

FISKARS®

Vision Statement

To be a global leader in sustainable indoor and outdoor gardening.

STEEPX RESEARCH

Digital Nomad
A remote worker who travels the world while working full-time. Digital nomads are projected to reach 1.2 billion by 2025.
Risks & Threats:
- Health and safety concerns
- Lack of social support
- Unstable income
Opportunities:
- Flexibility and freedom
- Access to global markets

Global Aging
By 2050, the world's population aged 65 and older is projected to reach 2.5 billion, up from 1.2 billion in 2020.
Risks & Threats:
- Health and safety concerns
- Lack of social support
- Unstable income
Opportunities:
- Flexibility and freedom
- Access to global markets

Mental Health
Mental health issues are increasingly being recognized as a global public health concern. In 2019, 1 billion people were affected by mental health issues.
Risks & Threats:
- Stigma and discrimination
- Lack of access to care
- Limited resources
Opportunities:
- Increased awareness
- Digital health solutions

Protective Tech
As the COVID-19 pandemic continues, protective technology is becoming a key focus for consumers. Smart masks and face shields are examples of this technology.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Glamping
The global glamping market is projected to reach \$1.2 billion by 2025, up from \$0.8 billion in 2020. This is driven by the growing desire for outdoor experiences.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Plant-based
The global plant-based food market is projected to reach \$1.2 billion by 2025, up from \$0.8 billion in 2020. This is driven by the growing desire for healthier and more sustainable food options.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Self-driving
Self-driving cars are projected to reach 1.2 million units by 2025, up from 0.5 million in 2020. This is driven by the growing desire for convenience and safety.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Biotechnology
Biotechnology is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for personalized medicine and sustainable food production.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Immersive Technology
Immersive technology is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for entertainment and education.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Increased GST on Packaging
Governments are projected to increase GST on packaging by 10% by 2025, up from 5% in 2020. This is driven by the growing desire for sustainable packaging.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Labor Shortage
The global labor shortage is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for flexible work arrangements.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Increased GST on Packaging
Governments are projected to increase GST on packaging by 10% by 2025, up from 5% in 2020. This is driven by the growing desire for sustainable packaging.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Global Logistics Disruptions
The global logistics market is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for efficient and reliable shipping services.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Circular Economy
The circular economy is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for sustainable and waste-free production processes.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Digital Wallet
Digital wallets are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for convenience and security in digital transactions.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Global Waste
The global waste market is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for sustainable waste management solutions.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Sustainable Tourism
Sustainable tourism is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for eco-friendly travel experiences.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Air Pollution
Air pollution is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for clean air and sustainable urban development.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Water Shortages
Water shortages are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for water-efficient technologies and sustainable water management.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Climate Change
Climate change is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for sustainable and climate-resilient products and services.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Inclusive Communities
Inclusive communities are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for diverse and equitable social environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Political Polarisation
Political polarization is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for diverse and equitable social environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Political Deglobalization
Political deglobalization is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for diverse and equitable social environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Innovation Ecosystem
Innovation ecosystems are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for diverse and equitable social environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

US-China Trade War
The US-China trade war is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for diverse and equitable social environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Indoor Farm
Indoor farming is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for fresh, local, and sustainable food production.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Camping Cookware
Camping cookware is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for outdoor cooking experiences.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Home Security
Home security is projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for safe and secure living environments.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Air Purifiers
Air purifiers are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for clean and healthy indoor air quality.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

Sustainable Home
Sustainable homes are projected to reach 1.2 billion units by 2025, up from 0.5 billion in 2020. This is driven by the growing desire for eco-friendly and energy-efficient living spaces.
Risks & Threats:
- High cost
- Limited availability
- Lack of standardization
Opportunities:
- Innovation in materials
- Integration with other technologies

OVERARCHING PROBLEMS

Food Insecurity

There are many neighborhoods throughout the country that lack grocery stores or other markets from which to buy fresh food and produce; instead, individuals in these neighborhoods are often left with easy access only to fast food restaurants and convenience stores.

Water Scarcity

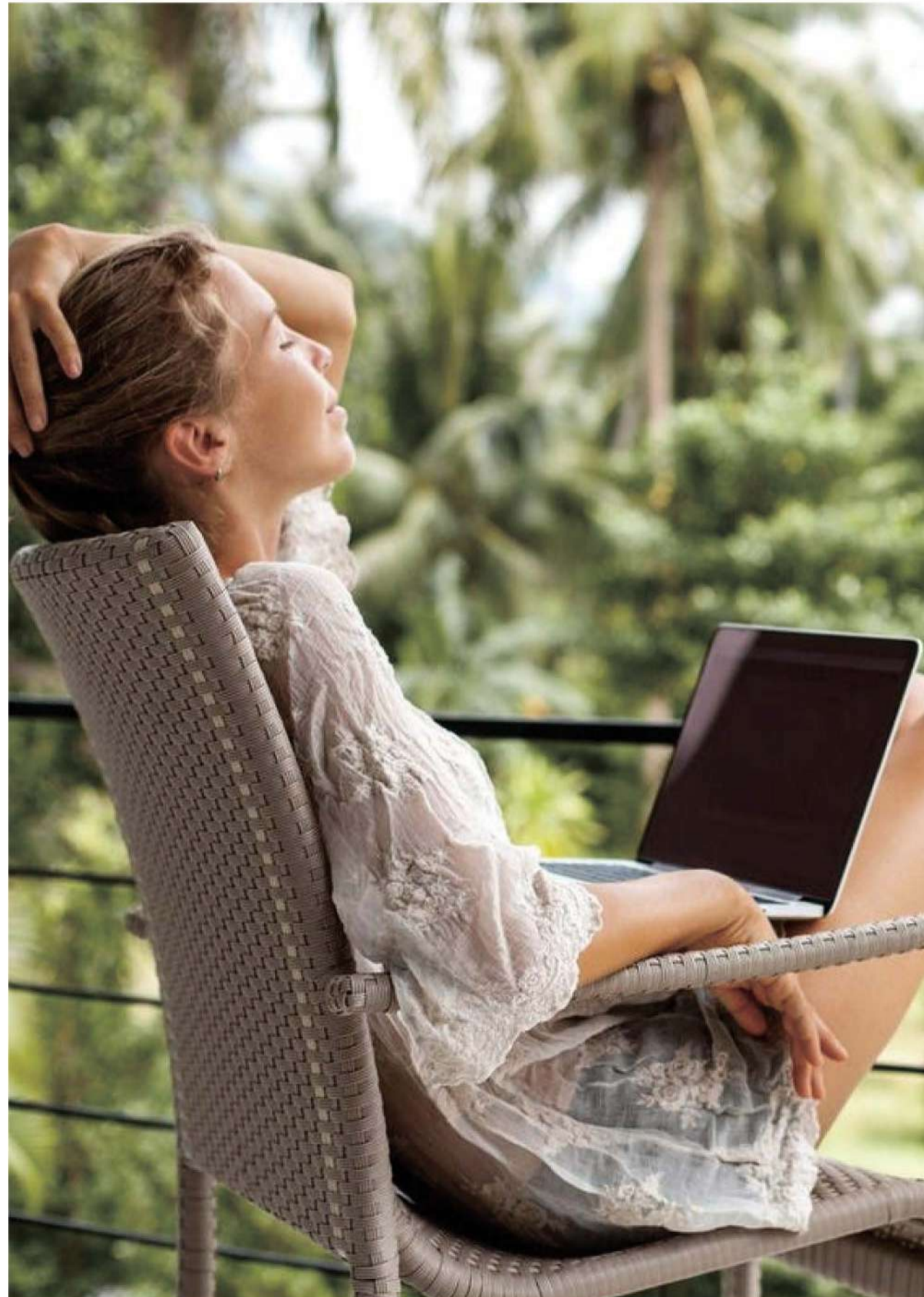
Over the last 50 years, the world's population has doubled and continues to grow. As a result, the use of water to drink, cook and meet other needs has tripled. As the global population is expected to boom in the coming decades, water resources need to be managed more efficiently.

The Loneliness of the Digital Nomad

Social media portrays digital nomads as perpetual travellers working in mesmerising locations, enjoying a lifestyle that others could only dream of. However, moving around frequently, the lack of social ties, and being alone for long periods, can be a lonely life for some.

ARCHETYPE RESEARCH

Digital Nomad Early Adopters



**Strict
Self-discipline**

Financial Foresight

Cultural Explorer

**Enjoy
The Moment**

Habitual Travelling

Remote Workers

DEMOGRAPHICS

- Age Range: Mid-20's ~ 40's
- Gender: Male & Female
- Education: Bachelor's Degree and Higher
- Occupation: Information Technology, Creative Service, Education and Trainin, Sales, Marketing, Consulting, Coaching, Research, Finance and Accounting
- Income Range: \$50K~\$100K
- Location: Low living costs with nature's beauty.
- Marital Status: 61% Married, 39% Unmarried

PSYCHOGRAPHICS

- Personality: Brave, Curious, Adaptable, Not Afraid to Try New Things, Self-discipline
- Lifestyle: Nomadic, Habitual Travelling, Back-to-nature
- Habits: Planning, Stay Social, Develop Flexible, Self-discipline
- Interests: Hiking, Trekking, Painting, Photography, Yoga, Reading
- Values: Prioritize Experiences and Freedom, Balancing Work and Life
- Preference: Quiet Environments to Work

Digital Nomad Must-Haves



Digital nomads must secure constant internet access everywhere they travel across the country.

Portable Laptop Stand/Desk



A noise-canceling headphone is necessary if working from a noisy public spaces.



Data Storage



Portable Power Charger

Digital Nomad Pain Points

No Fixed Working Place



"Travel alone is exciting, but sometimes I feel lonely and want to engage socially."



A nomad kitchen has no spices, no staples, and limited tools.



Hard to Maintain Work-Life Balance



A lack of ergonomically healthy options in non-traditional workspaces is a insidious challenge.



Traveling with multiple chargers is a pain in the butt.



Culture Shock



Scarcity of power outlets for charging devices is a big challenge.

Digital Nomad

PAINPOINTS

- Loneliness
- Travel Fatigue
- Cultural Shock
- No Fixed Workplace
- Cooking Accessories
- Slow Internet
- Language Barriers
- Work-life Balance

MOTIVES

- Cook By Self
- Have a Private Working Space
- Grow Food
- Decorate Accommodation
- Save Money
- Be More Sustainable
- Add Convenience to Life and Work

FEARS

- Inconvenient to Carry
- Easy to Loose
- Expensive
- Not Environmental Friendly
- Cannot be Carried on the Plane
- Not Durable
- Hard to Maintenance

What If Question

What if designing convenience cooking tools that enable digital nomads to cook their meals and save money?

What if designing a portable working space for digital nomads that provides a better work experience and more privacy?

What if designing a social platform that helps digital nomads from all around the world to make friends?

What if designing a portable power charger enables digital nomads to charge their devices anywhere?

What if designing an ergonomic neck brace that prevents neck pain from working too long?

What if designing a portable posture corrector that helps digital nomads work healthier in any place?

What if designing a platform helps digital nomads understand the local culture when traveling to different countries?

What if designing a portable body massager to help digital nomads relieve travel fatigue?

Modern Glampers

Early Majority



Avoiding
Crowds

Open-minded

Leisure Traveler

Enjoy
Comfort

Adventurous Lifestyle

Nature lover

DEMOGRAPHICS

- Age: Early-2000s to 30's
- Gender: Male & Female
- Education: Well Educated
- Occupation: College Students, White-collar workers
- Income Range: <\$25,000~\$100,000+
- Ethnicity: Hispanic, African Americans, White, Asian.
- Marital Status: Couples with children (45%), Couples without child (20%), Single without children (18%), Single with children (16%)

PSYCHOGRAPHICS

- Personality: Pursuit of Comfort, Adventure Spirit, Outdoorsy
- Lifestyle: Glamping, Delicate, Cozy, Convenient, Stunning Nature Meets Modern Luxury
- Interests: Make Campfire Food, Fishing, Biking, Sightseeing, Canoeing/ Kayaking, Bird Watching, Motor Sports
- Values: Enjoy the Comfy and Luxurious Life
- Preference: Tents, Rving, Cabins, Comfortable camping, Camping With Friends or Parents, Luxury-style Facilities and Amenities

Modern Glampers Must-Haves

"Nothing compares to the fun of sharing food with friends and family beside that warm glow."



Side Table

"Glampers like to stay in a place with all the minimum necessary requirements and comfort, and be in contact with natural life at the same time."



Insect Repellent



Glamping Lanterns



Portable Power Station

ARCHETYPE 2

Modern Glampers

Pain Points

"The large number of new campers has decreased the quality of the camping experience"



Less Direct Interaction With Nature



"Glamping cuts off all that camping is about, we lose contact with nature, people, and next-door neighbors"



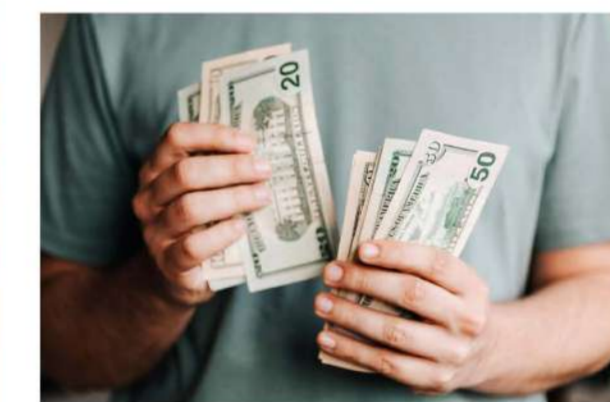
Glamping doesn't help with developing as many useful skills about the basics of outdoor living.



Environmental Pollution



Communal Facilities



"Glamping is expensive."

Estimate Cost Range:
\$50~\$3,000 per night

Modern Glampers

PAINPOINTS	MOTIVES	FEARS
<ul style="list-style-type: none">• Expensive• Less Direct Interaction With Nature• Lack of Interpersonal• Reduced Skill Development• Sustainability Concerns• Lack of Knowledge	<ul style="list-style-type: none">• Social Media Influence• More Comfort• Spending Time With Family and Friends• More Privacy• Contact With Nature• Escape Crowds From City	<ul style="list-style-type: none">• Inconvenient to Carry• Not Durable• Hard to Maintenance• Not Easy to Operate• Not Sustainable• Occupies a Lot of Space

What If Question

What if combining camping's adventure with glamping's comfort to creates a new experience?	What if designing a luxury portable kitchen for glamping to increase the comfort level?	What if providing a set of DIY tools to decorate the tents and RV to bring a glamping experience?	What if creating a social product enables glampers to interact more with each other?
What if creating a product that enables glampers to develop survival skills in comfort and fun way?	What if designing eco-fridnely product for glamping to reduce environmental pollution?	What if designing a product that can prevent glampers from insects?	What if designing a foldable fireplace that uses environmentally clean energy for glampers?

Hurried Homemaker Late Majority



**Empathetic
listener**

Hard Working

Selfless Devotion

**Rigorously
Self-Management**

prevalently Persevering

Extremely patience

DEMOGRAPHICS

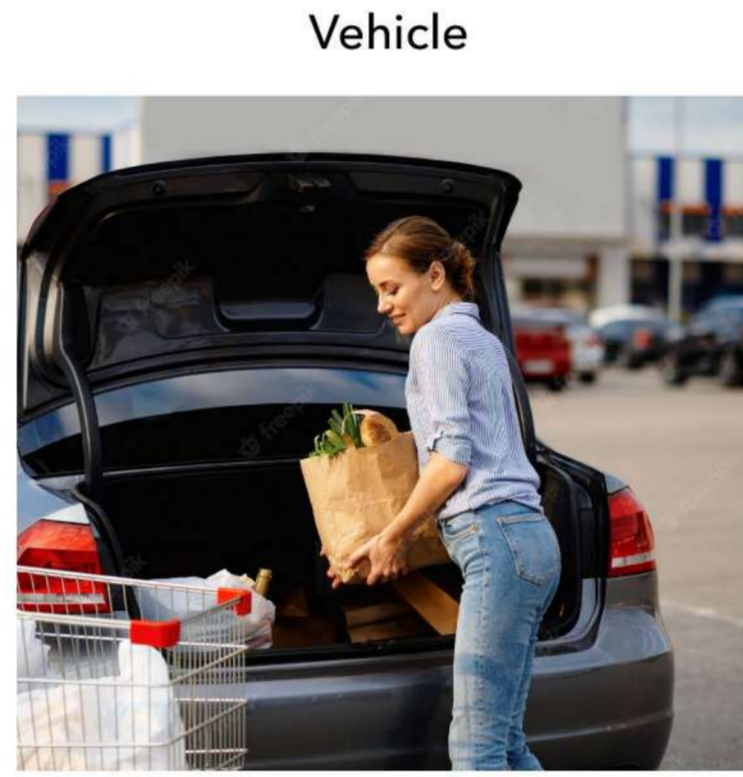
- Age Range: 20~40+
- Gender: Female (93.2%), Male (6.8%)
- Education: High School Diploma (28%), Bachelors (27%), Associate (24%), Diploma (10%), Others (11%)
- Occupation: Education, Health Care, Government, Retail and more...
- Income Range: \$15,000 ~\$28,620
- Ethnicity: Hispanic, Latino, Black, African American, White, Asian, American Indian and Alaska Native.

PSYCHOGRAPHICS

- Personality: Diligent, Sympathetic, Enthusiasm, Resourcefulness, Affectionate
- Lifestyle: Busy, Monotonous, Boredom, Organized, Slower-paced, Flexible
- Interests: Cooking, Gardening, Sewing, knitting, DIY, Yoga, Meditation, Painting, Writing, Reading, Teaching, Dancing
- Values: Family Centered, Devoted to Family, Building Self-worth
- Preference: Clean and Tidy Environment, Focus onto the Children, Non-repetitive Work

ARCHETYPE 3

Hurried Homemaker Must-Haves



Caring For Children



Kitchen Wares



Organizer



Only the higher-order needs like love, self-esteem and self-worth explain a homemaker's pursuit of selfless philanthropy.



Managing Family Finances



Home Cleaning Tools

ARCHETYPE 3

Hurried Homemaker Pain Points

Lack of Social Interaction



In some cases, if one partner is facing some stress or issue from their workplace, they come home and torture their homemaker to get rid of the frustration.



Musculoskeletal pain among female homemakers is common, they need to pay more attention to their health.



Repetitive Boring Work



Income Suspension



Exhasution With Children



Lack of Recognition

“Although I do as much work as a career woman, the hard work is always gone unappreciated.”

Hurried Homemaker

PAINPOINTS	MOTIVES	FEARS
<ul style="list-style-type: none">• Back Injuries• Less Social Awareness• Lack of Social Interaction• Exhaustion With the Kids• Income Suspension• Hard Work is Unappreciated• Domestic Violence	<ul style="list-style-type: none">• Freedom With Schedules• Low Anxiety• Managing Finances Without Earning• Gain Self-esteem• Love For Family• Accompany the Children• Manage Home Life	<ul style="list-style-type: none">• Not Easy to Operate• Price is Expensive• Not Help With Housework• Hard to Maintenance• Not Efficient

What If Question

What if designing a home management system helps the homemaker plan daily schedules, which helps reduce the burden?	What if designing an intelligent home system that helps the homemaker do less housework?	What if designing mental health products that enable homemakers to express negative emotions?	What if designing a product to relieve and prevent musculoskeletal pain while doing housework?
What if designing a product that monitors the mental health of the homemaker?	What if designing a product that makes the monotonous life of the homemaker more fun?	What if designing home cleaning products to help homemakers clean the house more efficiently?	What if designing a smart refrigerator helps homemakers prepare meals and store food efficiently?

Wheelchair Chefs

Late Majority



**Self-motivated
Learner**

Problem Solver

Creative Explorer

**Enthusiastic
Cooks**

Resourcefulness

Appreciate Beauty

DEMOGRAPHICS

- Age Range: Mid-2000s~60's+
- Gender: Female & Male
- Education: Less Than a High School Diploma, High School Graduates, Bachelor's Degree and Higher
- Occupation: Management, Healthcare Support, Sales, Food preparation, Office and administrative support and more...
- Income Range: \$29,000 ~\$48,000
- Social Security Disability Insurance (SSDI): \$800~\$1,800
- Supplemental Security Income (SSI): \$841~\$1,261

PSYCHOGRAPHICS

- Personality: Creative, Love Learning, Exploring, Food
- Lifestyle: Self-challenging, Unlimited Exploring and Learning
- Interests: Cooking, Gardening, Writing, Photography, Reading, Collecting, Socializing
- Values: Desire For Independence, Must be Treated With Respect and Dignity, Must be Able to Exercise Choice and Control in All Areas of Their Lives.
- Preference: Plan Ahead, De-clutter, Easy Clean Kitchen, Easy Operate Kitchen Appliances

ARCHETYPE 4

Wheelchair Chefs Must-Haves

Smart-Home Devices



Bathing Equipment



Air Pump



Manual/Power Wheelchair



Electric Scooters



"Convenience for you is independence for me."



Adaptive Furniture



Adaptive Clothing



Adaptive Kitchen Wares

"Navigating disability in the kitchen is all about finding the right adaptations."

Wheelchair Chefs Pain Points

Experiencing pain in the shoulders, elbows, wrists, and forearms as a result of overuse.



Unadaptable Kitchenwares



Limited Strength



Prolonged static sitting in a wheelchair is associated with an increased risk of lower back pain.



"For someone with the use of only one hand, preparing, chopping, and cutting food can be an especially difficult task."



Fatigue Easily



Disabling or chronic health conditions may be exacerbated by insufficient food or a low-quality diet.



Unable to Move the Body While Cooking

Wheelchair Chefs

PAINPOINTS	MOTIVES	FEARS
<ul style="list-style-type: none">• Mobility Impairments• Time Management• Standing and Reaching Limitations• Fatigue Easily• Difficulty Purchasing Food• Musculoskeletal Pain	<ul style="list-style-type: none">• Desire For Independence• Decreasing Prep and Cooking Time• Gain Self-esteem• Save Money• Passionate to Cook	<ul style="list-style-type: none">• Not Easy to Handle• Price is Expensive• Not Easy to Clean• Too Many Steps to Use• Not Durable• Very Heavy in Size• Not Reachable

What If Question

- What if creating a diet system that delivers nutritious meals to disabled people weekly?
- What if designing adaptive kitchen appliances enables the mobility disabled to cook easily?
- What if creating a set of DIY kitchen tools which allow disabled people to assemble different tools according to different cooking situations?
- What if designing a set of indoor gardening tools that enables disabled people grown foods to eat in order to reduce the frequency of going to the store?
- What if redesigning the wheelchair for mobility disabled, which help them turn around or reach higher place while cooking?
- What if designing a wheelchair for mobility disabled that prevents back pain from Prolonged static sitting?
- What if designing an intelligent kitchen that helps mobility disabled cooks conveniently?
- What if designing kitchenware for the disabled with a single hand?

Indoor Gardener

Early Majority



Being
Tenacious

Pursue Healthy

Self-sufficiency

Sustainable
Lifestyle

Assertive Curiosity

Natural Intimacy

DEMOGRAPHICS

- Age Range: Generation Z~ Millennials
- Gender: Female & Male
- Education: Bachelor's degree or higher (45%)
- Occupation: Statisticians, Bartenders, Financial Analysts, Emergency Medical Technicians, Web developers
- Ethnicity: Hispanic, Latino, Black, African American, White, Asian
- Income Range: \$32,500 ~\$47,034
- Region: North America, Europe, Asia-Pacific, LAMEA

PSYCHOGRAPHICS

- Personality: Curiosity, Tenacity, Creativity, Passion, Adaptable, Patience, Appreciate the Unpredictability of Mother Nature and the Ambition to Grow Plants that May or May Not Make it to Maturity.
- Lifestyle: Sustainable, Healthy, Self-Sufficient
- Interests: Indoor Growing, Cooking, Woodworking, Photography, Painting
- Values: Gardening Improves People's Quality of Life, Closer to the natural, Make Deep Connections With the Living Plants, Foster Good Mental and Physical Health

Indoor Gardener Must-Haves



Good Lighting



Control the Indoor Temperature



Proper Container



Repurposing scraps can reduce food waste by composting them to build nutritious soil that helps your plants grow healthy and strong.

Indoor Gardener Pain Points

Plants Attract Bugs

More House Works

High Cost

Difficult to Meet and Maintain Environmental Needs

Pets Destroy the Plants

Maintaining Humidity is Complicated Indoor

Can't take care of plants while away on vacation.

Plants Growing Mold

Disappointed Taste Buds

Indoor Gardener

PAINPOINTS

- Attract Bugs
- Mold and Bacteria Growth
- Vacation Care Options
- Temperature, Humidity, Light, Ventilation.
- Cost More than Outdoor Gardening
- Be Messy

MOTIVES

- Convenient to Harvest
- Be Healthier
- Joy of Gardening
- Save Money On Food
- Grow Own Food
- Gigher Success Rate
- Crave the Peace and Tranquility of Nature
- Self-sufficiency

FEARS

- No Enough Capacity
- Not Easy to use
- Hard to Maintenance
- Hard to Clean
- Requires Constant Monitoring
- Vulnerable to Power Outages

What If Question

What if designing an indoor garden that saves the gardener from having to take care of it all the time?

What if designing an indoor garden with a composter that can efficiently transfer the waste food into nutrients for plants?

What if designing an indoor garden that prevents destruction from pets?

What if designing an intelligent indoor garden that can automatically adjust the humidity, light, and temperature of the environment for the plants?

What if designing an indoor garden that can prevent plants from insects?

What if designing an indoor farming system that allows people grow their foods?

What if designing an indoor self-sustaining plant ecosystem?

What if designing tool sets that help indoor gardeners plant easier?

FRAMING QUESTIONS

How might we enhance food security for RV lifers through advanced technology?

How might we save water and energy from indoor gardening to be more environmentally responsible?

How might we promote social interaction for RV lifers through indoor gardening?

10-YEARS ROADMAP

10-YEARS ROADMAP

SHORT TERM

2025-2028

Fiskars focus on R & D and update the brand to penetrate more sophisticated client tiers.

- Develop technology
- Raise social media channels and increase brand awareness campaigns

MID TERM

2029-2032

Fiskars lunches first RV garden system and keep focus on technology R & D.

- Attract young generation audiences
- Beginning to enter the international market
- Develop new sustainability strategies

LONG TERM

2033-2036

Fiskars realized a complete brand transformation through advanced technology development.

- Launches the second generation of RV garden
- Successful entry into the international market
- Achieve brand sustainable development

OUTCOME

Fiskars strive to generate innovative experiences for people and bring more convenience to lives.

MATERIALS

Recycled Bioplastic

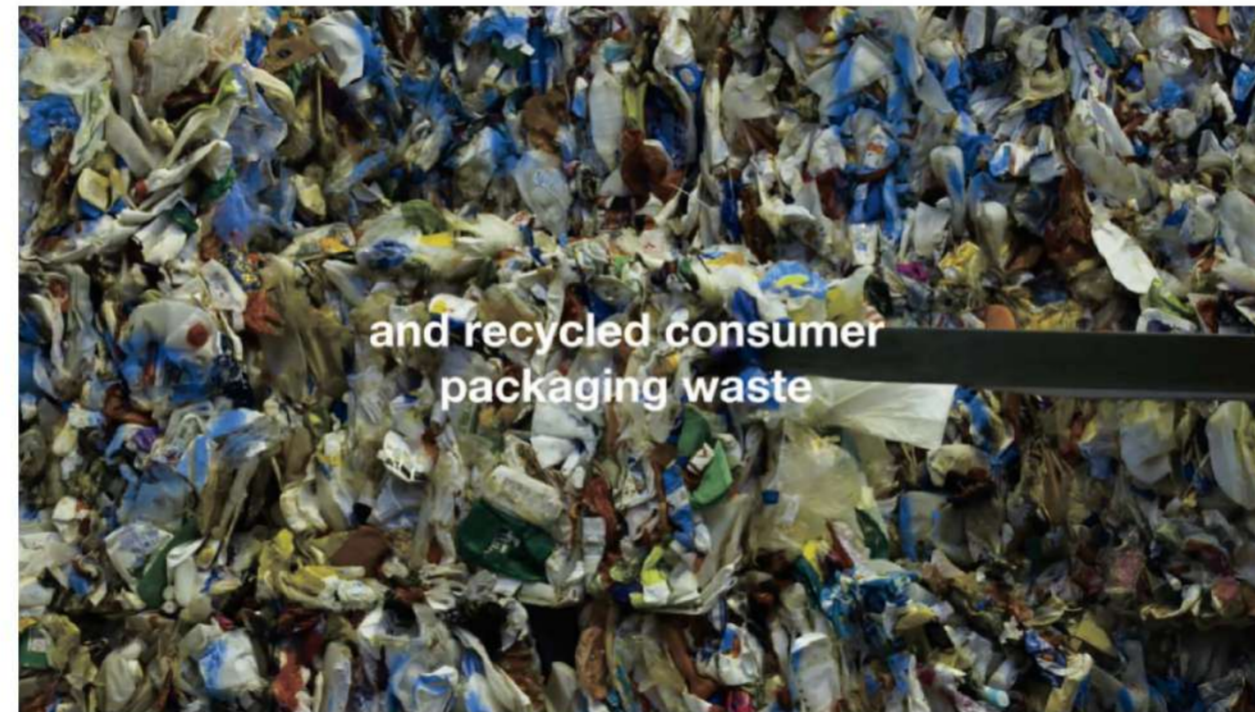
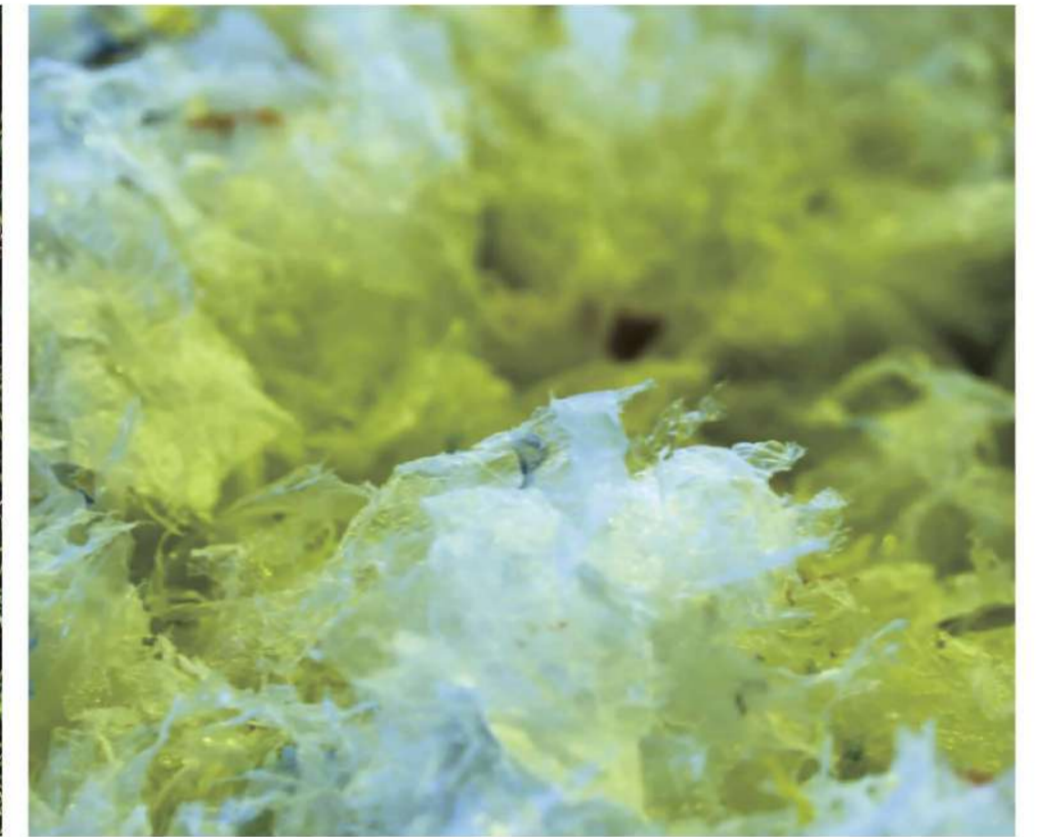
Fiskars used materials composed of post-consumer plastic and renewable wood fiber to make ReNew Scissors.

