no shortage of financing in NYC per se, there is a lack of financing for players (e.g. designers, etc.) in the apparel industry. Specifically, many up-and-coming designers need short-term financing, (typically for 2-6 months), after product gets to wholesaler but before the product sells to the retailers (Matsumoto, Rosman, Johnson, & Rowell, 2015). Yet just a handful of investment banks in NYC (the largest one being Financo) actually fund new designers (Bédat, 2015). Certain non-profits, particularly the NYCEDC, have attempted to fill in the gap with initiatives like the NYC Fashion Production Fund (debt-based) and the Fashion Manufacturing Initiative (grant-based) but programs are competitive (only seven companies receive FMI grants) and funds are small ($25K-$150K for FMI grants) (Matsumoto, Rosman, Johnson, & Rowell, 2015).

2) **High cost of living & doing business:** A large challenge facing the apparel cluster is the high cost of doing business in NYC. Coveted space in Manhattan is limited and costly, with the Garment District shrinking from 7.7 million square feet to 1.1 million square feet as city real estate becomes more competitive (Save the Garment Center; HBS NYC Case). Related to the high cost of doing business is the high cost of living. This is particularly detrimental for recent graduates of the top NYC design schools, who are on especially tight student loan budgets (Pagano, 2015).
3) **Production:** Due to NYC’s limited space and high cost of land, the city has little production capability to manufacture large quantities of clothes. Thus the cluster must outsource large-lots to more capable US sites like LA and North Carolina, or Asian countries like China and Bangladesh. Furthermore, the city does not have specialized machinery to produce certain capital-intensive items like jeans; LA, on the other hand, has become known as the “it” place to produce these items (Doeringer, 2012).

4) **Opaqueness:** Though the NYC apparel cluster’s network is incredibly strong, but it can be hard to see what is happening in the rooms of the Garment District. There are countless players in the space and it can be daunting for a newcomer to understand how of the pieces of the cluster map fit together. Though there are paper maps and databases to help industry participants navigate through the Garment District, they are rarely used. Thus it often takes a great deal of patience and the connections with the right people to be successful in the cluster (Gorsuch, 2015).

5) **Labor:** There are two labor challenges currently facing the NYC apparel cluster. First, though many apparel companies are in need of tech skills, such as social media and programming as they launch e-commerce platforms, much of the skilled tech labor is not readily accessible or fully trained. Second, though apparel design education in NYC is strong, but foreign designers are not being retained due to strict U.S. immigration laws that require them to return to their countries after getting educated in NYC. Therefore NYC is exporting one of their most important assets to their competitors, the highly skilled design talent. (Matsumoto, Rosman, Johnson, & Rowell, 2015).
Recommendations

“I want to show them that we matter. I want to break this façade of fashion being all glamour, all important, all chic. It’s not. It’s brutal, exhausting, messy. All the designers avoid talking about the factory workers involved in making a garment. All you see are the photo shoots, runway, street fashion, editorial. You don’t see the gritty [side]...Anything you see on a runway, it’s started in a factory.” - Joann Kim, manager at Johnny’s Fashion Studio (WICKER, 2015)

The NYC apparel cluster has key strengths that have been significant drivers of the cluster’s overall reputation and legacy in the fashion world. While there are opportunities to seize in both deepening these strengths and upgrading capabilities given new trends in technology and consumer behavior, there are also major challenges in NYC apparel that the city must address to continue to hold onto its overall competitiveness in the apparel industry as global and even domestic clusters become an increasingly real threat.

NYC Apparel Cluster Value Proposition

The NYC apparel cluster’s value is generated not from large scale production, but from design expertise and education, sample-making to test the market, innovate and capture value, distribution in wholesale and retail, & proliferation of fashion media. In order to remain competitive, the cluster should consider implementing the following recommendations:

