



# **IDEATE STAGE: SMART HOME ENERGY SYSTEMS**

Exploring innovative solutions for energy efficiency in smart  
homes

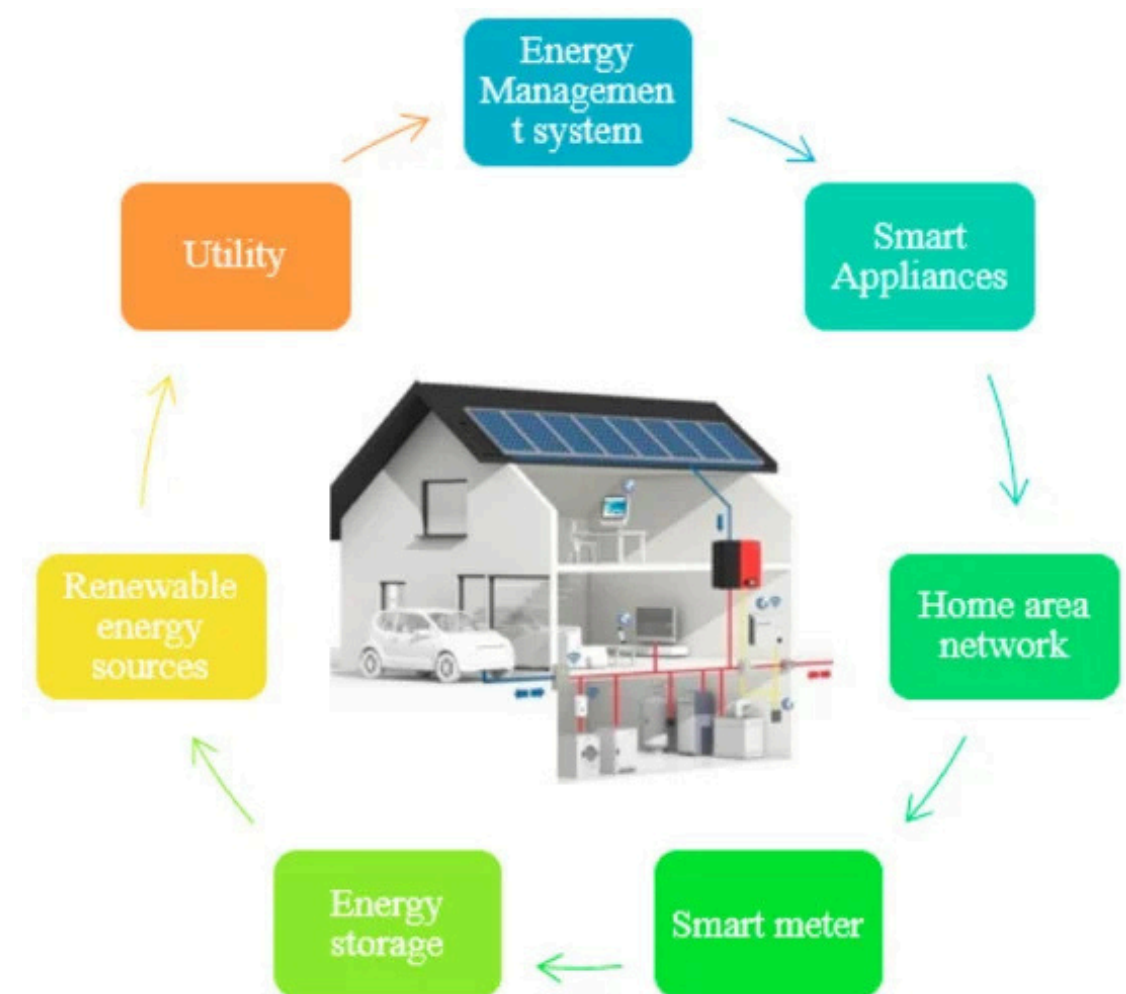


# PROBLEM STATEMENT

- High energy consumption in homes leading to increased costs and carbon footprint.
- Lack of intelligent, automated solutions to optimize energy use.

## Impact:

- Increased electricity bills
- Environmental impact due to excessive energy waste
- Lack of user awareness about energy consumption patterns



# BRAINSTORMING

Goal: Generate as many ideas as possible for smart energy solutions.

