Opportunity:
A quick, easy, and skill-less way to add designs onto the top of latte or cappuccino foam — just press a button.

Food Safety:
Constructed with food safe materials: HDPE, neoprene, aluminum, polyurethane, zinc plated steel, and nylon.

Lead Screws + GuideRails:
Lead screws guide the squeegee and lifting mechanism along with delrin guide rails.

Frame:
T-Slot extrusion expedited manufacturing, and is easy to adjust and modify to fit our needs.

Electronics:
Arduino Mega-controlled Nema 17 steppers actuate the lifting mechanism and IR sensors lift platform to correct height.

Dispensing Unit:
Automatically dispense the topping and move it over the silkscreen.

Benchmarking:
Ripple Coffee Machine:
- Extremely expensive ($1,300)
- Powder dispensing technology

TARTAN drINK Machine:
- Much less expensive
- Silk-Screen Technology
- User-Friendly Design

Market Research:
- Cafe patrons willing to pay small fee for designs
- Small coffee businesses would consider making room for product
- Minimize use time to maximize throughput

Engineering Analysis:
- Stress, fatigue from normal operation
- Wear, break and become inoperable
- Must ensure proper assembly and operation

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