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More and more, it’s becoming evident how inequitable the current economic system of the US is: it is unfair for those who don’t have the capital and resources needed to partake in our capitalistic system.

As I learned more about systems thinking and the interrelated connections between the different constituents, I wanted to understand as much as possible about our current economic system. I began to question how our current extractive, unsustainable production system is disproportionately affecting certain classes of people, ultimately creating systems of oppression and increasing disparities.
Introduction of Thesis

Growing up in Hong Kong, I was immersed in a highly capitalistic and consumer-driven culture. It’s a country lauded for its’ economic power and prosperity, but the other side of this coin is that there are ever increasing wealth disparities and inequities for certain communities and classes of people.

Our current capitalist economic system in the US has greatly decreased poverty levels and increased the chances for everyone to be able to obtain a fulfilling life, but there are a disproportionate amount of people in poverty with limited socioeconomic mobility. In the US specifically, immigrants of colour are more vulnerable to poverty. The unfortunate truth is that our economic system is built on the shoulders of immigrants of colour, and they face more barriers than others to overcome poverty and socioeconomic inequity.

I set out on my thesis journey to examine the disparities and socioeconomic inequity for immigrants of colour face in New York City. I wanted to explore possibilities and hidden opportunities in the systems to increase equity for the immigrant population.
1st Phase
Research
New York City is one of the most diverse places in the world, home to almost over 8.6 million people, with immigrants making up 40% of the population. Immigrants are a driving force in the economy-at-large and more specifically, they make New York City the creative capital of the world. Their presence enriches the city’s social fabric, creativity and dynamism - they do this by bringing their diverse cultures, perspectives and talent.

High Workforce Participation

They are important drivers of the economy, with a 44% participation rate in the workforce - more than US-born citizens. In 2017, they contributed $195 billion to the city’s Gross Domestic Product (GDP). But despite this high participation rate in the workforce, 19.9% of the immigrant population is impoverished.

Limited Occupation Choices

A major reason behind this is that they are more likely to occupy low-income jobs in labor-intensive sectors such as construction, cooks, dishwashers or maids and cleaners etc. where their average median wage is $24,200 compared to a US Born Citizen’s $45,300 median wage.

Barriers into the Creative Sector

Immigrants are at a disadvantage when in search of viable and fulfilling occupations, especially in the creative sector. Even though the sector has grown 155% in Brooklyn over the past decade, diversity is extremely lacking. 66 percent of the occupations are held by White, Caucasian individuals, and only 34 percent of the creative industry is made up of people of colour.
Understanding the Immigrant Communities

Taking a closer look into the growing immigrant population, we identified that Sunset Park is home to a racially diverse population of 47% foreign born residents and the majority being Chinese and Latino immigrants. The majority of these immigrant communities are working class, and know little to no English, with low educational attainment and limited skill sets.

Manufacturing

Historically, manufacturing factories in Bush Terminal and Industry City, provided large amounts of accessible employment opportunities. Many of these were small garment manufacturing firms owned by Latino and Chinese immigrants, where owners would hire within their own race that established a community for the newly arrived immigrants.

These manufacturing jobs provided important economic opportunities for the immigrant population, where it doesn’t require a high education or skill levels. They are also able to provide a viable living with an annual wage of $49,000, compared to $34,000 in the service industry.
Dwindling Manufacturing Sector

However, many of these traditional manufacturing jobs are under threat. Cheaper overseas labour, rapidly rising real estate prices and the increase of advanced technological manufacturing, have caused many firms to shutter and job losses for the working-class immigrants. With limited choices in occupations, they are forced to occupy low-paying, unstable jobs with no benefits.

Growing Creative Innovation Sector

In recent years, there has been a rapid increase in tech-based manufacturing innovation hubs emerging across boroughs. In Sunset Park specifically, there has been a number of waterfront property developments of innovation hubs - Industry City, Bush Terminal, and the soon to be opened Made in NY.

An incorporation of tech, design and manufacturing, these hubs are the developments of the post industrial economy that is driven by the new age economy of “creative professionals”.

