

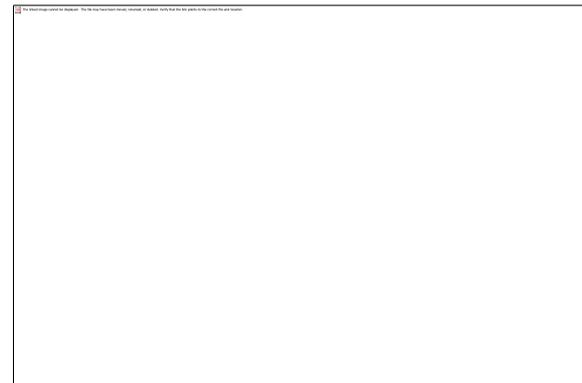


EnPRO 353

Crop To Truck

Mobile Coffee Barista

Background



City Code



	MOBILE FOOD DISPENSER <i>A truck used for serving wrapped individual food portions</i>	MOBILE FOOD FACILITY <i>A truck used for preparing and serving cooked food</i>
Requirements	- Commissary - Location	Name and Address of Owner and Operator - Sample Route - Plans
Fees	\$275 per vehicle	\$660 per commissary \$660 per vehicle
Health & Safety	Food Restricted to Wrapped Individual portions	- Operator must pass sanitation managers' course - recods 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: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 month	

[Questions](#)