Made of recycled materials (80%) and cellulose fiber (13%), these scissors are 100% recyclable.

Cellulose is the main component of the fiber.

Advantage of Recycled Plastic

- Light-weighted and durable.
- Reduces the amount of waste sent to landfills and incinerators.
- Prevents pollution by reducing the need to collect new raw materials.
- Diminished reliance on fossil fuels.



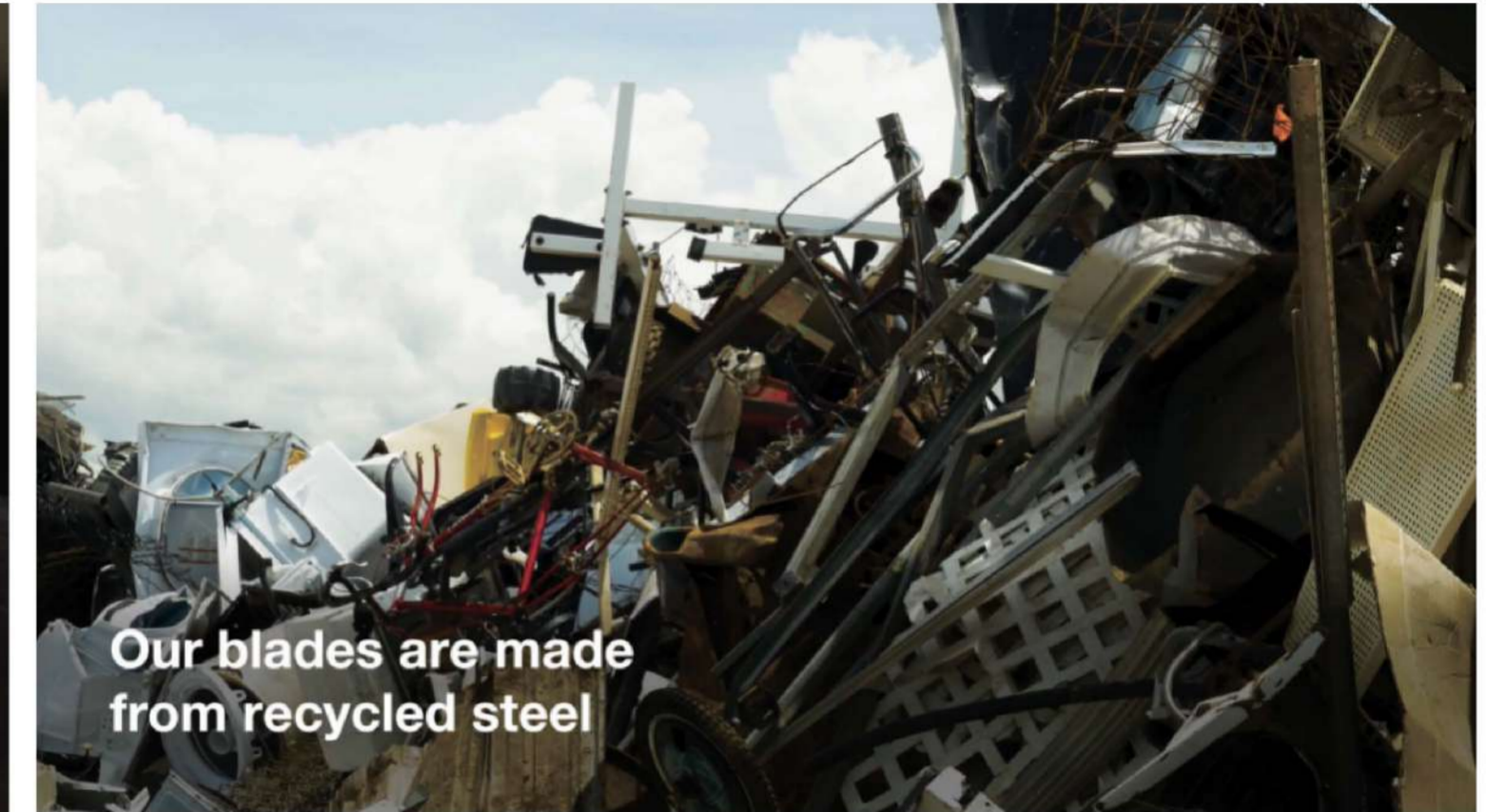
The Recycled Scissors may have a slightly brown or green hue or a somewhat patchy look. The light brown spots are characteristic of renewable cellulose fibers.

Recycled Steel

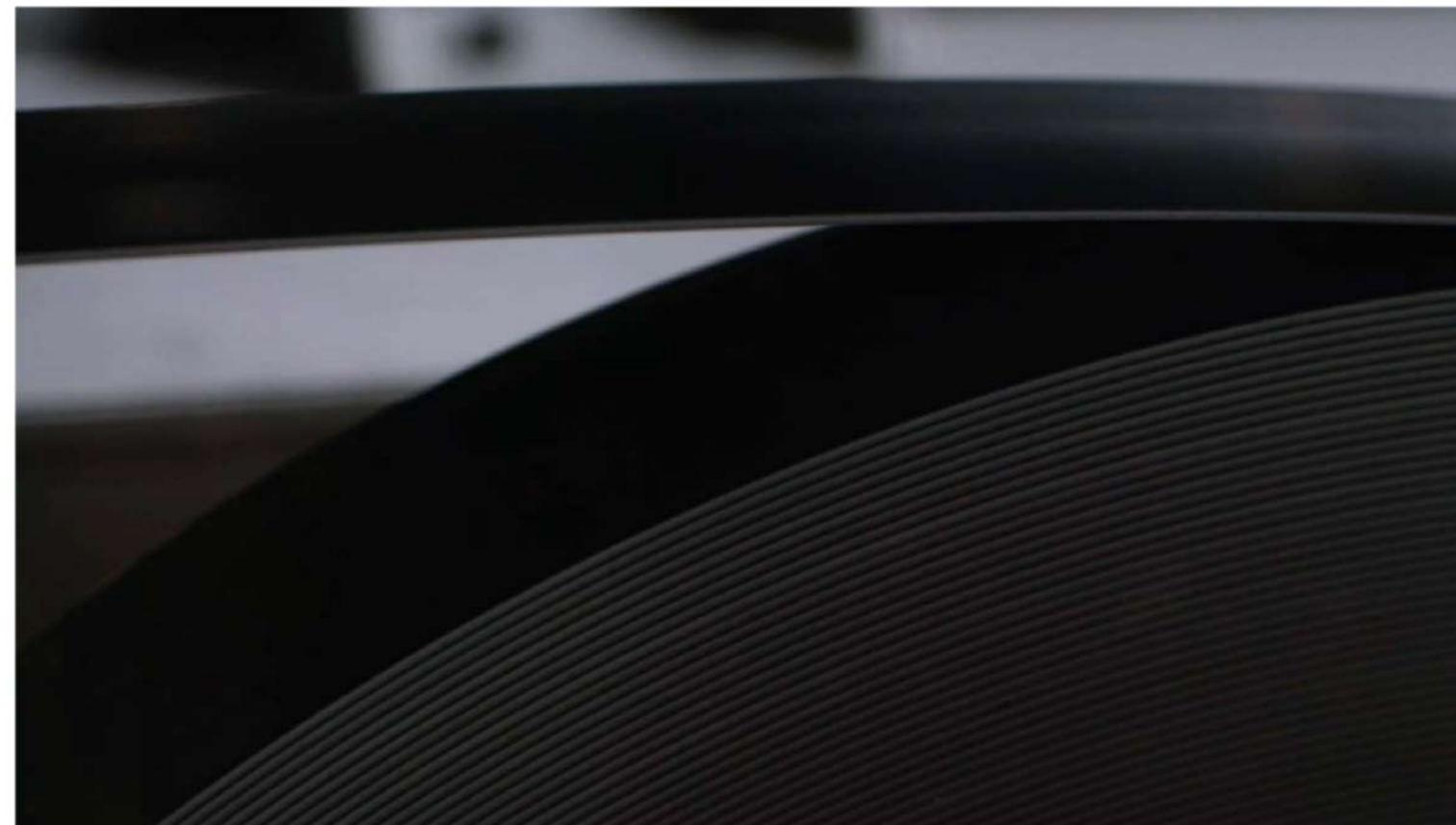
Steel recycling is good for the environment because the more steel we recycle, the less mining for new metals we have to do. Every ton of steel we recycle saves 2,500 pounds of iron ore, 1,400 pounds of coal and 120 pounds of limestone. It also saves energy – recycling steel uses 74% less energy than creating steel from raw materials.

Advantage of Recycled Steel

- Recycled steel is as strong and durable as new steel made from iron ore.
- Steel does not lose any of its strength, quality or durability when it is recycled.
- Steel can be recycled easily.
- Recycled steel reduces the consumption of other valuable resources and reduces the energy used to mine them.



Our blades are made from recycled steel



Cellulose Sponge

Cellulose sponges are primarily made from wood pulp. Other common materials used in cellulose sponges include hemp fibers, sodium sulfate crystals, and softeners.

Cellulose accounts for approximately 40-50 wt% of wood fiber and are the main component of wood fiber

Advantage of Cellulose Sponge

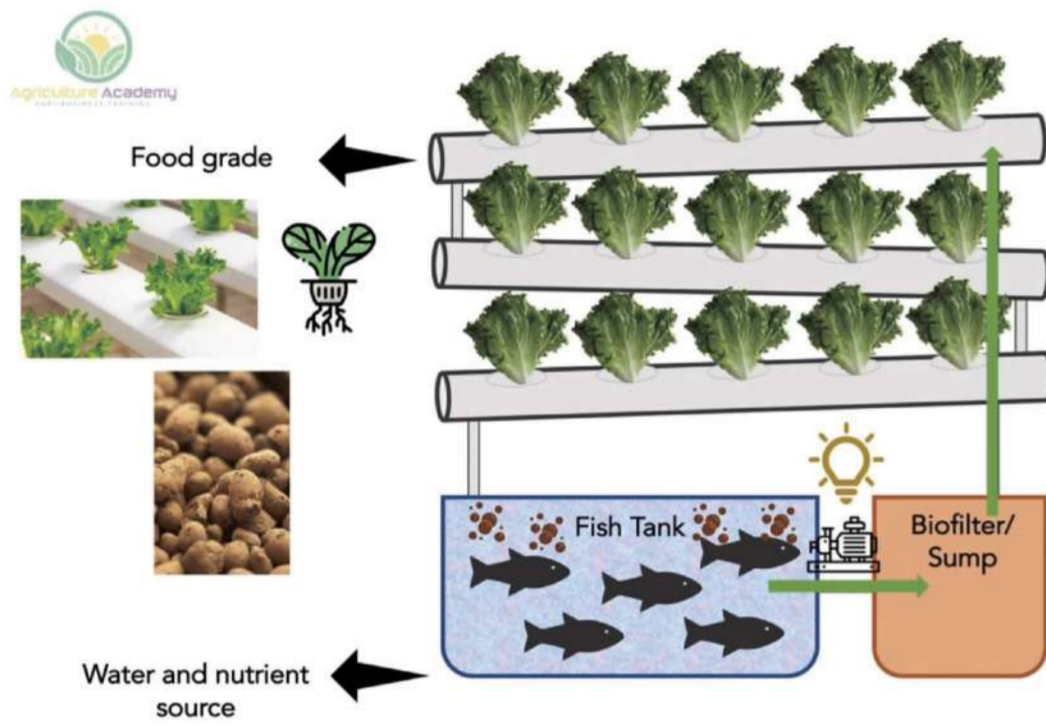
- It is affordable and easy to find.
- It is porous and can retain water while not heavy on plant roots.
- Plants can absorb water easily through their roots and grow faster.
- It is lightweight and easy to work with.
- It is reusable for up to six months when properly cared for and are biodegradable.



TECHNOLOGY

Aquaponics

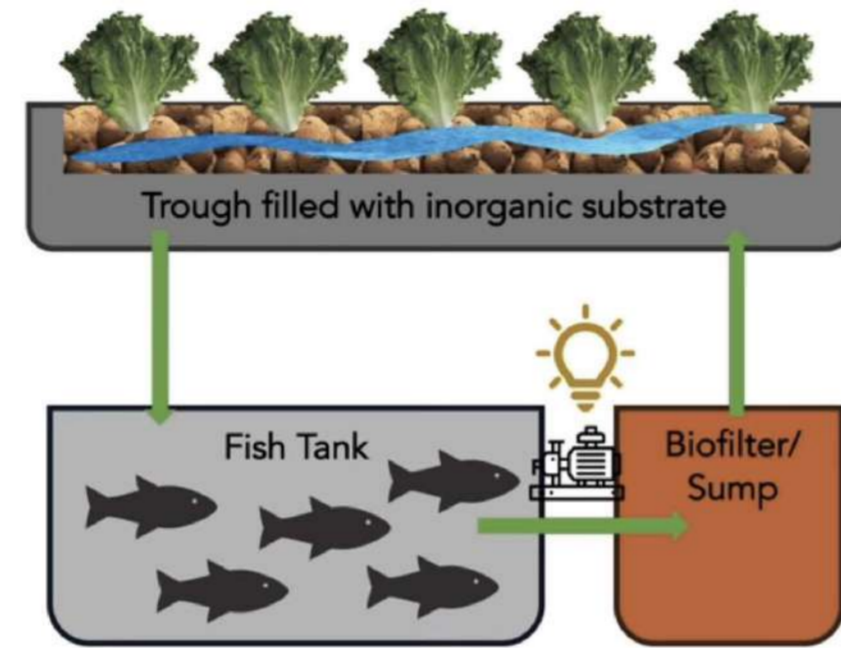
Nutrient Film Technique



This method uses horizontal pipes (usually PVC pipes) with shallow streams of nutrient-rich water flowing through them.

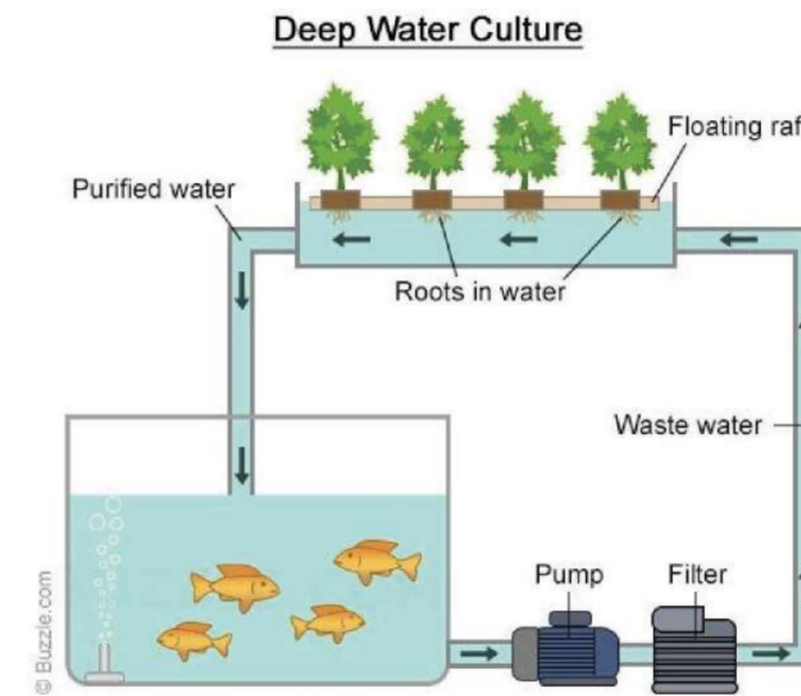
NFT channels are primarily used to grow leafy green plants with a short growth period.

Media Based



This method consists of a grow bed filled with grow media into which the vegetables are planted.

Deep Water Culture



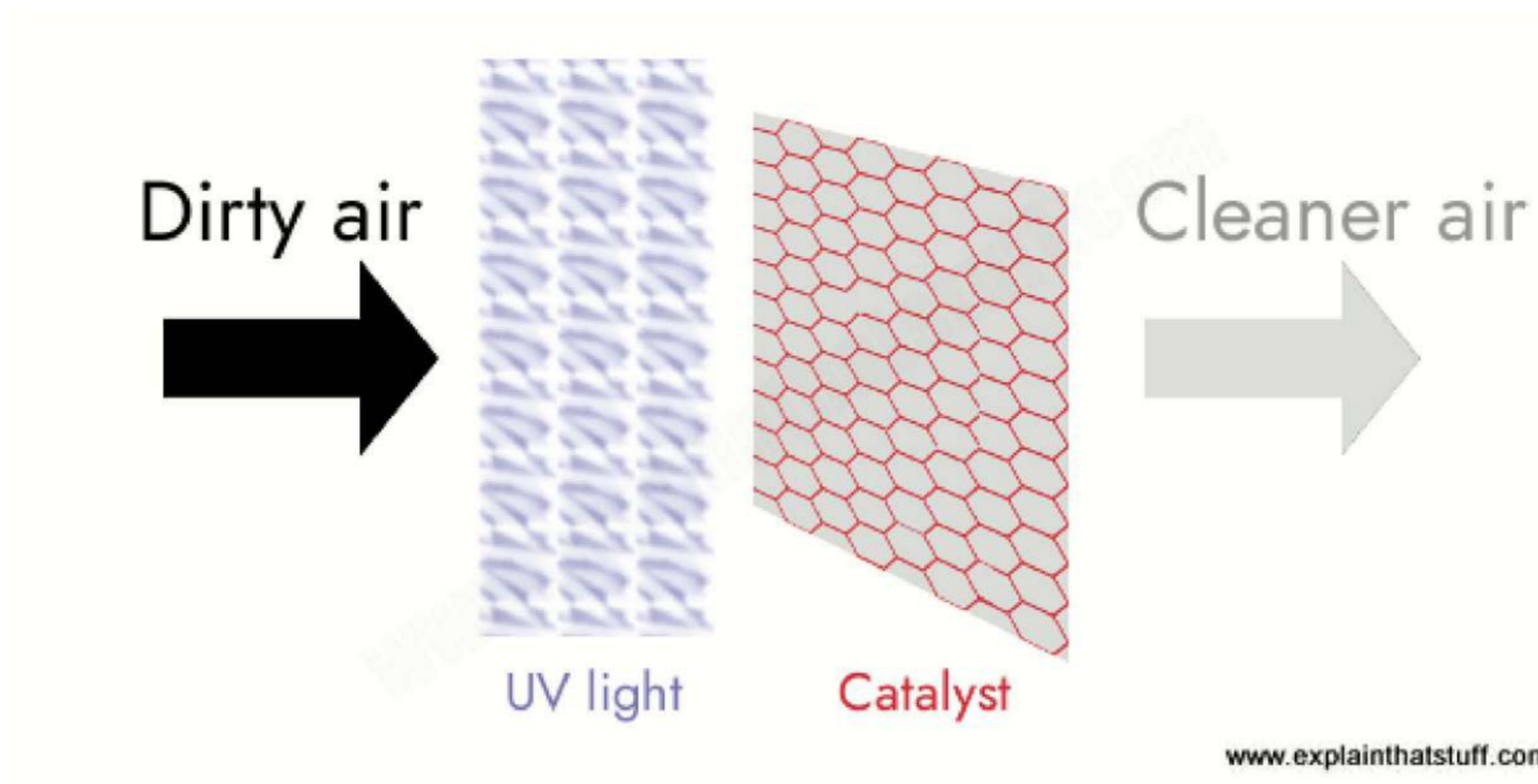
The nutrient-rich water is circulated through long canals at a depth of about 20 cm while rafts float on top. Plants are supported within holes in the rafts by net pots.

This method is the most common for large commercial aquaponics growing one specific crop.

Aquaponic System

Aquaponics is a combination of aquaculture (the growing of fish and other aquatic animals) and hydroponics (the growing of plants without soil) in one recirculating environment. In aquaponics, the fish produce waste that the nitrifying bacteria convert into nutrients for the plants.

PCO TECHNOLOGY



Cons of UV Light

it gives you sunburn

Pros of UV Light

Very benefit for the plant growth and fish.

Pro of Titanium dioxide (TiO₂)

At high concentrations can irritate the eyes, nose and throat. May have the potential for causing reproductive damage in humans.

Pro of Titanium dioxide (TiO₂)

Titanium dioxide (TiO₂) nanoparticles are used as an essential nutrient for plant growth and development

Photocatalytic filter

In a photocatalytic filter, ultraviolet light acts as the prime ingredient to clean the air of impurities with the help of a catalyst, in this case titanium dioxide (TiO₂).

PCO also eliminates bacteria, viruses, mold spores, and any other unwanted organic particles in the air.

The photocatalytic system showed excellent efficiency in removing nitrogen compounds from water with no significant adverse effects on fish.

The purification filter doesn't need to be changed or replaced.

IDEATION SKETCHES

Portable Massager

Fiskars offers a portable massager to help digital nomads reduce fatigue during travel and work. It can adjust the length to fit any part of the body. It also charges solar energy, which is convenient for indoor and outdoor use.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

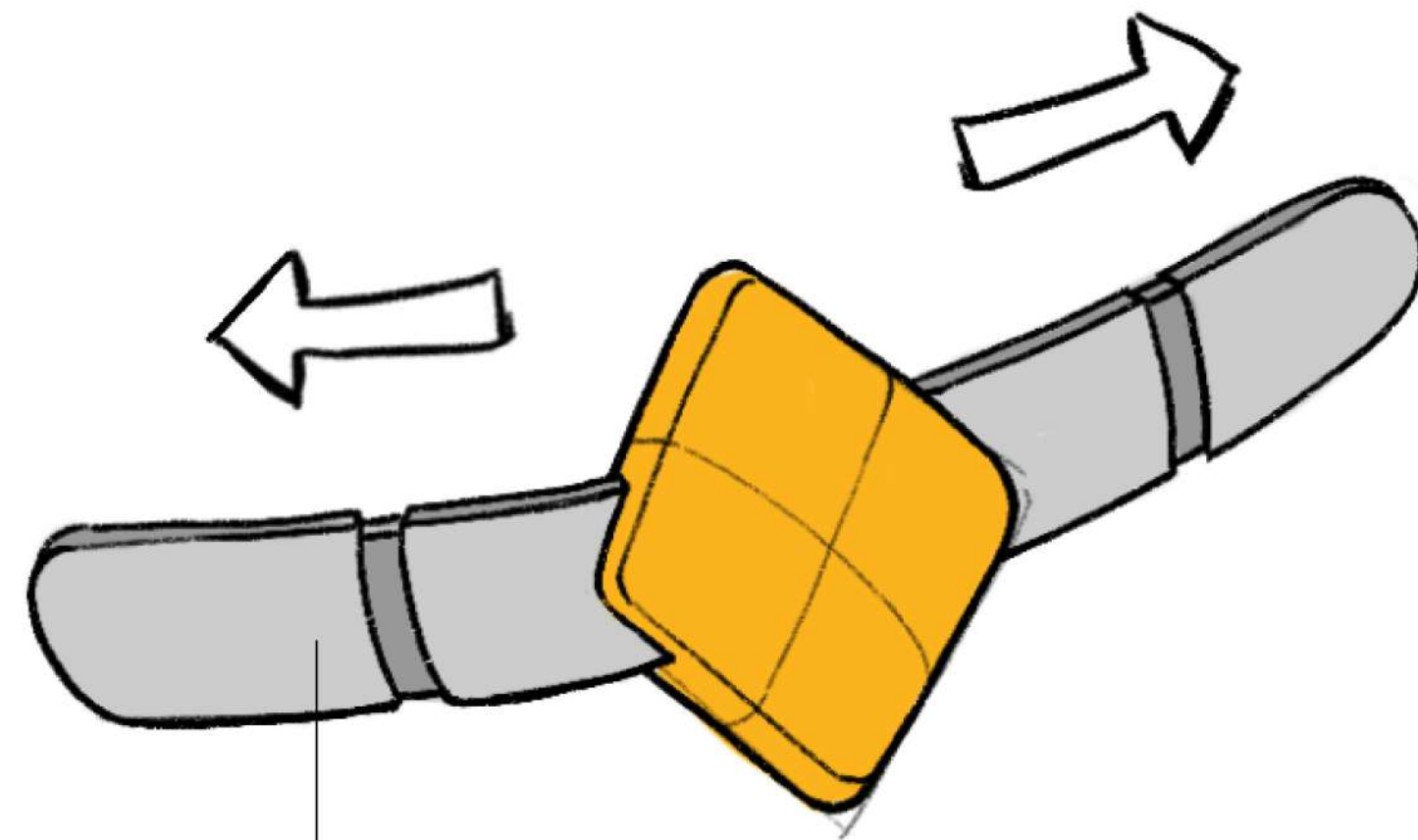
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

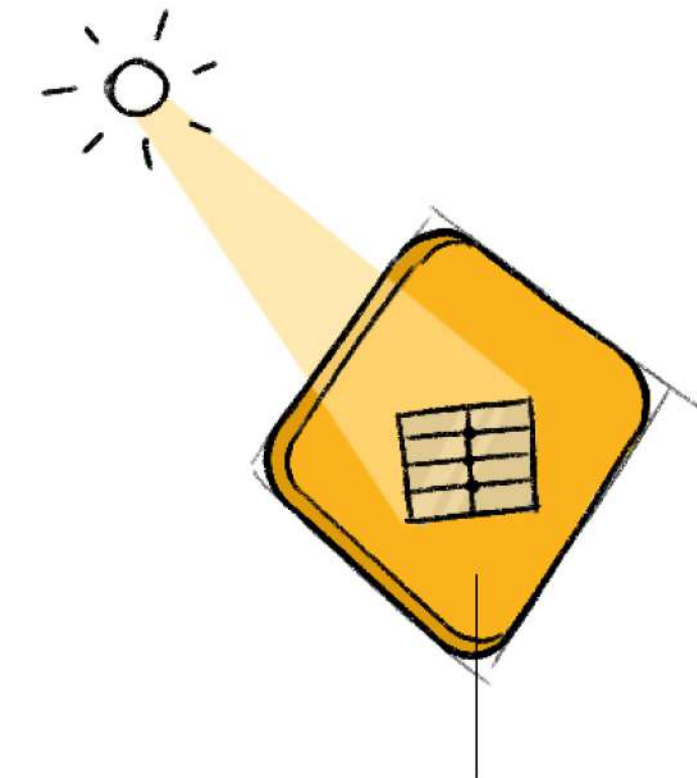
Roadmap



Brand Attributes Radar Chart



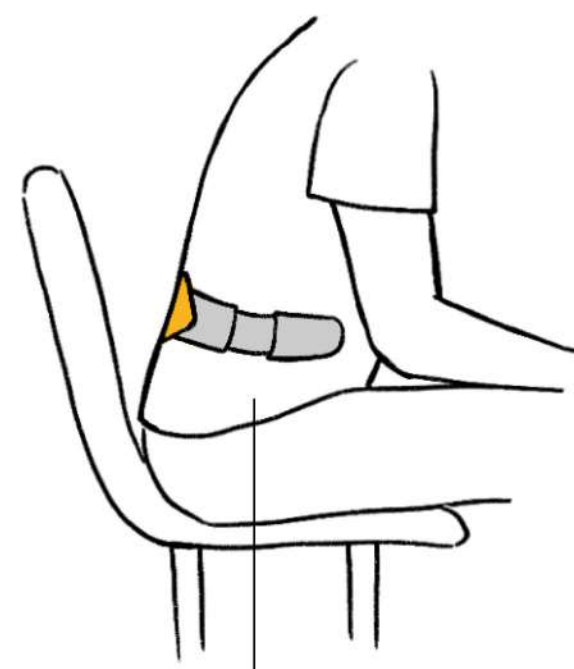
Length Adjustable



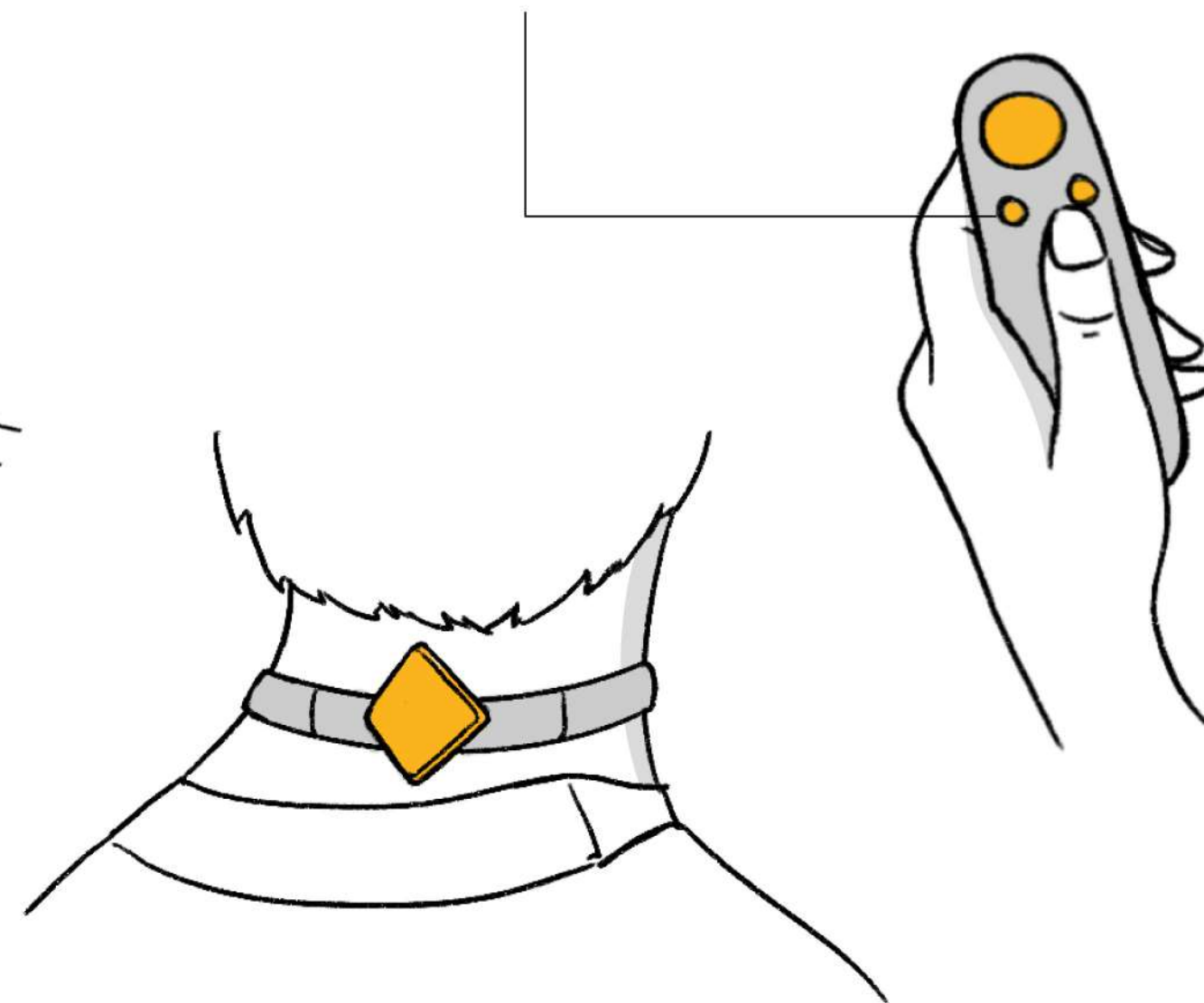
Solar Charging (can use outdoors for long time)



Use controller to adjust the massage speed and mode



Attach to the body



Social Interaction System

Fiskars provides a social interaction platform and a smartwatch for digital nomads to integrate new cultures better and make friends with the nearby digital nomads.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