Waterfront Developments

- Industry City
- Bush Terminal Pier Park
- MADE IN NY Campus managed by NYCEDC
- South Brooklyn Marine Terminal
- Brooklyn Army Terminal (BAT) managed by NYCEDC
- Bush Terminal
- Pier Park
- MADE IN NY Campus
- Industry City
- Bush Terminal Pier Park
- South Brooklyn Marine Terminal
- Brooklyn Army Terminal (BAT)
- Industry City
- Bush Terminal
- Pier Park
- MADE IN NY Campus
- Industry City
- Bush Terminal Pier Park
- South Brooklyn Marine Terminal
- Brooklyn Army Terminal (BAT)
Community Oppositions

These developments have caused a strong concern and opposition amongst Sunset Park communities. There are concerns of displacement, gentrification and skepticism of their plans for the community’s economic growth and workforce development. So far, Industry City has not addressed any of the worries and concerns, and even pushed for rezoning and building more luxury buildings and hotels.

According to Marcella from Protect Sunset Park, Industry City has donated money to the community and sent representatives to get community buy-in. The truth of the matter is that she knows they don’t care about the community, because they don’t live there and only care about financial gains.

Growth for Whom?

Industry City has outlined a vision and different strategies to create more opportunities in the neighborhood. Its’ economic development includes “convert[ing] vacant or underutilized property into job-intensive industrial uses and create affordable rental space.”

Although currently it is the biggest employer in the local community with 4,000 employees of color from the immediate area, there are questions about the quality of these jobs. They only boast numbers but lack transparency and a comprehensive display of the types of economic impacts they have had on local communities.

“There is nothing innovative about displacement!”
The creative innovation sector is an important economic and cultural driver in New York City, but it is also contributing to the disproportionate racial economic inequalities that perpetuates the racial wealth divide.

This is further confirmed by the research and interview in Sunset Park and its' creative innovation developments. It is evident that these developments are not inclusive and only appeal to groups of highly-educated creative individuals who have better access to the industries. In particular, immigrants and people of color often do not have the equal opportunity to enter these industries.

There is also a need to look at the current diversity and inclusion strategies and initiatives that attempts to address racial inequalities in the creative innovation sector, where they do not truly consider the needs of communities. Take for example, Industry City’s economic development strategies and plans only focuses on the amount of people they employ from the local communities, but does not consider the unique workforce and economic needs of the communities.
We interviewed Senior Fellow, Tanu at the Pratt Center for Community Development. She focuses on the intersection of land usage and how it hinders or helps local businesses in the greater New York City area. Ultimately, their main objective is to promote equitable growth. They do this by supporting the advocacy of local community groups and their objective through the organization and facilitation of workshops, research, and data analysis. The issues central to their efforts are job creation, transportation, land use, and economic development.

Many of these entities have a novel and innovative approach in equity building. Their model centers around supporting the unique needs of the individual and pay emphasis on self-actualisation and empowerment on top of skill building and workforce developments.

We have identified many organisations and businesses in New York City that are currently working on increasing racial economic inclusion and equity. Many of the communities they serve are historically disenfranchised groups such as low-income minorities, immigrant women and people of colour.

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Pratt Center for Community Development

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Learnings

Equity in Manufacturing Sector
Urban manufacturing and industrial sectors are still providing job opportunities and create equitable pathways for immigrants that have low-education attainment and limited skill sets.

The Growth of Maker’s Movement
There has been a recent growth in the movement with many smaller entrepreneurial production businesses creating locally made products. In particular, the food production sector is growing, with many women of colour entrepreneurs in the industry.

Takeaways
Tanu confirmed our assumptions about the manufacturing sector still being an important provider of viable working-class jobs.

“People talk about manufacturing is important in creating jobs but there is also the entrepreneurship piece”

Tanu Kumar
Senior Fellow
Made in NYC

A non-profit initiative of Pratt Centre of Community Development, that focuses in helping small manufacturing and production businesses enhance their marketing and branding capacity through skill and community building. They provide free services for these businesses and have nearly 1,400 members across all five boroughs.

In their membership, they have seen a drastic increase in the number of minority and women owned businesses.

Support for Minority Business Owners

They are focusing their efforts in supporting minority owned businesses and initiatives who have more challenges in the market than other businesses who are male owned, white owned.