Recommendations Building on Strengths

<table>
<thead>
<tr>
<th>Diamond Area</th>
<th>Opportunity to Seize</th>
<th>Recommendation</th>
<th>Institution</th>
<th>Level</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Conditions (FC)</td>
<td>Existing high designer caliber and density</td>
<td>Increase designer business support in general. E.g. Add business curriculum to design school to improve current lack of business minded orientation with designers, provide export assistance to designers (education, logistics, and access to markets abroad).</td>
<td>Gov’t, IFCs, Schools</td>
<td>State, Cluster</td>
<td>High</td>
</tr>
<tr>
<td>FC</td>
<td>R&amp;D &amp; Sample-making</td>
<td>Provide access to R&amp;D for new designers in the workforce</td>
<td>Gov’t, Retail companies,</td>
<td>State / Region</td>
<td>High</td>
</tr>
<tr>
<td>Making</td>
<td>(scholarship to new designers, apprenticeship programs, mentor/connect colleague programs for learning)</td>
<td>Schools</td>
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<tr>
<td>Host design competitions (from design to final sample manufacturing/prototype) to reinforce brand &amp; bring more innovation into cluster</td>
<td>IFCs, R&amp;D companies</td>
<td>Cluster</td>
<td>Medium</td>
<td></td>
<td></td>
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<tr>
<td><strong>Demand Conditions (DC)</strong></td>
<td>Strong Reputation</td>
<td>Develop a designer portal to find &amp; access individual designer talent; add ability to rate designers (consumer reviews) on design quality</td>
<td>IFCs</td>
<td>Cluster</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>DC</strong></td>
<td>Highly sophisticated and fashion driven market</td>
<td>Aggregate customer data and create knowledge base, and potentially leverage for other clusters (coordinate with other related clusters within region)</td>
<td>IFCs</td>
<td>Region/Cluster</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do comprehensive study on economic potential for U.S. exports, and market knowledge required to tap into those new markets</td>
<td>IFCs</td>
<td>Cluster</td>
<td>High</td>
</tr>
<tr>
<td><strong>Context for Strategy and Rivalry (CSR)</strong></td>
<td>Proximity / Network</td>
<td>Improve collaboration and networking opportunities for designers, etc.; Develop physical and affordable co-working space for designers (in addition to incubators), facilitate more networking events between designers and other cluster players</td>
<td>IFCs, Garment district players</td>
<td>Cluster</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Related and Supporting Industries (RSI)</strong></td>
<td>Media</td>
<td>Coordinate a “Market preparedness critique” with media to give new designers real world advice before jumping into the market</td>
<td>IFCs, media companies</td>
<td>Cluster</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase fashion media outlets to build on brand (connect media with training &amp; support, bloggers and spinoffs; create a “Fashion Channel” or “Fashion Network” TV)</td>
<td>Retail, fashion, and media companies</td>
<td>Region, Cluster</td>
<td>Low</td>
</tr>
</tbody>
</table>
## Recommendations Addressing Weaknesses

<table>
<thead>
<tr>
<th>Diamond Area</th>
<th>Opportunity to Seize</th>
<th>Recommendation</th>
<th>Institution</th>
<th>Level</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC</td>
<td>Attracting and Retaining Talent</td>
<td>Build tech talent by planning trainings for people in NYC; create internship, apprentice, and fellows program to retain global talent; have recruiting events that connect designers w/ techies</td>
<td>Gov’t, media companies</td>
<td>State, Cluster</td>
<td>High</td>
</tr>
<tr>
<td>DC</td>
<td>Expensive</td>
<td>Stop thinking like an island: seek less expensive space in other boroughs or upstate to live and work</td>
<td>IFCs, Gov’t, Garment District players</td>
<td>Region/Cluster</td>
<td>Low</td>
</tr>
<tr>
<td>CSR</td>
<td>Funding</td>
<td>Create risk profile rating for designers; connect to community banks to improve loan lending to designers</td>
<td>IFCs, Gov’t</td>
<td>Region/Cluster</td>
<td>High</td>
</tr>
<tr>
<td>CSR</td>
<td>Limited Production Capability</td>
<td>Create a cluster-wide initiative to negotiate with wholesalers; develop crowd-funding training for fashion companies and designers</td>
<td>IFCs, Gov’t, Garment District players</td>
<td>Region/Cluster</td>
<td>Medium</td>
</tr>
<tr>
<td>CSR</td>
<td>Limited Production Capability</td>
<td>Build manufacturing cluster in Bronx, Harlem or upstate in collaboration with ICIC to do large-lot production</td>
<td>IFCs, Gov’t</td>
<td>Region</td>
<td>Low</td>
</tr>
<tr>
<td>RSI</td>
<td>E-Commerce</td>
<td>Open access for e-commerce companies to the current cluster players (showrooms, wholesale, retail, global companies with fashion HQs, and industry leaders); develop platform for fashion hackathons</td>
<td>IFCs, media companies</td>
<td>Region/Cluster</td>
<td>High</td>
</tr>
<tr>
<td>RSI</td>
<td>E-Commerce</td>
<td>Facilitate more board membership of global trends in upstart companies</td>
<td>Retail, fashion, and media companies</td>
<td>Region, Cluster</td>
<td>Medium</td>
</tr>
</tbody>
</table>
Appendix

Cover Photo: Source (Wikipedia, 2015)

Chart 1: GDP Growth, Land Size, GDP/Capita of 3 Populace Countries, Source: (World Bank, 2014)


Chart 6: Government Debt in % of GDP, Source: (World Bank, 2014; OECD, 2015)


Chart 8: UNESCO’s HDI Ranking, Source: (UNESCO, 2014)


Chart 14: Global apparel revenue in Billions USD; Source: (Market Line, 2015)

Chart 15: Global apparel revenue in Billions USD, Source: (IBISWorld, 2014)


Chart 18: NYC Apparel Cluster Wages, Source: (US Census, 2015)

Chart 19: LA NYC Establishment Comparison, Source: (US Census, 2015)


Chart 21: Fashion Center Service Map

Figure 1: Apparel cluster value chain, Source: (Hammond, 2015)

Figure 2: NYC Apparel Cluster Map
References