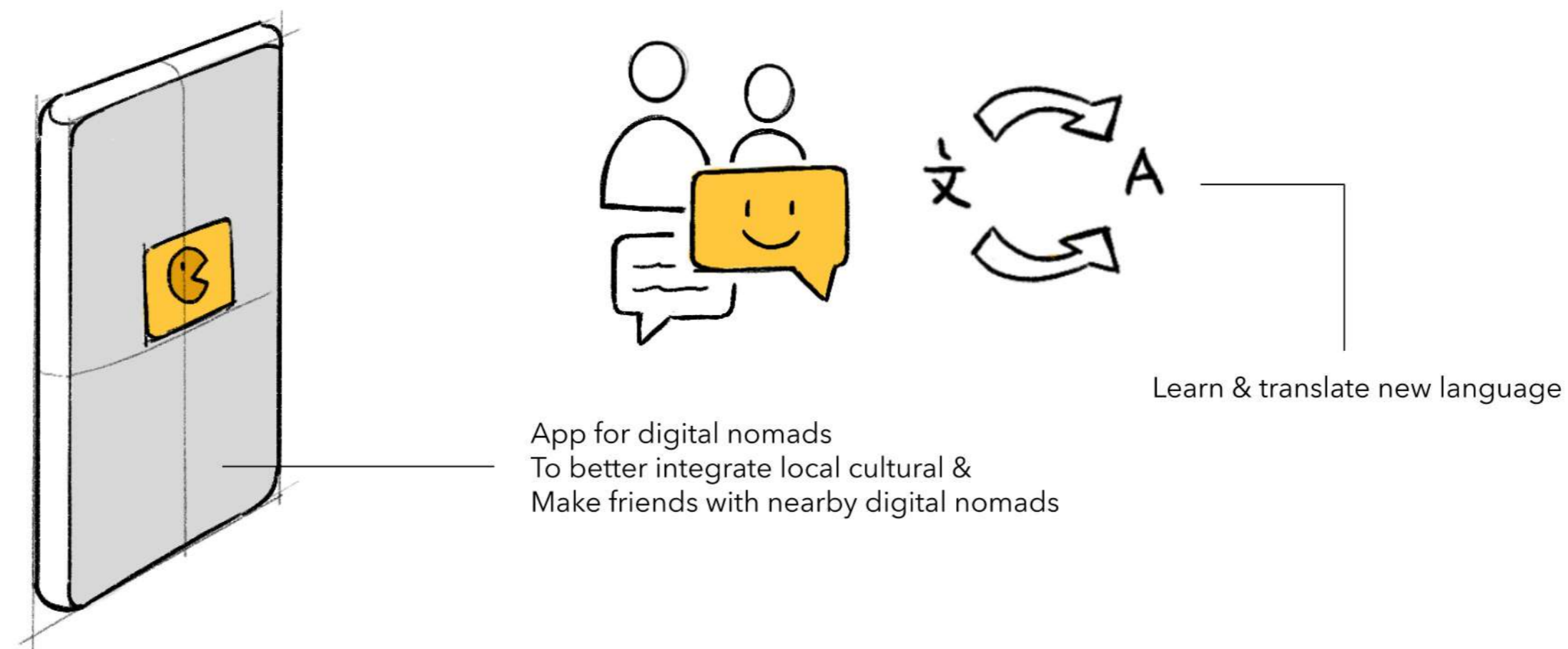
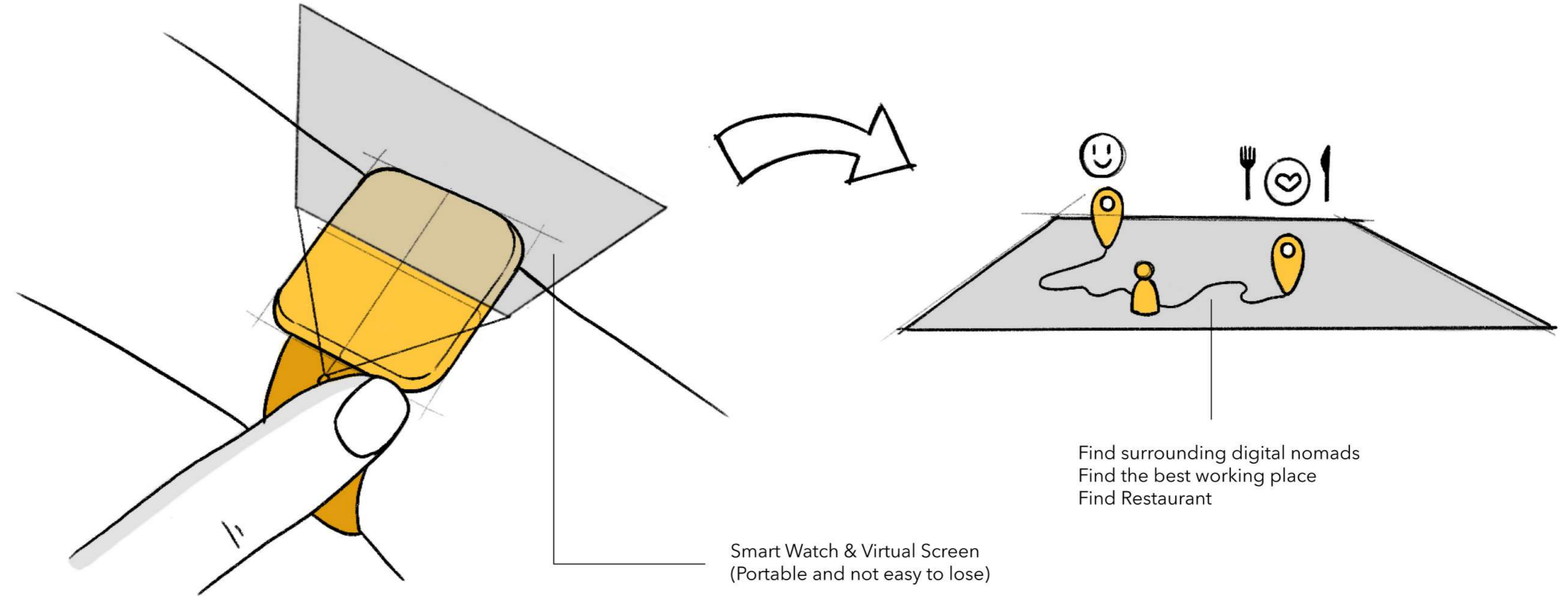
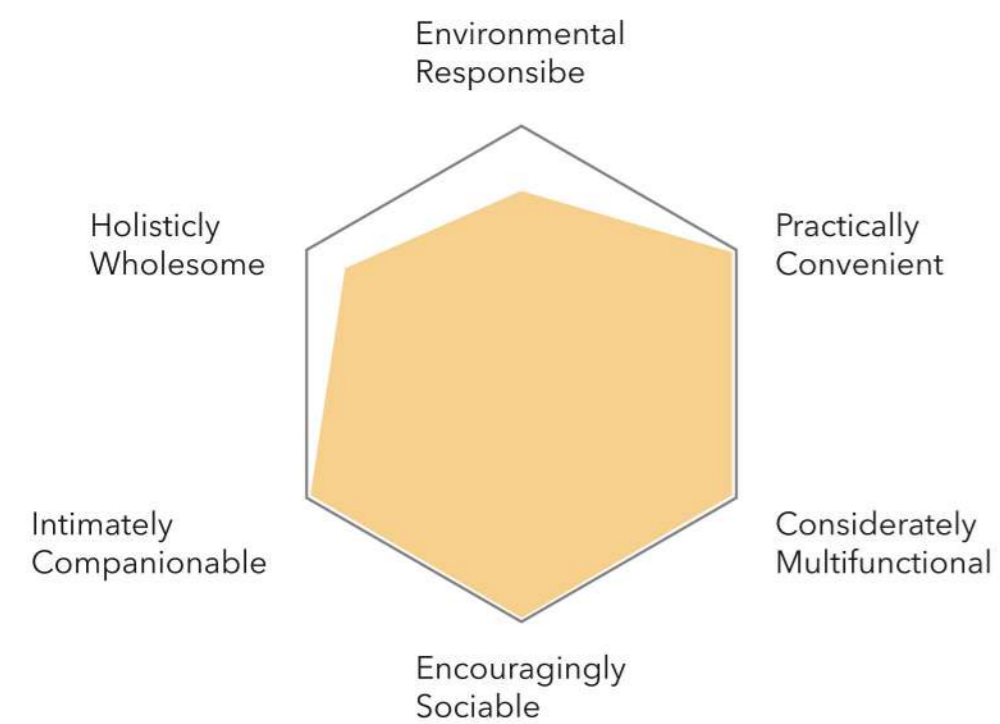
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

Roadmap



Brand Attributes Radar Chart



AR Glass For Future Working

Fiskars offers AR equipment for digital nomads to work anywhere without carrying a heavy laptop. The AR working system gives digital nomads more privacy and efficiency and helps them quickly integrate new cultures and promote social interaction.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

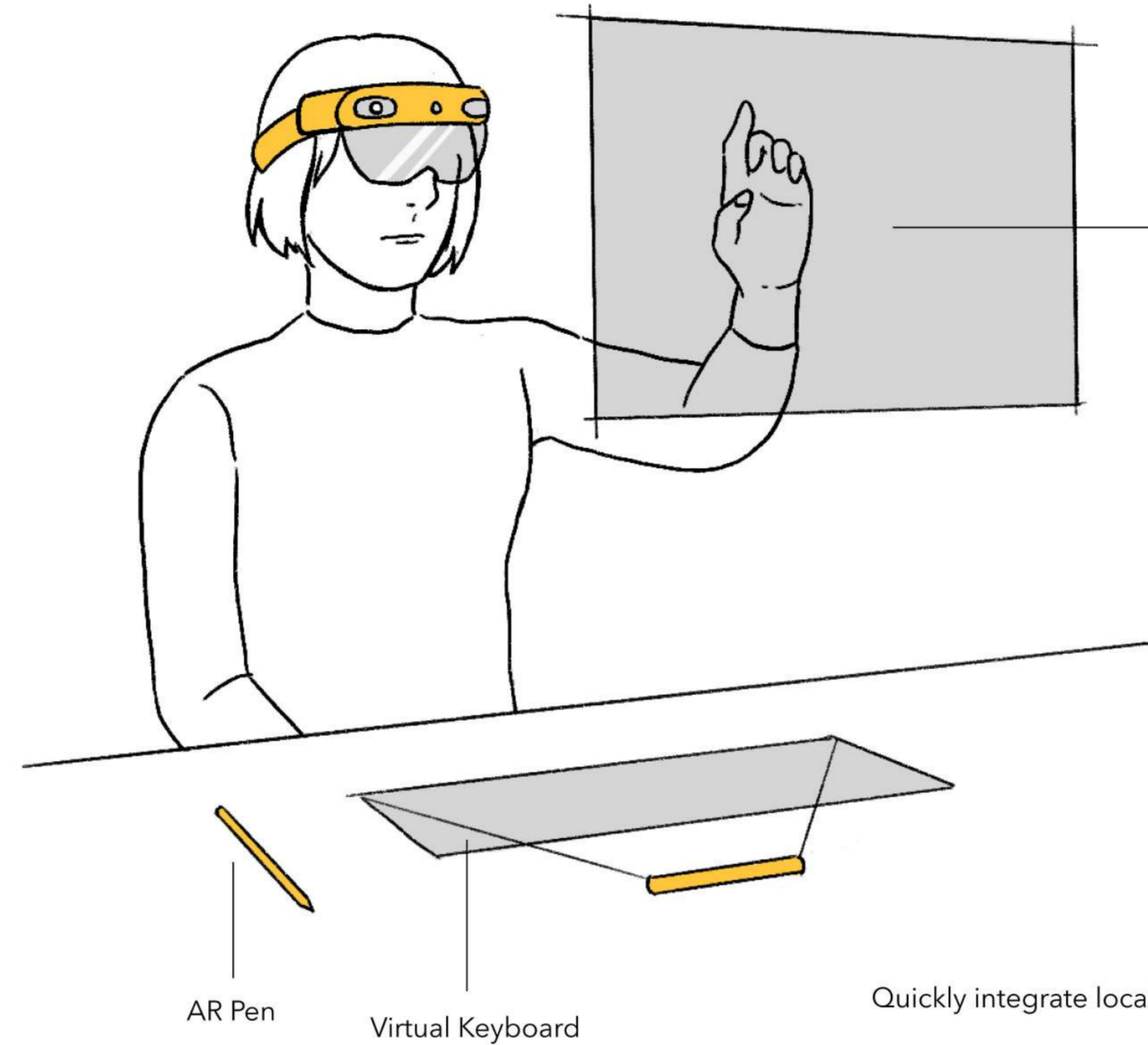
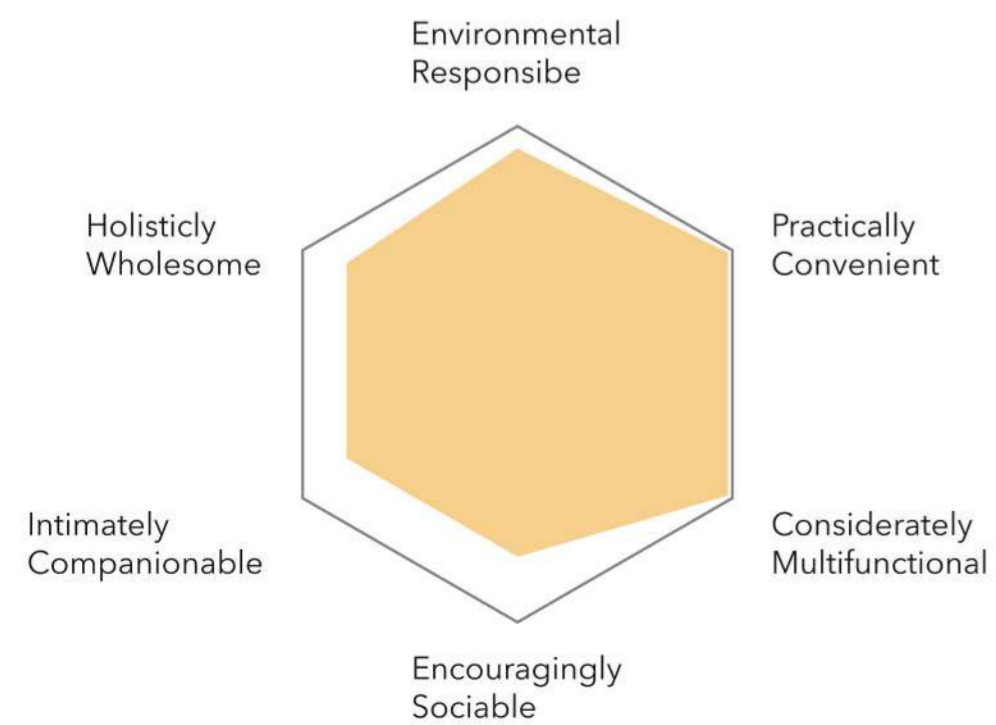
Needs: Confortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

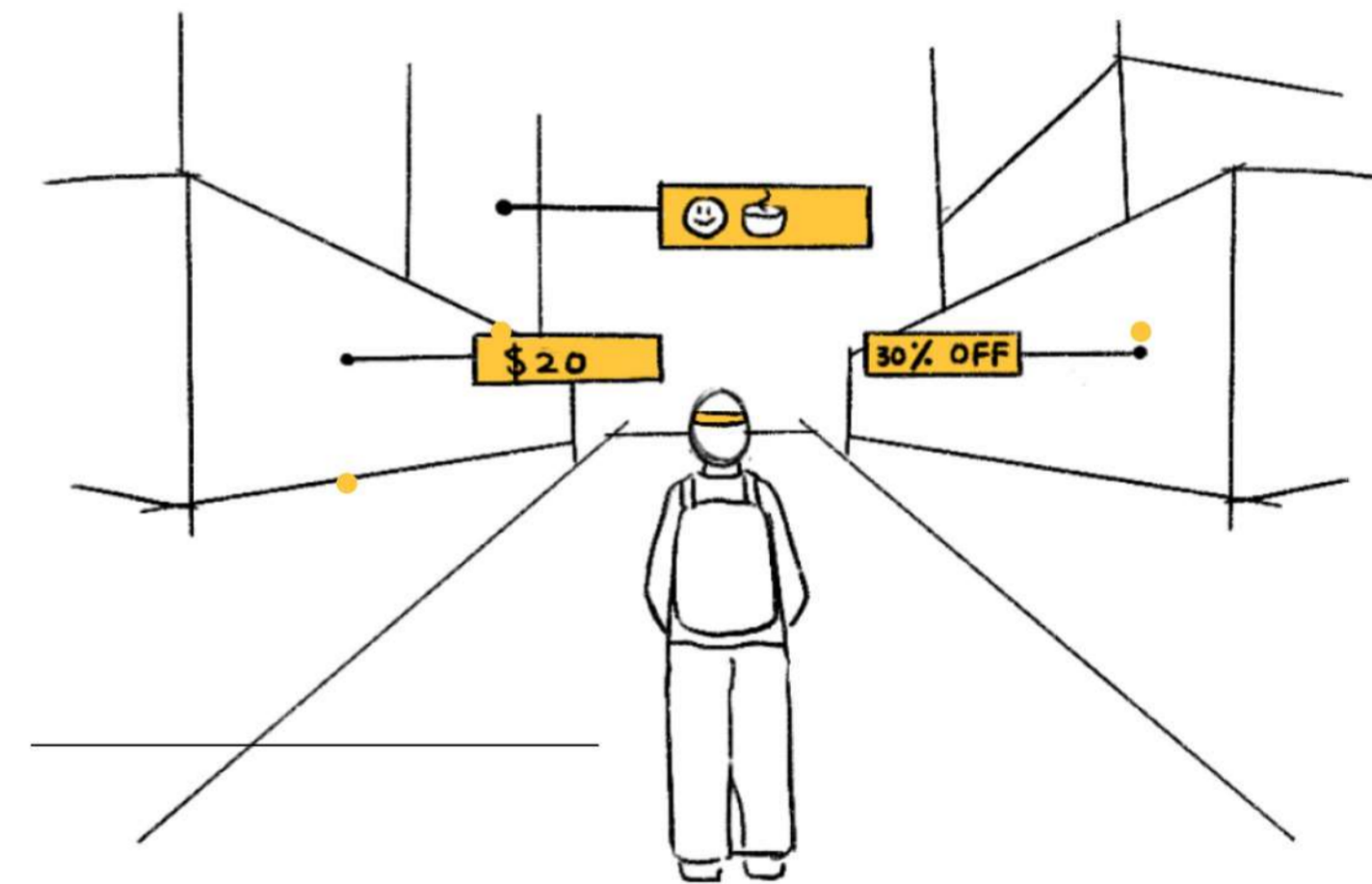
Roadmap



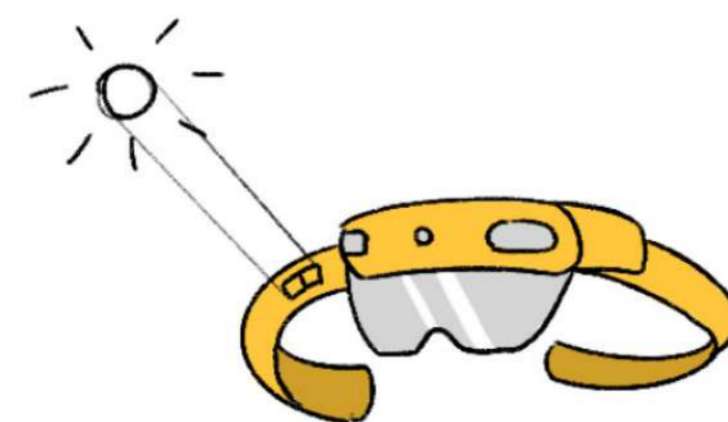
Brand Attributes Radar Chart



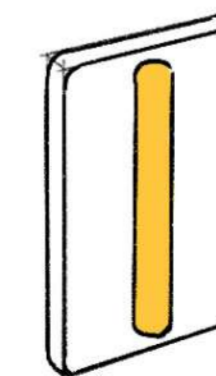
Can work anywhere without heavy laptop



Quickly integrate local cultural



Charge solar energy



Virtual keyboard + Magnet Charger



Outdoor Survival Skills Boardgame

Fiskars offers a board game that allows first-time campers and glampers to learn survival skills in a fun way. Players must finish their adventure journey to win the game by using survival skills correctly. The goal is to help players to learn survival skills to ensure safety in the wild.

Consumer Archetype

Modern Glamper

Painpoints: Reduce skills development, Less direct interaction with nature, Sustainability concerns

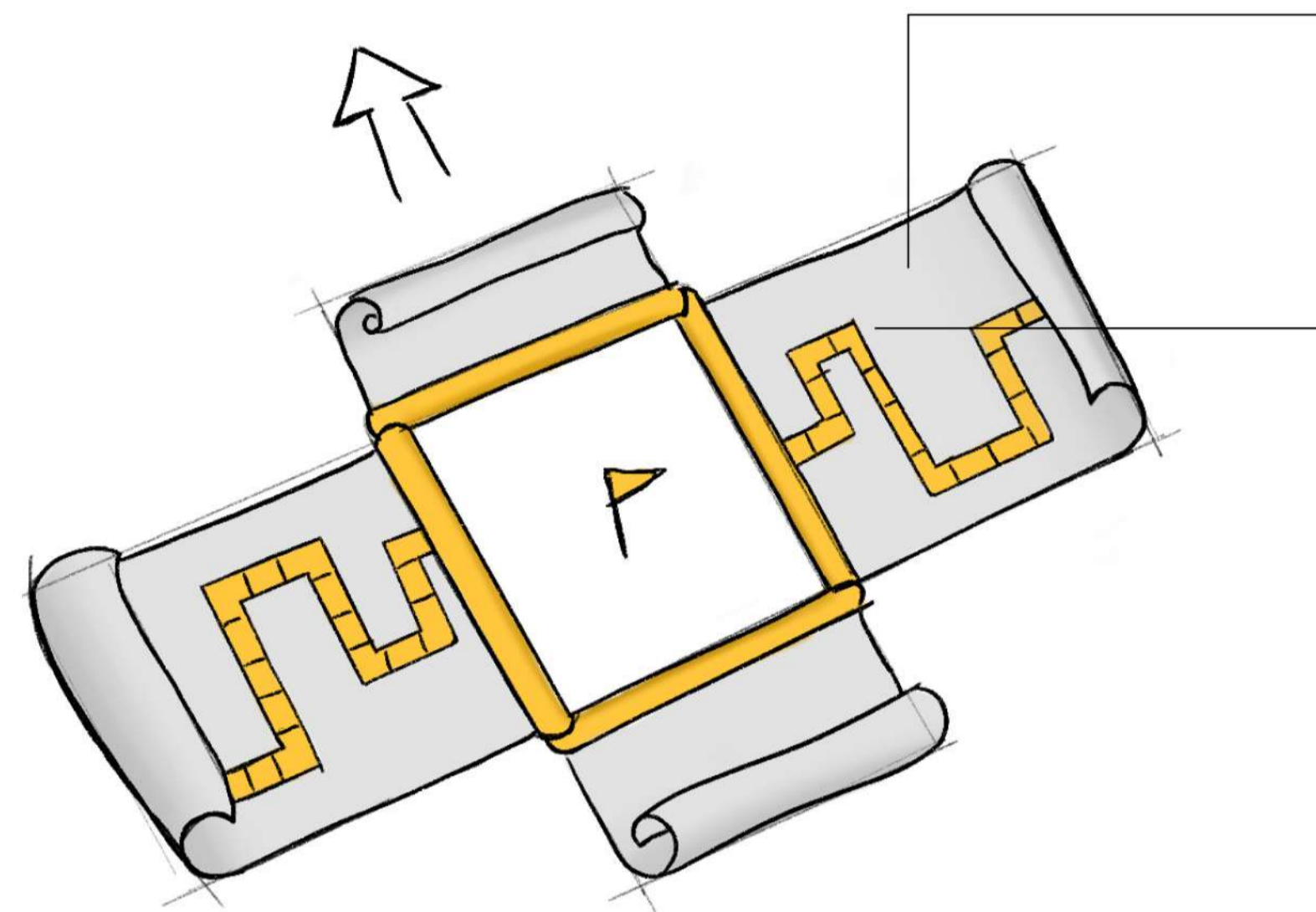
Needs: Comfortable & convenient accommodation and facilities, Close to nature

Motivations: Spend time with friends or family, contact with nature

Roadmap



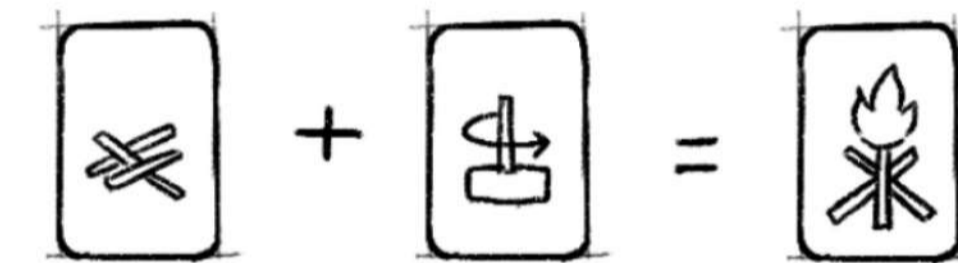
Brand Attributes Radar Chart



Use fabric as the material for game board (Lightweight, portable, sustainable)

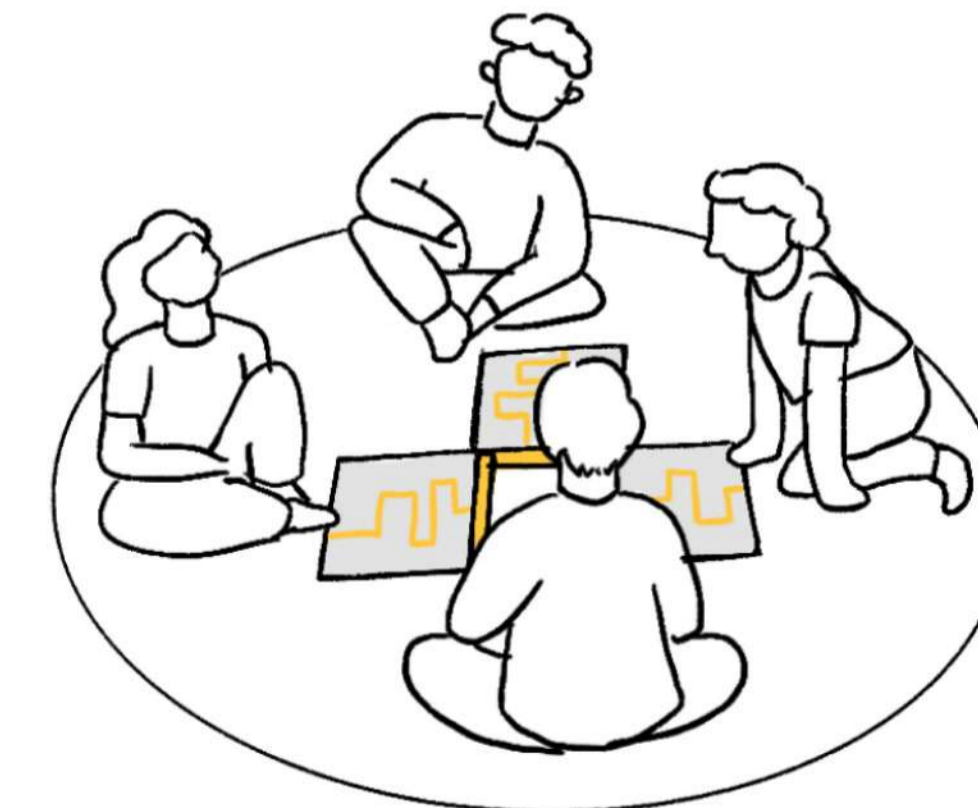
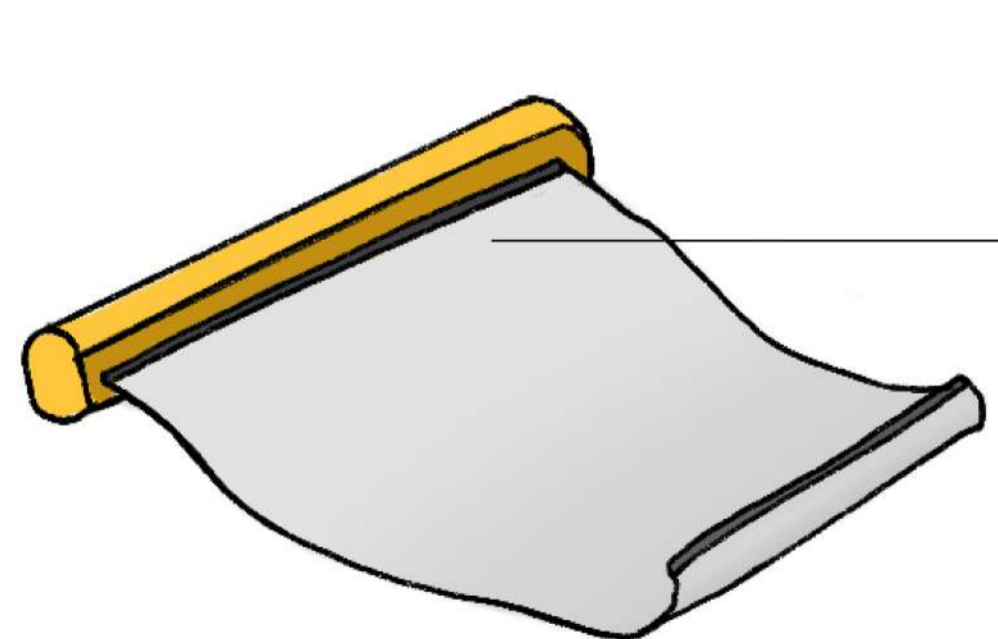
It can be disassembled and freely matched with different game maps

Each player needs to finish their camping journey to win



Match with different game cards

Pull out the game board from the box



Sustainable Indoor Farm

Fiskars offers a sustainable indoor farm system that saves water and reduces food waste. It reuses the water collected from transpiration and turns leftovers into fertilizers.