Social Impact Focused Businesses

Many of their business members are b-corp, have a triple bottom line, or a social justice component.

Learnings

Increase of Women of Colour Entrepreneurs

In their membership, they have seen a drastic increase in the number of minority and women owned businesses.

Support for Minority Business Owners

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Social Impact Focused Businesses

Many of their business members are b-corp, have a triple bottom line, or a social justice component.

“Made in NYC is important because it is doing a lot of work that the city is not doing”
Custom Collaborative

It is a Harlem based equity building business that provides training and programming to support low-income immigrant women, enabling them to enter into the fashion industry as entrepreneurs and designers.

Custom Collaborative in its current state of programming begins with the "Training Institute", a 14-week training that equips students with essential technical and business skills in an effort to prepare them for careers in the fashion industry.

Graduates then become part of the Custom Collaborative “Business Incubator” which provides crucial career advancement mentorship.

They are then steered towards two pathways: entrepreneurship/design or fashion production where they would attain entry-level skilled production work internally with Custom Collaborative or with external employers.

In addition, they can choose to be a part owner in a co-op where they would perform production work for Custom Collaborative and other fashion businesses.
Demonstrating Impact

So far, Custom Collaborative has had seven cohorts of graduates, but lack the capacity to demonstrate the successes and impacts of their equity building efforts. In turn, they are unable to communicate objectives to partners and potential funders, hurting their potential for growth.

It is crucial that current and potential funders and partners of Custom Collaborative to specifically understand the “Business Incubator” - the core of their equity building model. It is important to demonstrate the impacts on the graduates in order to obtain funding and sustain the growth of the organisation.

The Gap

They currently lack a data collection tool or system to track for the incubator. They want to focus more on information gathering and workshopping this with their graduates to identify the types of data that could be gathered and the indicators that would demonstrate the successes of the incubator.

Based on initial interviewings, there are two main areas of needs that surfaced:

- A robust method to track successes
- A data collection system
Early Prototyping
I wanted to understand and examine how equity and socioeconomic levels are measured in New York City and what types of data and indicators are used. So that I could understand the types of data that would demonstrate how Custom Collaborative’s programmings are building equity for the low-income immigrant communities.

The “New York City Equality Indicator” is a project of the CUNY Institute for State and Local Governance. The mission is to bridge the gap between researchers, practitioners, and policymakers using data and research to help government make better decisions.

“New York City Equality Indicator”

OneNYC is a strategy plan that aims to tackle issues regarding climate crisis, economic inequalities. Specifically, their inclusive economic development focuses on the growth and diversity of the city’s economy so that it is able to create opportunities for more people and to address racial wealth gaps.

Inclusive Economy: Grow the economy with good-paying jobs and prepare New Yorkers to fill them

- Income disparity by Race
- Labor force participation rate
- Individuals connected to employment through the City’s workforce system

Inclusive Economy: Expand the voice, ownership, and decision-making power of workers and communities

- Minority and women-owned business enterprises
- Total number of worker cooperatives created through the “Worker Cooperative Business Development Initiative”
**Prototype 1**

**What types of data is needed to effectively demonstrate the impacts of Custom Collaborative’s business incubator?**

**Data Gathering**

The outcome of the gathered data is to demonstrate Custom Collaborative’s programmings - especially the business incubator - capacity to support and provide services to meet the socioeconomic and personal needs of the graduates. Then being able to show these impacts to the potential funders and supporters to broaden the scope of their equity building work.

Ultimately, the graduates are coming into Custom Collaborative with their own personal goals and have different needs through the incubator. So I first conducted an interview with Tessa, the program’s director, to gain a better understanding of the general needs and begin developing the different themes and categories to collect the data.

I also took reference from “Maslow’s Hierarchy of Needs” to develop the themes and categories that could capture more comprehensive and multi-faceted data from the graduates. It is crucial to understand if their most fundamental physiological needs are met so that Custom Collaborative would be able to better support them.

