NEW YORK CITY MOTION PICTURE CLUSTER

MICROECONOMICS OF COMPETITIVENESS

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May 10, 2013

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ABSTRACT

To date New York has become a hub for the film industry due to strong factor conditions. The city has an unparalleled urban landscape for film and a dense network of professionals across all industries. In the last decade, however, the motion picture cluster has stagnated as population density gives way to higher costs of doing business and New York continues to serve as a satellite to the iconic Los Angeles film cluster. In order to compete going forward, New York must shift from its concentration on the production component of the value chain and seek a new unique advantage.

1. CLUSTER ENVIRONMENT: THE UNITED STATES & NEW YORK CITY

1.1 USA Overview

The New York City motion picture cluster has long enjoyed the benefits of being situated within the United States, the largest and most diverse national economy in the world. At $16 trillion as of 2012, the country's nominal GDP still dwarves that of most competitors, and while annual GDP growth of approximately 2% is lackluster in comparison to emerging markets, it compares favorably to most developed economies (Economist, 2013). Similarly, the United States' total factor productivity growth rate, while modest at just above 1%, still exceeds that of similarly positioned competitors such as the UK (World Bank, 2013).

Despite these factors, the gradual erosion of the US competitive position within the world over the past twenty years has called the extent of this advantage into question. For instance, labor force participation has declined steadily since 1997. And despite consistent increases in work output, hourly compensation has not increased to the same extent (Rivkin, 2013). Most startlingly, while the United States spends more than most nations on education, student performance in primary and secondary schools relative to cumulative spending is amongst the lowest in the developed world (Rivkin, 2013). These factors are all noteworthy given the NYC clusters' reliance on robust *discretionary* demand from a sophisticated customer base as well as trained professionals capable of performing highly specialized functions.

The impact of these negative trends can be seen in the anemic growth rates of most American traded clusters. Between 1998 and 2010, only seven clusters exposed to international competition saw increases in the number of jobs; only business services, education and knowledge creation, and transportation and logistics witnessed an increase of more than 350,000 jobs (Porter, 2013). Furthermore, only business services increased its share of national employment by more than 1%, and none of these clusters houses more than 5% of national cluster employment (Porter, 2013). This is all particularly relevant for the motion pictures cluster in New York City given its high level of interactivity with many related clusters including tourism, fashion, digital technology, and finance. Should these other clusters continue to decline, the New York motion picture cluster will correspondingly experience difficulty retaining its competiveness.

Recognizing these struggles, things are not all doom and gloom for the motion picture cluster at the national level. The United States still enjoys a fundamentally powerful competitiveness diamond with many unique strengths (**see diamond above**). For example, the United States goes out of its way to protect investors and intellectual property holders, promotes labor mobility, and apart from a confusing and ill-structured tax system, maintains a strong context for strategy and rivalry. Likewise, the US has best-in-class factor conditions including high quality infrastructure (particularly in regards to internet access) and fantastic universities. American demand is sophisticated, diverse, and coalesces to form an enormous market with customers at every stage of the value chain demanding world-class outputs and thus driving innovation. As far as supporting industries are concerned, new technologies are readily available, training and research is advanced and abundant, and most clusters are highly developed. All told, the US diamond, despite chinks in the armor, does offer significant benefits to the NYC motion picture cluster overall.

1.2 New York City Profile and Overall Economic Performance

Within the United States, New York City stands apart. Centrally located within the Tri-State area encompassing New York, New Jersey, and Connecticut, the New York City metropolitan area is one of the world's largest with a population of 19 million. The most important thing to understand about New York first is its physical endowments. New York had the ability to receive large ships with an abundance of goods due to its deep water, ice-free harbor, which was shielded from the Atlantic Ocean due to Staten Island and the Brooklyn peninsula (Glaeser, 2005). New York was an ideal place to berth ships. New York City's placement on the Hudson River allowed European traders access to a large inland market which perfectly complemented the harbor's ability to receive large quantities of goods. Economic activity agglomerated in New York over Boston because New York was closer to the southern colonies. It thrived over Philadelphia because it is closer to the Atlantic Ocean. Finally, New York's digging of the Erie Canal in 1817 opened up the Midwest to traders and solidified New York's reputation as "America's port". New York's favorable location, and deep water port, have made the city a hub for economic activity since its founding, a phenomenon accelerated by industrialization. Along with the diversity of economic activity, New York has drawn a diverse mix of people accommodated by the city's historical openness to religious background; this diversity has contributed to a sophisticated level of demand within the city and permitted niche genres of film to grow and flourish.

New York City's annual GDP stands at $1.4 trillion, translating to $73,308 per capita, which dramatically eclipses the US average of $48,112 and the average of the largest global cities

(PricewaterhouseCoopers, 2009). This difference reflects the outsized profits of some of the clusters New York City specializes in, particularly financial services. However, the number also obscures inequality across the five boroughs. While Manhattan consistently outperforms national averages, the other four boroughs fall below them. In terms of education (an important correlate of economic outcomes), Manhattan more than doubles the other boroughs in the number of residents with a bachelor's degree. The percentage of individuals with high school diplomas in Manhattan similarly exceeds the other boroughs, though less starkly. This has important implications for film companies because accessing high quality talent necessitates concentrating on Manhattan, where property and transportation costs are high.

New York City is highly competitive with other top motion picture producing cities. According to the PwC *Cities of Opportunity* report released in 2012, New York City ranks higher than Los Angeles in terms of FDI attracted, productivity, and the ease of starting a business (Pricewaterhouse Coopers, 2012). New York's primary weakness compared to other motion picture producing cities is its total tax rate. As a state, New York collects more taxes per capita than any of the other nine largest state economies in the United States (Carrig, 2013). This partially explains the prevailing policy of New York City's Office of Media and Entertainment to offer tax credits for production in NYC. Overall, comparative measures point to New York being a compelling platform for business.

At the microeconomic level, New York City specializes in a multitude of clusters. Among the most iconic clusters are financial services (222,489 employed), education and knowledge creation (166,229), entertainment (82,246), publishing and printing (63,821), and jewelry and precious metals (18,287). In the past decade, however, New York has seen a trend of decline in their clusters' share of national employment. Over the period of 1998-2010, only six New York clusters gained in share of national employment: jewelry and precious metals (+2.41%), publishing and printing (+1.26%), entertainment (+1.13%), information technology (+0.5%), hospitality and tourism (+0.5%), and building fixtures and equipment (+0.07%). Furthermore, even some clusters that gained national share saw absolute job destruction like publishing and printing, an important related cluster for the motion picture cluster that on net lost 3,847 jobs over the past decade (Cluster Mapping Project, 2013).