Key Concepts:

- AI-driven energy management
- IoT-enabled automation
- Renewable energy integration
- Smart appliances and sensors
- Behavioral insights for energy conservation



# 2X2 MATRIX

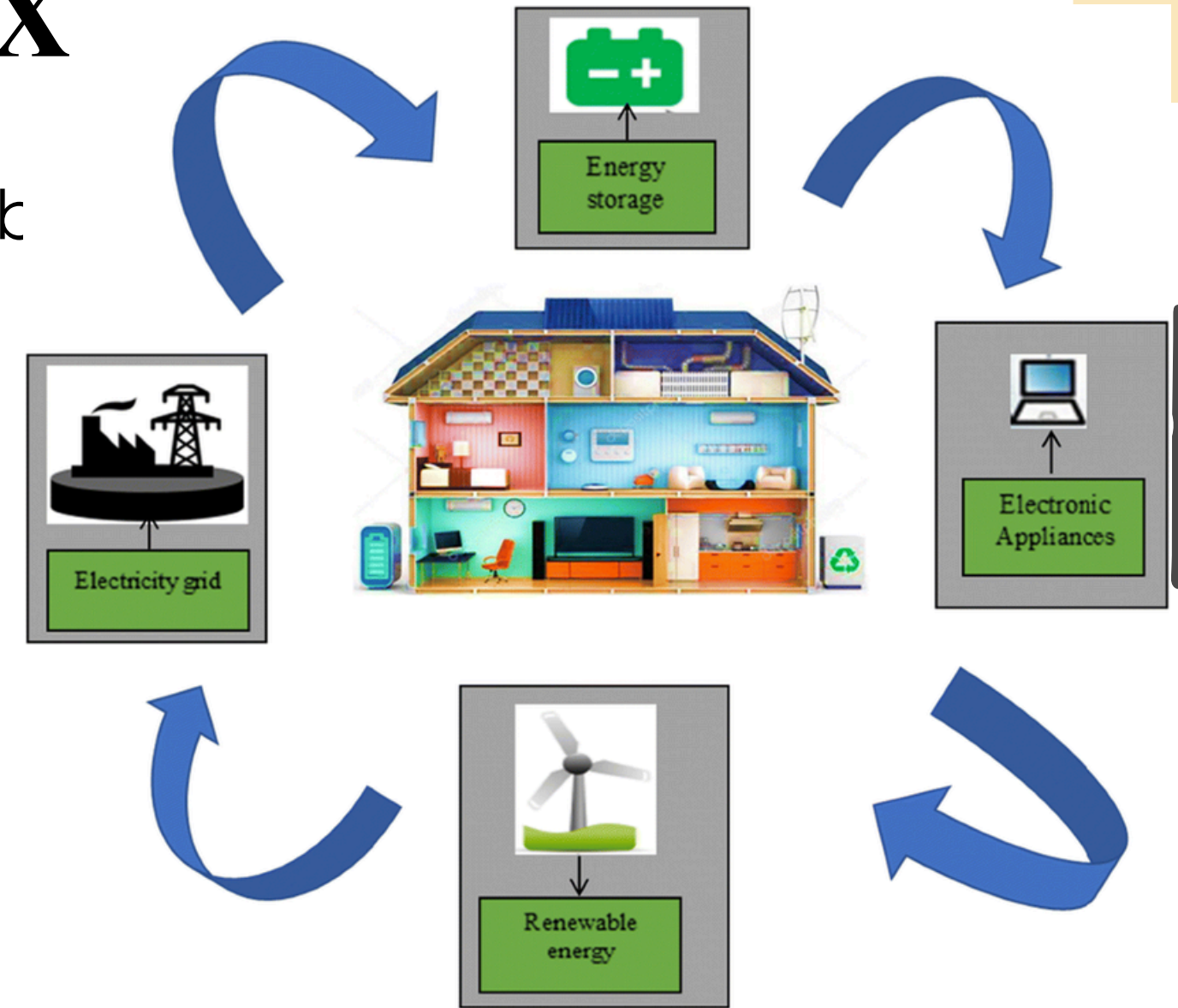
Purpose: Prioritize ideas based on impact and feasibility

Categories:

1. High impact, easy to implement
2. High impact, hard to implement
3. Low impact, easy to implement
4. Low impact, hard to implement

Example:

- AI-driven energy optimization (High Impact, Hard to Implement)
- Smart scheduling & automation (High Impact, Easy to Implement)



# DOT VOTING

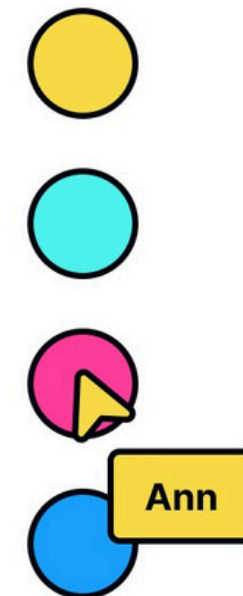
Objective: Narrow down ideas by team voting.