The three main areas of focus that I identified:

**Quantitative Indicators**
- Number of graduates to enter Incubator
- Amount of jobs (part-time and full-time)
- Marriage Status
- Number of Children
- Income levels and benefits

**Qualitative Indicators**
- Newly obtained skills
- Skills improvement
- Confidence increase
- Sense of achievement
- Capacity to achieve their goals
**Activity 1**

*“Affinity Diagram”*

The first activity is to surface the graduate’s point-of-views of the business incubator and to gain an understanding of their needs.

Prompts for the activity:

What does the incubator provide for you?

What are some new skills or knowledge that you have gained while being part of the incubator?

What are you hoping to gain while being in the incubator program?

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**Activity 2**

*“Card Sorting”*

The second activity is built to determine and assess graduates’ current skill sets and confidence levels about their new learnings. It also surfaces what areas they would like to improve on.

Types of data collected:

- Types of skills they have gained from the training program
- Level of proficiency within each skill set
- Level of comfort and confidence within each skillset
- Skillsets that they want to improve on

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**Workshop 1**

**Activity 2**

CONFIDENCE ASSESSMENT WORK SHEETS

**WORKSHOP 1**

**ACTIVITY 2**

CONFIDENCE ASSESSMENT

SELECT THE SKILLS YOU FEEL THE MOST CONFIDENT IN AND YOU FEEL YOU HAVE A GOOD GRASP ON

PUT THOSE IN THE BOXES ON THE LEFT

1. [ ]
2. [ ]
3. [ ]

SELECT THE SKILLS YOU FEEL LESS CONFIDENT IN AND WANT TO LEARN MORE ABOUT

PUT THOSE IN THE BOXES ON THE LEFT

1. [ ]
2. [ ]
3. [ ]
In the second workshop, they would be guided through a futuring workshop where they would map their growth and envision their futures as new designers and entrepreneurs.

**Types of data collected:**
- Challenges and barriers encountered while in training, incubator and coop
- Types of support that helped them overcome past barriers
- Personal stories of graduates journey’s from start to present
“There is a real need to truly interrogate and assess the efficacy of what are the motivations and results that city agencies for profits and non-profits initiatives are looking for.”

The initial feedback from the Custom Collaborative team were approving. The data categories - safety needs, esteem and self-actualisation - were relevant and would be able to collect valuable data that was needed. They were excited about the human-centered workshops and the activities, and the types of qualitative, nuanced data and information these activities would be able to collect.

“Lovely experience to read through your work feels very representative and accurate to what we have experienced.”
Work Ways

A data gathering tool kit for equity building businesses to capture sentiment-based data to highlight the impact and effectiveness of their programings.
Theory of Change

My thesis goal is to support equity building efforts by creating a data collecting tool that creates a feedback loop system. The tool would gather necessary data to exhibit the impacts of equity building businesses and initiatives.

This will then...

- lead an increase in supporters and funders for the equity building efforts
- lead to an increase of programings and support for low-income immigrant women
- lead to increased self-sufficiency, empowerment and actualisation for immigrant women
- lead to increased number of immigrant women occupying viable jobs in the creative innovation sector
- lead to an increase in racial and socioeconomic diversity

