



TransVend



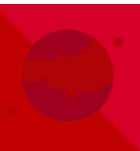
*“Vending machines are very **large** and there are **limited** and often **hidden places** to put them.”*

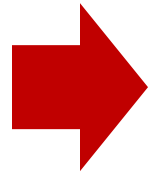
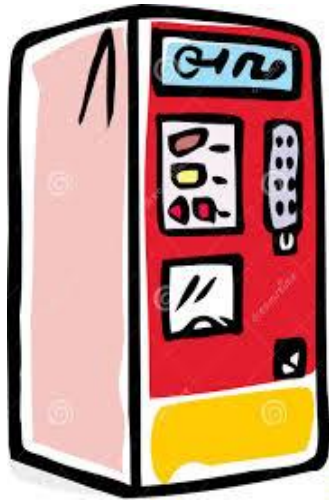
*“We want to **save energy**... to create an entirely **new futuristic look, feel, and capability**”*



MOTIVATION

RED A





TransVend

GREATER

Energy Efficiency

Smaller size and lower power needs

Integration

into everyday life

Accessibility

via new space options

Interaction

with friends & technology

THE PRODUCT

RED A



FORM

WHAT WILL
IT LOOK LIKE?

MECHANISM

HOW ARE DRINKS
TRANSFERRED?

COOLING

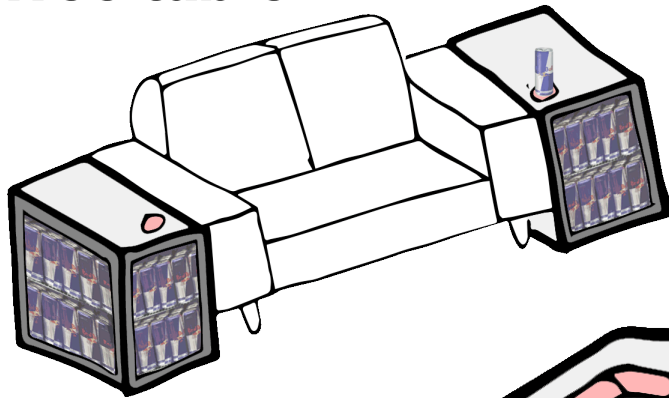
HOW DO WE
COOL DRINKS?