Despite strong endowments and high relative prosperity, New York City's cluster performance indicates slipping competitiveness. An analysis of the New York City business environment provides further nuance. The competitiveness diamond for New York City reveals many of the city's advantages come at the price of high overall costs of doing business, unequal development of human capital, and rivalry between firms at the expense of genuine collaboration.

1.2.1 Factor Conditions

New York possesses a dense transportation network composed of the country's largest subway system, commuter rail stations, federal highways, and major tunnels (MTA, 2012). While the transportation system permits easy transit for human capital locating in New York, the transit system is also becoming increasingly overburdened. The result is significant levels of vehicle traffic and $13 billion in annual losses due to road congestion (HDR, 2013). This limits filming locations within the city due to the challenges of redirecting or shutting down traffic. Additionally, high population density affects the real estate market. Prices for commercial real estate (particularly office space) have been rising; this general real estate environment discourages all but the best-capitalized production companies from relocating or maintaining a large physical presence (Pristin, 2011).

In terms of human capital, New York City (and especially Manhattan) boasts a large number of professionals with post-bachelor degrees. One challenge New York faces, however, is that the market for educated employees outside of financial services is less developed. There is a need for middle-skill workers (those with greater than a high school diploma but less than a bachelor's degree) that is not being addressed

(National Skills Coalition, 2011) These individuals work in IT, healthcare, construction, and transportation clusters, which do not affect motion pictures directly, but are important related and supported industries.

Finally, there are highly developed markets for corporate and venture capital within New York but uneven access to capital for smaller businesses. The Department of Small Business Services provides financing and business plan development for aspiring entrepreneurs; however, our interviews revealed these services are less prominent in creative services.

1.2.2 Context for Strategy & Rivalry

New York City's business environment is characterized by *intense* rivalry. It is home to more foreign-based companies than anywhere else in the world along with over 200,000 small businesses (Mayor's Office of International Affairs, 2013). Within the financial service sector, more Fortune 500 financial services companies are headquartered in New York than any other city in the U.S., including 18 of the top 20 foreign-owned banks. The high density of businesses in New York City – particularly restaurants, apparel, banking, and theater - fosters an atmosphere of sustained competition in order to attract clients.

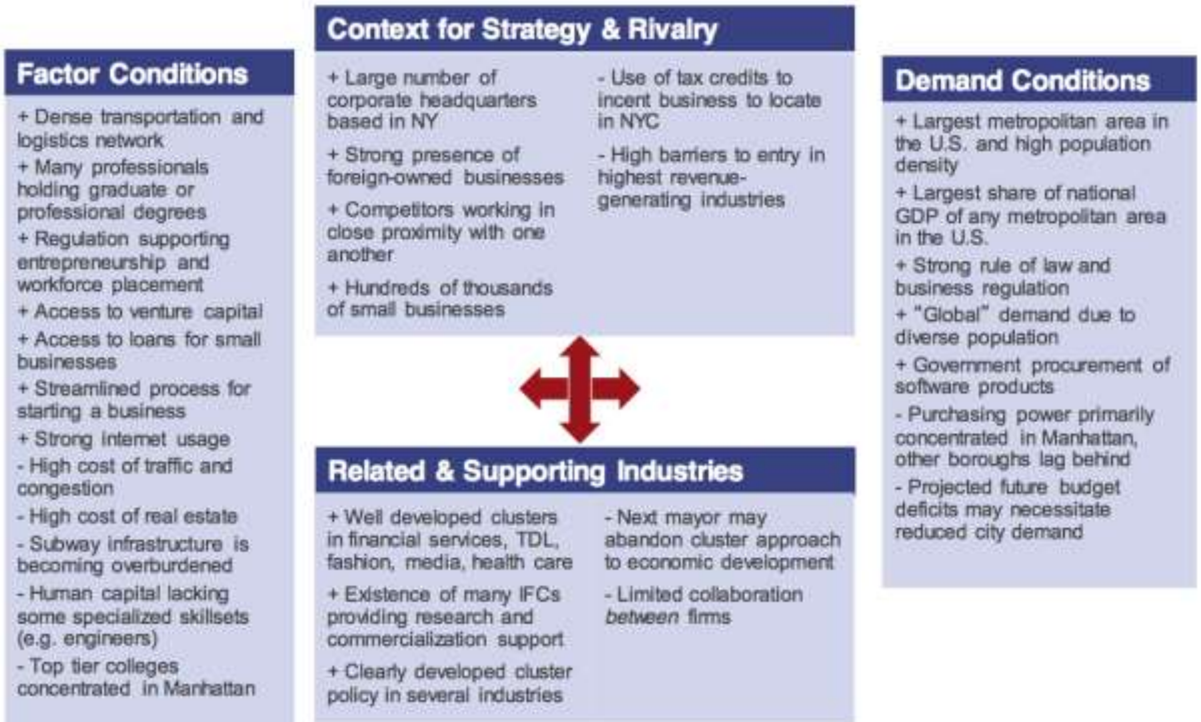
One detriment of well-established industries and firms in New York is that smaller firms often face *barriers to entry and success*. Judged by the average age of small businesses, Biz2Credit—a broker for small business loans—found New York City is not as strong in producing startups as its PwC "Ease of Starting a Business" ranking would suggest (Biz2Credit, 2013). As an example, the effects of large established firms on smaller business can particularly be seen in the motion picture arena. The concentration in ownership of distribution channels (i.e. Lions Gate Films, The Weinstein Company) means it is harder for independent producers to finance productions and generate sustainable incomes unless they deliver the types of productions distributors want (Christopherson, 2012). Despite a proliferation of economic activity in New York City, barriers persist for entrepreneurs and smaller businesses.

1.2.3 Related and Supporting Industries

New York City has well-developed clusters and countless IFCs to support the growth of clusters. As previously mentioned, however, many clusters are shrinking in terms of absolute jobs or share of national employment. Furthermore, while IFCs proliferate many are small and disconnected. In the case of the Media & Emerging Tech cluster, some IFCs seek to identify promising ideas through competitions, others seek to recruit talent, some provide financing for new businesses, and others promote collaboration through academic research (New York City Economic Development Corporation, 2013). There are considerably fewer IFCs, however, that attempt to coordinate across the full range of activities in a sector and engage in substantive conversations about competitiveness and innovation.

