Supply Chain Strategy for Lightweight Concrete Arborloo in Haiti

**Problem:**
- Around 2.6 Billion people all over the world are still suffering from poor sanitation facilities.
- "A child dies every 20 seconds due to poor water and sanitation quality" (World Health Organization (WHO), 2012).
- Light Weight Concrete Arborloo is our step to contribute to overcome the poor sanitation challenges in Haiti.
- People in Haiti live on less than $6 a day and cannot afford to build toilets.
- This product costs < $50 and is produced in modules so it can be bought in pieces when people have the money and easily transported.

**How it works:**
- An arborloo is a moveable pit latrine that composites human feces into organic fertilizer to provide nutrients for a fruit-bearing tree.
- It is easy to install in the earth, allowing a safe and dignified place to defecate, which in turn will help halt the spread of pathogens present in human feces.

**Objective:**
To design an optimized Supply Chain and Manufacturing Strategy in relatively uncertain environment and suitable for the resources in Haiti.

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**Our strategy**
- Risk Mitigation
- Supplier Flexibility
- Supplier relationships
- Supplier performance
- Continual Improvement

**Our strategy**
- Economic Order Quantity (EOQ)
- Reducing replenishment times
- Centralized inventory management
- SOPs for Inventory Control

**Our strategy**
- Service Based Manufacturing  
  Lean Manufacturing  
  Workplace standardization  
  Quality Assurance and Control  
  Equipment Maintenance and Inspection

**Our strategy**
- Reverse Logistics Planning  
  Bi-weekly product inspections  
  Report generation  
  Packaging

**Our strategy**
- Employee Training  
  Multimodal Transportation  
  Module Based, Package based, Contract based

**Porter’s Five Forces**

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