Consumer Archetype

Indoor Gardener

Painpoints: Environmental requirements, Mold & bacteria growth, attract bugs, Pets destruction, High cost

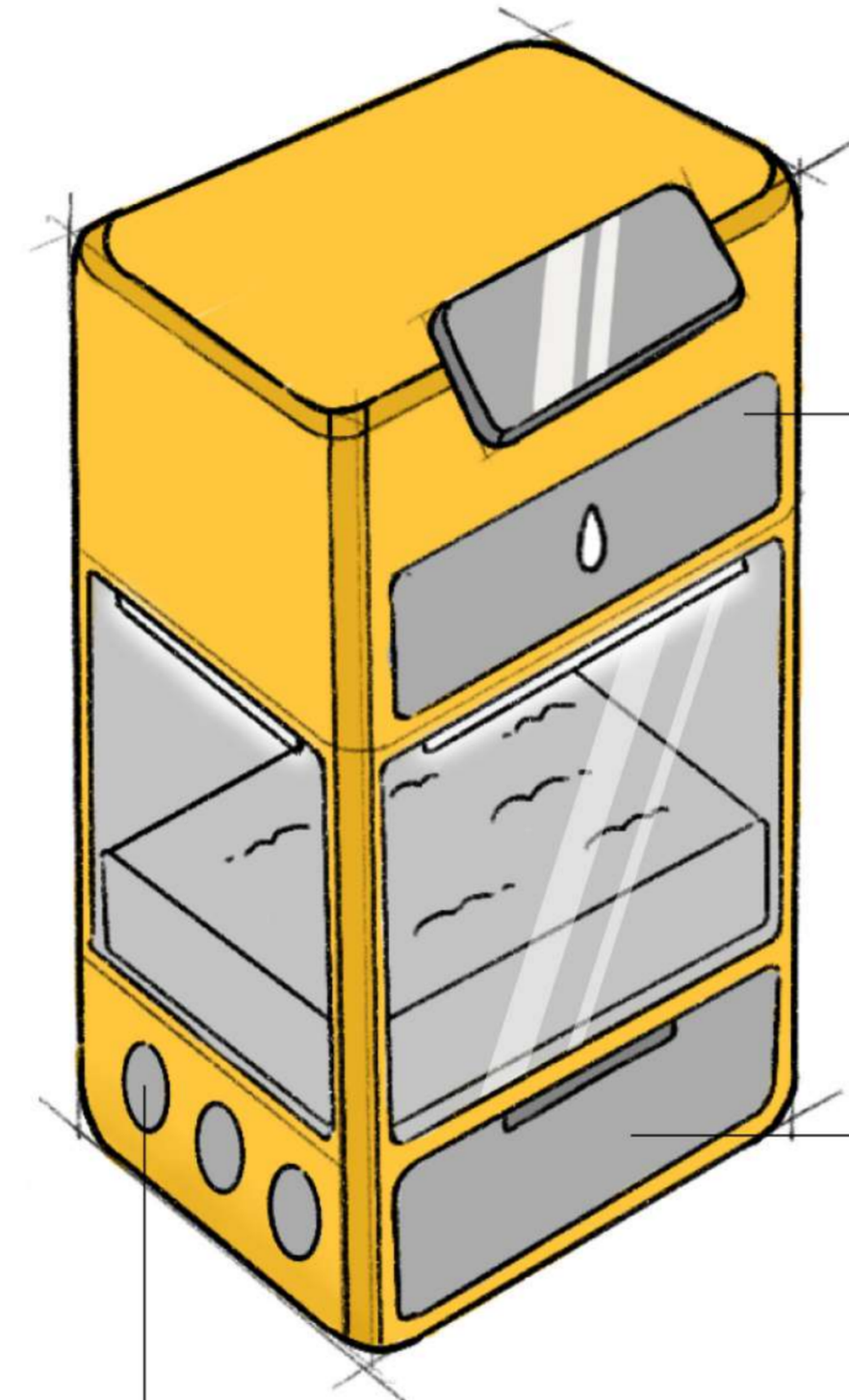
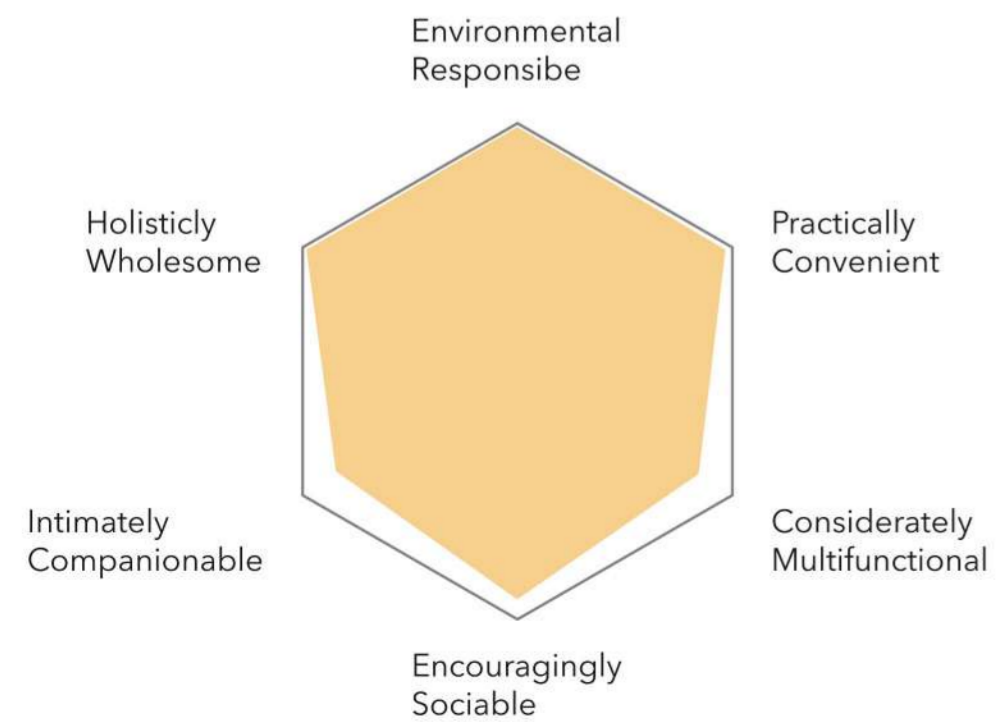
Needs: Good lighting, temperature and humidity, prevent bugs, energy saving

Motivations: Healthy lifestyle, Self-sufficiency, Convenient, Joy of gardening

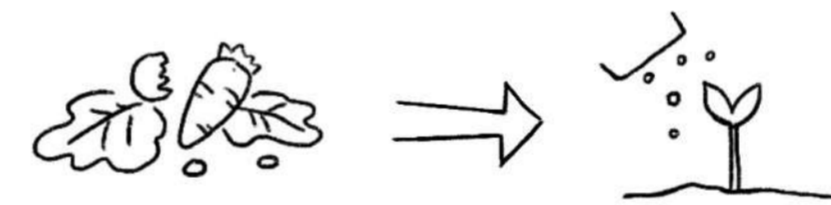
Roadmap



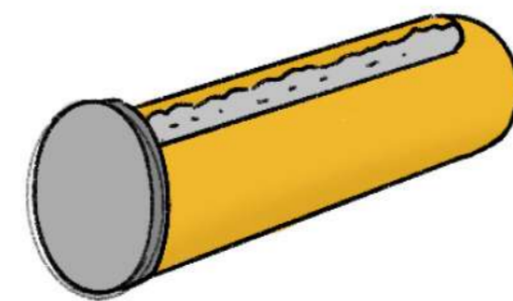
Brand Attributes Radar Chart



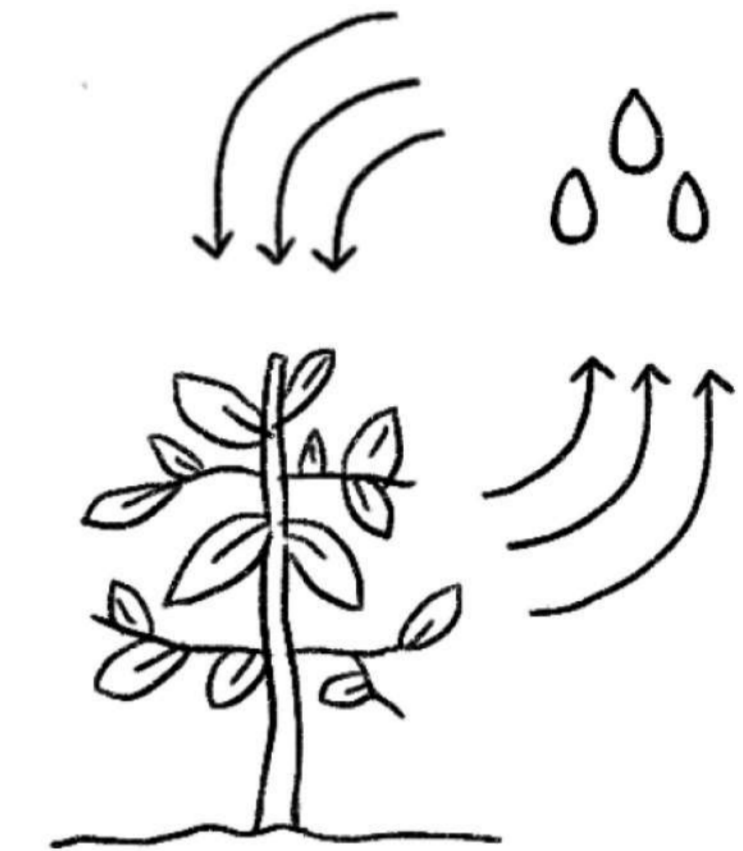
Collect water from plant's transpiration, then use recycled water to water plants



Compost the leftovers and turns them into fertilizer for plants

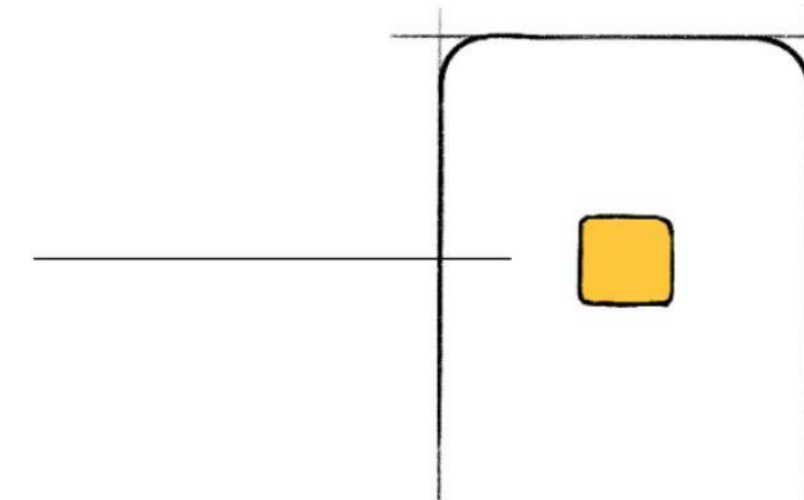


Compost will be stored in the individual container for future use



Recycled waste food and save money

Come with an APP (Create a personalized vegetarian diet plan)



Senior Healthy Diet System

Fiskars offers a healthy diet system for seniors, containing a meal-planning robot and a smart indoor garden. The robot will help seniors to cook delicious and healthy cuisine through virtual projection. The smart garden will provide fresh vegetables for daily needs.

Consumer Archetype

Solitary Senior

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

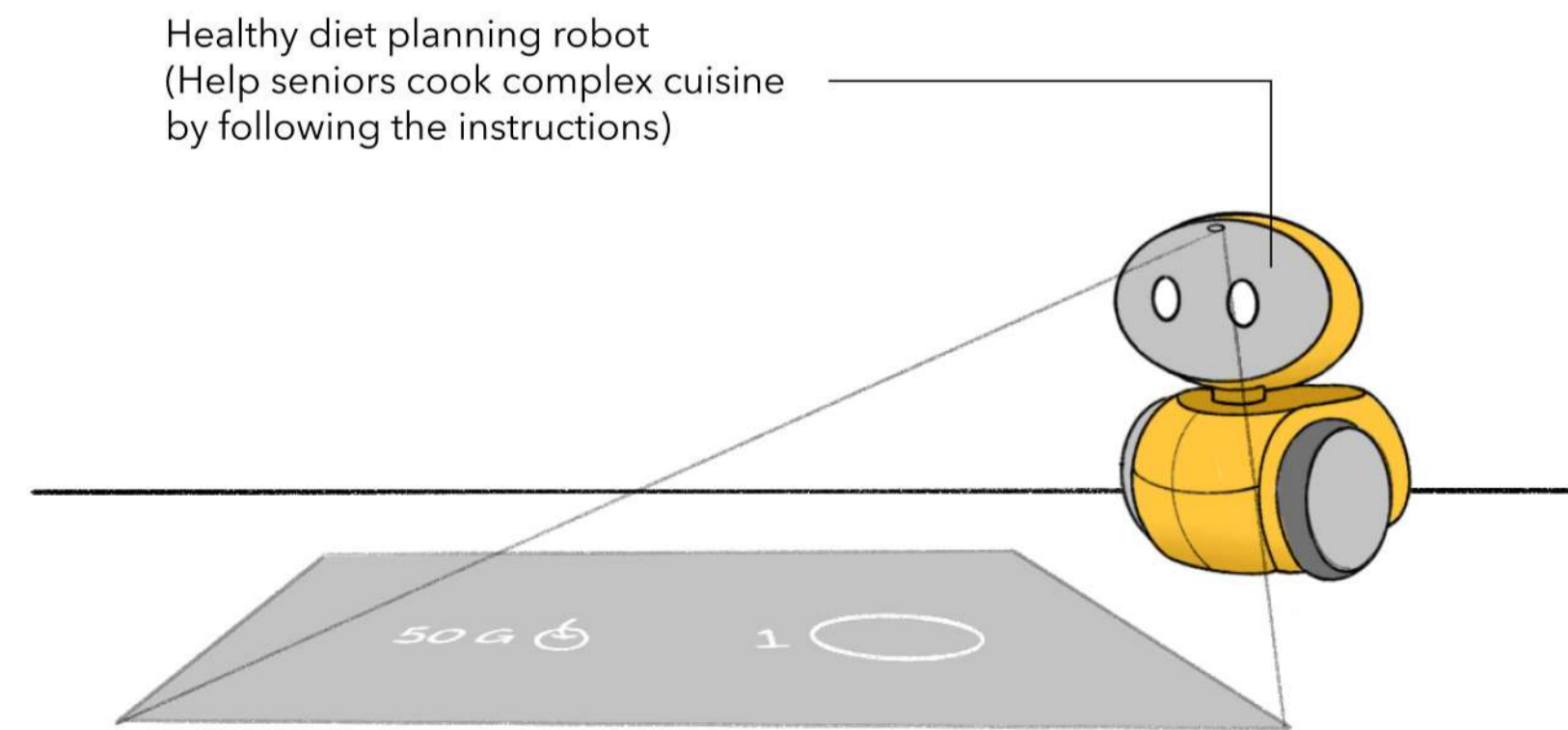
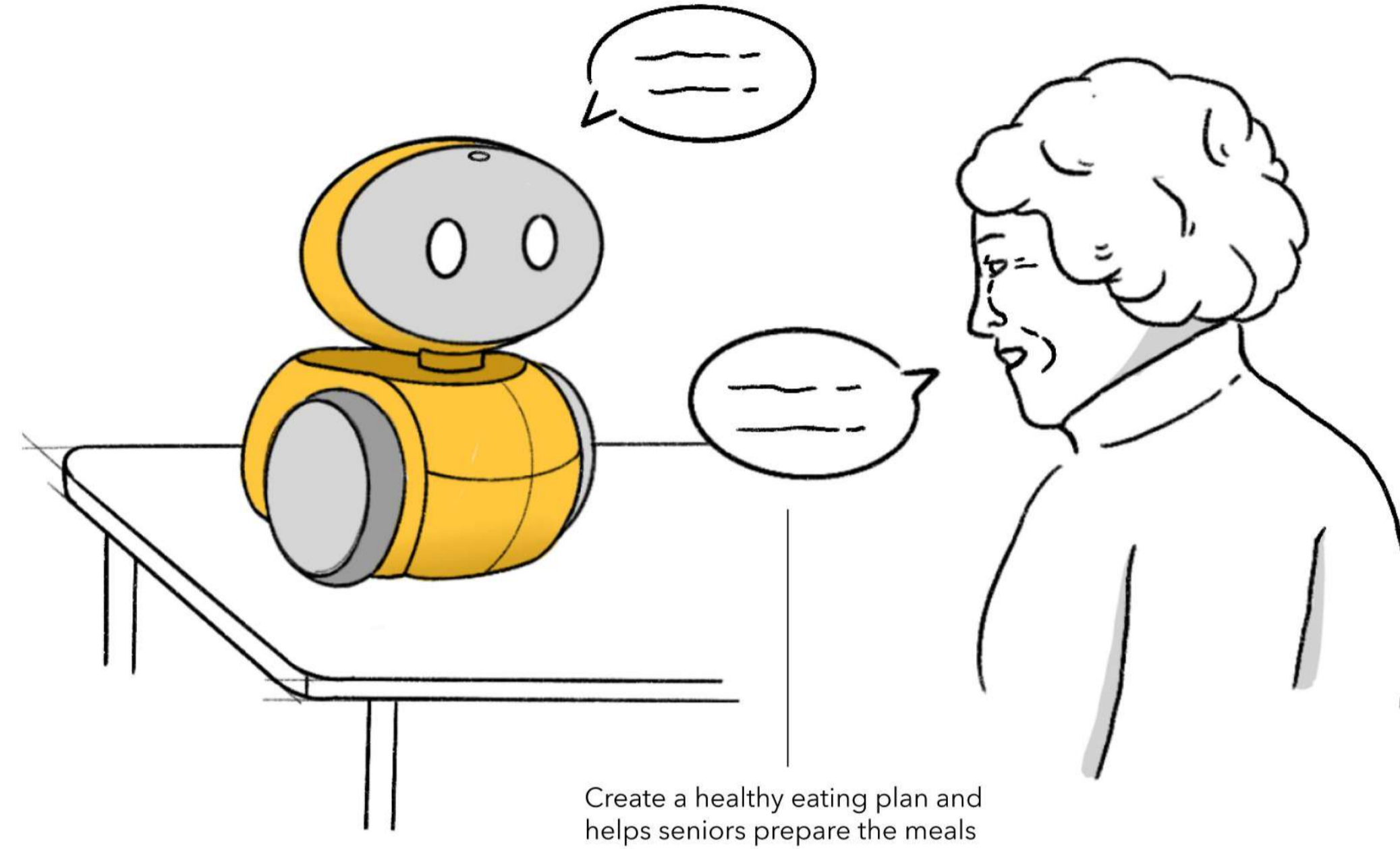
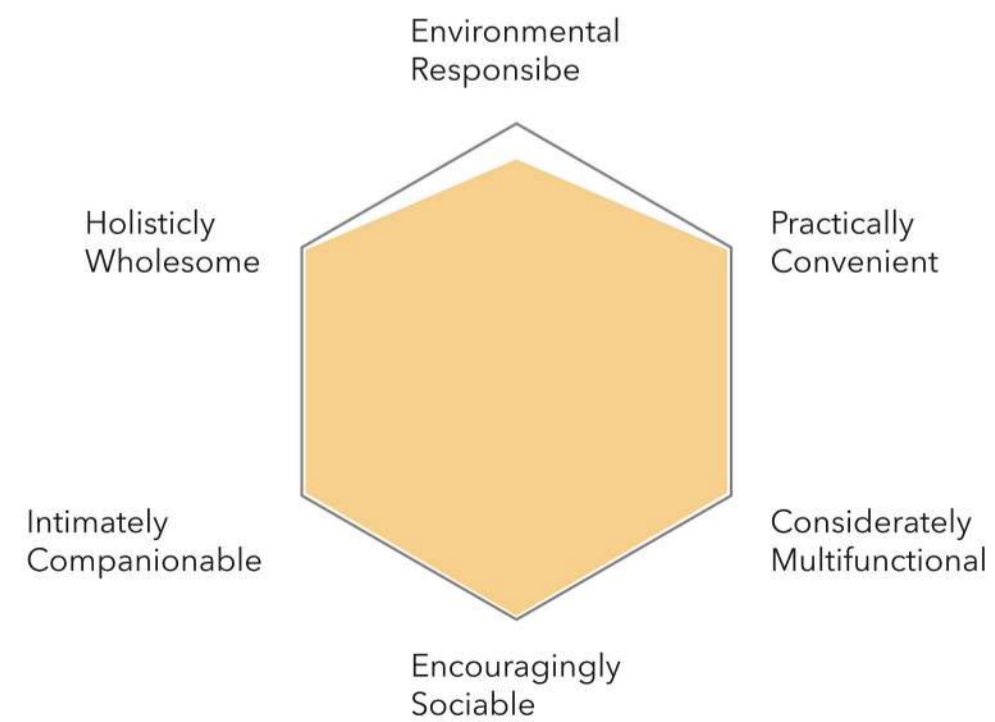
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

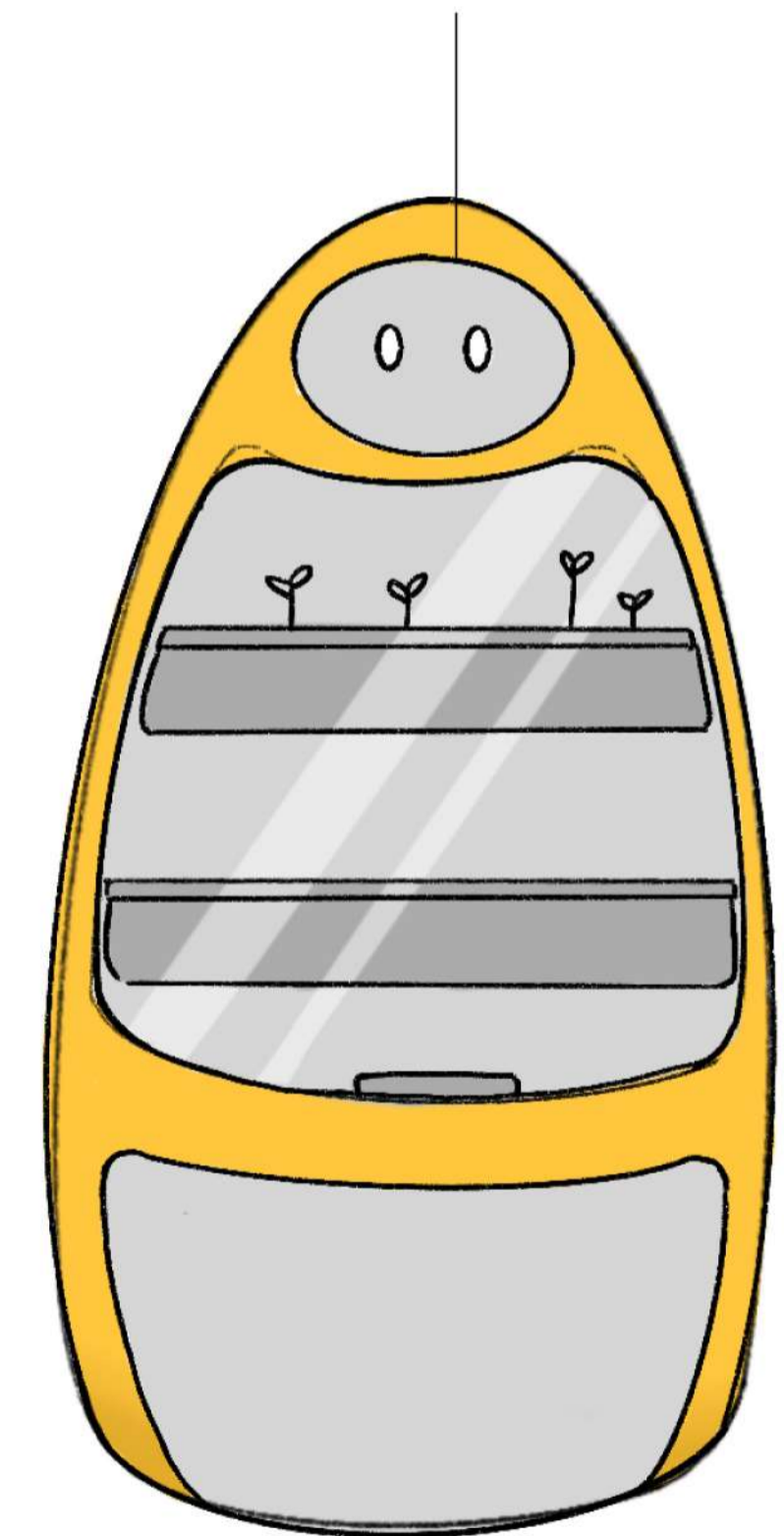
Roadmap



Brand Attributes Radar Chart



Intelligent indoor garden (Connected with the meal planning robot)



Kitchen Ware for Blind Chef

Fiskars offers a set of cooking ware to help blind people cook more conveniently and safely. The cooking wares combine touch and hearing to create a better cooking experience.

Consumer Archetype

Disabled Chef

Painpoints: Sight loss, mobility impairments, risk of falls and hurt, access to information

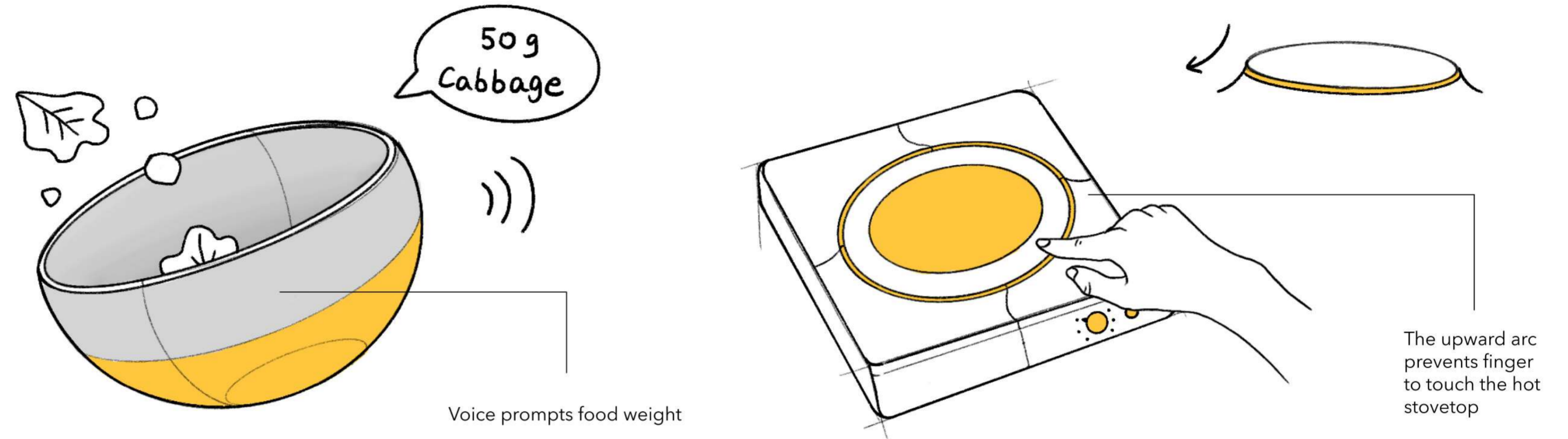
Needs: Safe & convenient kitchen utensils, accessibility of food information (packaging)

Motivations: Freedom, Private working space

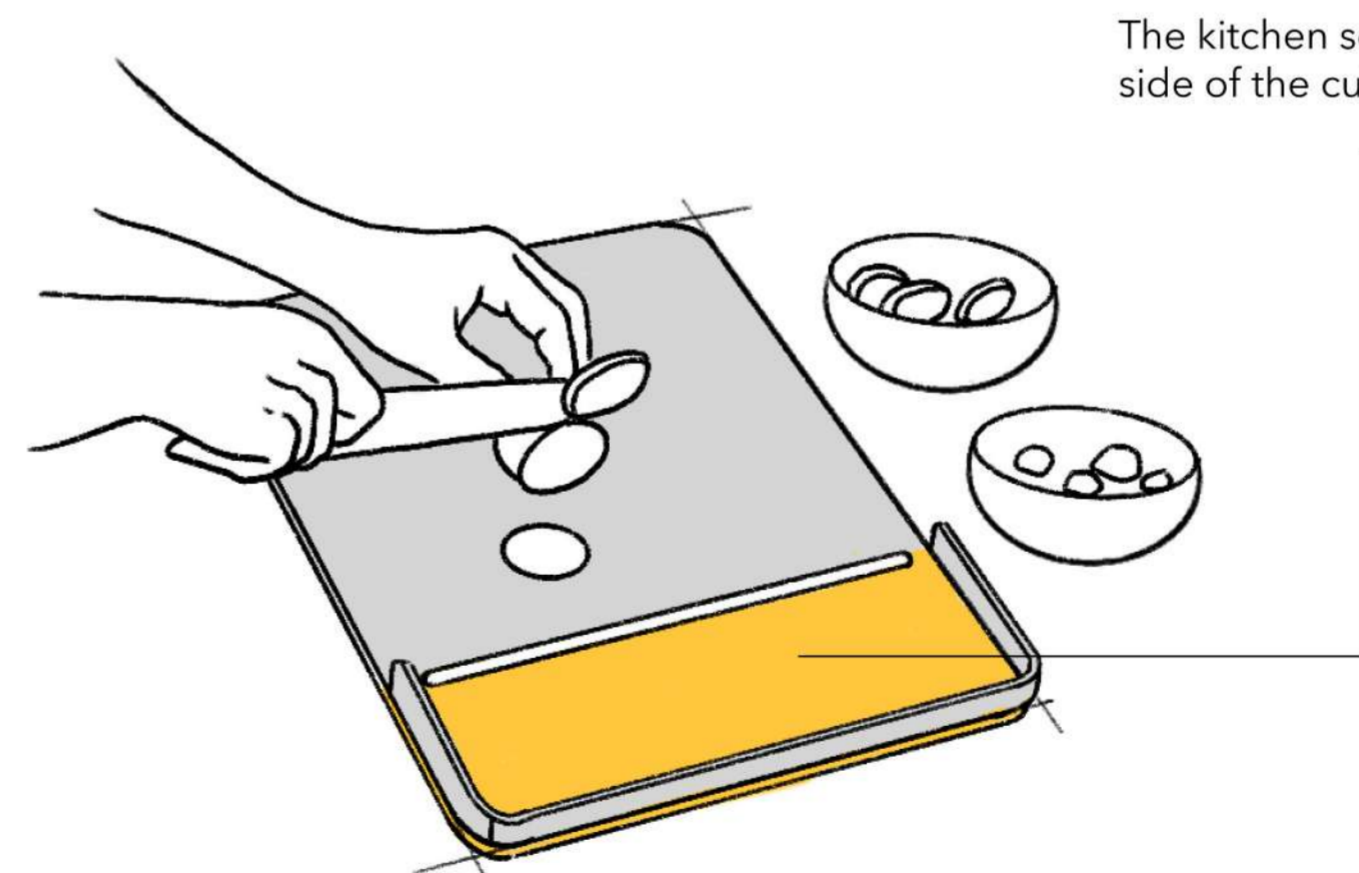
Roadmap



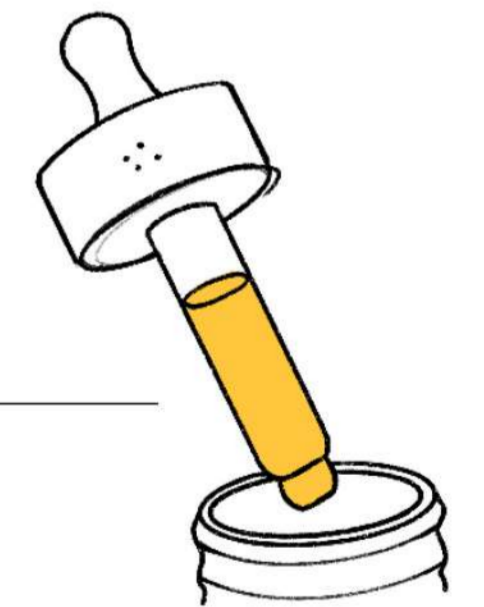
Brand Attributes Radar Chart



Increase the angle of the water outlet to increase the sound of the water, and know the water level according to the change of the sound of the water



The kitchen scale is on one side of the cutting board.



Use a dropper to know the amount of liquid to use

Future Kitchen for Blind Chef

Fiskars offers a new cooking experience for blind people. The intelligent scanner can identify the food and transfer texts on the food package into voice text. The cooking mat can scale the food weight, heat the pan, and count time. The goal is to help blind chefs cook conveniently, safely, and more efficiently.