1.2.4 Demand Conditions

New York City has a diverse consumer population with sophisticated tastes. This is particularly important for the motion picture cluster. In a study on cultural industries in New York City and Los Angeles, Elizabeth Currid writes that "cultural industries require an immediate consumer base, which means that they tend to locate where demand is concentrated" (Currid, 2010). As a bustling urban environment, this makes New York City highly appealing for directors, producers, marketers, and distributors. Additionally, the high concentration of cultural clusters including fashion, music, and media create a robust integrated ecosystem where each cluster consumes services from the other. For instance, the music cluster produces scores and soundtracks, the fashion industry cutting edge wardrobes, while the motion picture cluster provides writers, directors and acting talent for music videos, as well as strategic product placement and brand exposure via films. The primary weakness New York City faces with regard to demand conditions is the untapped demand present in the Bronx, Brooklyn, Staten Island, and Queens. Lower-income populations in these areas provide for low-quality demand conditions. The New York City competitiveness diamond is summarize below:



Sources: New York City ; Bloomber' s Strategy for Economic Development; http://www.nyc.gov/html/unccp/html/international_biz/intbiz_whynyc.shtml

1.2.5 New York Conclusions

In order to halt the shrinking of New York's economic clusters, there are several areas that need to be addressed. New York must find a way to draw economic activity out of Manhattan where traffic and real estate costs are becoming prohibitive. Human capital needs to be developed across all clusters. Private and government actors have to come together to rethink how IFCs are structured to coordinate more impactful activity within industries. Finally, entrepreneurs need to be able to access financing and platforms to grow their businesses. While New York has leveraged its endowments to become a hub for people and economic activity, it will stagnate if it does not continue to build upon that foundation.

2. THE MOTION PICTURE INDUSTRY

The motion picture industry remains a stalwart engine of economic activity in the United States, representing not only one of the main sources of entertainment-related consumption but serving as a generator of millions of jobs. Production and distribution of a diverse range of products, from high profile blockbuster movies intended for multi-city theatrical release, movie content created specifically for network and cable television or digital distribution, DVD and BluRay discs for sale and rental, to merchandising and licensing rights contributed over $42 billion in direct industry wages and 2.1 million jobs in 2010. (Motion Picture Association of America, 2013) While the core activities associated with film, including production, marketing, manufacturing, and distribution are concentrated among approximately 280,000 professionals, a much larger integrated web of indirect jobs for caterers, dry cleaners, florists, hardware and lumber suppliers, and retailers also play critical roles in supporting the creation and delivery of content. (Motion Picture Association of America, 2013)

2.1 The Motion Picture Industry Value Chain

The motion picture value chain is characterized by a complex array of activities that incorporate creative artists (i.e. writers, actors, clothing and set designers, musicians, directors), transactional intermediaries (talent agencies, accountants, lawyers), financiers, and technicians (photographers, cameramen, sound mixers, lighting professionals, digital editors), and calls for extensive coordination among studios, distributors, movie theater proprietors, marketers, and various members of the media. Because the industry is one dominated by a handful of large entertainment corporations, the roles assumed are often concentrated and managed under one roof, but vary depending on the type of movie being created (studio vs. independent), the format (theater, television, digital) and the extent of industry-wide consolidation currently underway. (Bloore, 2012) The chain can be divided into five major stages, which include: Development, Production, Distribution and Exhibition, and Consumption. A brief summary illustrating the key participants and activities from each stage is provided below:

2.1.1 Development

This stage is defined by the conceptualization and composition of screenplays, which can be adapted from existing literary pieces or written as original works by the author. Writers often engage literary agents to get their works in the hands of production companies, which evaluate the viability of translating the concept to film and capturing a meaningful segment of a particular target demographic. (Ikimi, 2013) This process is not entirely linear however, as production companies can also seek out writers to flesh out a particular concept and agents may steer their clients in one creative direction if the current consumption trends are leaning towards a particular genre. Additionally, script-writers can also be directors so their involvement may continue through the subsequent stages. When high-potential scripts are identified, producers or film studios pay for option rights that grant them the ability but not obligation to develop them into films. While most mainstream films are developed this way, with the advent of new distribution verticals in the digital realm like YouTube as well as online crowd-sourcing engines like Kickstarter, writers are less dependent on major production companies to translate their work into film. This represents an important opportunity for independent filmmakers in New York.

2.1.2 Pre-Production

Once a production company is committed to a script, it must undertake the logistical steps to budget, finance, staff, and manage its evolution into a movie. In many instance, production companies maintain strategic ventures with large movie studios that have sufficient capital, access to filming space, and in house technical expertise required to greenlight the project and help coordinate such efforts. (Bloore, 2012) it is during this phase that directors and actors are chosen, set locations defined, key technicians engaged, and key financing targets and structures set. The size and profile of this team as well as the project timeline is largely dependent on the anticipated financial payout associated with its release. While many studios have satellite offices in New York, most of this planning activity takes place in Los Angeles where the studios main headquarters are based.

2.1.3 Production

During this stage, the production company oversees the actual filming process, which introduces a host of technical experts in the areas of costume and makeup, props, set design and construction, lighting, electrical, and sound. (New York Film Academy) The culmination of this lies in post-production, an extensive and highly technical editing process which incorporates visual effects, voicing, and musical scores into filmed content. Successful execution in the production phase is incredibly important because it both defines the quality of the final product and ability of key constituents to ultimately generate a profit (based on producer's ability to stay within budget). This is New York's bread and butter. According to independent filmmaker Thomas Ikimi, New York provides an unmatched urban landscape for film and draws a great deal of production activity (Ikimi, 2013).

2.1.4 Distribution and Exhibition

Upon completion, distributors pay for licensing agreements, which give them the right to distribute copies of films to traditional movie theaters (domestically and internationally) as well as network and cable televisions, pay-per-view providers, DVD rental and sales channels, and merchandisers. (Tyson, 2000) These "buyers" provide access to consumers during the Exhibition stage, and have some discretion over the price, extent, and duration of the product's availability. Prior and throughout the Exhibition process, producers, marketing firms, and distributors work in collaboration to unveil, publicize, and reframe the movie to its target demographic as needed. In an effort to control costs and the circumstances under which films get shown, most of the largest film studios also own major distributors and have owned film chains as well, complicating the process for film-makers that operate completely outside of the studio system. (Tyson, 2000) The increasing demand amongst consumers for online film and television content empowers these smaller players however, by making sites like YouTube and Netflix credible and less costly avenues to showcase films. Likewise, sites like iTunes will force modifications to the traditional distribution structure, challenging major studios to integrate themselves into this evolving ecosystem. The ongoing shift in distribution may have implications for production activities. Specifically, emergent distribution channels may drive studios to pursue lower-cost production options if they are no longer able to profitably exploit traditional channels like movie theaters.

