EnPRO 353
Crop To Truck
Mobile Coffee Barista
Background
## City Code

### MOBILE FOOD DISPENSER
* A truck used for serving wrapped individual food portions

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| Fees               | $275 per vehicle                                                                    | $660 per commissary                                                                  |

| Health & Safety    | Food Restricted to Wrapped Individual portions                                      | Operator must pass sanitation managers’ course                                        |
|                    |                                                                                        | - Records of food’s origins kept for 30 days                                          |

| Restricted Areas & Events | - 200 feet away from a similar food establishment - 100 feet of any food establishment without written consent of owner - Any private property without consent of owner - Special events in Chicago park districts without additional permits |

| Operational Requirements | - 2 hour stop limit in one block - Sales from 10:00 pm to 10:00 am except construction sites | - Potentially hazardous foods held at or above 140°F shall be discarded at the end of the day - Thermometers shall be provided for all warming/refrigeration units. |

| Facility Requirements   | - Hand washing sink - Hot water storage tank, cleaned and flushed at least twice a week - Wastewater retention storage container, emptied daily and as necessary - Tight non-absorbent washable refuse receptacle | Three compartment ware-washing sink |

| Inspection             | Department of health inspection once every 6 months                                  |                                                                                      |
Problem

- No direct outlet for Crop to Cup products
- No market for African coffee farmers
- Established competitors
Team Organization

Jacob Elster

Limia Shunia
Professor / Leader

Product

Nick Pierce
Business

Nico Sanchez
Architecture

Joseph Muchna
Engineering

Interior

Joseph Muchna
Lead / Engineer
Marina Horchin
Arch. Engineer
Daria Haznar
Engineer
Mihee Choe
Archivist / Architecture
Wes Klockowski
Civil Engineer

Envelope

Nico Sanchez
Lead / Architecture
Nick Pierce
Business
Kevin Karner
Architecture
Naguib Azab
Architecture
Nikola Zistakis
Architecture

Urban

Mariana Palau
Lead / Architecture
Aaran McEneff
Business
Andrea Velazquez
Communication
Kevin Brenner
Arch. Engineer
Hee-jong Min
Business
Solution

• Mobile Coffee Barista
  – Direct outlet for C2C, new distribution channel
  – Promote and advertise
  – Provide market for farmers
SWOT Analysis

• **Strengths:**
  - Mobility
  - Less start-up cost
  - Social message

• **Weaknesses:**
  - Weather
  - Transit

• **Opportunity:**
  - Growing market
  - Expansion/Franchise
  - Education

• **Threats:**
  - Big name coffee shops
  - New entrants
Design Progression

• Concept
• Program requirements
• Site location
• Social considerations
• Competitors
Research Methods

- Case studies
- Ethnographic
- Training
- Archetype study
- Site visits
- Market research
Customer Journey

- DISCOVER
- APPROACH
- DECIDE
- ORDER
- WATCH
- PICK-UP
- TASTE
- SHARE
- THINK
Exterior Concept
Service Design
Interior Concept
Start-up Costs

• Exterior $40,000.00

• Interior cost

• Total start-up cost
Start-up Costs

- Exterior

- Interior cost $30,000.00

- Total start-up cost
Start-up Costs

- Exterior

- Interior cost

- Total start-up cost $70,000.00
Business Model

Beta truck  → Build brand name → Expand locally

→ Expand nationally
Competitors

Traditional:
- Starbucks
- Panera

Take-away:
- Dunkin Donuts
- 7 Eleven

Other:
- Vending Machines
- Coffee Pools
Target Customer
Route

- High foot traffic areas
- Follow city code
- Databases
Route

Weekday Route

Weekend Route

EnPRO 353 | IIT, Fall 2010
Crop to Truck | “Think outside the cup”
Financial Forecasts

Cup of coffee:
Lid: $0.05
Cup: $0.13
Coffee: $0.83

Revenue per cup: $3/cup
Variable cost per cup: ~$1/cup
Contribution margin per cup: $2/cup

Cups per hour: 25 cups/hr
Hours per day: 6 hrs
Days per year: 350 days

Annual contribution margin: $105,000
Fixed + start-up costs: $100,000

\[
\frac{\text{Annual contribution margin: } $105,000}{=}
\]

Break Even: ~ 1 year
Risks

• Risks
  – Changing city codes
  – Transit
  – Competitors

• Solutions
  – Adaptable design
  – Insure vehicle
  – Social message
Impact

- Chicago
- Crop to Cup farmers
• Questions?
Case Studies

Gastro Wagon
Chicago, IL

Simple Sandwich
Chicago, IL

Bistro Truck
New York, NY
Happy Bodega

• Successes:
  – Attention grabbing
  – Friendly
  – Unique

• Problems:
  – Small window
  – Menu issues
  – Only one person
  – Security
  – Location

• Solutions:
  – Organized/Smart use of interior space
  – Transparency
  – Optimal route
Site Observations

• Route Site Visits
• (insert pics of various sites)
Surveys

- Avg. Age: 36.5 years old
- Avg. # of drinks/day: 2 coffee drinks/day
- Avg. willingness to pay: $4 per cup
- Would you buy from a truck: 8 Yes, 4 No
Commissary

- Place where trucks are stored, cleaned, and prepared for future trips.
- Used by cities to investigate cleanliness and code standards of trucks.
- Two Methods:
  - Use current AAA commissary
  - Establish new commissary
Product

• What can we move in a day?