Consumer Archetype

Disabled Chef

Painpoints: Sight loss, mobility impairments, risk of falls and hurt, access to information

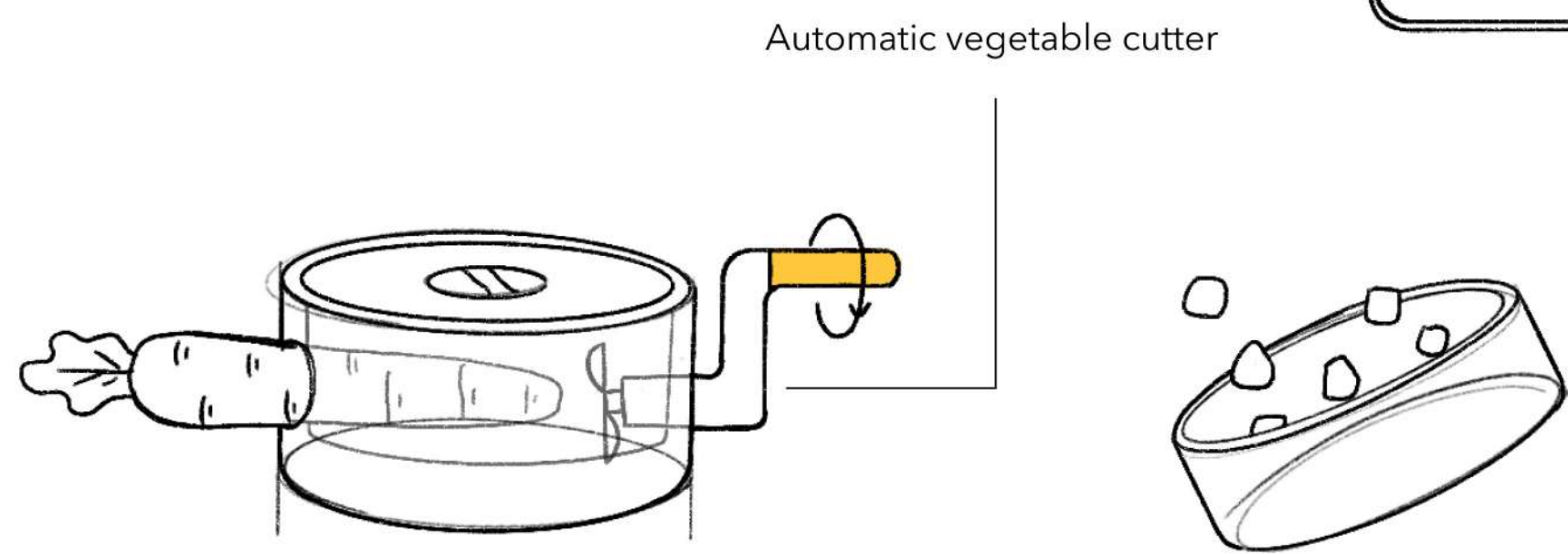
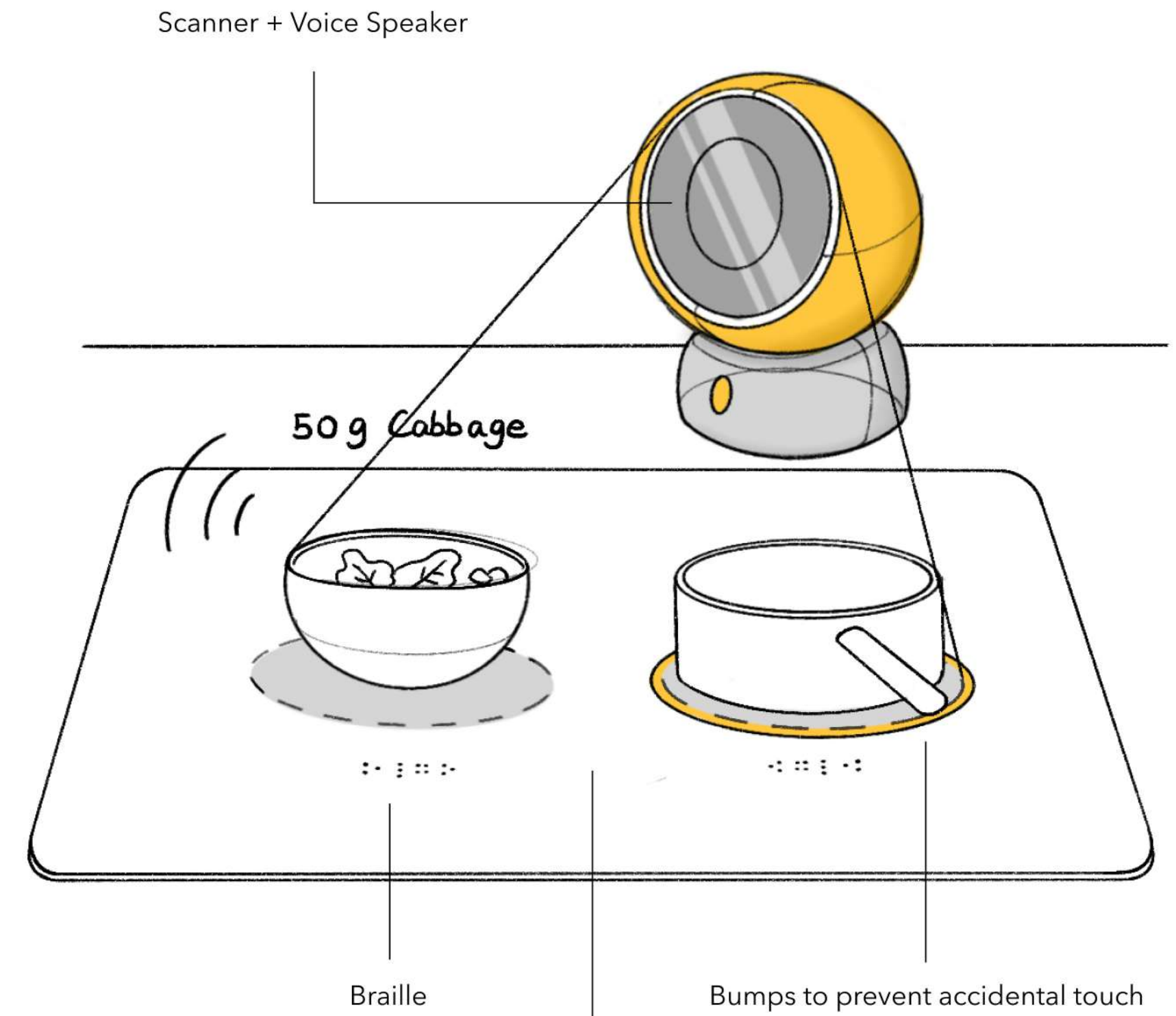
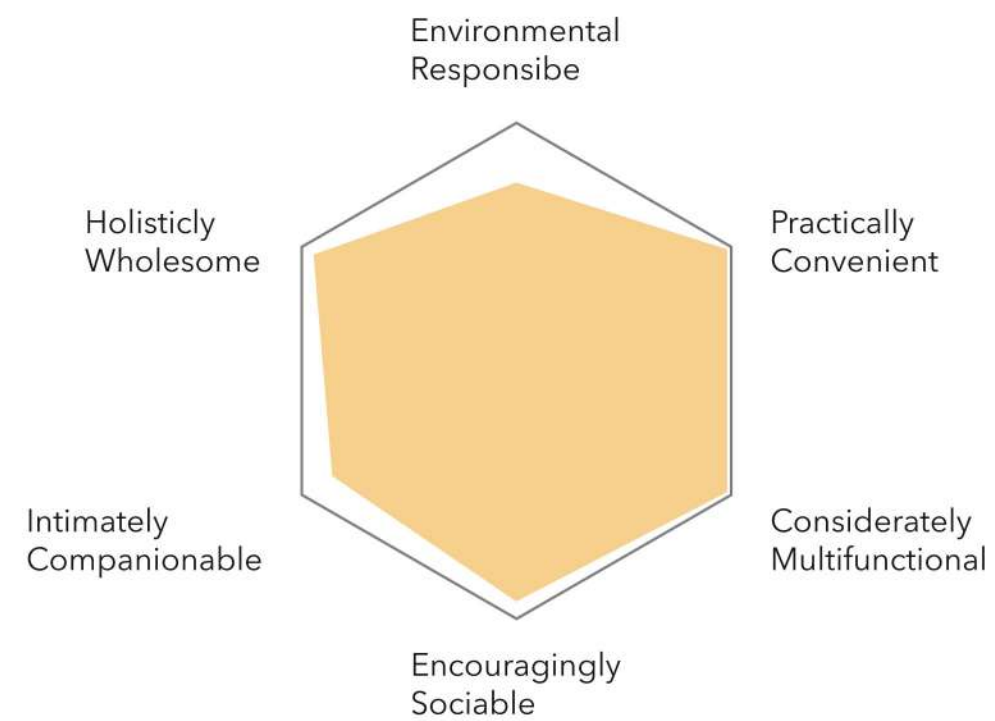
Needs: Safe & convenient kitchen utensils, accessibility of food information (packaging)

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



Sustainable Glamping Equipment

Fiskars offers DIY cardboard equipment for glampers who want to minimize their carbon footprint during glamping. The product contains several pieces of precut cardboard with DIY tools. Glampers need to assemble the cardboard pieces to create the equipment.

Consumer Archetype

Modern Glamper

Painpoints: Reduce skills development, Less direct interaction with nature, Sustainability concerns

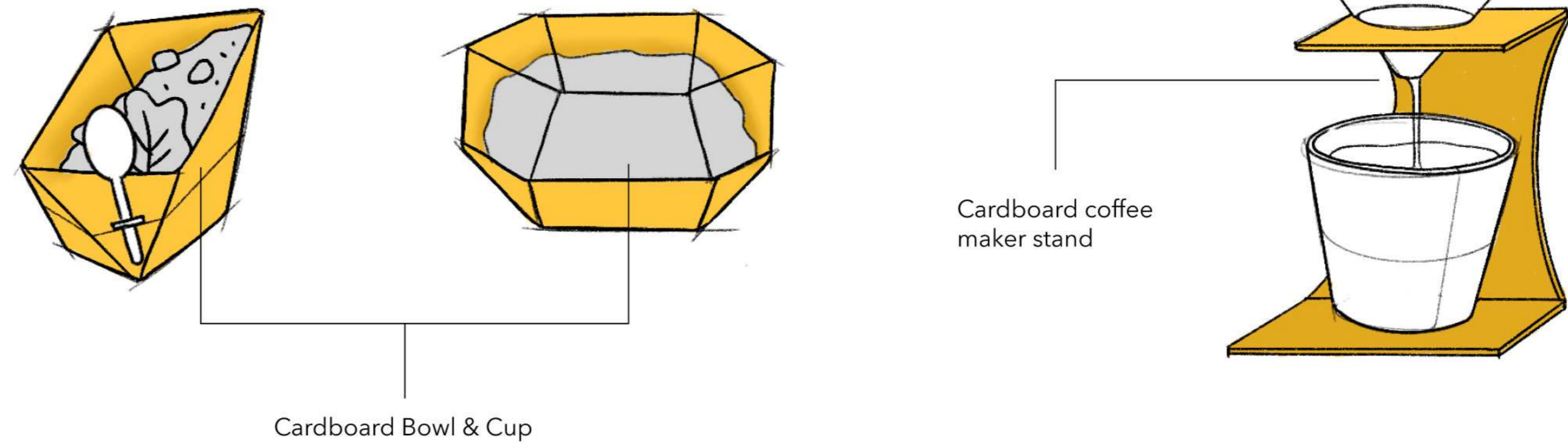
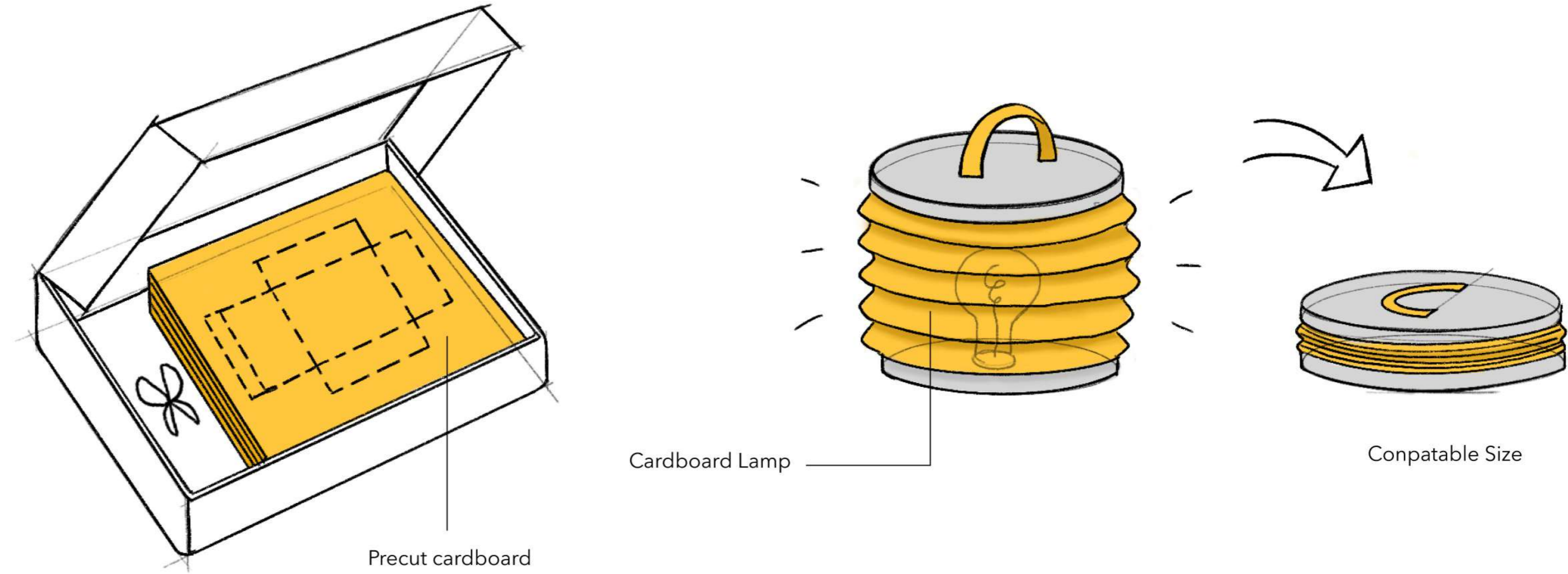
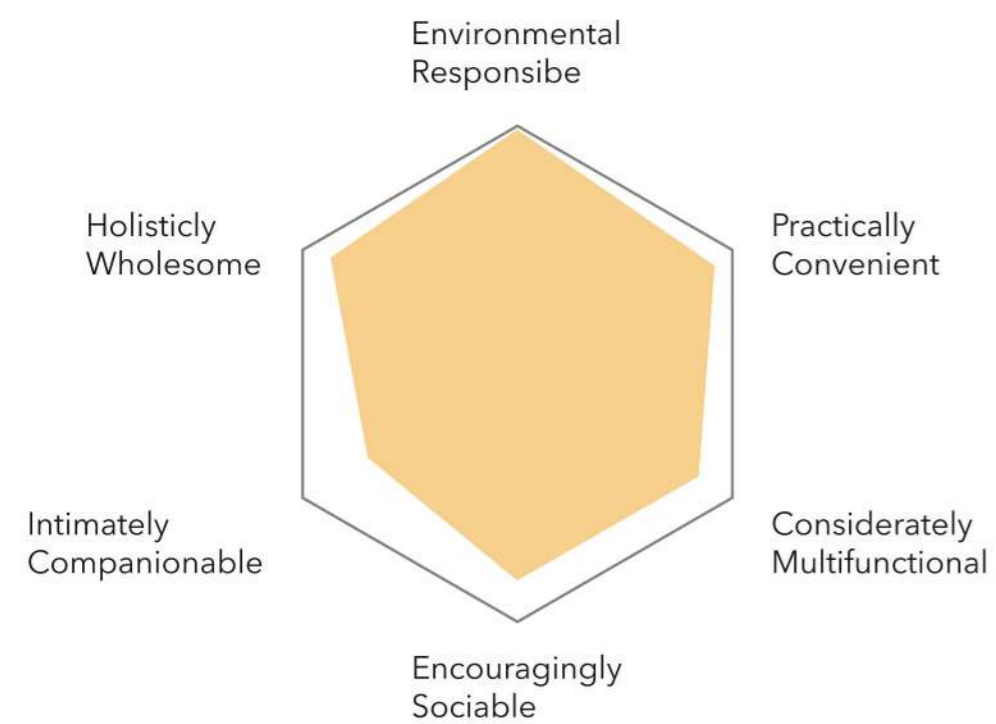
Needs: Comfortable & convenient accommodation and facilities, Close to nature

Motivations: Spend time with friends or family, contact with nature

Roadmap



Brand Attributes Radar Chart



Food Storage System

Fiskars offers a food storage system that prolongs freshness and prevents bacteria growth, which helps the homemaker prepare meals more efficiently, conveniently, healthily, and safely.

Consumer Archetype

Hurried Homemaker

Painpoints: Lack of social interaction, Tedious work, Exhaustion with kids, Back injuries, Hard works are unappreciated

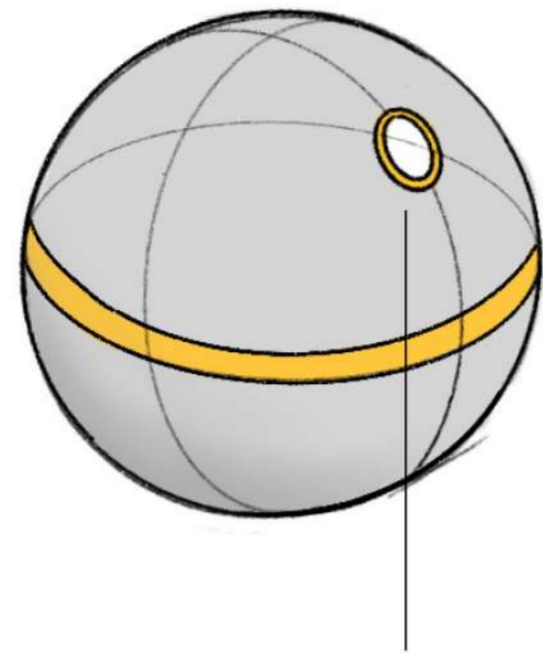
Needs: The roduct that can increase housework efficiency, Better health

Motivations: Love for family, Freedom with schedules, Accompany the child

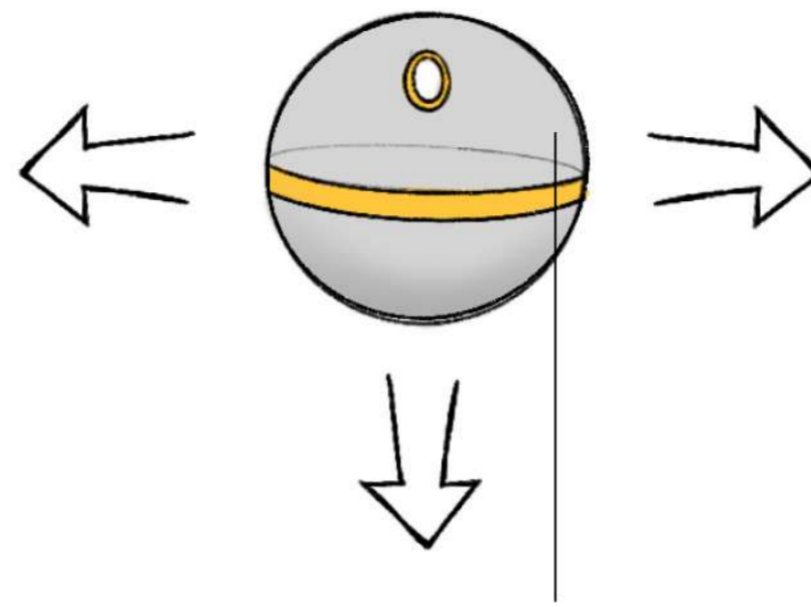
Roadmap



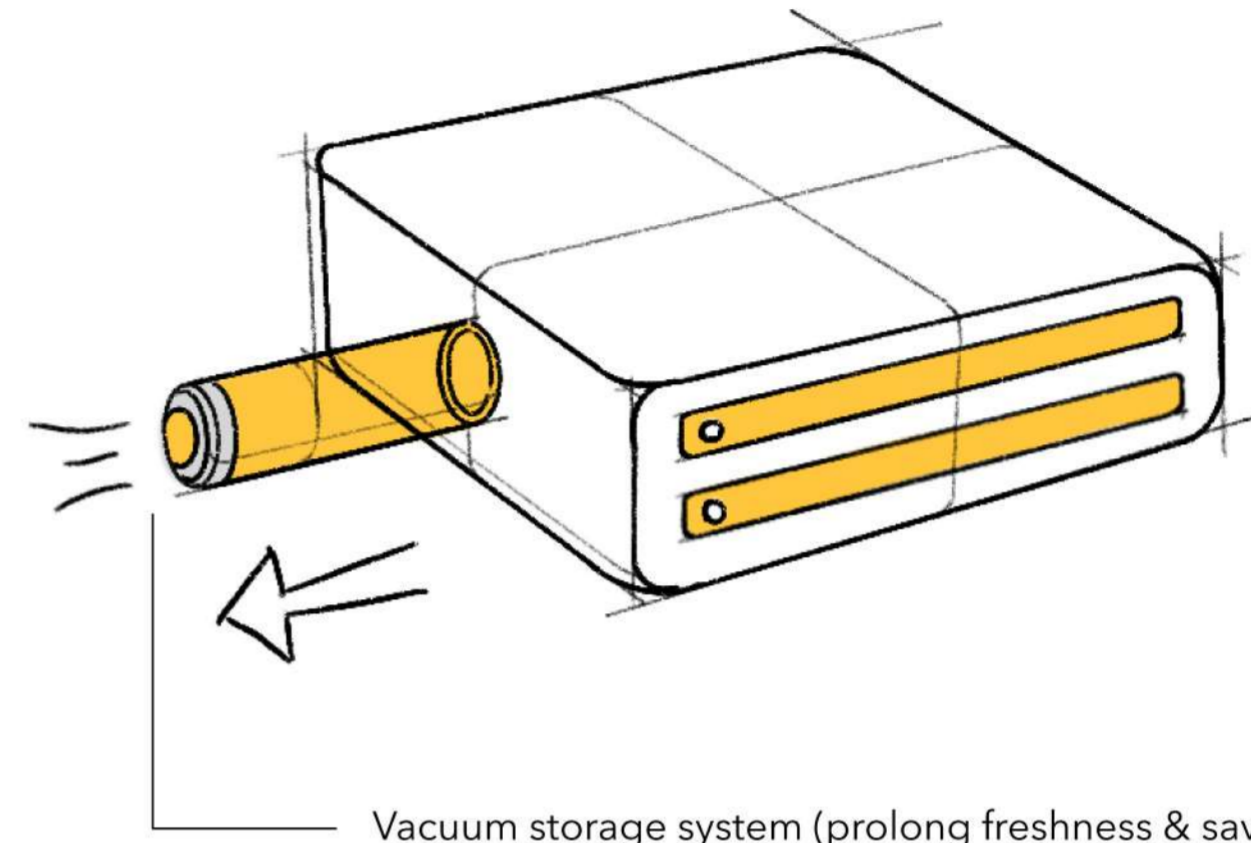
Brand Attributes Radar Chart



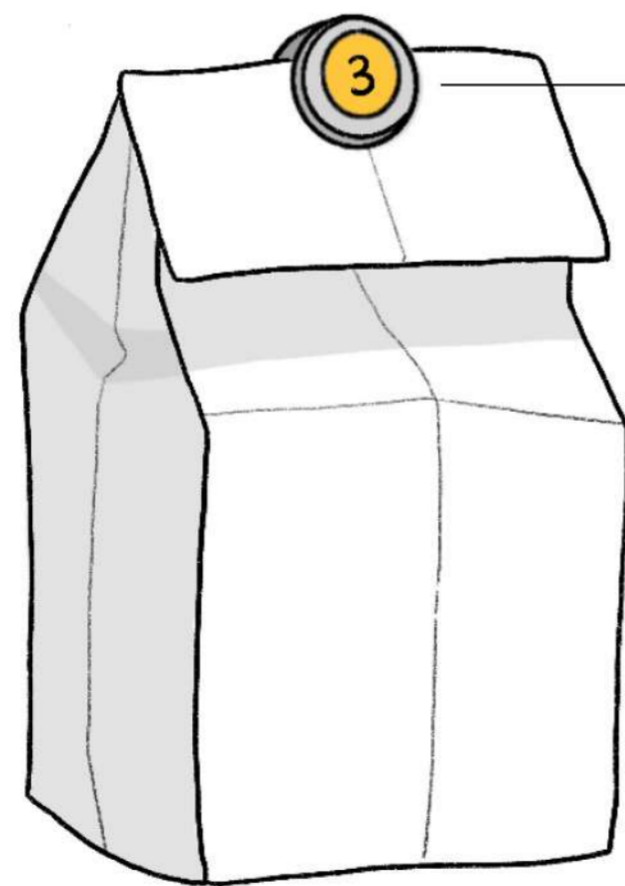
Detect food bacteria in refrigerator



Food UV disinfecting light to eliminate bacteria

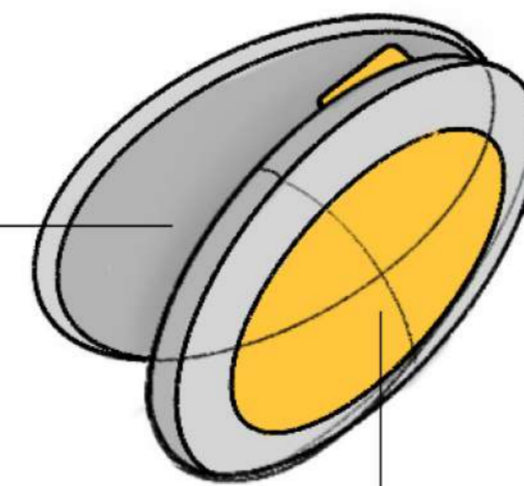


Vacuum storage system (prolong freshness & save time)

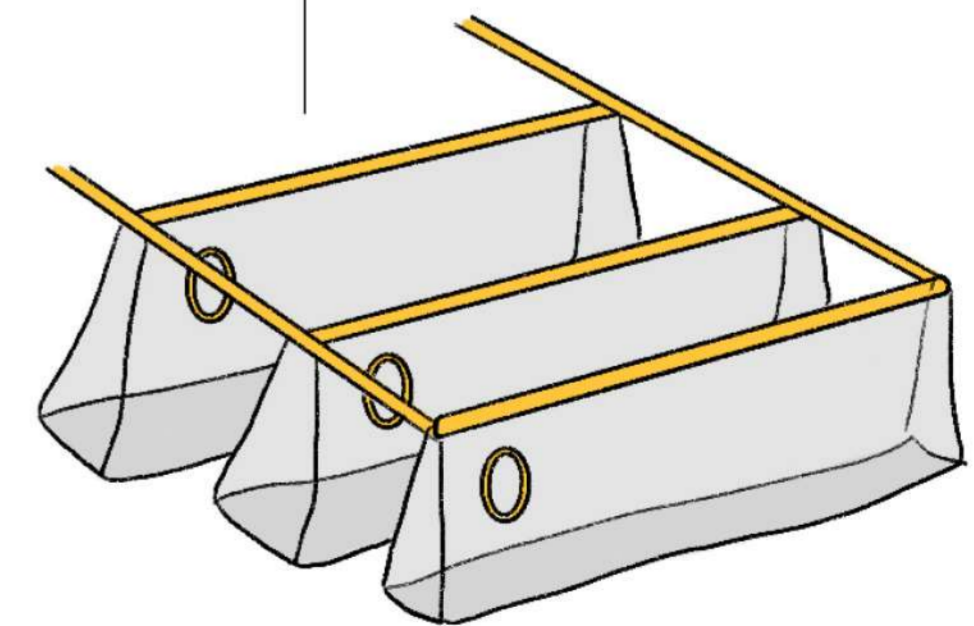


Remind of remaining edible days of food

Expiration date reminder clip



Shows day number



Portable Herb Garden

Fiskars offers a portable car herb garden for digital nomads traveling by car. The spice garden helps digital nomads enjoy fresh spices, save money, and not be worried can't find locally. A smart robot is linked to the garden, which can remind digital nomads to take care of the plants and interact during the journey.

Consumer Archetype

Digital Nomad

Modern Glamper / Indoor Gardener

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

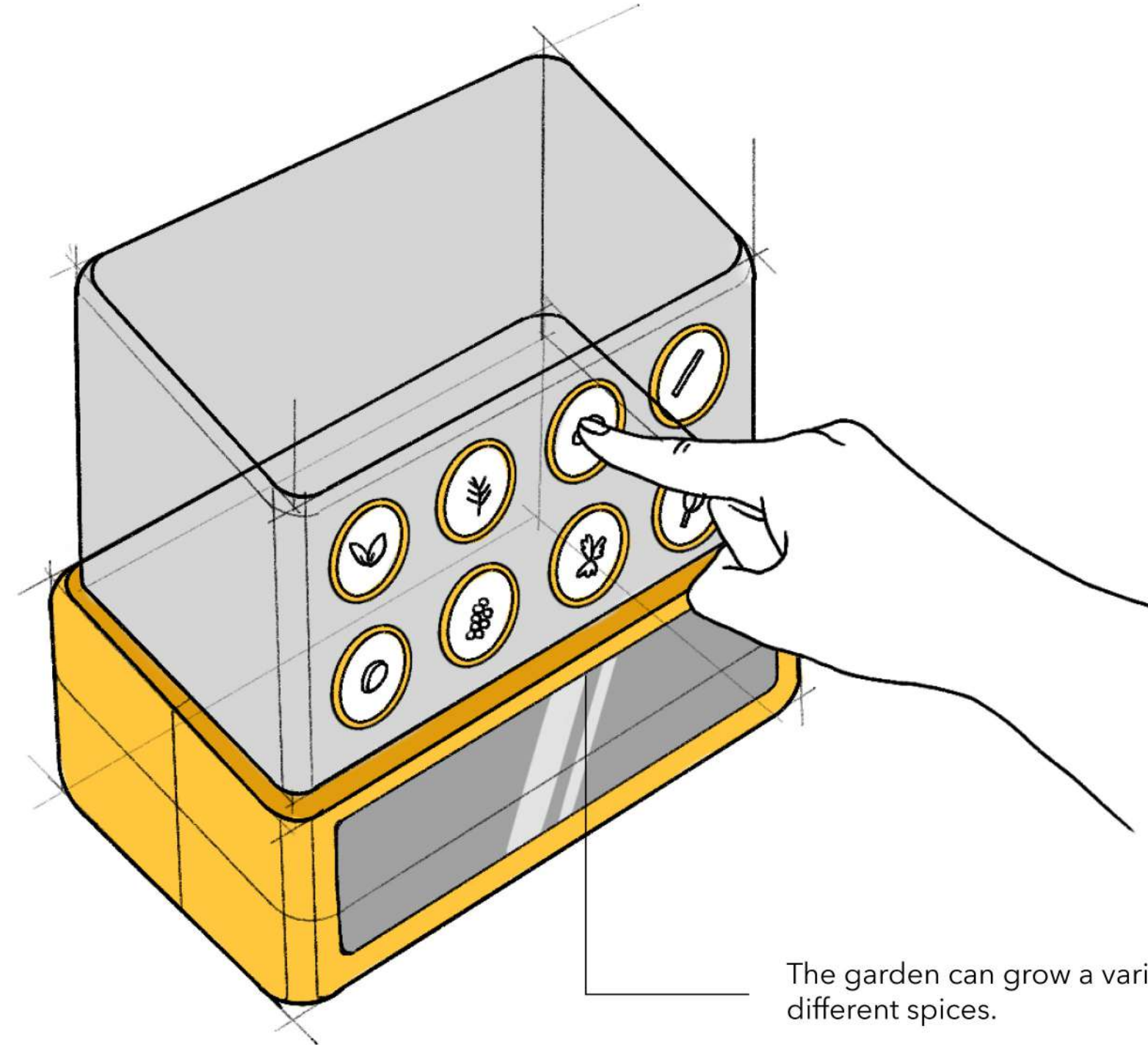
Needs: Confortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



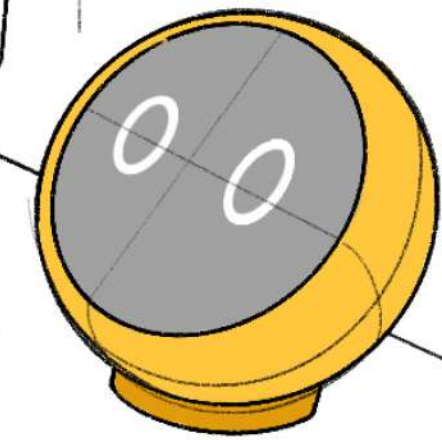
Brand Attributes Radar Chart



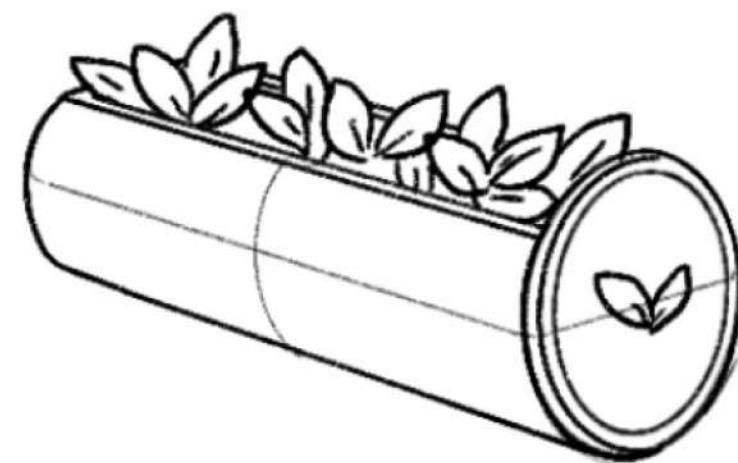
The garden can grow a variety of different spices.



