HOW \nWOULD \nYOU? \nSUSTAINABLE URBANISM AND \nTHE CORNELL TECH BRAND

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CITY + BRAND + MISSION = THESIS

INTRODUCTION

The Cornell Tech campus is poised to usher in a new age of technological entrepreneurship in New York City. Concurrently, pressing environmental and social issues threaten the viability and long-term resiliency of our cities. Because of their criticality and complexity, these issues demand new and innovative treatments to generate a new age of sustainability and equity. Combining the collective conscience of local residents, the efforts of city services, and the potential of Cornell Tech students could yield the solutions to the city’s most challenging questions. To this end, my undergraduate honors thesis aims to redefine the brand engagement strategy of Cornell Tech through a series of environmental graphics which blend the entrepreneurial and technological spirit of the college with a more responsible ethos surrounding environmental and equity issues. Ultimately, my thesis seeks to prompt thought, dialogue and action in the city.

OBJECTIVES

DEVELOP THE CORNELL TECH BRAND TO:

1. Develop a rich, symbiotic relationship between Cornell Tech and the city as a whole.
2. Provoke thought, action, and idealism in citizens and visitors.
3. Provide a portal for involvement in business, social, and environmental programs.
4. Grow interest in emerging technologies, urban issues, and education.

A NEW SUSTAINABILITY

EQUITY

Sustainability should take the human into consideration. As gaping inequalities emerge in our society, we should consider the ways our actions, businesses, and philanthropy affect individuals, especially the disadvantaged.

ENTREPRENEURSHIP

Introducing an entrepreneurial slant to sustainability means leveraging initiative-based actions to jump start the pace of change. Empowering the groups and individuals to accomplish significant sustainability goals, while ensuring a sustainable business model, will help actualize innovative change.

ENVIRONMENT

As the threat of climate change intensifies, protecting both the built and natural environment should be at the center of policy, business, and activism. With that said, promoting new messages that recognize individual contributions, local impacts, and personal benefits can help environmental sustainability speak to the public.

WHAT IS IT?

The Cornell Tech campus on Roosevelt Island represents the physical embodiment of the Applied Sciences program New York City has developed over the past years. This program has gathered momentum from multiple universities partnering with the city to build out the capacity of New York’s entrepreneurial and technical practices. Starting with a competition to gain access to valuable real estate on Roosevelt Island, colleges from all over the world put together proposals for programs and campuses on this site. As the winner, Cornell has been given the opportunity to articulate an original vision for graduate learning in emerging fields.

AS A CLIENT

With considerations for Cornell Tech’s long term growth and continuity, my goal is to enrich the existing brand of Cornell Tech with a more substantive and responsible ethos. With that said, I am not trying to replace or interrupt the current mission of the Tech Campus. Enhancing current initiatives and education with egalitarian and environmental factors will help develop Cornell Tech as a leader for New York City’s most urgent challenges. I want to momentarily re-frame the Cornell Tech brand in order to show the potential of expanding past industry engagement into more substantive engagements with environmental and social topics.
INTERACTION METHODS

TWEETS
Twitter will play a part in the interaction with the digital portion of these installations, contributing real-time feedback.
ACCESS TO:
• Feedback
• Suggestions
• Other Citizens
• Cornell Tech

WEB PORTAL
The web portal is a vital part of this scheme, connecting viewers with the abundant resources available to them.
ACCESS TO:
• Jobs & Careers
• Education
• City Services
• Cornell Tech

INSTALLATIONS
For ground-level installations, taking advantage of viewer inputs will lead to meaningful and dynamic interactions.
ACCESS TO:
• Industry
• Knowledge
• Sustainability in your area

TACTILE

CAMPUS
Highlighting the new campus and the activities and events surrounding it will integrate Cornell Tech as a fixture of the city.
ACCESS TO:
• Open Space
• Courses
• Events
• Outreach

LOCATION SENSITIVITY

LOCATION + DEMOGRAPHICS + CONTENT ALIGNMENT = MAXIMUM EFFECT

FINANCE
MID-TOWN

FASHION
CHELSEA

TRANSPORTATION
JERSEY CITY

GOVERNMENT
DOWNTOWN

HOSPITALITY
GREENPOINT

ENTREPRENEURS
BROOKLYN

CORNELL TECH CAMPUS
ROOSEVELT ISLAND

TECH
DUMBO/DOWNTOWN
ENVIRONMENTAL GRAPHICS

AWARENESS + KNOWLEDGE + PROMPT = ACTION

DESIGN TYPOLOGIES

SCALE

Utilizing the size and scale of objects helps to impress and make tangible some concepts that often evade normal conceptualization. Additionally, playing with scale in the urban environment can work to recontextualize a viewer's impressions. Whether it is a 1:1 scale installation reflecting a realistic technology or a 1:5,000 scale microchip on the side of a building, playing with scale can be an effective design tool. Ensuring legibility is also a high priority for any type of graphic endeavor. Sizing text correctly for the scene without being overbearing presents challenges. Additional spaces within a dense city can work with lots of noise and interference, making your ad most prominent is key.