2.1.5 Consumption

The final stage of Consumption involves consumers actually viewing and acquiring content, allowing the original investors to experience a monetary return on their capital. It is during this phase that the popular media, through industry periodicals and magazines, newspaper articles, and online blogs, can shape the public's perception and contribute to lengthening or shortening a movie's life cycle. While critics play a vital role in this, often viewing new films prior to official release via highly regarded film festivals or private showings, the power of word of mouth should not be underestimated and can play a huge role in the success of follow-on offerings (DVD sale and rental, television broadcast) after a film has been released. Also, the increasing sophistication and segmentation of viewer preferences can produce varying levels of success depending on the distribution vertical, with some films enjoying cult-like following throughout and after the peak rental phase but demonstrating lackluster in-theater performance. (Thelemaque, 2010) As producers spend more time aggregating and analyzing such data, it should be expected that new mediums of consumption will emerge with time.

2.2 The US Domestic Motion Picture Industry Market

Although recessionary pressures have contributed to marginally negative revenue growth within the industry over the last five years, box office performance, exceeding $10.8 billion in sales in 2012, underscores fundamentally strong domestic demand. (Motion Picture Film Association, 2013) With total admissions of 1.36 billion (a significant portion concentrated among repeat buyers), drawing more consumers than theme parks and major US sports combined, it is likely film will remain a consumption mainstay for the foreseeable future. (Motion Picture Film Association, 2013) Furthermore, demographic trends work in the industry's favor, as one third of all box office sales are generated by individuals 12-24 years old, implying a stable base of moviegoers that have decades of spending ahead of them.(Motion Picture Film Association, 2013) It is also noteworthy that movie attendance is highest among Hispanics, the fastest growing ethnic group in the United States. (Motion Picture Film Association, 2013) These and other factors including high per capita income and cultural norms make the United States the largest global box office market by a healthy margin, eclipsing even the second and third largest markets by over 3x. (Motion Picture Film Association, 2013)

2.3 The US Domination of the Global Motion Picture Industry

Global demand is on the rise, with countries such as China, Japan, UK, and France achieving box office sales of $2.7, $2.4. $1.7, and $1.7 billion, respectively. (Motion Picture Film Association, 2013) The United States remains the supplier of choice to the world, generating exports in excess of $13 billion, contributing to a positive trade surplus that exceeds telecom, management and consulting, legal, medical, computer, and insurance services. (Motion Picture Film Association, 2013) Part of this can be attributed to the strong cultural influence the US still retains abroad, with foreign viewers often looking to American products as the standard-bearer or conveyer of status.

2.4 Industry Concentration by Geography

US motion picture clusters have been geographically concentrated, with Los Angeles and to a lesser extent New York maintaining historical dominance over almost every component in the industry value chain. Both benefit from diverse entertainment ecosystems that encompass areas including fashion, media, and music, but important distinctions remain. Los Angeles, the home of most major film studios and key film service providers (talent agencies, lawyers, accountants) is traditionally associated with large-budget mainstream movies, television production, and its deep post-production expertise. New York, in contrast, is strongly linked to independent film production and distribution, as well as serving as a secondary or satellite hub of operations for all the aforementioned parties. (Ikimi, 2013) Despite the well-entrenched positions of these two markets, the growing popularity of digital consumption has and will continue to reduce what was once a blanket requirement of locating in either of these markets to create successful film enterprises. Furthermore, major advances in film equipment technology have reduced the costs of high quality cameras dramatically, allowing smaller filmmakers to operate semi-autonomously without having to lean as heavily on traditional financing channels.

3. THE NEW YORK CITY MOTION PICTURE CLUSTER

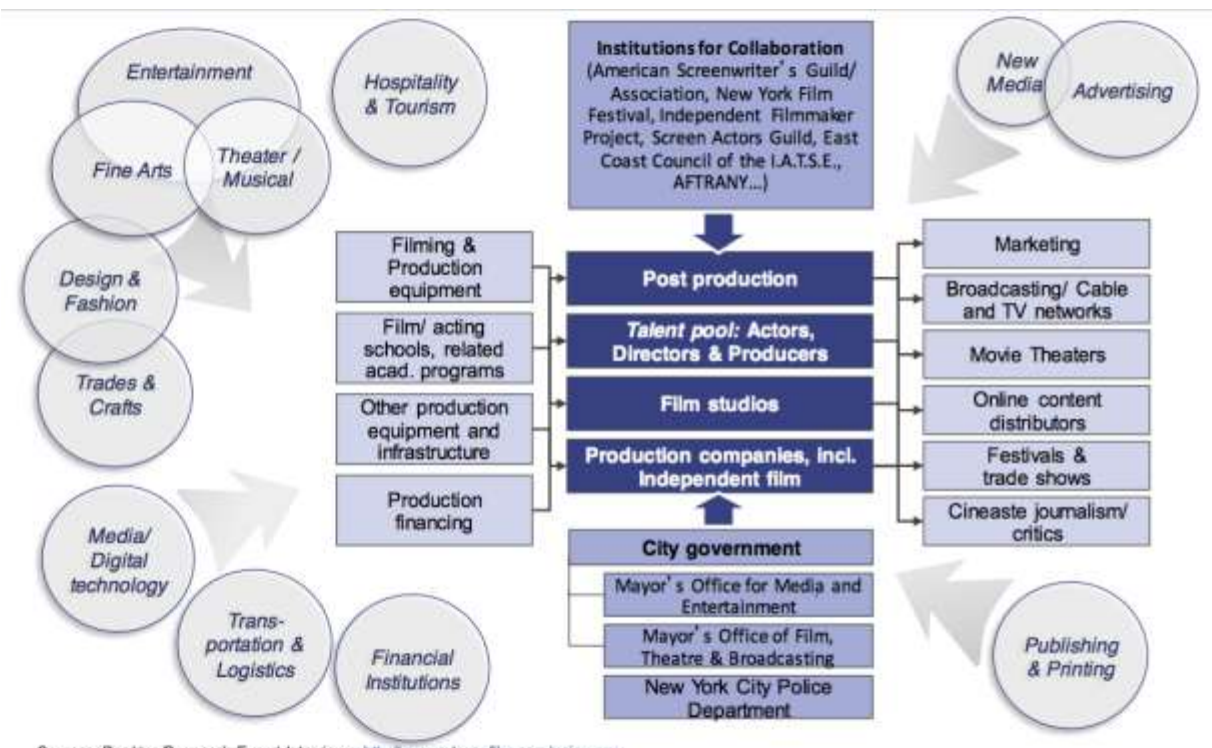
3.1 A Short History of the Motion Picture Cluster in New York City

New York City is the birthplace of the motion picture industry. In the late 1800s, Thomas Edison's Kinetoscope was used by his former employees to project entertaining images to audiences throughout New York (The Library of Congress, 1999). Shortly thereafter, America's first motion picture studio was started in the city. It was not long, however, before the Los Angeles motion picture cluster was birthed as film director D.W. Griffith drove a movement to the West Coast in the early 1900s (Griffith & Hart, 1972). As Griffith left for California, most major studios went with him. Even so, New York remained one of the key hubs for motion pictures in the country.