<table>
<thead>
<tr>
<th>PRECONDITIONS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
<th>INTERVENTION: WORKWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>City funding is easily accessible by equity building businesses</td>
<td>City agencies increase funding for equity building businesses</td>
<td>The private fashion and food sector partners with equity driven businesses</td>
<td>More opportunities and pathways for immigrant women to enter the fashion sector</td>
</tr>
<tr>
<td>The city funding application process is transparent and open</td>
<td>The city sees the impacts created by businesses working with immigrant women</td>
<td>A clear partnership approach is created between the private sector and equity building businesses</td>
<td>An increased percentage of immigrant women with stable, viable jobs and careers</td>
</tr>
<tr>
<td>These businesses know they qualify for city funding</td>
<td>The city is convinced on the successes of the equity building businesses</td>
<td>Private sector understands the importance of equity building business models</td>
<td>An increased sense of empowerment and ownership of their career for immigrant women</td>
</tr>
<tr>
<td>These businesses know there is funding available from the city</td>
<td>City agencies better understand the disparities amongst immigrant women</td>
<td>Private sector sees the success of equity building business models</td>
<td>Career guidance support and mentorship for immigrant women</td>
</tr>
<tr>
<td>The application process for funding is easy to navigate</td>
<td>City agencies prioritize immigrant women’s issues</td>
<td>There are incentives for private sector to work with equity building businesses</td>
<td>Training programs for immigrant women who don’t have access to formal education</td>
</tr>
<tr>
<td>Assistance and support is provided to businesses applying for funding</td>
<td>City agencies recognise the opportunities of immigrant women owned businesses</td>
<td>The private sector sees the value that equity building businesses add</td>
<td>The city sees the capacity of business to fill employment gaps in city and public initiatives</td>
</tr>
<tr>
<td>Increased conversations between city agencies and businesses to understand barriers and needs</td>
<td>Increased fundings in programs and initiatives supporting immigrant women owned businesses</td>
<td>The viability and feasibility of the equity driven models are proven by impact measuring indicators</td>
<td>There is a recognition of the issues of socioeconomic disparities amongst immigrant women</td>
</tr>
<tr>
<td>Understanding the needs and barriers of equity building businesses</td>
<td>Data on the impacts of Custom Collaborative’s training program and incubator</td>
<td>Case studies of existing private and public impact measuring criteria and city equity indicator frameworks</td>
<td>Businesses are able to outline a clear and strategic plan of their impacts</td>
</tr>
<tr>
<td>The number of businesses adopting the data collection toolkit</td>
<td>The number of businesses that were able to use the data sets to generate support</td>
<td>The number of graduates participating in the data gathering workshops</td>
<td>Aligning intervention with the needs of Detroit manufacturers initiative SAIC</td>
</tr>
<tr>
<td>The number of graduates in narrative Custom Collaborative is able to gather</td>
<td>The number of graduates that thought the toolkit was relevant to them</td>
<td>The journeys of the Custom Collaborative graduates mapped out</td>
<td>The number of businesses able to cast a wider reach within the fashion and food sectors</td>
</tr>
</tbody>
</table>

Policies are amended to support the adoption and integration of businesses into wider markets

The businesses are endorsed by the city

There is a joint vision between the city and equity building businesses

The city supports and push’s the social mission of equity building businesses to the mainstream
COVID 19 Disruption
COVID-19 interrupted our original workshop execution plan. In light of the situation, we pivoted to continue to service our partner, Custom Collaborative. The first workshop was held virtually with seven co-op members with a “town hall” format that gave space for participants to share their concerns, emotions and experiences during the pandemic.

Virtual Town Hall Workshop
Zoom Workshop with Co-op Members
I wasn’t able to hold the two workshops originally planned. Instead, I developed a “Town Hall” workshop for Custom Collaborative’s co-op members that addressed the current crisis and provided them a space to discuss all the changes around them, as well as to better understand their needs during these times.

The results will then be compiled and translated into visuals and presented to Custom Collaborative’s team.
Virtual Town Hall Workshop

Synthesis & Data Visualisation

Ultimately, the results of the workshop would be condensed into a “Work Ways Data Visualisation” that displays the individual and collective co-op member’s experiences.

This workshop not only is about gathering data but also highlights each co-op member’s strength, resourcefulness and resilience, and also to bring a sense of empowerment.

**VIRTUAL TOWN HALL WORKSHOP
INSIGHTS & SYNTHESIS**

What is something that has become more challenging for you now compared to a few months ago?

- **NOT BEING ABLE TO WORK IN PERSON**
  - “I miss meeting the co-op members in person”
  - “We can’t easily get to the things we need for our clients”
  - “I have always been sewing at home but now my clients can’t come in for fittings and I miss that”

- **DIFFICULT ACCESSING TOOLS AND MATERIALS**
  - “Sometimes when we are doing work in Custom Collaborative, a lot of the stuff we need are in the supply rooms”

- **HAVING TO BALANCE WORK & HOME LIFE IN ONE PLACE**
  - “The most challenging doing production at home, is I have to manage home be school, a studio, a house, a kitchen and everything.”
  - “I have a daughter at school and I have to help her with homework and I have to work on my sewing machine and I have to cook and clean.”

What would you want to keep the same?

