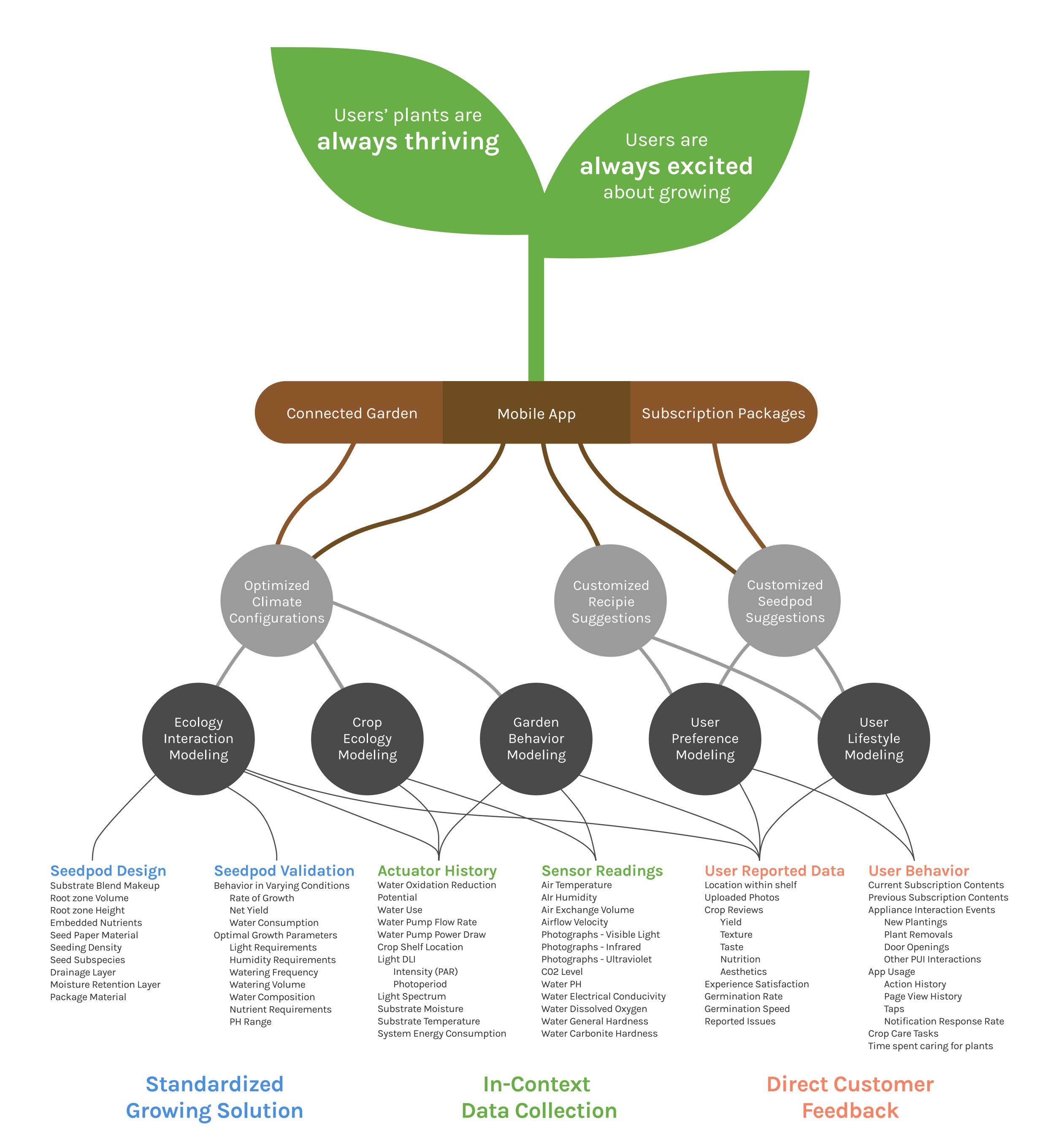# GROVE MACHINE LEARNING PLATFORM

Grove is building the most consumer-centric machine learning platform in indoor growing.

Our close touch with consumers combined with our IOT growing platform and sophisticated ecological research give us a unique ability to collect powerful, multi-faceted datasets and a unique opportunity to harness this data and deliver an always thriving, highly engaging gardening experience.

Users' plants are **always thriving**

Users are **always excited** about growing

Connected Garden   **Mobile App**   **Subscription Packages**

Optimized Climate Configurations

Customized Recipie Suggestions

Customized Seedpod Suggestions

Ecology Interaction Modeling

Crop Ecology Modeling

Garden Behavior Modeling

User Preference Modeling

User Lifestyle Modeling

Seedpod Design
Substrate Blend Makeup
Root zone Volume
Root zone Height
Embedded Nutrients
Seed Paper Material
Seeding Density
Seed Subspecies
Drainage Layer
Moisture Retention Layer
Package Material

Seedpod Validation
Behavior in Varying Conditions
  Rate of Growth
  Net Yield
  Water Consumption
Optimal Growth Parameters
  Light Requirements
  Humidity Requirements
  Watering Frequency
  Watering Volume
  Water Composition
  Nutrient Requirements
  PH Range

Actuator History
Water Oxidation Reduction
  Potential
Water Use
Water Pump Flow Rate
Water Pump Power Draw
Crop Shelf Location
Light DLI
    Intensity (PAR)
    Photoperiod
Light Spectrum
Substrate Moisture
Substrate Temperature
System Energy Consumption

Sensor Readings
Air Temperature
AIr Humidity
Air Exchange Volume
Airflow Velocity
Photographs - Visible Light
Photographs - Infrared
Photographs - Ultraviolet
CO2 Level
Water PH
Water Electrical Conducivity
Water Dissolved Oxygen
Water General Hardness
Water Carbonite Hardness

User Reported Data
Location within shelf
Uploaded Photos
Crop Reviews
  Yield
  Texture
  Taste
  Nutrition
  Aesthetics
Experience Satisfaction
Germination Rate
Germination Speed
Reported Issues

User Behavior
Current Subscription Contents
Previous Subscription Contents
Appliance Interaction Events
  New Plantings
  Plant Removals
  Door Openings
  Other PUI Interactions
App Usage
  Action History
  Page View History
  Taps
  Notification Response Rate
Crop Care Tasks
Time spent caring for plants

Standardized Growing Solution

In-Context Data Collection

Direct Customer Feedback