With the rise of television over the subsequent decades, the movie industry was forced to innovate and consequently launched wide screen viewing and 3D technologies. The first 3D movie, (*The Robe*, produced by 20th Century Fox) debuted in Roxy Theater in New York in 1953 and more innovations followed ((AMC Filmsite, 2013). In 1962, the first New York Movie Festival debuted, while in 1966, the municipal government made all public facilities in New York City available to movie production, including parks, museums, streets and libraries for the first time. By 1974, Mayor Abraham Beame created the Council on Motion Pictures and Television to provide a one-stop regulatory body for film, a first not only for the city, but for the world (NYC Government, 2013). In the past fifteen years, the cluster continued to grow, ultimately reaching $7.1 billion in revenue (BCG, 2012).

3.2 Cluster Product Overview and Map

While the motion picture cluster most prominently creates blockbuster and independent films and television programs, other products are nestled in the value chain like talent scouting, catering services, equipment sales and rentals, special effects engineering, DVD distribution, advertising, and merchandising.



Sources: Desktop Research, Expert Interviews, http://www.nylovesfilm.com/union.asp

The New York City motion picture cluster map helps illustrate the cluster's depth and diversity. Key players within the cluster include:

- **Companies selling or lending production equipment**. This includes companies such as the *Azden Corporation,* which designs and manufactures a wide range of audio products and *CP Communications*, which offers products ranging from walkie-talkies to microphones and cameras.
- **Production and distribution companies**. Production and distribution companies are often tightly integrated because without a clear path to distribution, production for big budget films is not viable. Production companies manage the development of films, while distributors obtain rights to distribute content to theatres, cable and network television stations, and internet channels. Prominent companies in New York include *Lions Gate Films*, *The Weinstein Company,* and *New Line Cinema.* The five major studios—*Warner Bros*., *Columbia, Disney, 20*th *Century Fox*, and *Paramount*—all have satellite offices in the city.
- **Film and Acting Schools**. These organization train employees in acting, directing, production and post-production related fields. Some prominent institutions include *The Lee Strasberg Theatre and Film Institute, The Pratt Institute, The Katharine Gibbs School, The New York Conservatory for Dramatic Arts, The Juilliard School, Columbia University's School of the Arts* degree programs in "Film/Creative Producing"/"Visual Arts", *Cinema Studies at New York University, and The New York Film Academy.*
- New York City has a long history of **independent filmmakers** spanning the likes of big names like *Martin Scorsese (*The Taxi Driver), *Brian De Palma* (Scarface), *Spike Lee* (Do the Right Thing) and *Darren Aronofsky (*Black Swan) to up-and-comers like *Lawrence Levine* and *Sophia Takal* (The Empress) (Zakarin, 2013). These filmmakers thrive in New York due to the unique, sophisticated demand in the city that values the artistry in film (Ikimi, 2013).

- **Non-classical pre-production services**, including companies like *Scout NYC Services*, which scouts, organizes, and secures locations for shoots.
- **Production financing companies,** which include all firms that pre-finance productions. These include the big five production companies as well as small Venture Capital/Equity Funds focusing on motion picture investments. New York's *City National Bank* provides loans to independent filmmakers that have sold their film to international distributors prior to production (Oliver, 2013).
- Important related clusters include the **Theater, Musical, and Fine Arts cluster and the Advertising cluster**. The Motion Picture Industry and the Arts regularly draw from the same the same talent pool. Also, many supplies (scenery materials etc.) are sourced from the same companies. These overlaps have contributed to a significant co-dependence between the two clusters over the past decades and mutual prosperity (Glickman, 2013). Similarly, the advertising industry has played a significant complementary role in the motion picture industry's business model development. This interrelatedness reflects New York City's unique competitive advantages as a business location and its value proposition: few cities offer the same proximity to so many crucial partner clusters.
- Particularly noteworthy is **the multitude of IFCs,** as well as specialized **Mayor's Offices**, that support the cluster. These IFCs fall into the categories of film festivals (*New York Festivals),* trade fairs (*International Alliance of Theatrical Stage Employees' Fair*), and professional associations (*The American Screenwriters' Association*). They focus on isolated activities within the film cluster and would benefit from greater coordination and collaboration.

3.3 Performance of the NYC Motion Picture Cluster

The U.S. motion picture cluster has a strong base in the NYC economic area. As of 2010, the NYC economic area had the second highest concentration of video production and distribution employment with 17,464 employees (U.S. Cluster Mapping, 2013). While dwarfed by the LA cluster's 98,601 employees, NYC had more than three times the number of employees as the third largest cluster—the San Francisco Bay Area (5,313 employees). In addition, New York City boasts higher average wages for the cluster ($77,984) than the national average ($75,038) and the Los Angeles area ($71,725) (U.S. Cluster Mapping, 2013). That being said, the San Francisco Bay Area leads the pack with average wages of $179,247, representing San Francisco's high concentration of high value post-production employment.

Despite the aforementioned strengths, there are signs that the motion picture cluster in New York has weakened over the past decade. From 1998-2010, New York lagged behind its expected job creation (given national cluster trends) producing 1,154 net jobs compared to an expected target of 5,017 net jobs. Furthermore, while the Los Angeles cluster has gained share of national cluster employment over the last decade (buoyed by 59,471 net jobs exceeding 18,190 expected), New York City lost 2.5 percentage points of national share over the same period (Cluster Mapping Project, 2013). Part of this may be explained by New York's status as a satellite hub whose importance rises and falls as national interest in independent films or the number of films actually filmed in the city fluctuates. Consequently, cluster employment is over-concentrated amongst crew workers and thus highly susceptible to swings. This necessitates that NYC become more indispensable as a center of film *development*, not just production and distribution.

3.4 Diamond Analysis

New York's greatest strength is in its factor conditions, primarily its rich, urban landscape for filming and its status as an international center for commerce. The other aspects of the city's competitiveness are not as strong.

3.4.1 Factor Conditions

There is a strong pool of formally trained and self-taught artistic talent with expertise in both the creative and technical aspects of fashion design, acting, music, painting, and dance. No other city in the nation but Los Angeles could credibly challenge NYC in terms of density of professionals working in the arts. Furthermore, the availability and quality of filming facilities is high with studios such as Steiner, Silvercup, Metropolis and JC Studios sustaining capacity to tape multiple large-scale productions simultaneously, a rarity in the US. Also, the richness and timelessness of the city's geographic landscape offers considerable allure for independent filmmakers, who are often budget constrained and need to find low cost means to maximizing the quality and entertainment value of their films.

However, the cost of commercial real estate still prevents some companies from locating or maintaining a large presence in New York. Furthermore, space is limited, confining the number of new facilities that could be introduced to expand filming capacity. New York City also lags in post-production capabilities to Los Angeles, largely attributable to a lower concentration of qualified labor, preventing the cluster becoming a leader in this segment of the value chain.