Process:

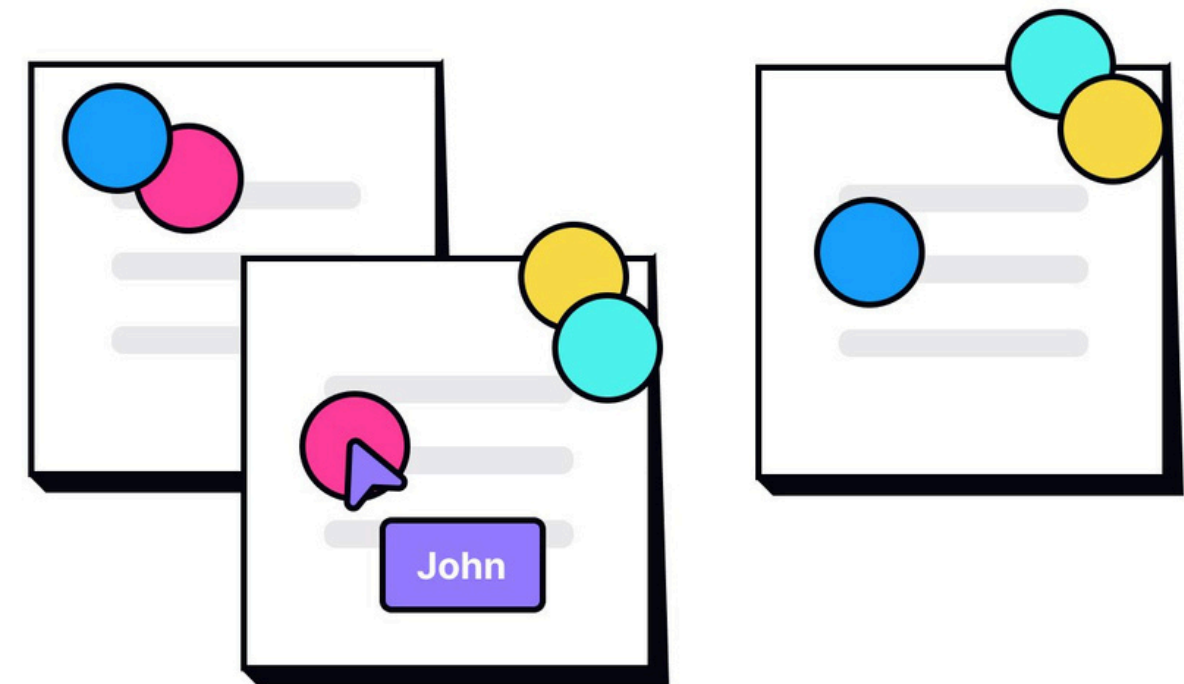
- Each participant gets 3-5 votes
- Vote on the most promising ideas
- Top-voted ideas move forward

Example:

- AI-based energy optimization: 10 votes
- Smart sensors: 8 votes
- User energy alerts: 6 votes



