



Measuring User Behavior Change in Frost

Impact Xchange Hackathon – Team DAMP + J



Why Behavior Change Matters

Energy and Food Waste

Major contributors to environmental harm

Behavior Tracking

Insufficient without sustained change

Sustainability

Starts with raising user awareness



What We Track Per User

Fridge Door Open Frequency	Duration per event
Late-Night Access	Scanned via RFID
Steam Events	Hot food insertion
Gas Events	Food spoilage detection
Fruit / Other food Compartment Use	Usage patterns



Behavior Analytics Model



Just-in-time Nudging

Buzz and roast prompts for action



Behavior Logs

User profiles via RFID tracking



Real-time Feedback

Roasts increase self-awareness

Metrics for Measuring Change

Quantitative Metrics

- ↓ Average door open duration
- ↓ Late-night fridge visits/week
- ↓ Steam/gas events
- ↑ Fruit section openings
- ↓ Sustainability Issues (Web app)

Qualitative Metrics

- User feedback on reduced snacking
- Roast tone preference tracked (High, Medium, Low)