MAIN USE:
- Sizing and Hierarchy
- Interpretation

DATA

People below data and statistics. With the revolution in data collection, storage and access putting together data sources for insightful purposes has become commonplace. Utilizing this new wealth of information, designers can drive forward knowledge and awareness of larger, complex subjects.

With that said, manipulations of design in the data realm have also worked to reduce the reliability of information design. Therefore in my designs, I have sought to integrate legible and simple data in order to contextualize the presented prompts. In the future, I see great potential for student contributions to information design for the Cornell Tech brand.

MAIN USE:
- Awareness-Raising
- Sustainability Insights

SYMBOLS

Symbolism is a useful tool to help viewers internalize complex concepts with more simple images. This is especially helpful when you can direct their interpretation. Positive symbols also prompt positive associations with the Cornell Tech brand. Solely asking the right questions like “how would you create a better world” shows Cornell Tech is interested in doing just that.

By utilizing symbolism in both text and imagery, I aim to engender thought and action in viewers. Ultimately, I hope to create installations that will remain memorable to viewers so they will be compelled to engage with Cornell Tech.

MAIN USE:
- Interpretation
- Associations

MOTION

Especially in a dense city like New York, digital signage has become mainstream. Although it comes with an increased cost, motion design and the accompanying digital technology is seen by many as a versatile solution to displaying engaging and diverse material with limited real estate.

Motion design has huge implications for my project. In order to boost the effect of my installations, providing dynamic digital content is essential. My use for motion design in my thesis is twofold. For one, live-updating social networking features and crowd funding requires dynamic posting. Secondly, I will use digital technology for more interactive and interpretive prompts.

MAIN USE:
- Social Media Updates
- Viewer contributed content

CASE STUDIES

EQUITY

Developed by the University for Engineering and Technology in Lima, Peru, this billboard uses reverse osmosis generators to provide clean water to impoverished areas of the city. The “engineering in action” angle works to both better their community while providing renown and marketing for the university. With great responses on social media and publications, the university plans to replicate these billboards for other uses in Peru. This approach shows the extent to which advertising can have functional utility for communities, a novelty which can have far-reaching benefits.

ENTERPRISE

Designed by Unified Field for the new Yale School of Management, this digital signage provides real-time updates reflecting the fast-paced business nature of the school. The key to the success of this installation was the ability for the school to provide dynamic updates to the content displayed. The installations are visible from both inside and outside the building, becoming an integral part of the architectural scheme. Although designed to be temporary, the success convinced administrators to leave it permanently. The main takeaway from this case is how critical the careful curation of content is to success.
HOW WOULD YOU... CONTRIBUTE TO SCIENCE AND HUMAN-KIND?

ORGANIZATION: SUNN
HUMAN CAUSE: ADVANCE HUMAN HEALTH, COMFORT, AND INDOOR ENVIRONMENTAL QUALITY
SCIENTIFIC NOVELTY: ENHANCE ENERGY EFFICIENCY AND PROMOTE PERSONALIZED LIGHT CONTROL
FUNDRAISING GOAL: $50,000

BY CORNELLIANS, FOR THE WORLD

STUDENT PROJECTS

THE NEED
Cornell students produce a wealth of innovative, novel business ideas, designs, and ideas every semester. The best of these get circulated to the press, but they could use an extra push to gain even greater notoriety. Furthermore, Cornell could put itself in a position to become an even stronger entrepreneurial force in New York City. This would work to cement Cornell Tech’s brand aspirations.

CONTENT
The content strategy for the student projects installation stems from the current activities of Cornell students. With a focus on how their projects propel both science and human-kind, the installation balances between didactic outreach efficacy. The term “by Cornellians for the world” leverages Cornell’s outreach mission and conveys global significance and impact to each example.

THE INDUSTRY
The students of Cornell represent the main “industry” focus of this installation. Showcasing student achievement in entrepreneurship serves as the main goal of this installation. With that said, popular crowdfunding sites like Kickstarter and Cornell Crowdfunding could prove good pathways in which to track progress and call viewers to action in order to power these students.