## DOT VOTING





# 6-3-5 METHOD

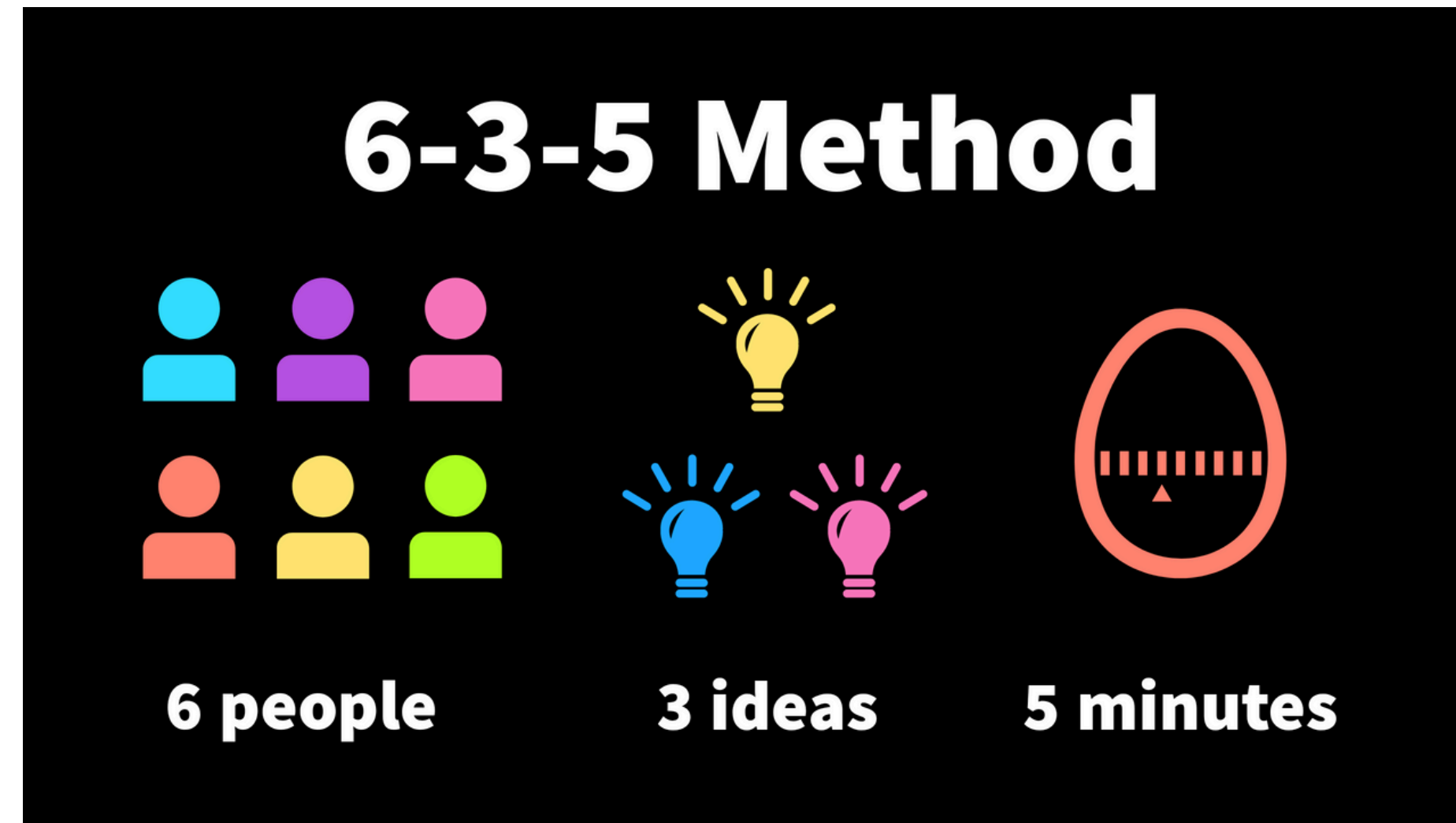
Process:

- 6 participants
- Each writes 3 ideas in 5 minutes
- Ideas are refined in subsequent rounds

Outcome: Well-developed concepts with multiple perspectives.

Example:

- Smart thermostats that learn user behavior
- AI-powered real-time energy suggestions



# SPECIAL BRAINSTORMING TECHNIQUES

- Negative Brainstorming: Identify ways to waste energy, then reverse solutions.  
Example: Leaving lights on all day → Implement auto-dimming.
- Figuring Storming: Think from the perspective of companies like Tesla.  
Example: Google Nest-like AI for energy optimization.
- Bodystorming: Act out home energy usage scenarios to identify pain points.

# NABC FRAMEWORK

- Need: Reduce home energy consumption efficiently.
- Approach: AI-driven energy monitoring & IoT integration.
- Benefit: Lower energy costs, increased sustainability, and enhanced user experience.
- Competition: Traditional energy monitoring apps, manual energy-saving habits.

## SRI's "NABC" approach

*A methodology to develop a quantitative value proposition — the first step in value creation*

IMPORTANT  
CUSTOMER **N**EEDS

**A**PPROACH

**B**ENEFITS

**C**OMPETITION





# CHALLENGES & FUTURE ENHANCEMENTS

## Challenges:

- High initial cost of smart home energy systems
- Data security & privacy concerns
- Compatibility issues with existing appliances

## Future Enhancements:

- Improved AI models
- Blockchain for secure transactions
- Integration with smart city infrastructure.