3.4.2 Context for Strategy and Rivalry

Given the high concentration of actors, writers, directors, and producers marketing their professional talents to hiring agents, financiers, and film buyers NYC remains a highly competitive marketplace. Taping studios aggressively battle to attract the next hottest production. The saying "If you can make it in New York you can make it anywhere" rings true as talent is constantly recycled through the city, with professionals working to maintain any competitive creative or technical edge they can.

3.4.3 Related and Supporting Industries

The motion picture cluster relies heavily on the theater and fashion clusters for artistic talent as well as the media cluster to promote awareness and generate buzz around new films. The blossoming start-up community accommodates rapid integration of new technologies into distribution channels, while the presence of specialty finance firms like have served as a significant source of project funding. Furthermore, especially in the aftermath of September 11th, the city administration has been been providing fast track filming approval, reducing bureaucratic barriers to taping (Ikimi, 2013).

3.4.4 Demand Conditions

New York City is one of the largest demand generators for film across the country, with healthy interest in both mainstream and independent material among the general public. The combination of a highly diverse and well-educated populace has contributed to the popularity of niches like foreign films. The highly sophisticated nature of consumers has also made them early adopters of new forms of consumption such as mobile phone and Internet viewing. The presence of several major cable and television networks in the city creates steady demand for new content from producers, creating clear advantages to orienting nearby. Likewise, international distributors view New York as a favorable centralized location to move interchangeably between the US and foreign markets.

Sources: New York City : Bloomberg's Strategy for Economic Development; http://www.nyc.gov/html/unccp/html/international_biz/intbiz_whynyc.shtml

3.5 Critical Factors

3.5.1 Talent

New York hosts some of the world's best creative programs and film schools. Among the top fifty creative programs in the country, thirteen are located in New York while twelve are in California. Jacob

Glickman, Director of Finance for the Mayor's Office of Media and Entertainment asserted that the large New York theater network provides an excellent supply of top- notch actors. "Talent attracts talent; that is our secret" (Glickman, 2013). However, this talent surplus does not extend into post-production capabilities. Independent filmmaker Thomas Ikimi stressed that New York is mainly valued as a backdrop for films and is not sought after for post-production activities (Ikimi, 2013).

3.5.2 Capital Resources

New York has an abundance of capital resources and media and entertainment related venture capital investments are increasing sharply. Since 2002, over $2 billion was invested in the Media and Entertainment sector by venture capital firms while in 2011 alone, 85 deals were closed with $591 million invested. Part of this is attributed to the city's sophisticated investor community. Around 120 investment companies focusing digital media have operations in New York. Among these firms, 60 digital-focused private equity and venture capital firms are headquartered in New York area and 23 more have New York offices.

And yet, in a recent interview, Daniel Oliver of the City National Bank shared common obstacles to financing independent filmmakers. Private equity and venture capital investors are generally hesitant to invest in an individual independent film because they perceive the risk to be too great. Furthermore, while City National Bank provides loans to filmmakers, they have to have sold their film to an international distributor prior to production (Oliver, 2013). There is potential for more capital to flow into the independent film space if the diligence process is made easier for investors.

3.5.3 Tax Incentives and Government Involvement

New York City actively encourages film production with attractive tax incentives, and the industry has responded. In 2005, NYC saw a large uptick in film production corresponding with a newly introduced 15% production credit. This uptick disappeared in 2007 as other eastern states introduced similar programs, but rebounded again when New York matched these states' credits at 30% (BCG, 2012). These incentives are expensive and represent a sizable chunk of government budgets, so it is unlikely that any states will push them higher (Glickman, 2013).

The New York municipal government also pursues initiatives to reduce impediments to operating in the city. These include expediting permitting, granting access to most public property, providing production office spaces. Furthermore, “Made in NY,” is a flagship campaign that aims to brand New York as a distinct location for motion picture production.

3.5.4 Technology

The context for technological innovation has been enhanced over the past five years through joint efforts between start-ups, big firms and NYC government. Major corporations like Google, Facebook, and Twitter have opened offices, and the newly minted tech corridor, “Silicon Alley,” continues to grow. This bodes well in driving more technical expertise into NYC and creating an environment where producers, distributors, and entrepreneurs can introduce/integrate new technological developments in the film value chain. However, such advancements may also accelerate the decentralization of film production and distribution, making it easier for filmmakers to create and disseminate products without locating in a major cluster.

3.5.5. Institutions for Collaboration

IFCs in the motion picture cluster fit into three main categories: film festivals, trade fairs, and professional associations.

Film festivals often serve as an early gauge of critical opinion and consumer interest, and they can play a major role in helping producers and independent filmmakers secure distribution deals for their projects. One of the more prominent organizations for firms hoping to submit films to festivals is *New York Festivals* (NYF). NYF primarily plays a *promotional* role, hosting competitions organized and officiated by judges and advisors with credible industry experience. Producers can also apply directly to festivals including the Tribeca Film Festival, New York International Independent Film & Video Festival, and the New York International

Children's Film Festival. Trade fairs and professional associations also help members hone their craft and promote their work to the broader professional film community.[1]

3.6 New York City Vs. Other US Motion Picture Clusters

There have been a handful of domestic markets concentrated on the east coast such as Connecticut, with nascent clusters of their own. Such areas market themselves as low cost alternatives to filming in NYC, and various networks including ABC, Style, Discovery, and HGTV have taped programs there. In an effort to simplify the process of taping there, Connecticut specifically launched an initiative to document film locations and crew listings as well as support services for pre and post-production. The lack of differentiated geographical landscapes and limited depth of artistic/technical talent has limited the growth prospects of such clusters in the near team but continue to exert pressure on NYC to discover new means of to retain its competitive positioning.

4. STRATEGIC ISSUES AND RECOMMENDATIONS

4.1 Strategic Issues

4.1.1 Technical Talent Shortage and Post-Production Deficiencies

New York has struggled to move to high value-add segments of the motion picture value chain. While the city excels at artistic talent and provides excellent backdrops for filming, its lack of technical talent severely handicaps the growth of the cluster. This talent dearth is most evident in post-production, where New York producers routinely outsource these services to studios in San Francisco, Vancouver, and London (Ochiva, 2013). Without developing technical talent, the city's competitive advantage will be limited.

[1] The *American Screenwriters Association,* for instance, seeks to combine the knowledge of its membership to refine and improve screenplays as well as strengthen ties between writers, producers, filmmakers, and actors. *The Independent Filmmakers Project* hosts workshops and seminars to teach its members the nuances of creative and business-related aspects of filmmaking while simultaneously drawing audiences for screenings of independent films.