- **MORE TIME FOR PERSONAL LIFE & FAMILY**
  - “A few months ago, I was only focused on making money and not spending a lot of time with my daughter and at home. And now I get to work better now. I have more focus to work because a few months ago I was just confused about what to do.”

- **MUCH MORE BUSY - LONGER WORK HRS**
  - “I’m much busier now and working longer hours at home”
  - “Now with the mask production, I have to work extra hours”

- **FASHION RELATED PRODUCTION HAS BEEN PUT TO A HALT**
  - “We have to meet the immediate needs right now”
  - “It’s been hard to work on the dream”
  - “I try to get excited to do the work”
  - “I need to keep the discipline when doing the work”

What would you want to leave behind?

**VIRTUAL TOWN HALL WORKSHOP
INSIGHTS & SYNTHESIS**

- **NOT BEING ABLE TO WORK IN PERSON**
- **MORE TIME FOR PERSONAL LIFE & FAMILY**
- **MUCH MORE BUSY - LONGER WORK HRS**
- **FASHION RELATED PRODUCTION HAS BEEN PUT TO A HALT**

**VIRTUAL TOWN HALL WORKSHOP
INSIGHTS & SYNTHESIS**

What are somethings you are most grateful for being a coop member in this moment?

- “I’m feeling grateful, hopeful and lucky”
  - “I’m also thankful for this technology...so we can get through this together”
  - “I’m really grateful for our sisterhood”
  - “Everyone came from a different background, age, stage of life and it’s been really nice”
  - “Ngozi has really been able to put together a team and we have different strengths”
  - “We share the communication very well”
  - “If you have a personal problem, they will support you”
We had the fortune of holding a “Town Hall” with the co-op members and getting to know everyone on Saturday. We thank everyone for sharing their feelings, thoughts, struggles, worries and also laughter together. We are excited to be holding more future workshops with you all and to further explore your journeys through Custom Collaborative individually and collectively as a cohort.

WE ASKED THE CO-OP MEMBERS WHAT WERE SOME OF THE CHALLENGES THEY ARE FACING IN THEIR WORK AND HOME LIFE IN THIS CURRENT SITUATION, AND HOW HAS THESE CHALLENGES AFFECTED THEM.

WORK LIFE

NO ACCESS TO CUSTOM COLLABORATIVE STUDIO

“We can’t easily get to the things we need for our clients”

DIFFICULTY ACQUIRING MATERIALS NEEDED FOR PRODUCTION

“Sometimes when we are doing work in Custom Collaborative, a lot of the stuff we need are in the supply rooms”

WORK & HOME LIFE BALANCE

“The most challenging doing production at home, is I have to manage home be school, a studio, a house, a kitchen and everything.”

“We have a daughter at school and I have to help her with homework and I have to work on my sewing machine and I have to cook and clean.”
“The questions are framed nicely, and the slides are very clear. I think the presentation will be well received and the cooperative members will be engaged and participate.”

- Grace
Custom Collaborative Co-op Lead

“I look forward to your future analysis and recommendations”

- Ngozi
Custom Collaborative Founder

Feedback from Custom Collaborative
From the preliminary feedback collected from Custom Collaborative’s team, the response was overall positive in that Work Ways was engaging, inviting and clear, and there is a wish to continue this working partnership for future recommendations.
To gain a better understanding of the scalability of Work Ways, I have engaged with ISAIC, a Detroit-based industrial training institute and factory that operates at a national-level and focuses on equitable workforce development in the fashion production sector.

I am hoping that this could be a potential future partnership and that Work Ways could be put to test at a larger nation-wide level that is able to reach more equity building businesses.

With Work Ways, I want to highlight and amplify the equity building work that is happening in the fashion industry, so that there could be more access for low-income immigrant women to enter the creative sector.

By using data-driven methods, it would produce tangible outcomes that demonstrate the successes of these equity building models and that equity building should consider individual, unique needs and challenges and is not a “one-size-fits-all” approach.

Future Roadmap
Special Thanks

My Partner Organisation
I would not have been able to complete this thesis without the generous help and support from the whole Custom Collaborative team - Ngozi, Tessa, Grace and the coop members. I appreciate you all for being so welcoming and engaged with this thesis work.

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