I'm hungry, I need some fertilizer.



The smart robot linked to the garden. It can interact with the user. (ex: Remind users to fertilize)



Each of the spice plants has an individual container.

Car Scent Garden

Fiskars offers a car garden that can build an emotional connection with digital nomads through scent. The garden can grow different plants and release the scent of the specified plants that benefit the body.

Consumer Archetype

Digital Nomad / Modern Glamper

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

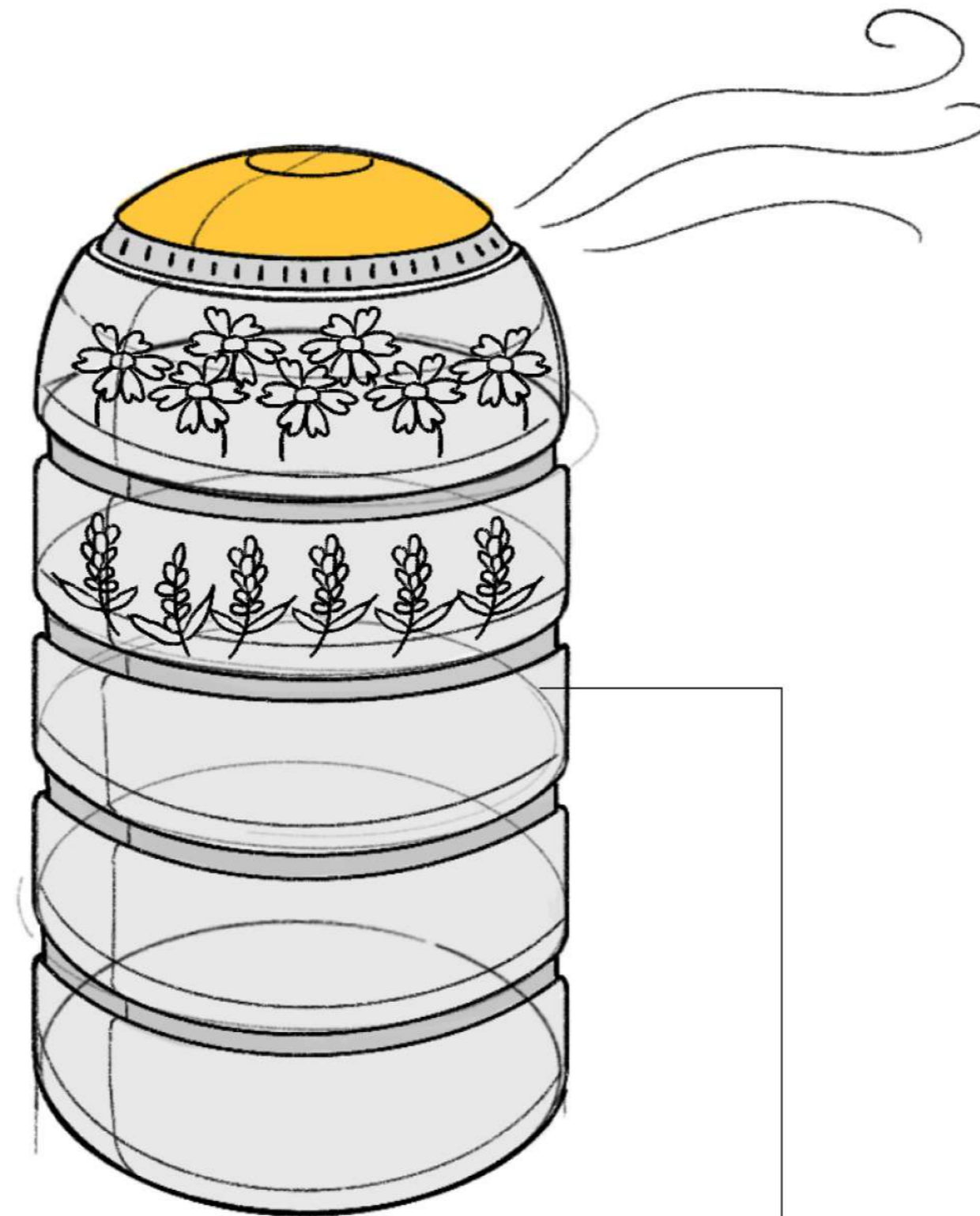
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

Roadmap



Brand Attributes Radar Chart



The garden can emit the scent of the specified plants planted in it.



Peppermint

Release a scent to refresh your mind, boosting attentiveness

Release a scent to be uplifting, reducing stress, anxiety



Lavender

AR Working Tools

Fiskars offers a set of AR tools to help digital nomads work more conveniently anywhere. The AR glass links to a touchpad or a controller, which interacts with the AR images.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

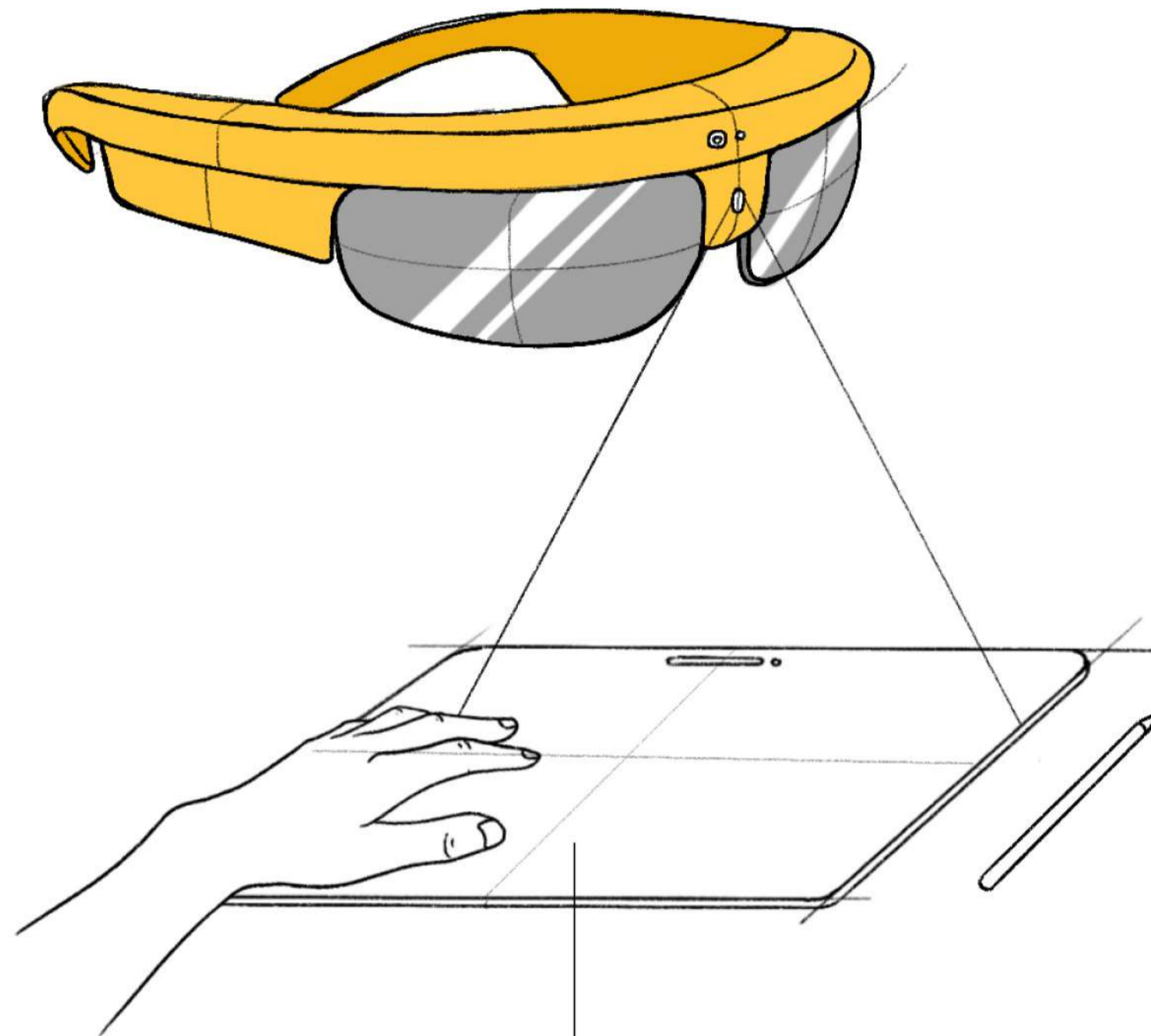
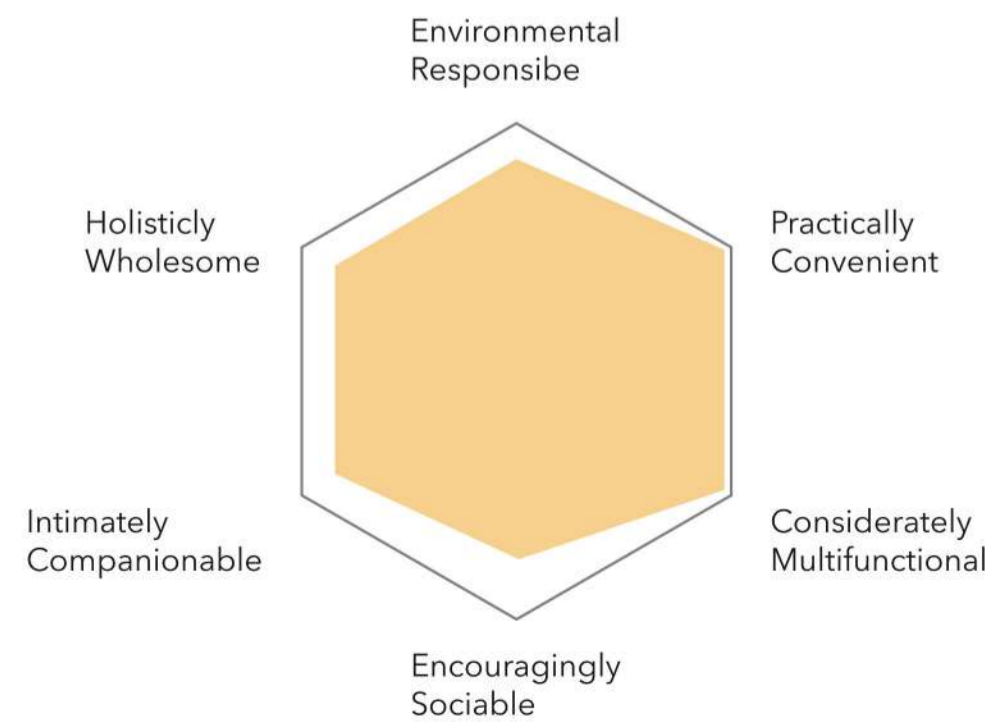
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

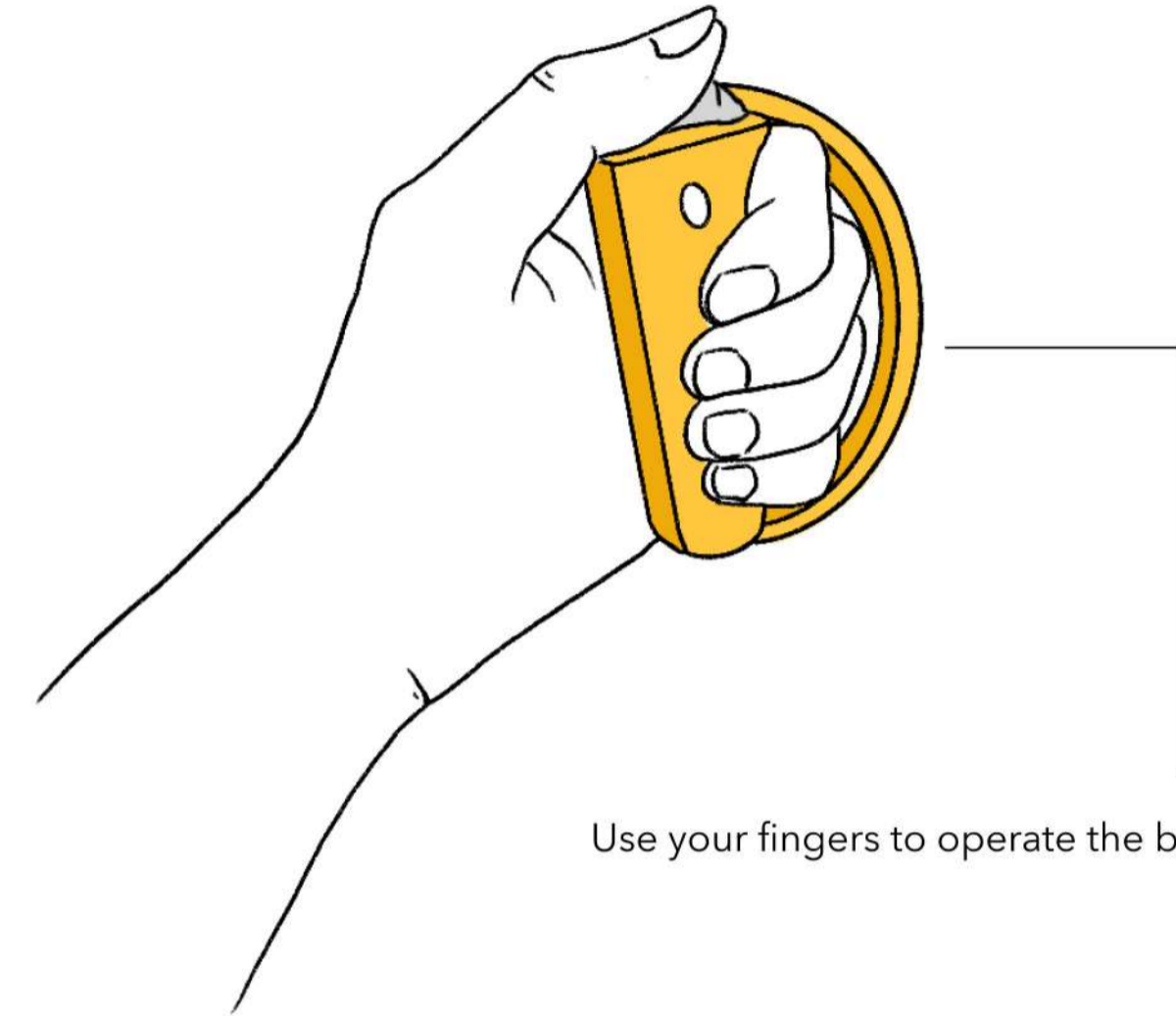
Roadmap



Brand Attributes Radar Chart

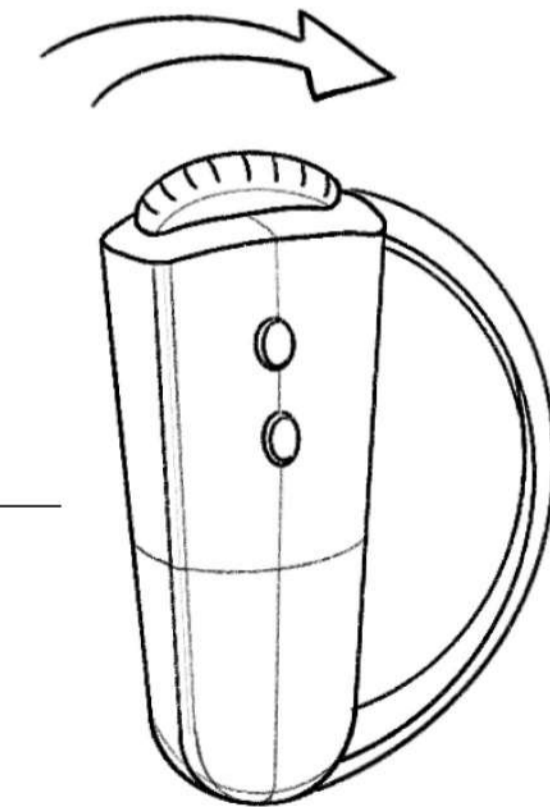


The touchpad is identified by AR glass. (use the touchpad to interact with the AR image)



Use your fingers to operate the buttons.

A controller to replace the mouse and keyboard.



Social Interaction System

Fiskars offers a social interaction system for digital nomads who want to make new friends or travel partners. The APP will match users with high similarity, which helps make friends easier.

Consumer Archetype

Digital Nomad / Modern Glamper

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

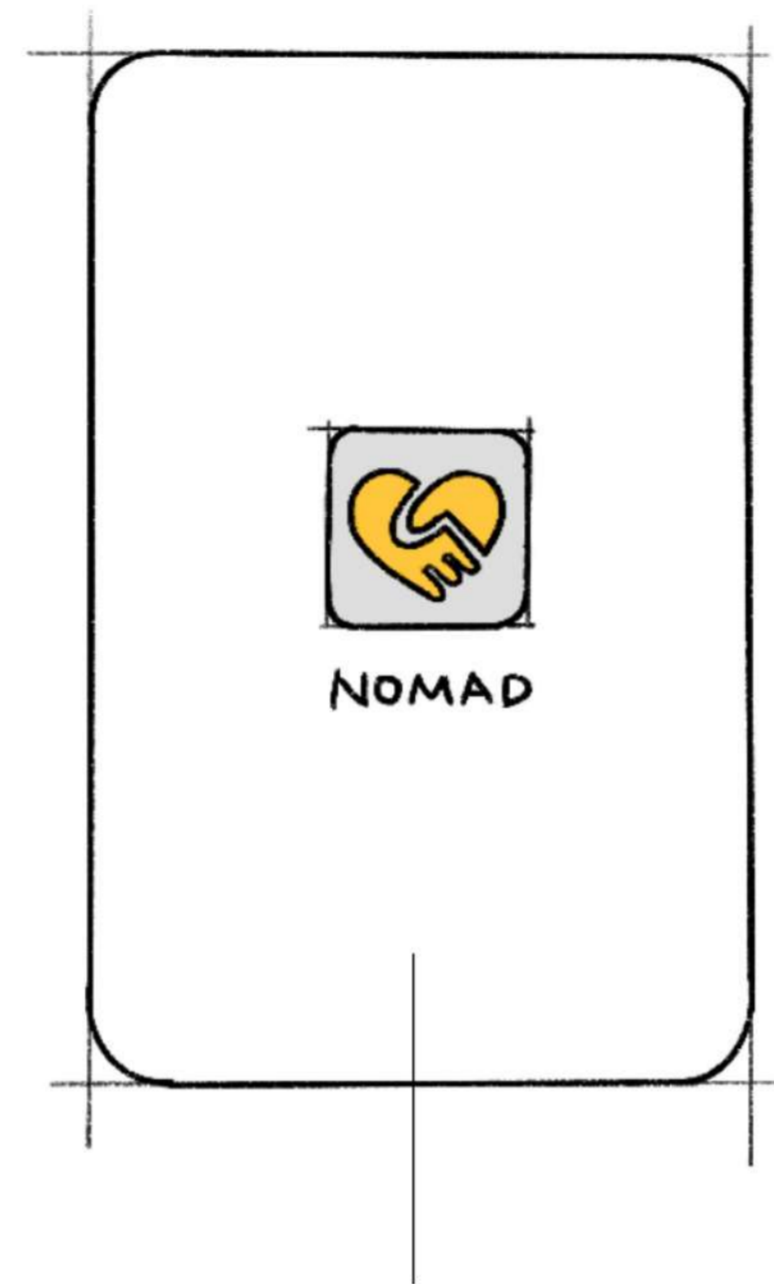
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

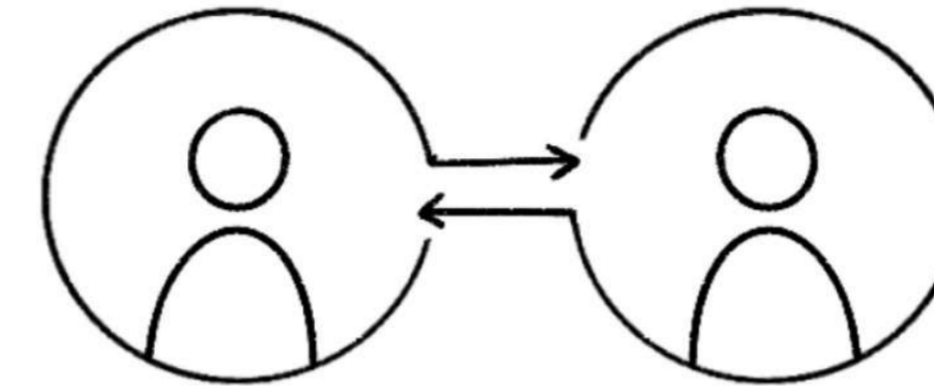
Roadmap



Brand Attributes Radar Chart

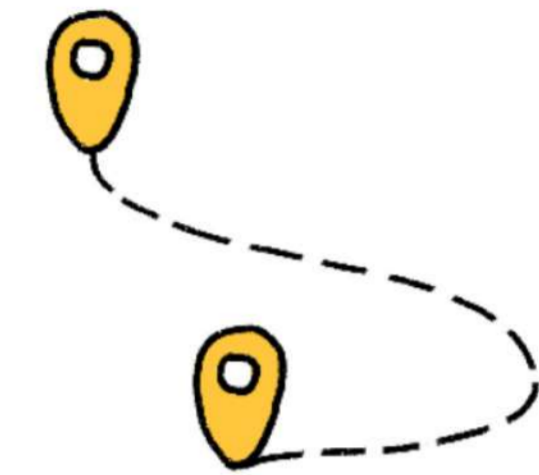


APP for digital nomads to make friends. (more easy, more safety)

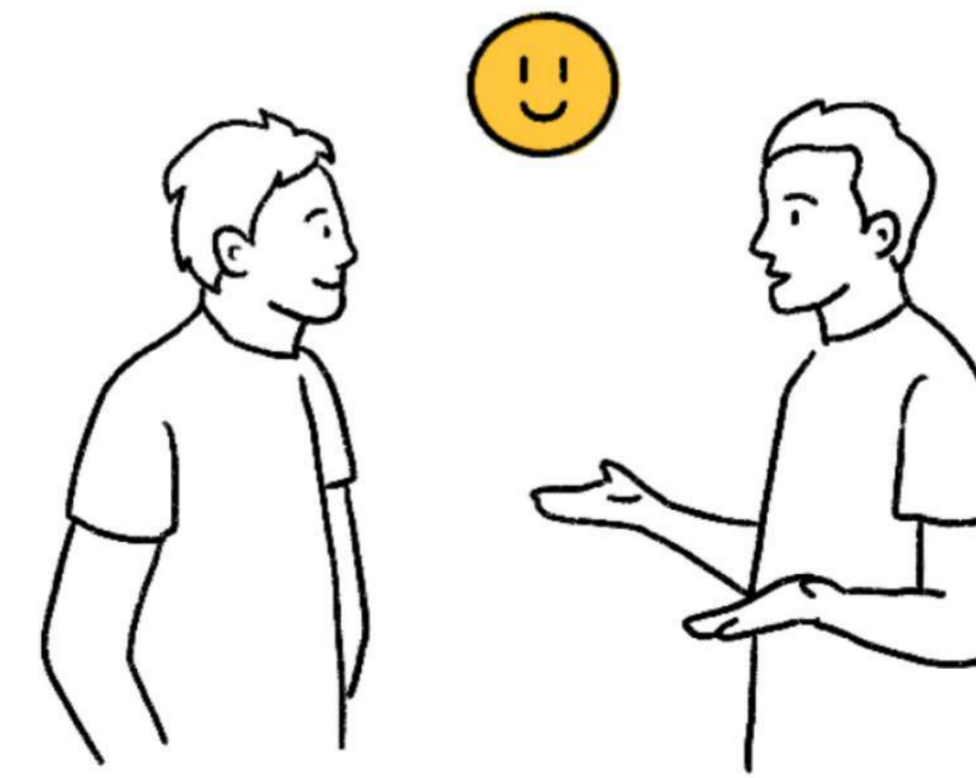


96%

The APP will match users who are most similar to you nearby.



Match people who have the same next travel destination.



Make new friends and partners.

Build Stronger Relationship

Fiskars offers a companion robot and APP that helps digital nomads build a stronger relationships with others. The APP will help match similar users together. The robot enables users to interact and communicate more to build intimacy.

Consumer Archetype

Digital Nomad

Hurried Homemaker / Disabled Chef

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

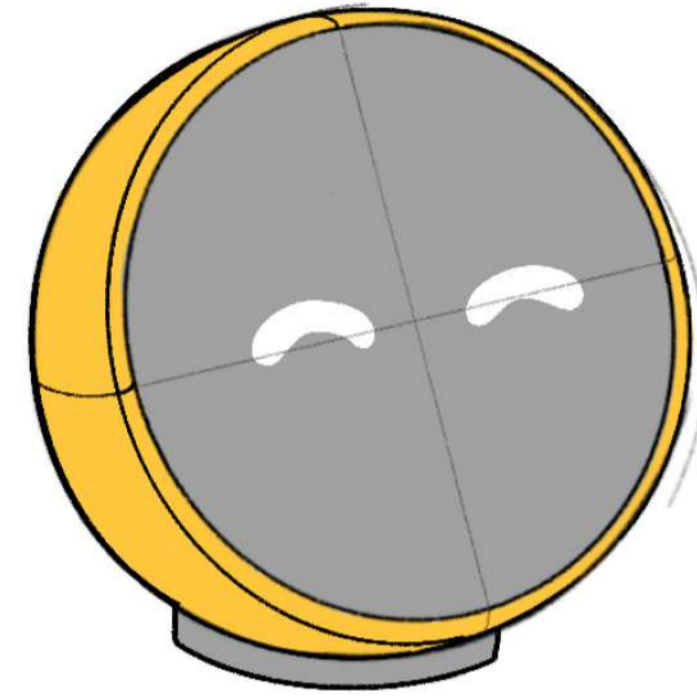
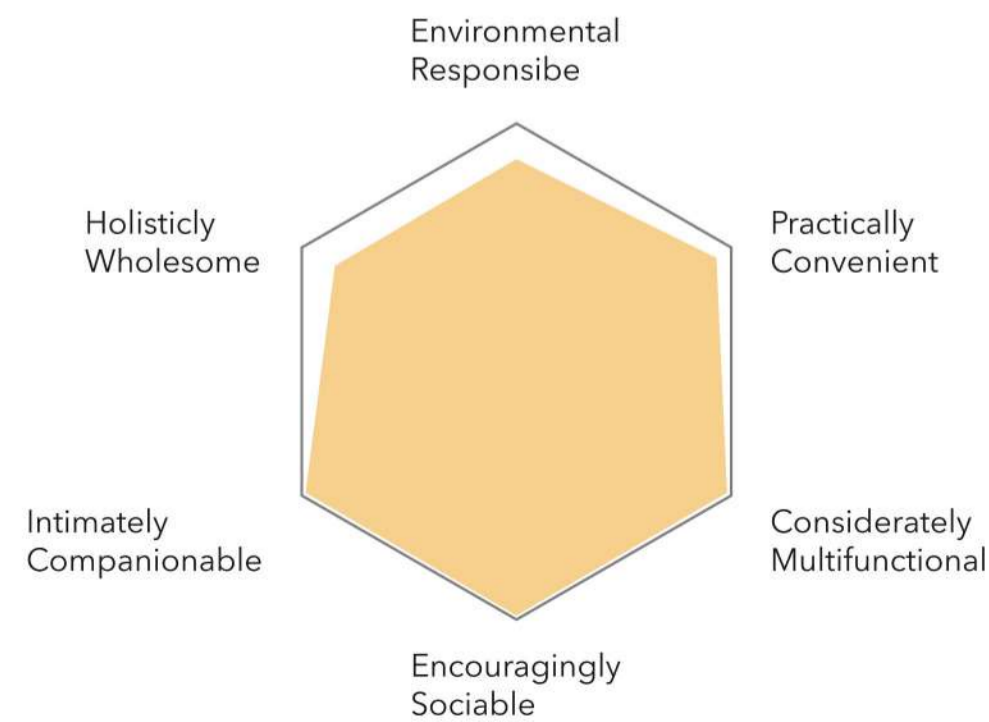
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

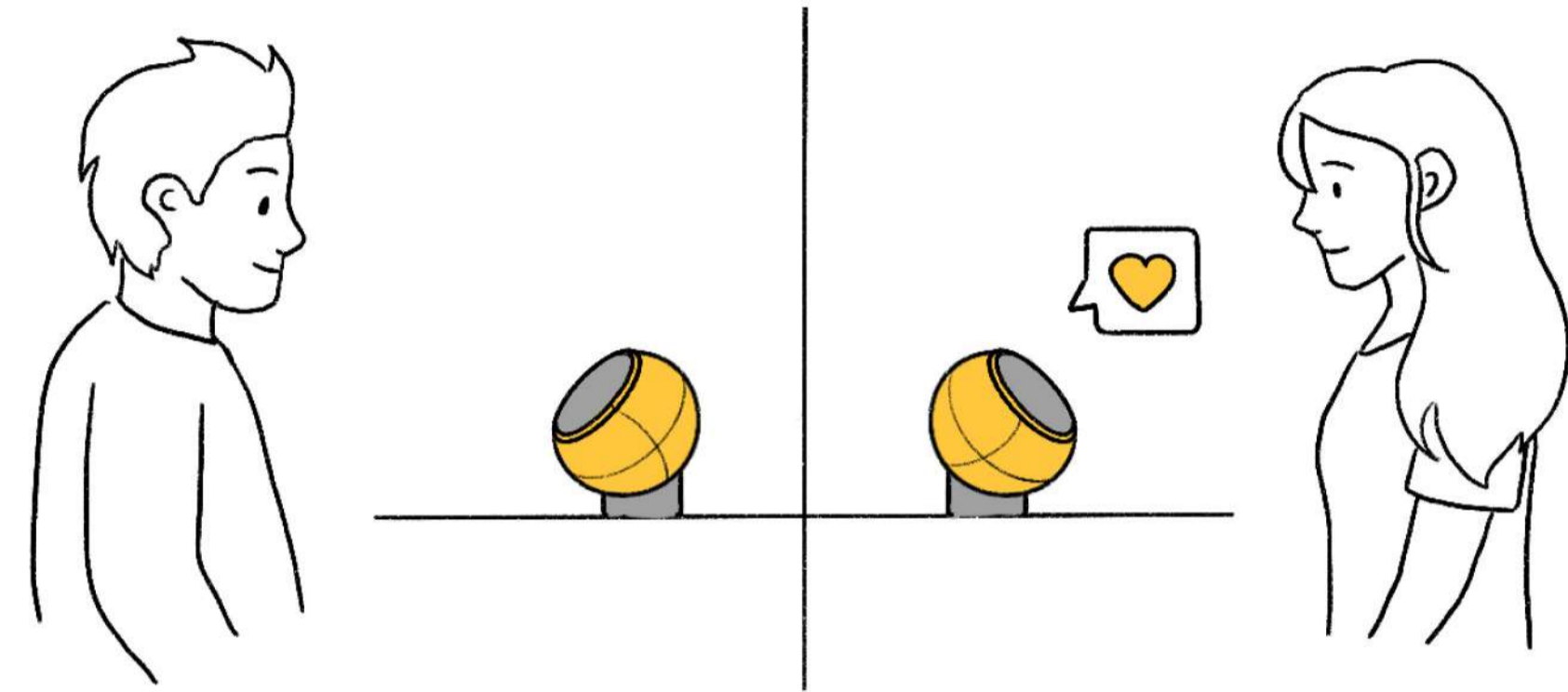
Roadmap



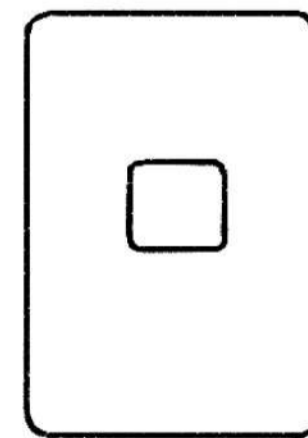
Brand Attributes Radar Chart



Companion Interactive Robot
(Can be used when both single or dating)

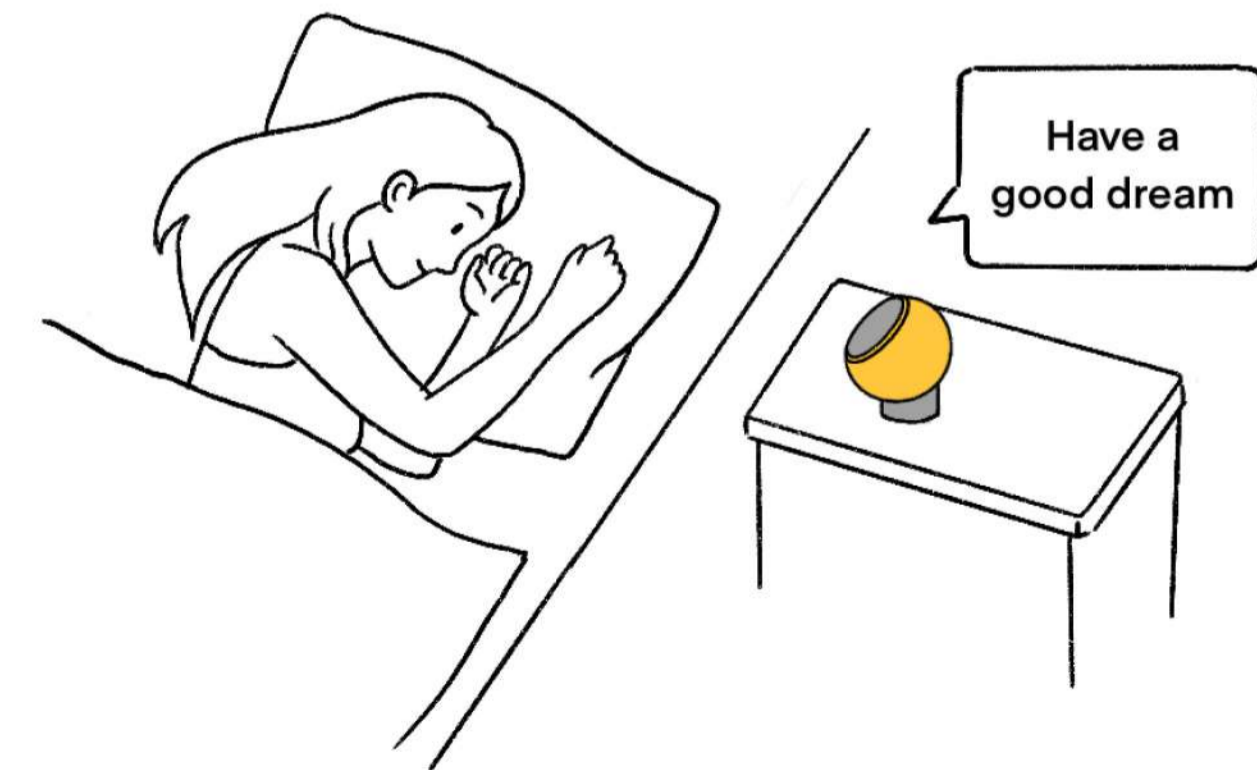


Create more interaction, and build a stronger relationships.
Maintain long term relationships, even from far away.