4.1.2 Technology Disruption

New technologies have disrupted the cluster in a number of ways. First, customers are drastically changing the ways in which they consume media. Internet streaming and mobile devices have pushed producers to find new ways in which to monetize their products. More concerning, digital piracy threatens intellectual property, weakening the profitability of the entire cluster. Lastly, drastically falling prices in filming equipment has democratized motion picture production. For example, DSLR cameras once sold for $250,000 but now go for approximately $15,000. Without this barrier to entry, studios can expect decreased profitability (Hart, 2011).

4.1.3 **IFCs with limited scope**

The IFC network in New York City fails to drive cluster growth because each organization focuses on only a narrow scope of activity related to the cluster. Among the IFCs mentioned, some focus on exhibition (film festivals), others on sharing best practices (trade associations), and others still on mentoring and training (professional associations). None, however, take a holistic view of the cluster; they fail to prepare firms to address changes in consumer consumption, advocate for talent-creating institutions, or connect emergent independent filmmakers with higher profile distribution and financing options. They also struggle to connect firms to important players in other related clusters. If IFCs seek only to maintain the status quo, the cluster's strengths will erode.

4.1.4 Public Infrastructure Weaknesses

Traffic congestion and city access in general make filming in New York particularly difficult. Getting from place to place with truckloads of production equipment is obviously difficult, but clearing locations for actual filming is also a challenge. Ironically, most producers want to film in Manhattan, but Manhattan is the one borough that least needs the economic activity and does not care for the headache filming brings. New York's high real estate costs hurt many cluster participants' balance sheets, particularly in new start-ups or lower-budget, independent films; with lower-cost Connecticut and Pennsylvania nearby, this is a particularly salient challenge.

4.2 Recommendations

In order to accelerate growth, New York City must move away from relying only on its unique urban landscape, artistic talent, and tax credits, and move into new parts of the motion picture value chain.

4.2.1 Develop Technical Talent

As a first priority, New York City needs to take a long and short-term approach to developing a robust base of human capital. As a long-term move, New York should work to introduce film curriculum into its secondary public and private schools. In New Mexico in 2004, state funding was used to create "mobile" film equipment packages that allowed students to practice production training as a part of their school curriculum. As an analogue in New York, the city should offer opportunities for high-school aged students to begin cultivating talents in post-production. New York City can leverage the technological infrastructure it already has in place (via the post-production companies already located in the city) to provide students with these opportunities at low-cost. This would most feasibly be implemented by creating a consortium of post-production firms that collaborate to establish curriculum and an apprenticeship program for high school graduates. The consortium participants can easily be identified leveraging *New York 411* (an information aggregator for the motion picture cluster) and the *Post NY Alliance* (a post-production IFC). Not only would this begin to encourage collaboration among firms, it would also begin to develop deep post-production expertise in New York's next generation workforce.

In the short-term, New York should focus on strengthening the post-production curriculum delivered through its colleges. The establishment of Steiner Studio, the largest film and production studio outside of Hollywood, made a strong statement that New York would compete with Los Angeles to be a *center of production*. The downside of a focus on production, however, is that it promotes skillsets around set design, staging, and lighting; these types of relatively undifferentiated skills will struggle to capture significant wages in the motion picture value chain. New York should instead draw a comparable investment in a *postproduction* center. Such a center would train students in editing and video finishing, 3D animation, and other special effects-based skills that will continue to evolve and be valuable as filmmakers continue to push forward the aesthetic of their films.[2] Postproduction centers for college students or high-school graduates should be based near current film universities and could be funded in any number of ways (e.g. individual donors from the industry, government funding matched by corporate funding, savings from reduction in production tax credits). Ultimately, this strives to plant valuable film-related competencies in New York, rather than entice them to New York via tax credits.

4.2.2 Harness New Technologies and Enforce Technology Laws

After taking steps to protect the cluster's future prosperity, New York must confront the brutal realities facing motion picture clusters everywhere. If New York wants to ensure the major production companies located in its city continue to thrive, it must help facilitate the industry's response to the reduced cost of filming, piracy, and changing consumer behavior.

Major studios can make sure they do not lose out on the economic upside of low-cost filmmakers by investing in them (akin to music labels sourcing and signing undiscovered artists). For a large studio, a marginal investment (e.g. the $15,000 cost of a camera plus minimal development funding) to support a promising young director would require negligible resources. Furthermore, studios have a deep bench of expertise that perfectly positions them to select new emerging talent. Studios have the ability to structure agreements with new directors that provide directors with the initial capital to start filming and

[2] Films like *Sin City, 300, The Life of Pi,* countless 3D and animated films demonstrate this trend of evolving film aesthetic.

studios with a monetization plan via mainstream distribution, exhibitions, or ad revenues from posting recordings on websites. This allows studios to serve as angel investors and continue to benefit from the ideas that will emerge from the democratization of filmmaking, while simultaneously stimulating New York's economy. The New York City Mayor's Office of Media and Entertainment should partner with universities to identify young talent and aid in placing them in front of the executives that can receive, mold, and fund their ideas.

In response to piracy, New York City government can play a more direct role. The next administration should engage existing developers of anti-piracy software to pilot products relevant in industries at risk of digital copyright infringement. In addition, New York should seek stricter prosecution for those involved in the distribution of bootlegged material.

Finally, in order to appeal to new consumption patterns, New York studios can create exclusive digital content on their own online platforms. Companies could create one or more of the following types of content:

- Unique scenes for new or previously released films (i.e. Wolverine or Spiderman) that expand upon undeveloped story lines
- HD-quality highlight reels or mash ups of classic moments of cinema from existing film catalogues
- Real-time celebrity "meet and greets" allowing website members to interact directly with their favorite stars
- YouTube channels for shorter and/or more interactive videos incorporating the eccentricities of New Yorkers

4.2.3 Strengthen IFCs

Despite the multitude of IFCs within the cluster, none sufficiently address the ongoing lack of transparency surrounding viewership patterns, consumer preferences, historical budgets by film genre, and the financial performance of independent films made in New York or elsewhere. This data would be a powerful resource to guide filmmakers through development and pre-production (allowing them to pursue higher potential projects or navigating the budget process), help financiers establish more precise underwriting metrics to extend credit, and allow distributors to create customized plans to release content based on the target demographic. Such an institution should be initially funded by production and distribution companies with the intention of becoming self-sustaining with time through the sale of research analysis and membership dues.