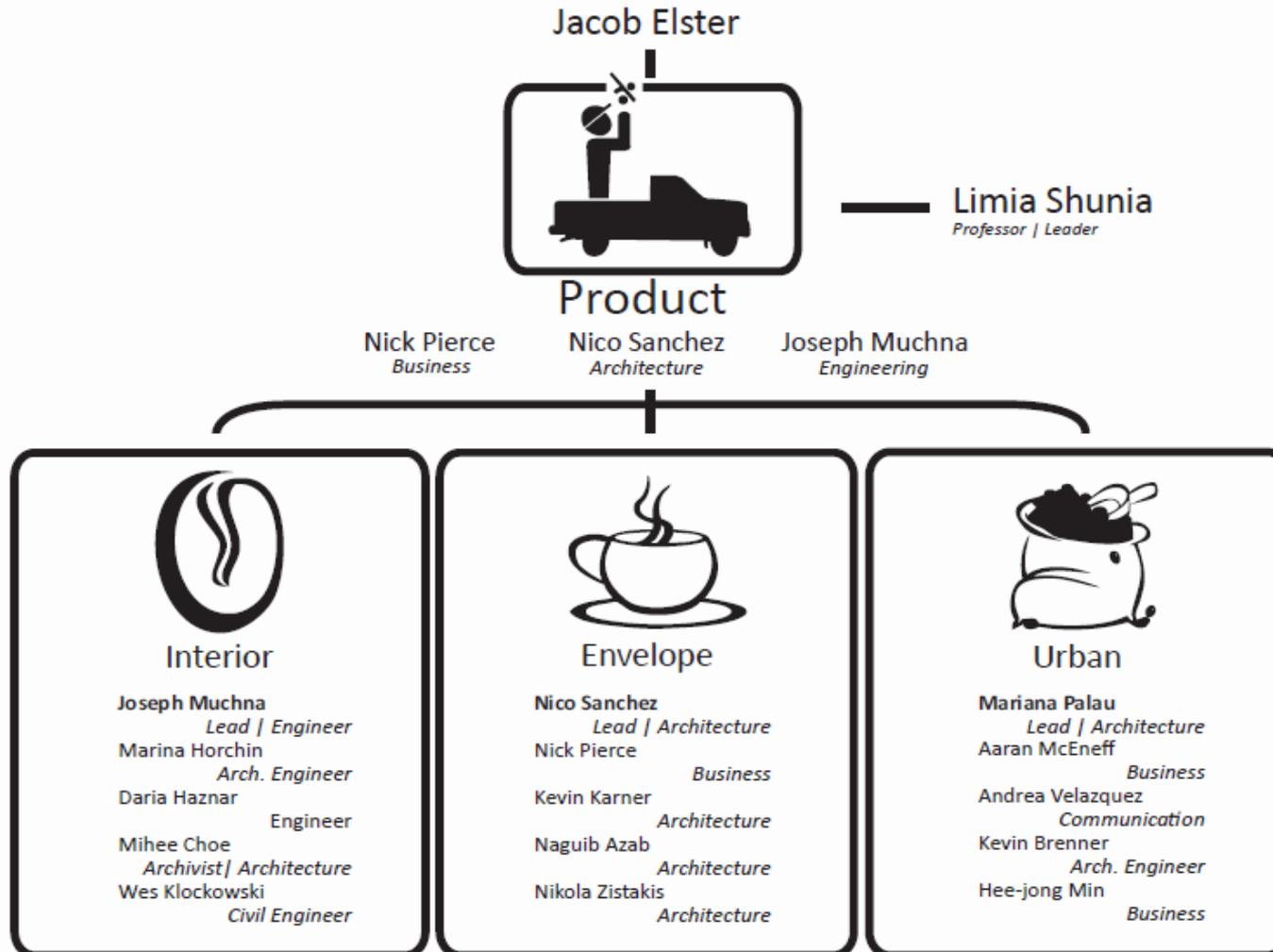
Problem



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



Team Organization





- 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

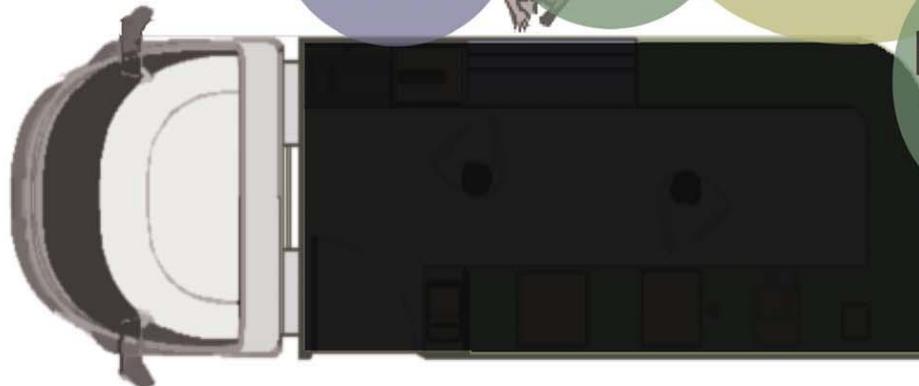
WATCH

PICK-UP

TASTE

THINK

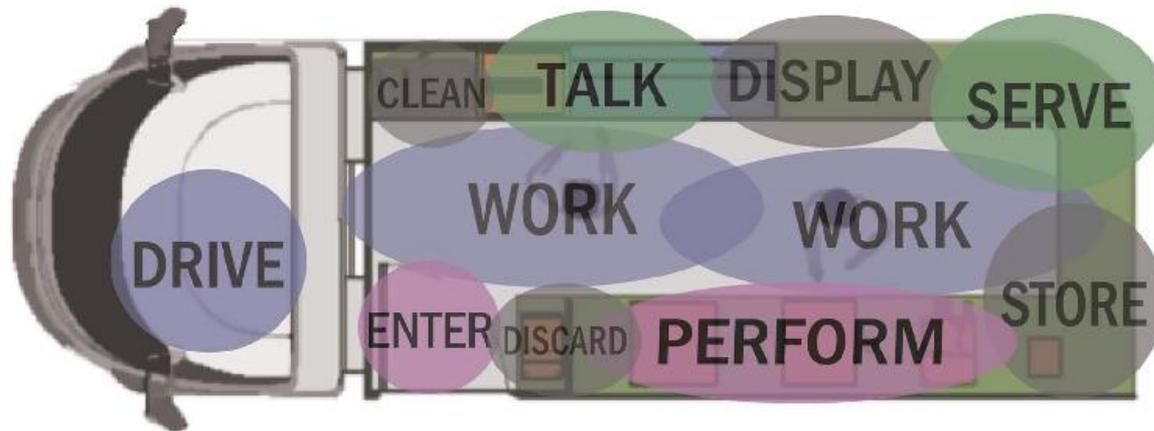
SHARE



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

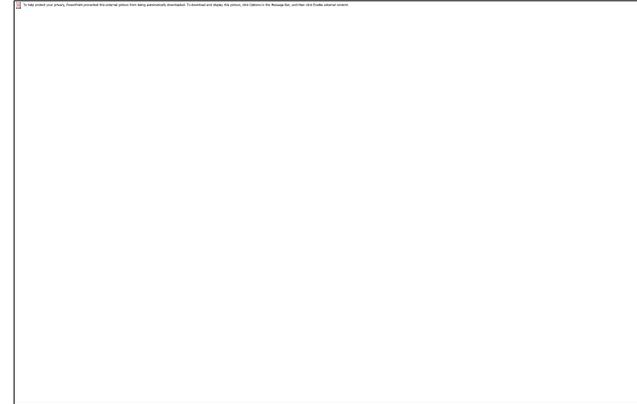
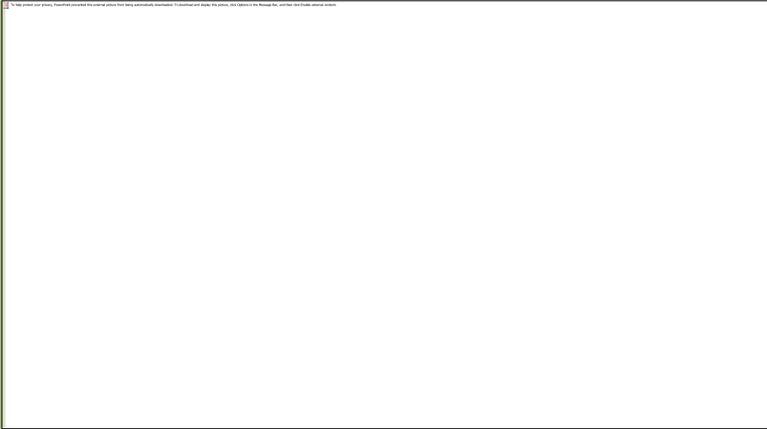


Start-up Costs



- Exterior
- Interior cost
- **Total start-up cost** **\$70,000.00**

Business Model



Beta truck $\xrightarrow{\text{Build brand name}}$ Expand locally



Expand nationally \leftarrow

Competitors



Traditional:

- Starbucks
- Panera



Take-away:

- Dunkin' Donuts
- 7 Eleven

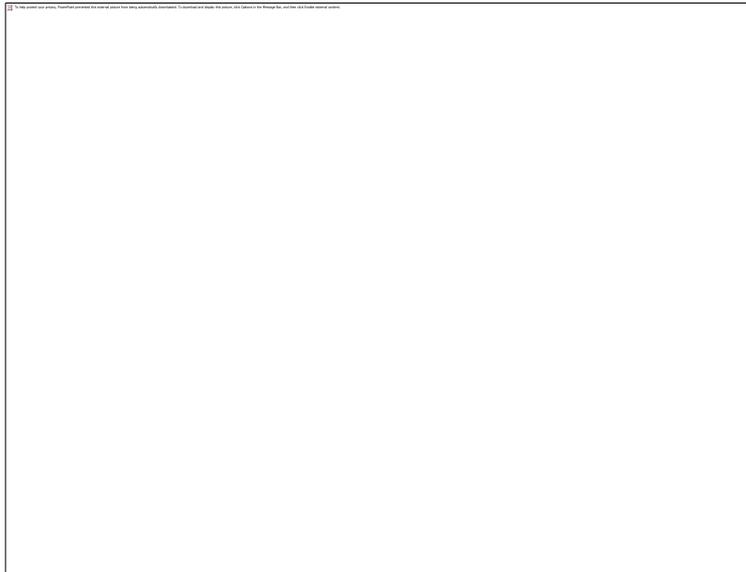


Other:

- Vending Machines
- Coffee Pools



Target Customer



Route



- High foot traffic areas
- Follow city code
- Databases



Route



Weekend Route



Weekday Route



Financial Forecasts

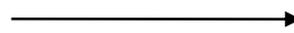


Cup of coffee:

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

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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](#)

[Power/Energy](#)

[Commissary](#)

[Happy Bodega](#)

[Waste Management](#)

[Site Visits](#)

[Surveys](#)

Case Studies



Gaztro Wagon
Chicago, IL



Simple Sandwich
Chicago, IL



Bistro Truck
New York, NY

[Questions](#)

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



[Questions](#)

Site Observations



- Route Site Visits
- (insert pics of various sites)

Power/Energy



GENERATOR



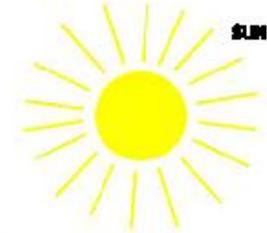
TRANSFORMER



CHARGE CONTROLLER



BATTERY



SUN



SOLAR PANEL



ELECTRIC CURRENT



ALTERNATOR



TRUCK EQUIPMENT



TRUCK POWER



TRANSFORMER

Supply
Adaptations
Solar Panels

[Questions](#)

Waste Management



[Questions](#)

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



[Questions](#)

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

Menu Options



[Questions](#)

Product



- What can we move in a day?