APP

Match perfect partner
Plane together
Build connections with someone in your next travel destination before you've even arrived



Healthcare System

Fiskars offers a healthcare system consisting of a health status monitor wristband and an intelligent robot. The robot will plan daily healthy meals and provide remote healthcare support. The goal is to help users keep up healthy habits.

Consumer Archetype

Digital Nomad / Disabled Chef

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

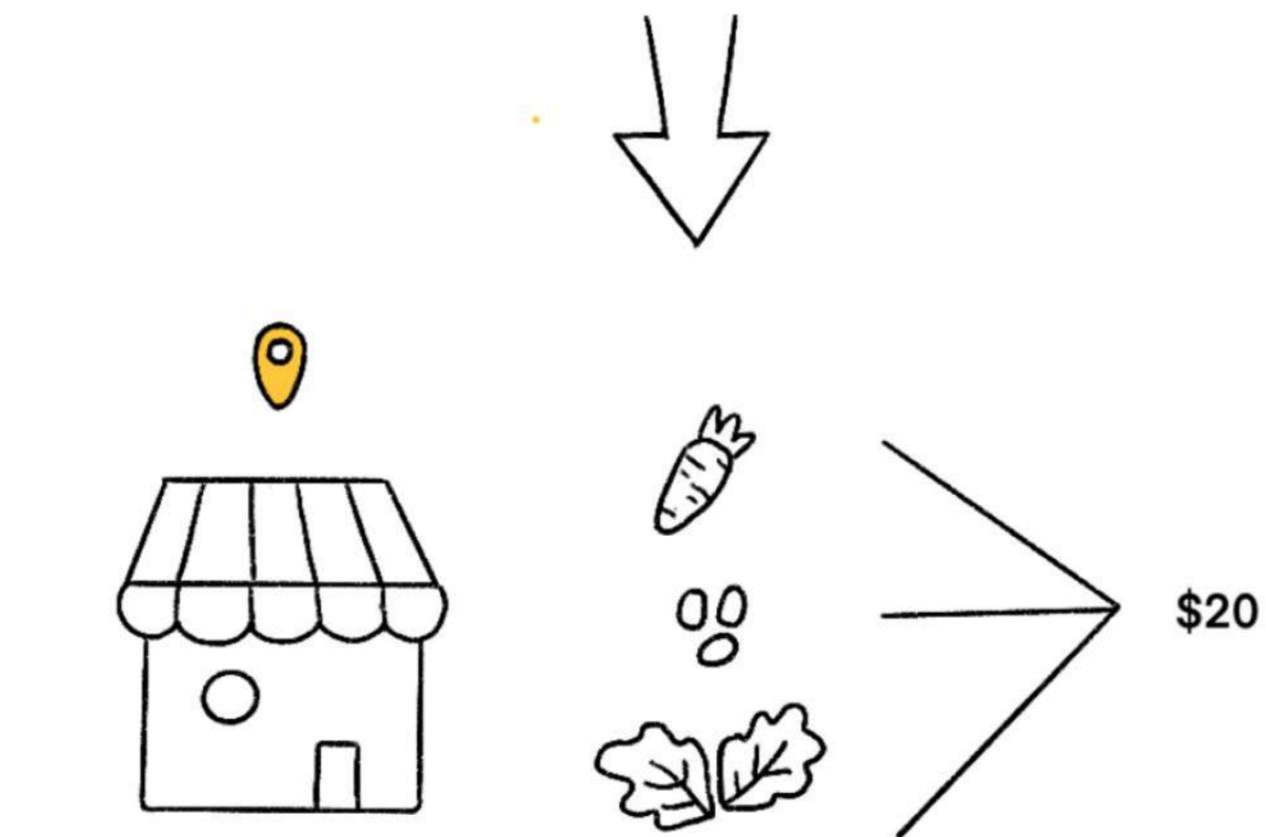
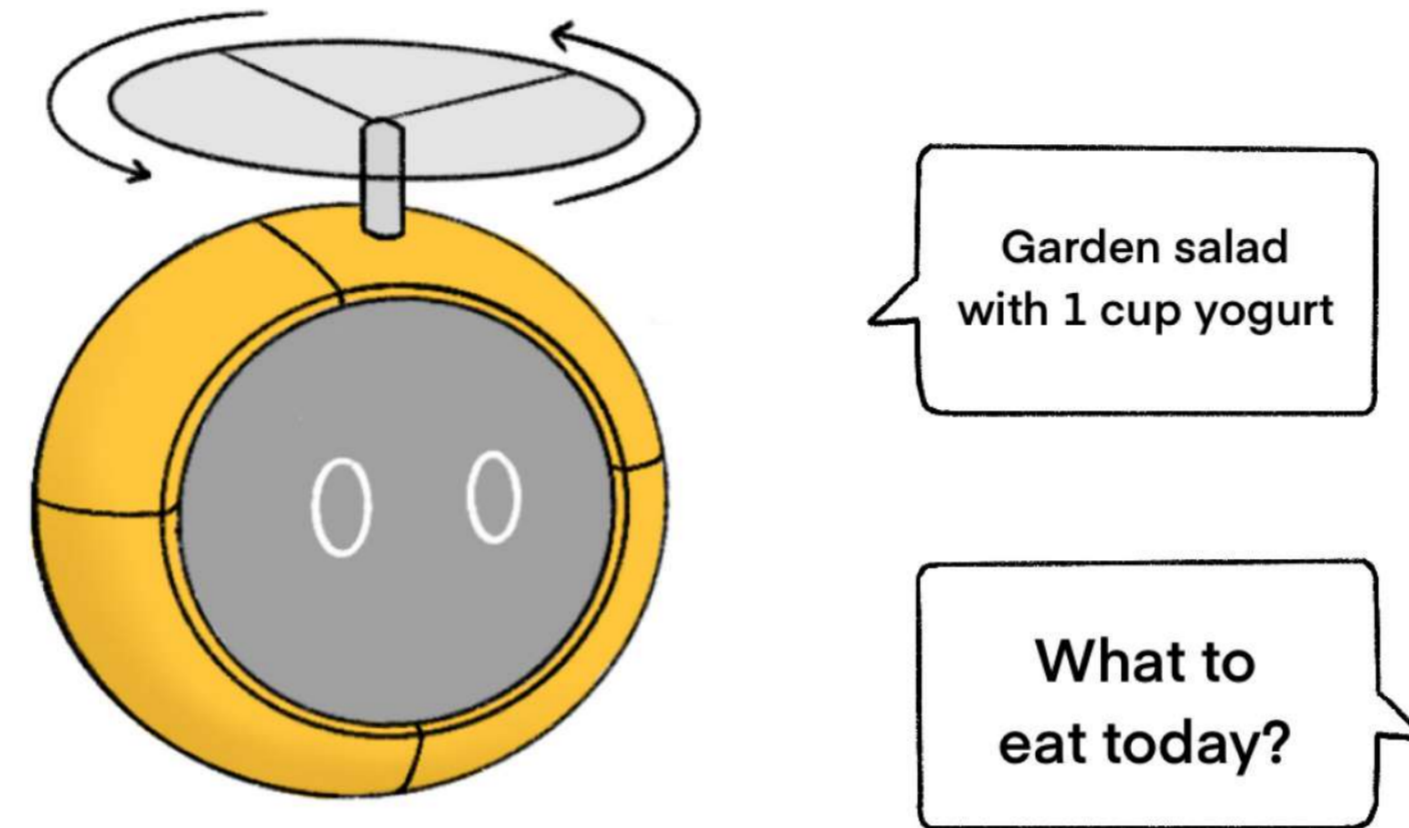
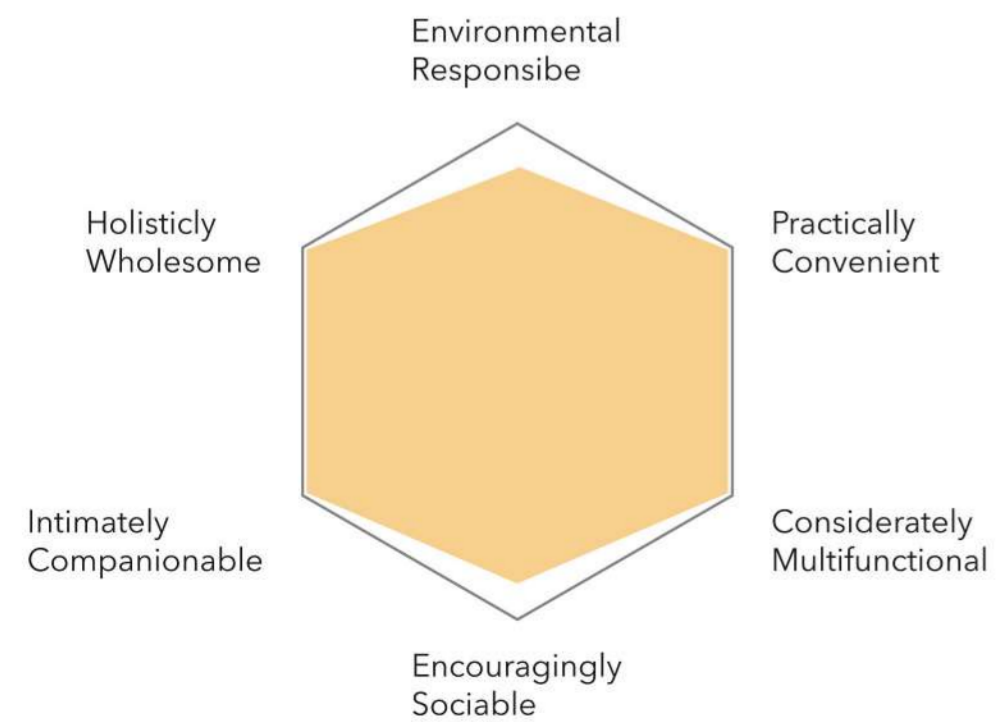
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

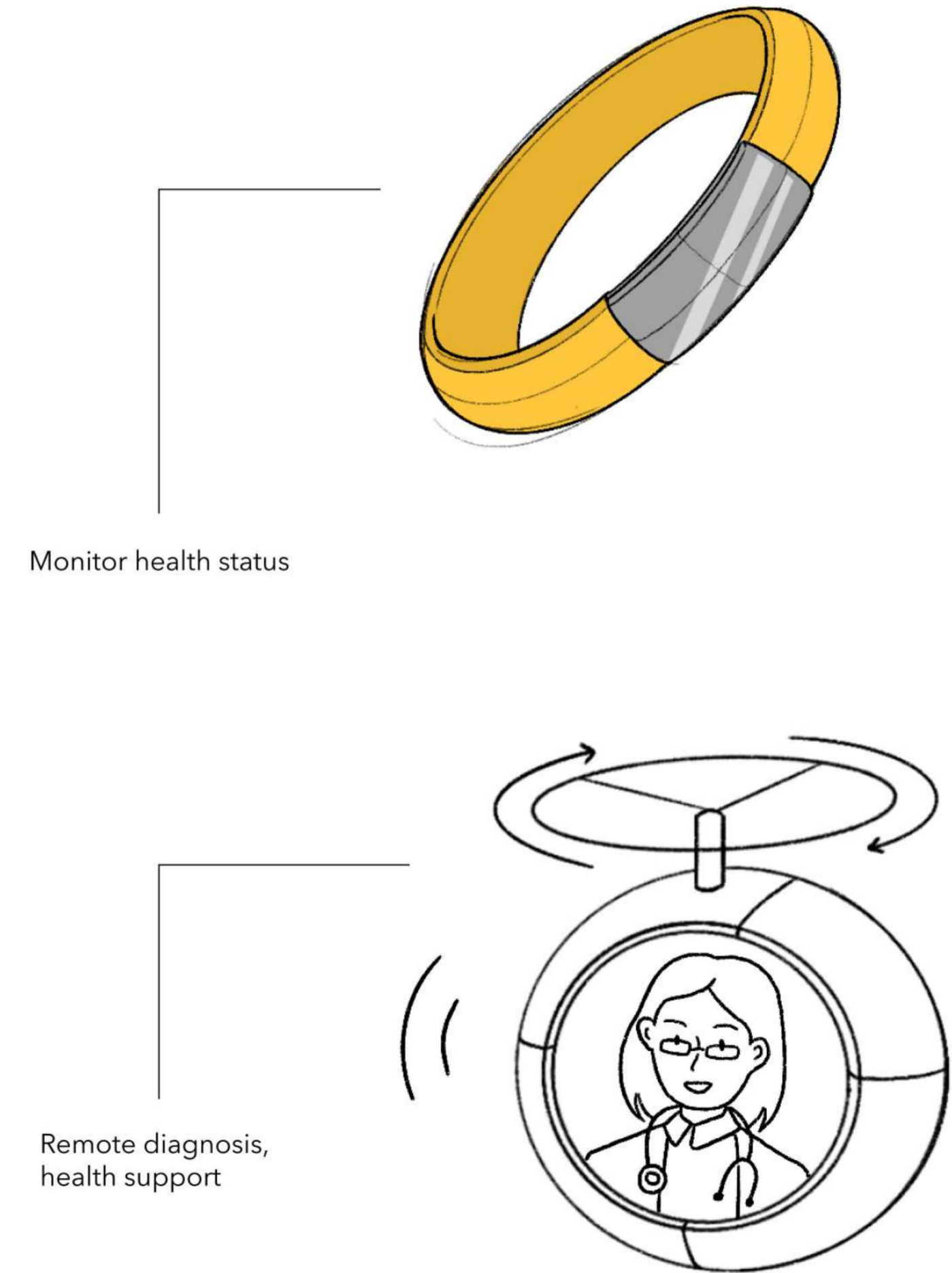
Roadmap



Brand Attributes Radar Chart



Plan daily healthy meals, cost and nearest store for grocery purchases



Healthy Routine System

Fiskars offers products to help digital nomads build a healthy routine. The meditation tool helps with obtaining stillness and boosting productivity. The planning tool helps build healthy habits for travel, diet, sleep, and exercise. The robot helps maintain long-term relationships with new & old friends. This system will enable digital nomads to achieve a work-life balance.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

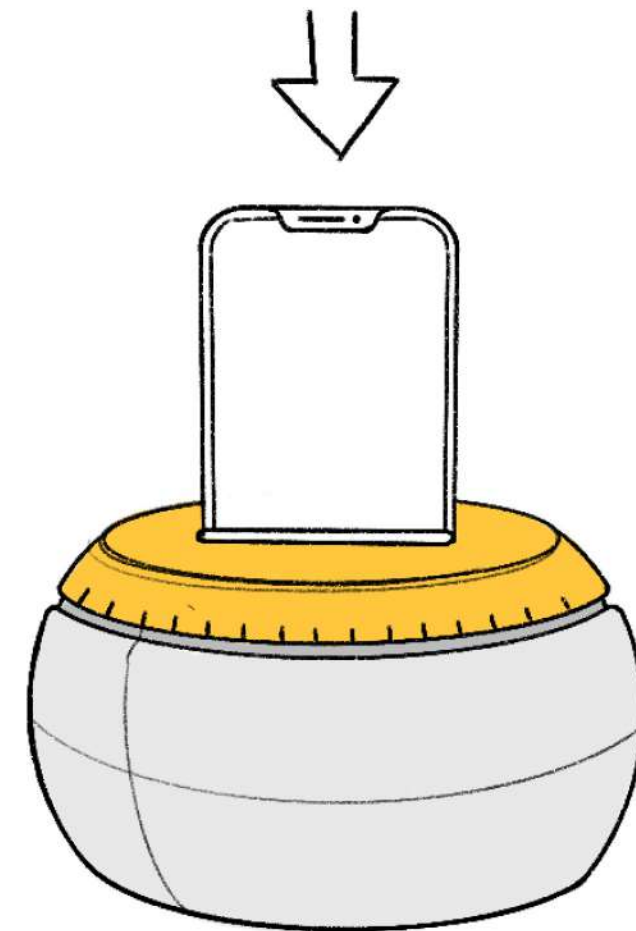
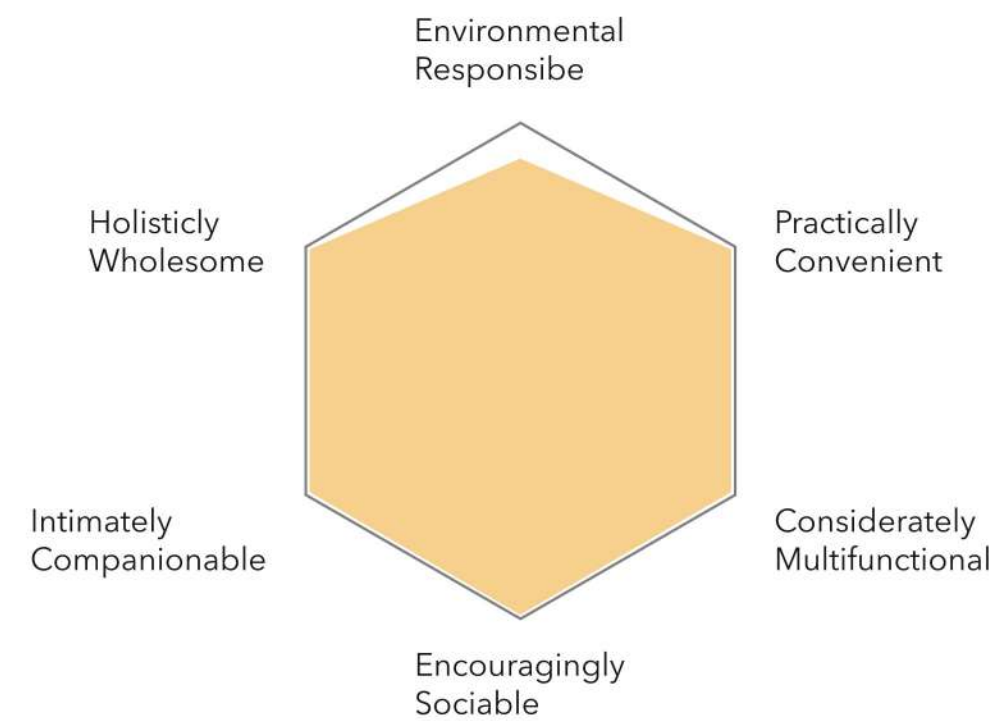
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

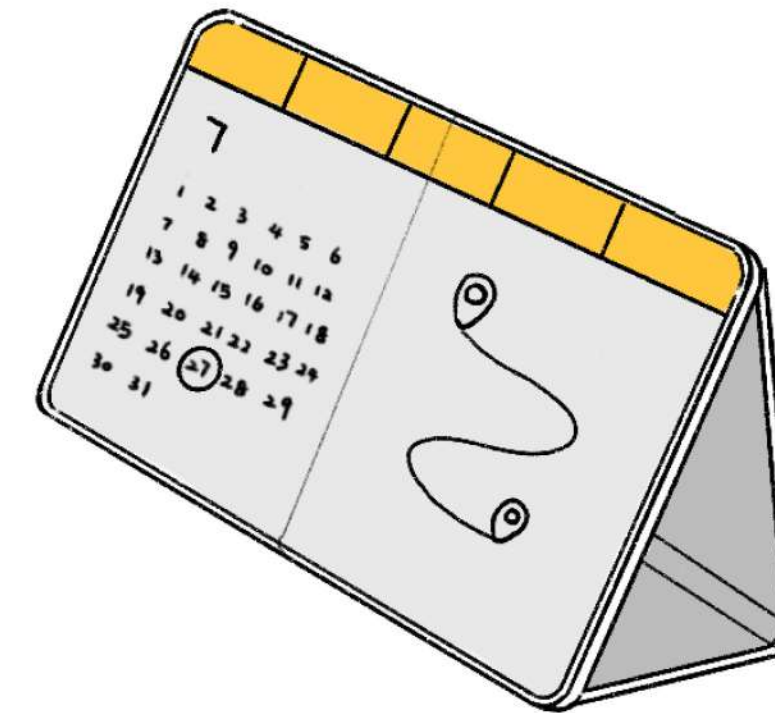
Roadmap



Brand Attributes Radar Chart



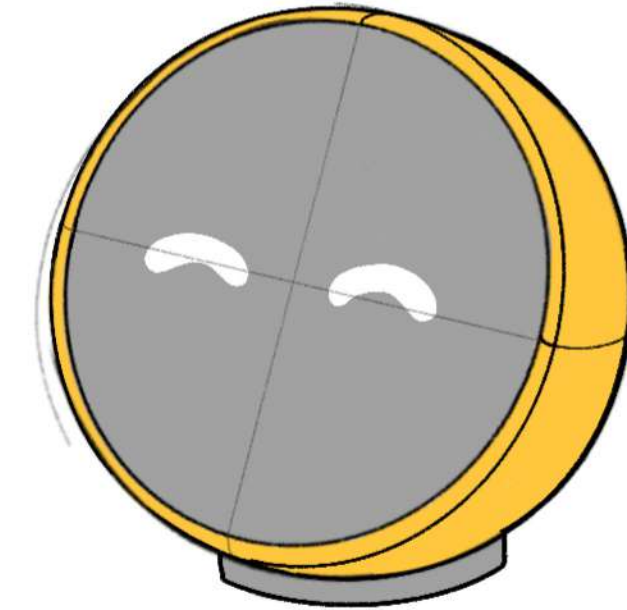
Mindfulness (stay away from temptation, boost productivity)



Planing ahead
 Make plans for travel, meals, sleep, and exercise
 Develop core habits that work anywhere in the world
 Feel that life is under control



Obtain stillness, reduce travel fatigue



Companion Interactive Robot
 Promote social interactive
 Build long-term relationships with new & old friends

Meal Planning Plate

Fiskars offers a smart plate that can plan daily healthy meals. The projector on the plate will show the virtual image of the ingredients. The plate can scale the weight of each ingredient. By following the instruction, users will achieve a healthy diet every day.

Consumer Archetype

Digital Nomad

Hurried Homemaker / Indoor Gardener / Disabled Chef

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

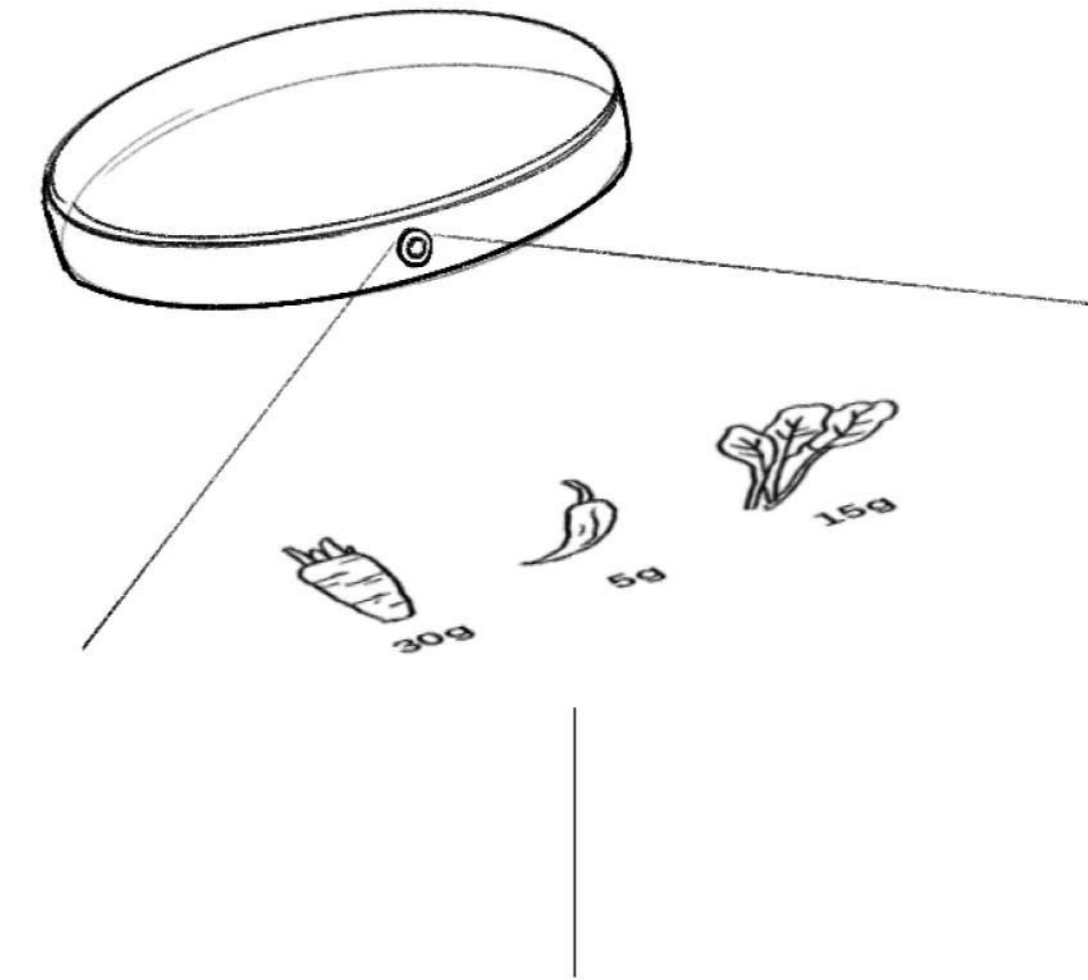
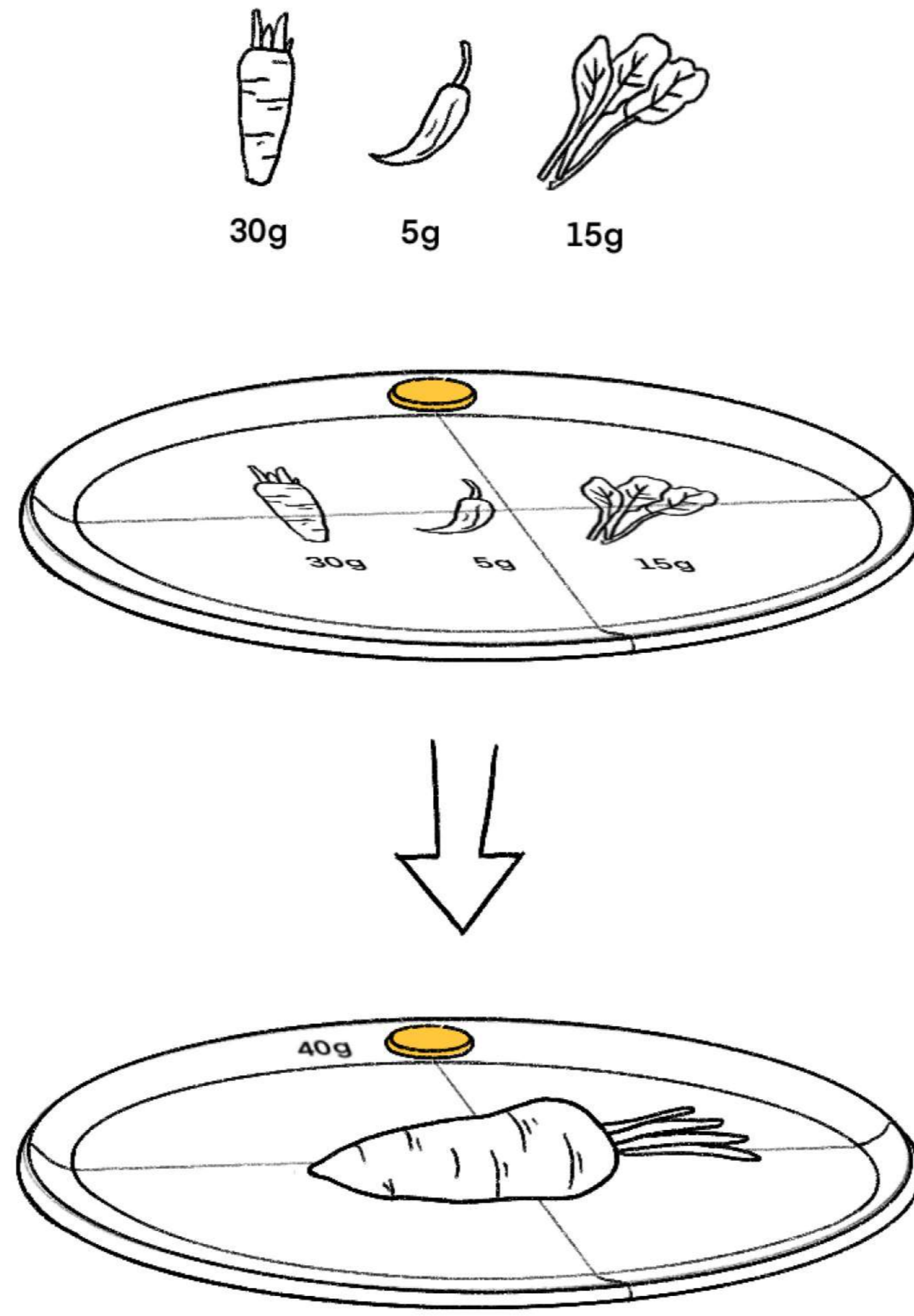
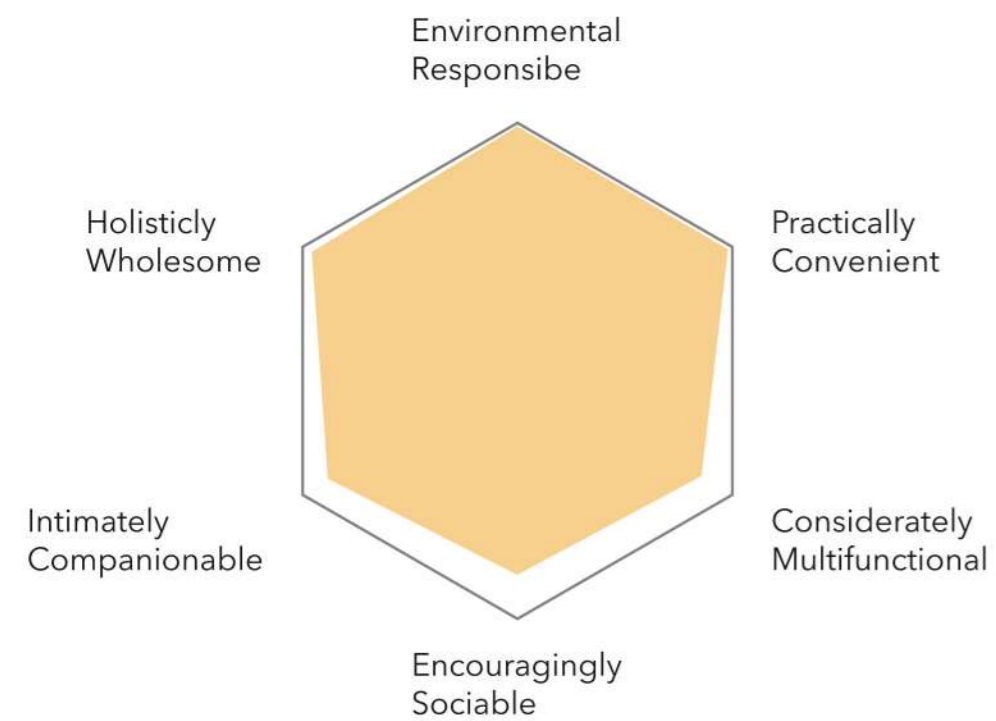
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



The projector shows the meal plan on the plate.