Furthermore, the disconnect that exists between independent filmmakers and financiers remains severe. To allow for the continued growth of the independent film market, an IFC should be created to educate burgeoning and existing filmmakers on how to establish reasonable financial projections for their projects and develop investor pitches firmly grounded in business principles in order to maximize their ability to raise third-party capital. Furthermore, such an entity would act as a birthing ground for research on the main roadblocks to financing independent films, collect successful deal templates from prior transactions, and develop recommendations for creative financial products such as syndicated or collateralized loans (backed by residual revenues from a producer's earlier projects) to help finance firms reduce and/or better mitigate their risk. This initiative could conceivably be developed by an academic institution with strong standalone film and finance programs and sponsored by financial service firms that have historically shown a strong commitment to the arts in New York City.

4.2.4 Ease Infrastructure Burdens by Expanding outside of Manhattan

The New York City municipal government already works hard to maximize access to city resources and locations for filming companies. The city should continue to open its iconic and historic locations to filming and to provide free police services for filming sets. By eliminating so many logistical headaches for studios, the mayor's office has helped the cluster function much more effectively. However, because these steps have primarily benefited Manhattan, re-directing such efforts to the outer boroughs should be a primary priority.

For example, many major studios are less familiar with the unique filming locations outside of Manhattan, such as the Bronx Botanical Gardens. The city government should maintain lists of unique settings throughout New York and advocate for their use. Simply promoting filming locations never before considered would go a long way in alleviating infrastructural burdens inside of Manhattan and encouraging the growth of the cluster outside of it. The city can also target specific locations for new studio construction with strategic zoning programs. Doing so will also allow companies to take advantage of the lower operating costs associated with the outer boroughs.

The city should further incentive relocation to the outer boroughs by changing its tax scheme. By decreasing the tax credits available to cluster participants inside of Manhattan (relative to the rest of the city), New York can re-direct activity to Brooklyn, Queens, and the Bronx. While the underlying risk of such an approach would be to hamper activity within Manhattan, it is arguable that the most unique locations are price inelastic and thus retain their overall appeal.

Should New York follow these recommendations, it can strengthen the overall competiveness of its motion picture cluster.

Bibliography

AMC Filmsite. "Epics-Historical Films." Available online at http://www.filmsite.org/epicsfilms.html

Biz2Credit. "Biz2Credit Names the Fastest Growing Small Business Cities in America." Available at <http://www.biz2credit.com/research-reports/study-on-the-fastest-growing-small-business-cities-in-america.html>.

Bloore, Peter (2009). "Re-defining the Independent Film Value Chain." Available at http://industry.bfi.org.uk/media/pdf/h/b/Film_Value_Chain_Paper.pdf

The Boston Consulting Group. "Evaluating NYC Media Sector Development and Setting the Stage for Future Growth." Available at <www.nyc.gov/html/film/downloads/pdf/Media_in_NYC_2012.pdf>.

Carrig, D and Ahrens, R.W. "States with the highest and lowest tax burdens." USA Today. March 2, 2013.

Christopherson, S. "Hollywood in Decline? US film and television producers beyond the era of fiscal crisis." Available online at <http://cjres.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/6/1/141.full.pdf+html>

Currid, E., Williams. S. "Two Cities: Five Industries: Similarities and Differences within and between Cultural Industries in New York and Los Angeles." Available online at <http://jpe.sagepub.com.ezp-prod1.hul.harvard.edu/content/29/3/322.full.pdf+html>

The Economist (2013). The Economist Intelligence Unit. EIU.com.

Glaeser, E.L. "Urban Colossus: Why is New York America's Largest City?" National Bureau of Economic Research, June 2005, Pp. 7-11 <http://www.nber.org/papers/w11398.pdf?new_window=1>

Glickman, Jacob, Director of Finance, Mayor's Office of Media and Entertainment. *Interview with Team*. March 2013

Griffith, D.W. and Hart, J. "The Man Who Invented Hollywood." 1972.

HDR. Economic Costs of Congestion Study. Available online at <http://www.hdrinc.com/portfolio/economic-costs-of-congestion-study>

Hart, Hugh. "DIY Filmmakers Dig High-Def, Low-Cost DSLR Cameras." Available online at < http://www.wired.com/underwire/2011/01/cinema-out-of-your-backpack/>

Ikimi, Thomas, Independent Filmmaker. *Interview with Team*. May 2013.

Library of Congress. "Edison Motion Pictures." Available online at <http://memory.loc.gov/ammem/edhtml/edmvhm.html>

Mayor's Office of International Affairs. "Why New York City?" Available online at

<http://www.nyc.gov/html/unccp/html/international_biz/intbiz_whynyc.shtml>

Metropolitan Transit Authority. "Subway and Bus Ridership." Available online at http://mta.info/nyct/facts/ridership/index.htm

The Motion Picture Association of America (2013), "The Economic Contribution of the Motion Picture & Television Industry to the United States." http://www.mpaa.org/Resources/6f8617ae-bdc7-4ff2-882e 746b1b23aba9.pdf

The Motion Picture Association of America (2013), "Theatrical Market Statistics."b http://www.mpaa.org/Resources/3037b7a4-58a2-4109-8012-58fca3abdf1b.pdf

National Skills Coalition. "New York's Forgotten Middle Skill Jobs." Available online at <http://www.fmsworkforcesolutions.org/Middle-Skills%20Jobs%20report%20(r).pdf>

New York City Government The Office of Film, Theatre and Broadcasting. "Office History." Available online at <http://www.nyc.gov/html/film/html/about/office-history.shtml>

Ochiva, Dan. "Can the Post New York Alliance Help Build an Empire that Rivals L.A.? " Available online at <http://nycppnews.com/2013/02/can-the-post-new-york-alliance-help-build-an-empire-that-rivals-l-a/>

Oliver, Daniel, City National Bank. *Interview with Team*. May 2013

Porter, M.E. (2013). Cluster Mapping Project. Institute for Strategy and Competitiveness, Harvard Business School. R. Bryden, Project Director.

PricewaterhouseCoopers. UK Economic Outlook. Available at <http://www.ukmediacentre.pwc.com/imagelibrary/downloadMedia.ashx?MediaDetailsID=1562> November 2009

Pristin, Terry. "After Hibernation, the Office Market is Waking Up." http://www.nytimes.com/2011/01/05/realestate/commercial/05invest.html?pagewanted=all

Rivkin, J.W. (with M.E. Porter) (2013). "U.S. Competitiveness: Key Facts and Figures."

The World Bank (2013). "United States: World Development Indicators." http://data.worldbank.org/country/united-states.

Thelemaque, Jacques (2012). "The Film Life Cycle." Available at filmmakerslife.blogspot.com

Tyson, Jeff. (2013) "How Movie Distribution Works." Available online at http://entertainment.howstuffworks.com/movie-distribution2.htm

Zakarin, Jordan. (2013) "Fast Cheap and Indie: The Rise of New York's Next Big Filmmakers." Available online at http://www.hollywoodreporter.com/news/new-yorks-new-indie-film-425752