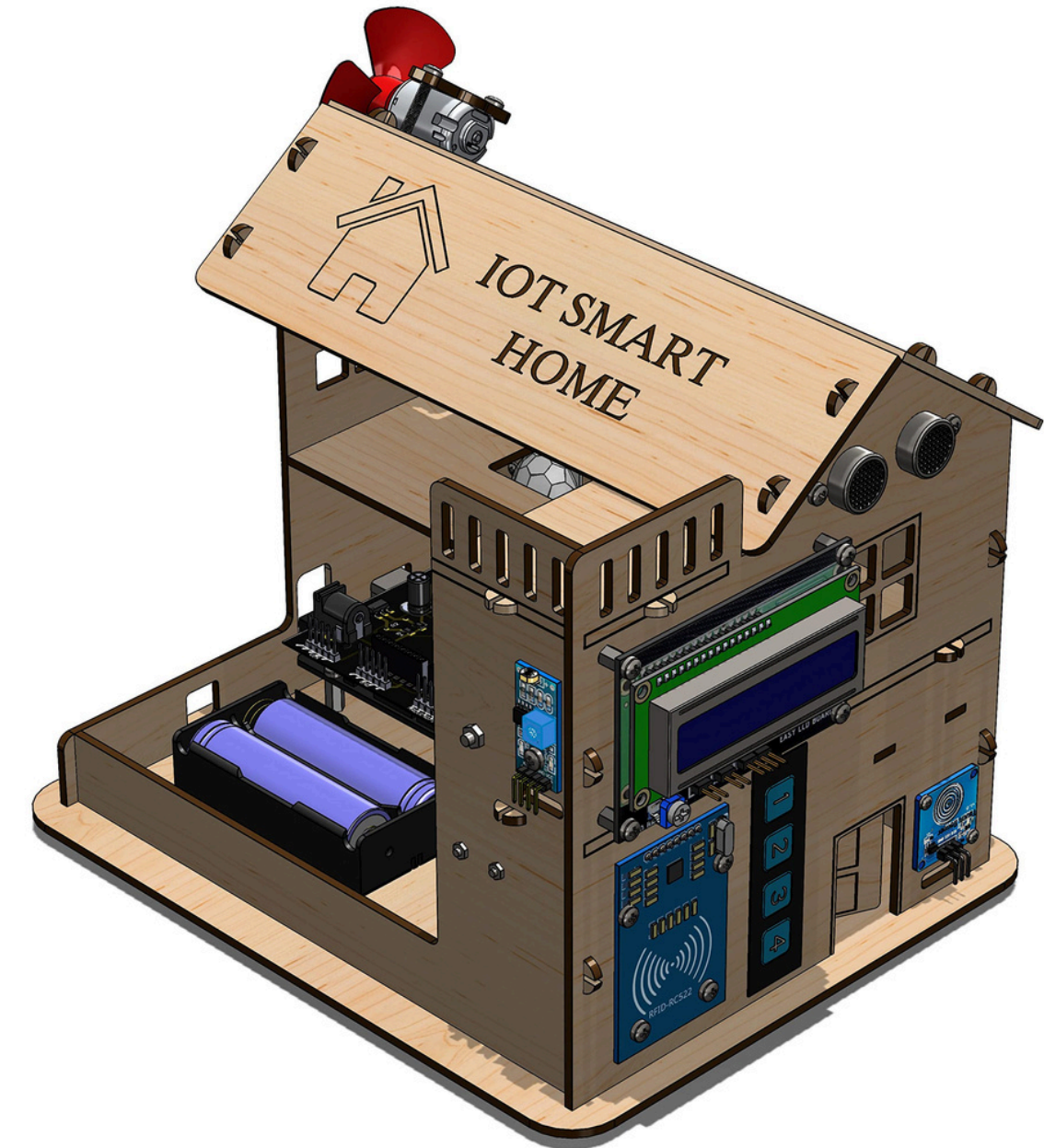
# CONCLUSION & NEXT STEPS

## Finalized Ideas:

- AI-powered energy optimization
- Smart scheduling & automation
- Real-time energy tracking & alerts

## Next Steps:

- Develop a prototype
- Conduct user testing and gather feedback
- Iterate based on insights
- Develop partnerships with smart home device manufacturers.





**THANK YOU**