CITY PROGRAMS
New York City is full of entrepreneurial programs that viewers could dive into to start their own entrepreneurial aspirations. The applied sciences program that created Cornell Tech has far reaching outreach opportunities across the boroughs. Some outlets are:
- NYC Entrepreneurial Fund
- EliaNYC
- NY Entrepreneur and Start-up Network
- NycEDC
THE NEED
According to Mayor Bill De Blasio’s plan, New York City is attempting to cut carbon emissions by 80% by 2050, a quite ambitious goal. Developing alternative energy sources to meet this goal is essential and looking toward more avant-garde methods stimulates more innovative thinking around these issues. Furthermore, New York City, according to NYCEDC, lags behind other American metropolises in terms of green industry jobs, compelling more New Yorkers to look toward green technology crucial for the resilience of the city.

CONTENT
The content of this installation represents an analog of an actual Algae facade system currently being developed. Utilizing the size of the structure, this installation appears to be a to scale representation of the actual technology. Furnishing a touch-screen interaction system in the installation allows direct and tactile feedback for viewers, allowing them to instantly respond to the prompt as well as explore other suggestions from other users.

CITY PROGRAMS
New York City is attempting to reduce carbon emissions through developing more clean energy sources. Furnishing space for development of new energy sources through the Urban Future Lab also shows NYC’s commitment to clean energy. Providing citizens with services like free solar energy consulting services works to spread clean energy throughout the city.
- NYSEED
- The Urban Future Lab
- Greencitys

THE INDUSTRY
The “green collar” job sector is still nascent, but growing. Although New York City lags behind other cities in proportion, significant green enterprise flourishes in New York. Clean Edge, a clean energy research firm, reinforces NYC’s growth in this area citing $209 million in venture capital in the green energy industry for the city. Furthermore, in 2007 alone NYC added 3,223 green businesses with 34,263 new jobs.

BUILDING TECHNOLOGY

THE NEED
According to the USGBC, the built environment accounts for 39% of all carbon emissions in the United States, the largest proportion of any carbon contributor. Furthermore, 70% of electricity is consumed by buildings. Making buildings more efficient is a necessity, especially for cities like New York with older, less efficient building stock.

CONTENT
This installation utilizes a scaled up microchip aesthetic, which imparts a notion of technology while channeling a green wall. The use of a large scale LED screen also allows for dynamic programming and feedback from viewers. Using the hashtag “AlgaeWalls” creates a touchstone for Cornell Tech’s new brand strategy, encouraging free-thinking and engagement with entrepreneurship and sustainability.

CITY PROGRAMS
The City of New York is currently working comprehensively under the Build to Last plan to develop increased resiliency in all five boroughs. Spread throughout the city government, this program targets easy solutions like insulation and admittedly less proven strategies integrated into extensive retrofits. Citizens gaining knowledge about how they can play a part in this green revolution represents an important step toward reducing emissions and increased efficiency.
- NYC Built to Last
- GreenNYC

THE INDUSTRY
With the advent of green building metric systems, like the USGBC’s LEED, green building practices have become respected and desirable for developers. Aids from new buildings, many businesses have sprung up to help New Yorkers make sustainability improvements to existing structures. GreenPoint NYC and Build It Green NYC are some examples of companies in this area.
HOW WOULD YOU... TRANSFORM TRANSPORTATION FOR THE 21ST CENTURY?

TRANSPORTATION ACCOUNTS FOR 33% OF US CARBON EMISSIONS.

CORNELL TECH #HOWWOULDYOU

THE NEED
Transportation accounts for 33% of the carbon emissions in the United States. Although New York City has a larger public transit system than any other city in America, there is still room to innovate new modes, methods, and strategies to get citizens from place to place, with existing infrastructure crumbling at our feet, we will need visionaries from the public and private sector to help build a new generation of transportation systems.

THE INDUSTRY
Many industries are attempting to re-emission the future modes of transportation in the city. Start-ups like Uber and Lyft are attempting to reconfigure the current transportation paradigm to be more flexible. In the end, especially in places like New York, the potential for innovative new transportation technologies and other alternative transportation routes in the hands of pioneering businesses and start-ups.

CONTENT
This installation strategically ties with the grid system of New York City, running and twisting streets of the city's urban fabric behind the design represents a departure from the strict grid to invite viewers to rethink their preconceptions around transportation. Furthermore, adding the board above the parking lot brings attention to the current status quo of car-based transportation.

CITY PROGRAMS
New York City has begun to roll out programs to bring the MTA into the 21st century. Electric city vehicles and an EV in this program contribute to the city's commitment to lower pollution and carbon emissions. Providing new bike lanes, expanded Citi Bike stations, and other amenities display New York City's leadership in creating safe and easy alternative transportation.