QUESTIONS

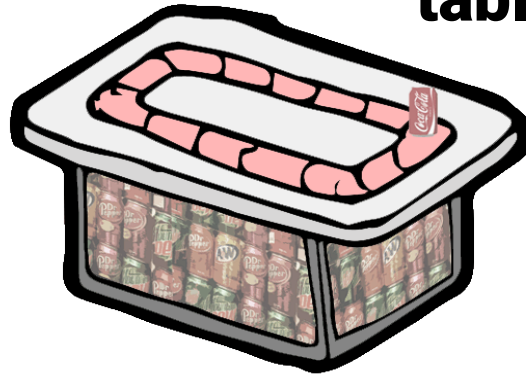
RED A



coffee table



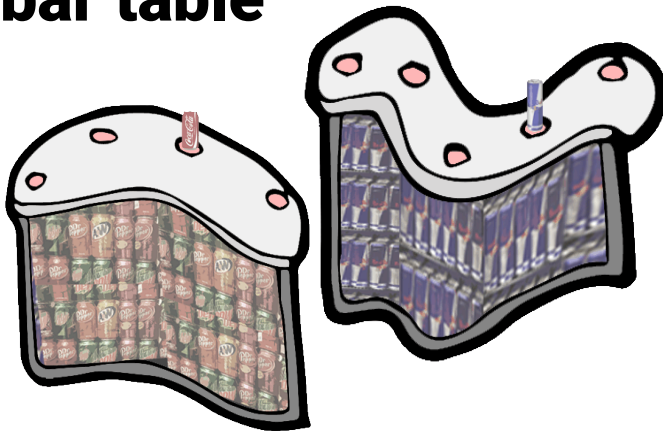
table



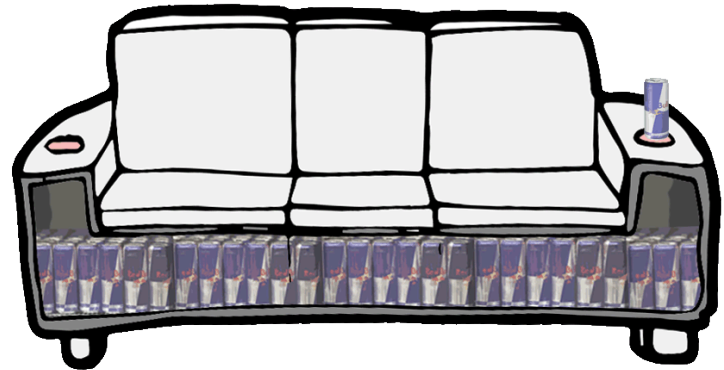
high table

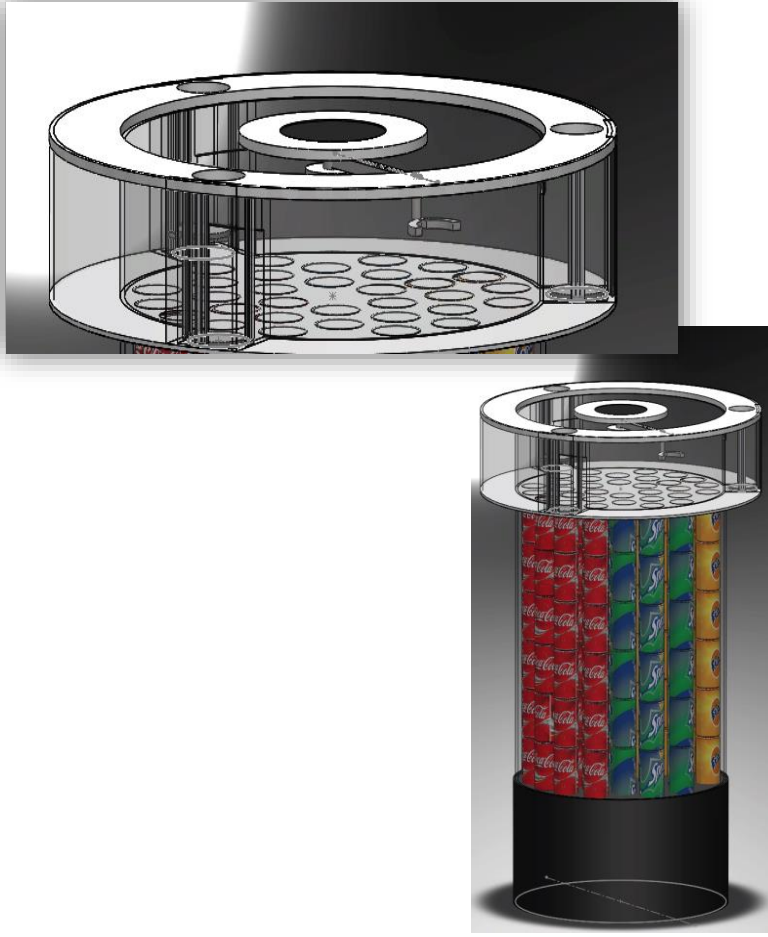


bar table



couch





MECHANISMS

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Let's use gravity



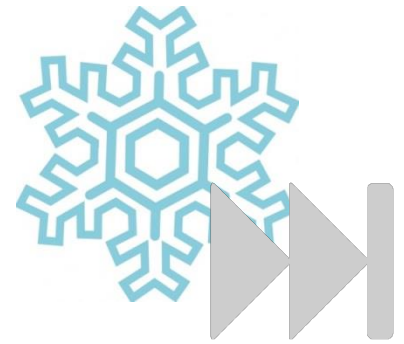
... but a potential concern





RAPID COOL

*Claims show
energy savings of 54-80 %
compared to some standard vending
machine*



Standard Vending Machine
**~ 500 W per vending
machine continuous**

TransVend
 $E = mc\Delta T$
 $(4.18\text{J/gC} \cdot 330\text{g} + 0.9\text{J/gC} \cdot 14\text{g}) 20\text{C} \sim 30108 \text{ J}$
~501W instant 1 min cool
** Cooling 22C → 2C*

COOLING

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Vending machine market size is \$40-50B

since 2000

55% of the vending market is packaged cold beverages

in 2009 & 2010

Coca-Cola holds 18.1 % market share is the leader in liquid refreshments

Coca-Cola owns 14M vending machines

MARKET

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