Scale the weight of the ingredients.

Light Therapy Eye Mask

Fiskars offers a light therapy eye mask that benefits health in several conditions. The Jet lag mode helps users reduce travel fatigue by simulating natural light according to the time zone change. The sleep mode enables users to moderate the harmful effects of blue light from working the whole day and have high-quality sleep.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

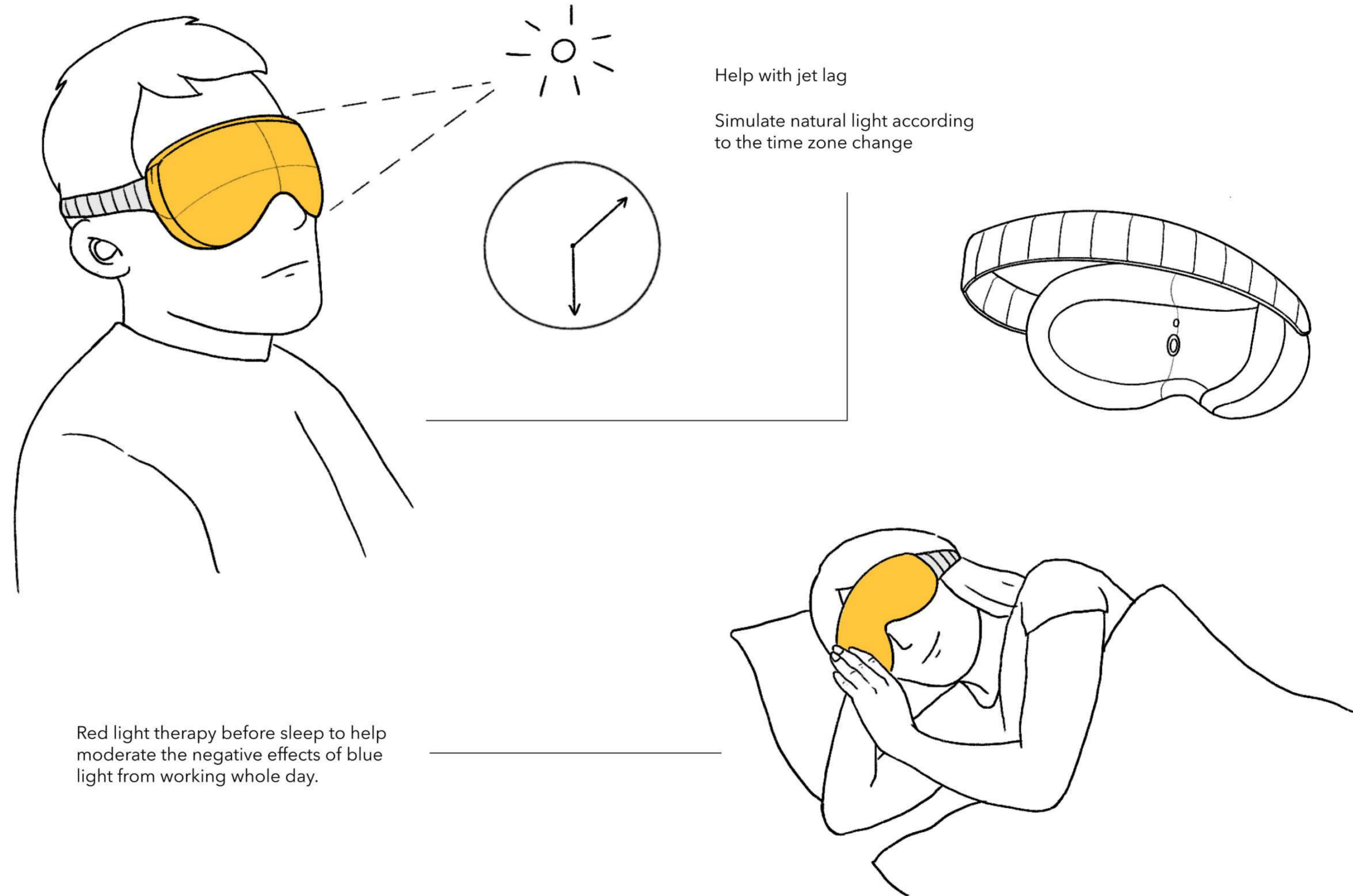
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



Language Learning

Fiskars offers a product that helps users learn a new language effectively in a fun way through singing. The microphone will record the misspelled word and help users correct the pronunciation. The portable size enables users to learn a new language anywhere.

Consumer Archetype

Digital Nomad

Hurried Homemaker / Disabled Chef / Morden Glamper

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

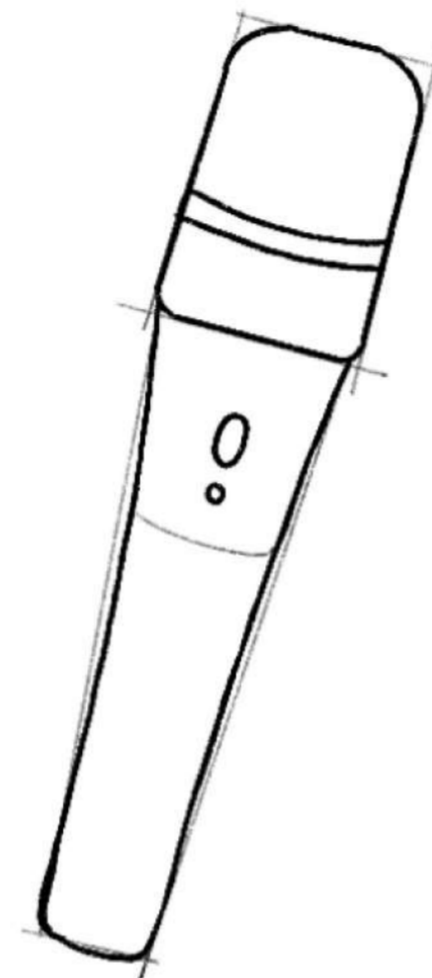
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap

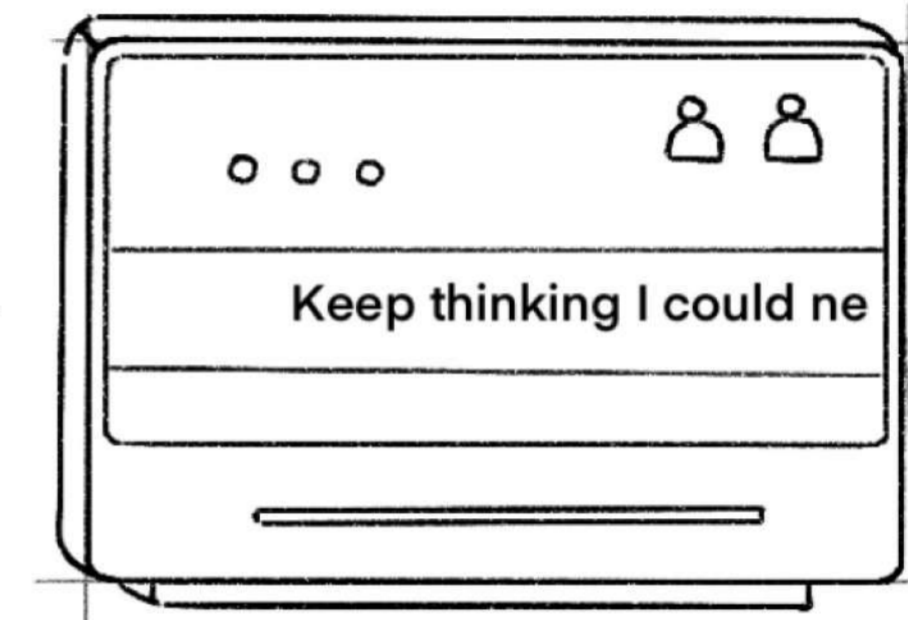


Brand Attributes Radar Chart

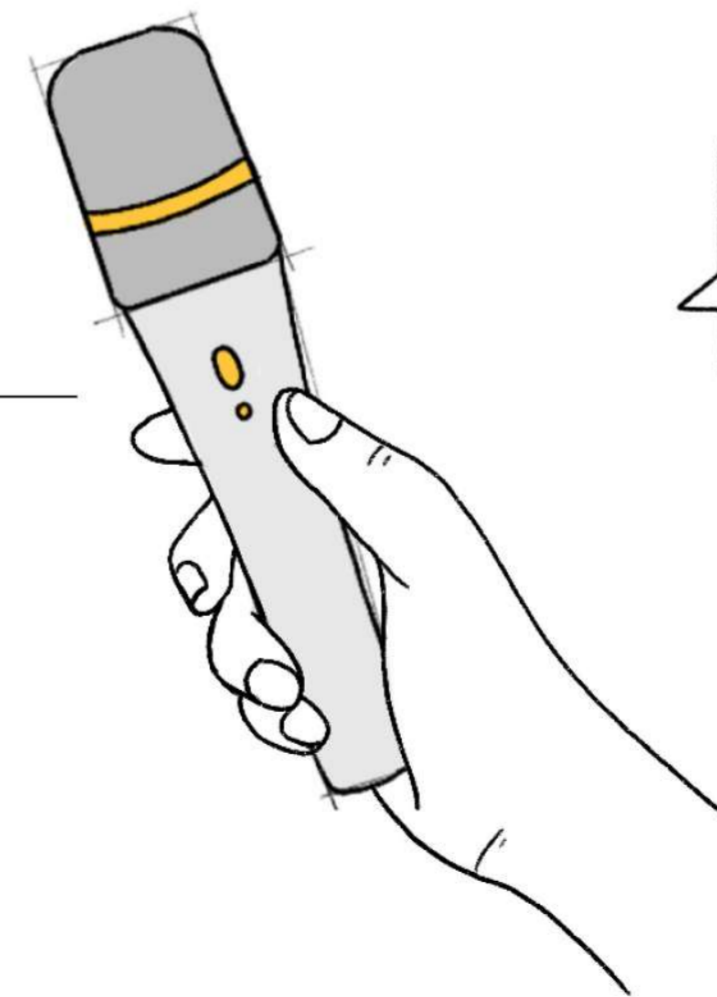


Learning a new language effectively through singing

Match other learners and learn the language together



Record the misspelled word, help correct mispronunciations



RV Aquaponic System

Fiskars offers an aquaponic system for RVs that allows users to grow vegetables and herbs in the RV. The aquarium adds a natural touch to the RV and provides food for the plants. With this aquaponic system, users can achieve a sustainable life.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

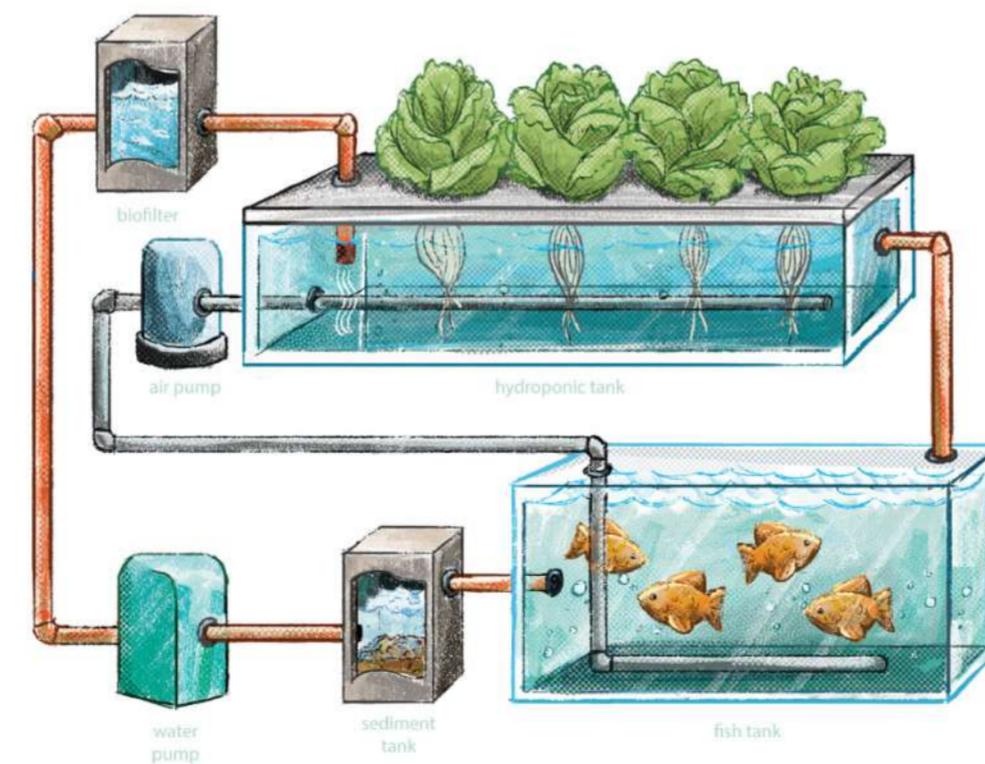
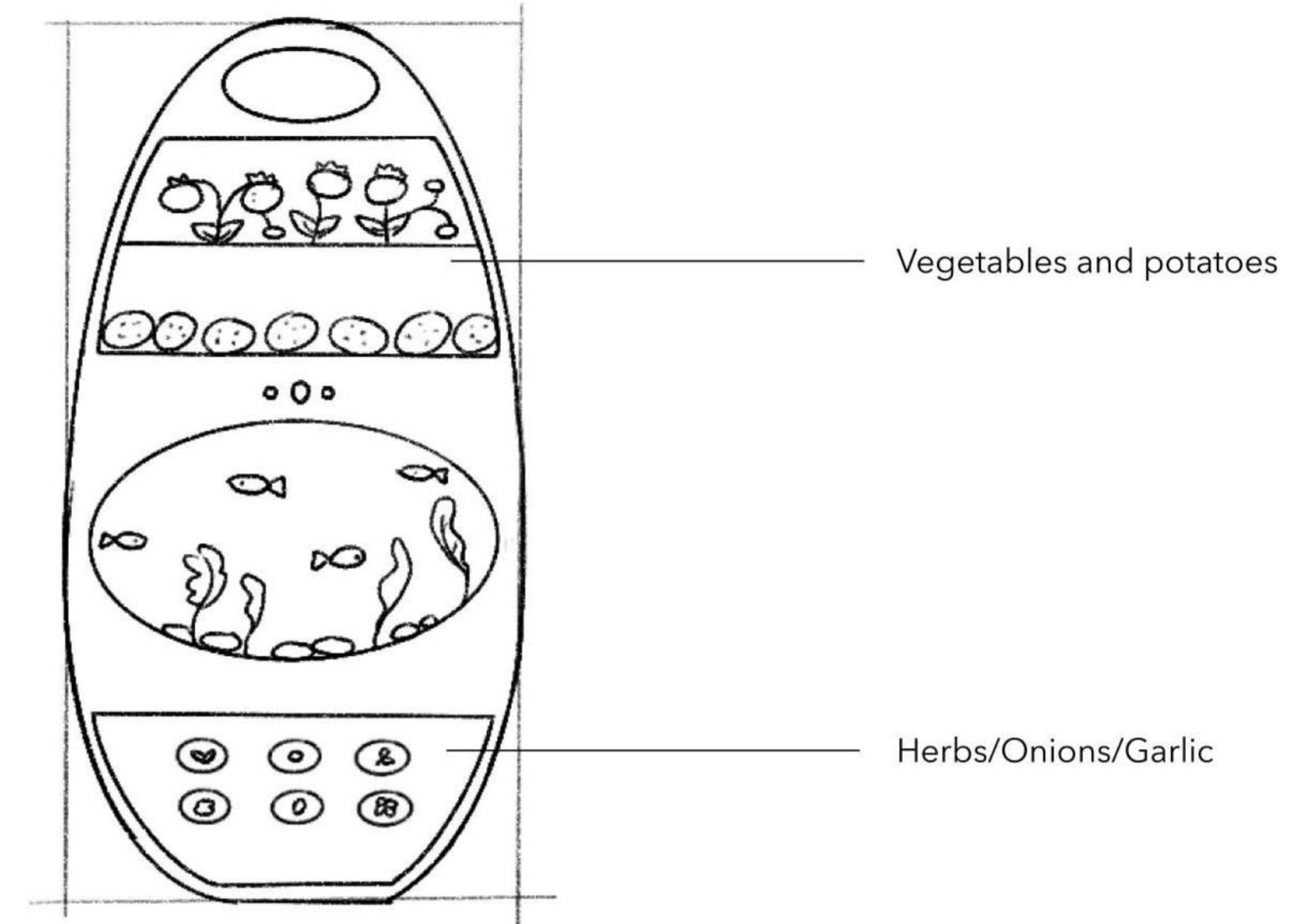
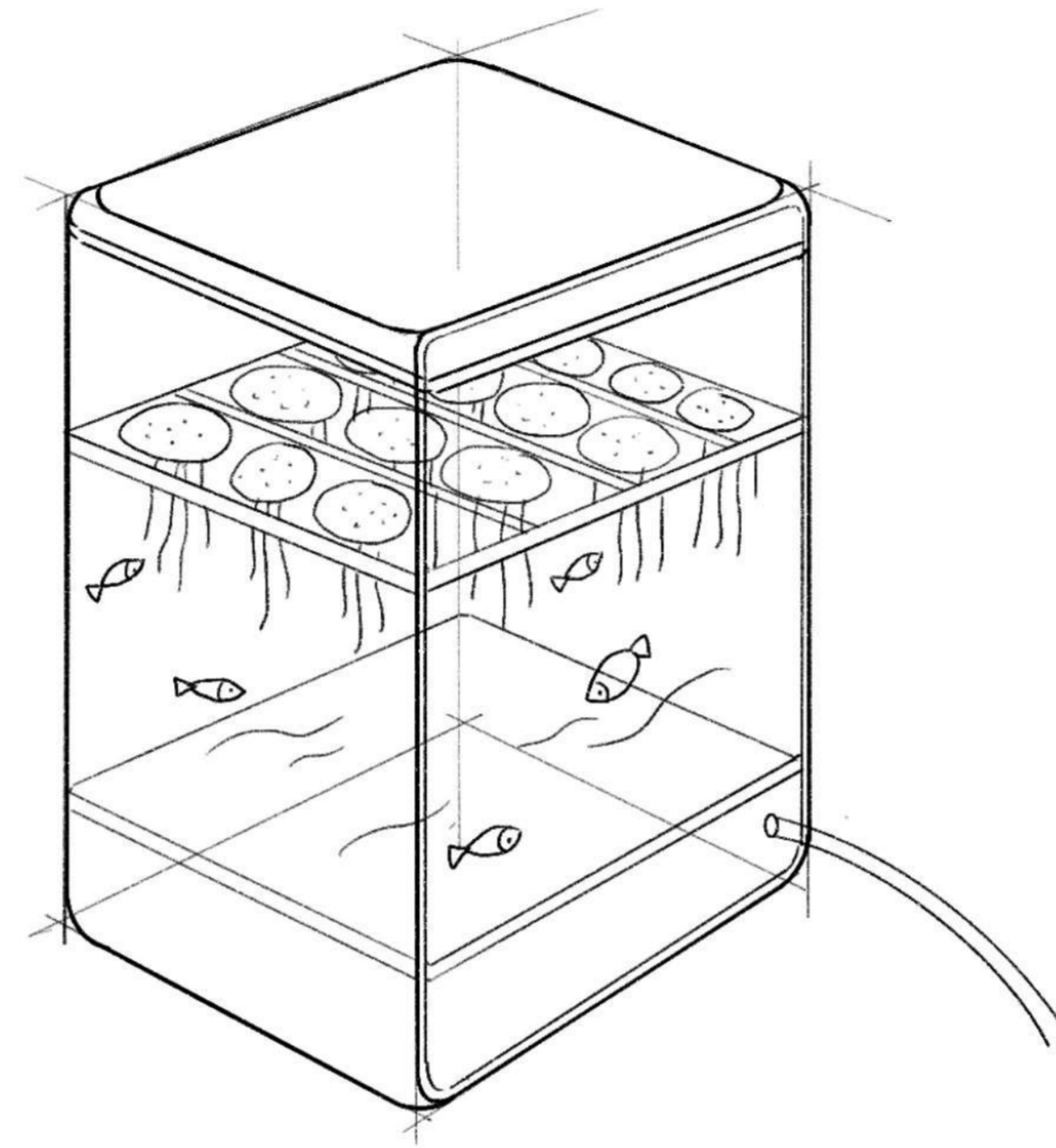
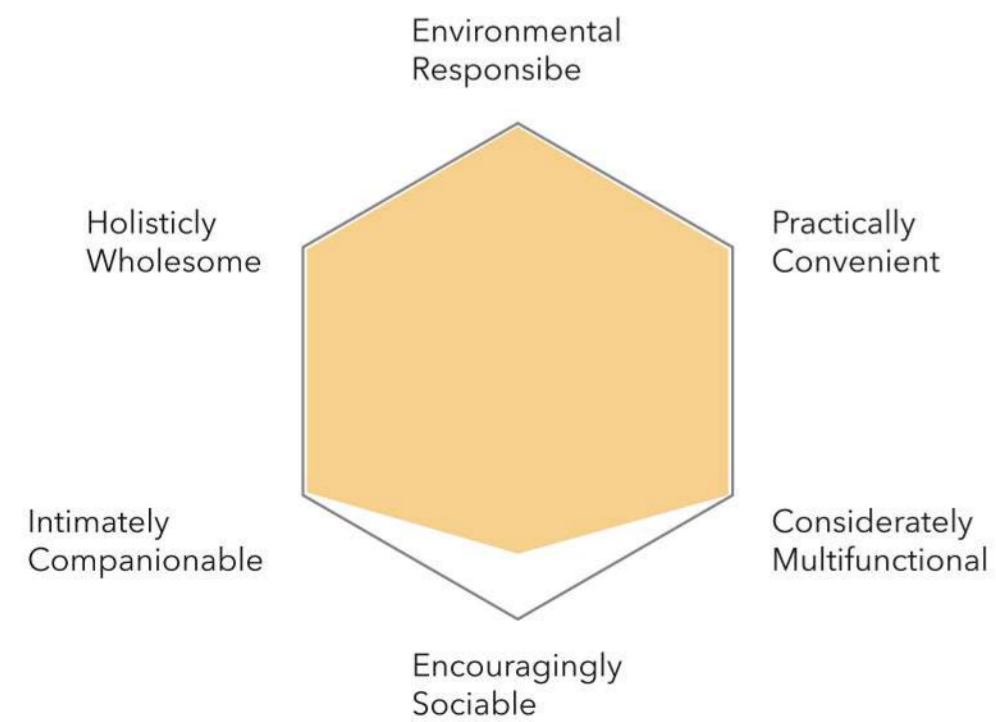
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

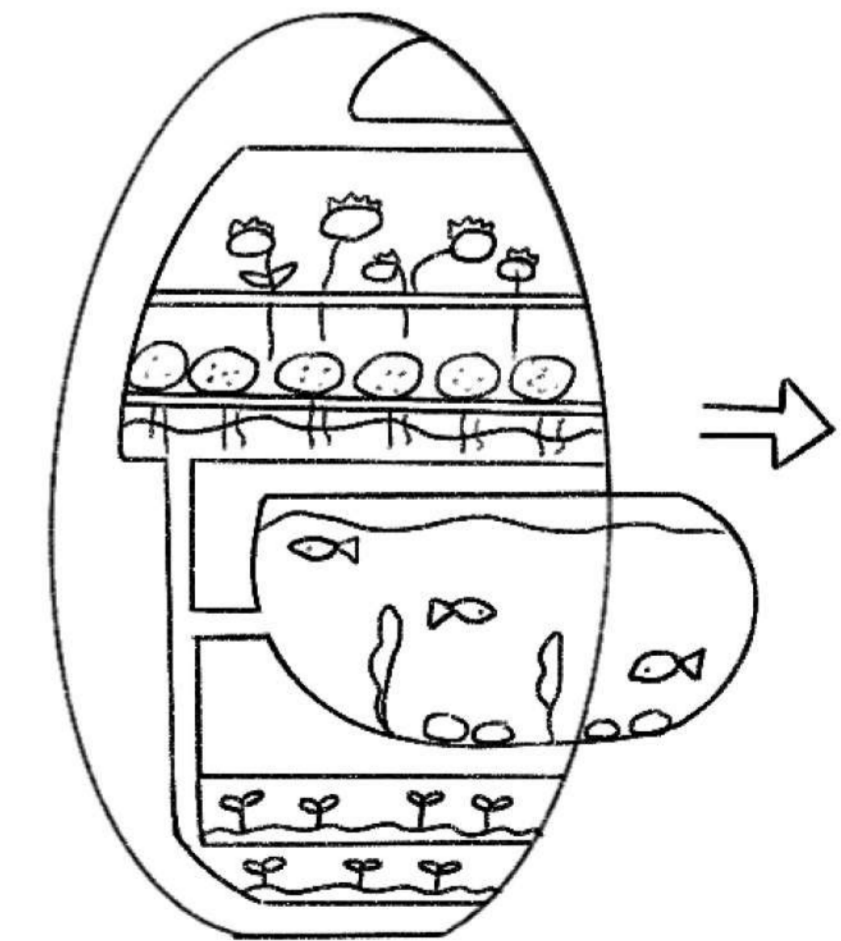
Roadmap



Brand Attributes Radar Chart



Closed-loop aquaponic system



Aquaponic AR Glass

Fiskars offers an aquaponic AR glass that can detect the illness of plants and fish and provide professional solutions.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

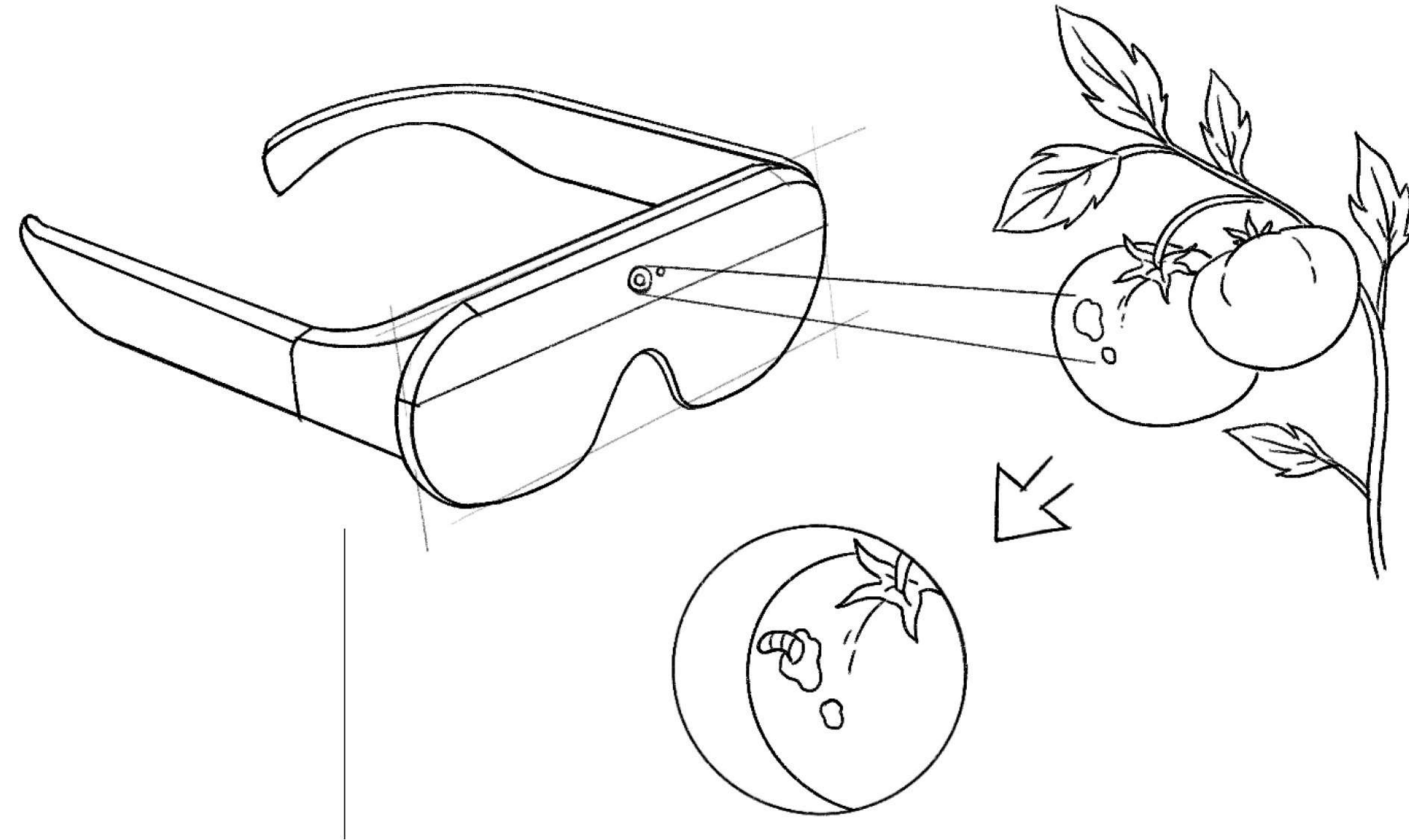
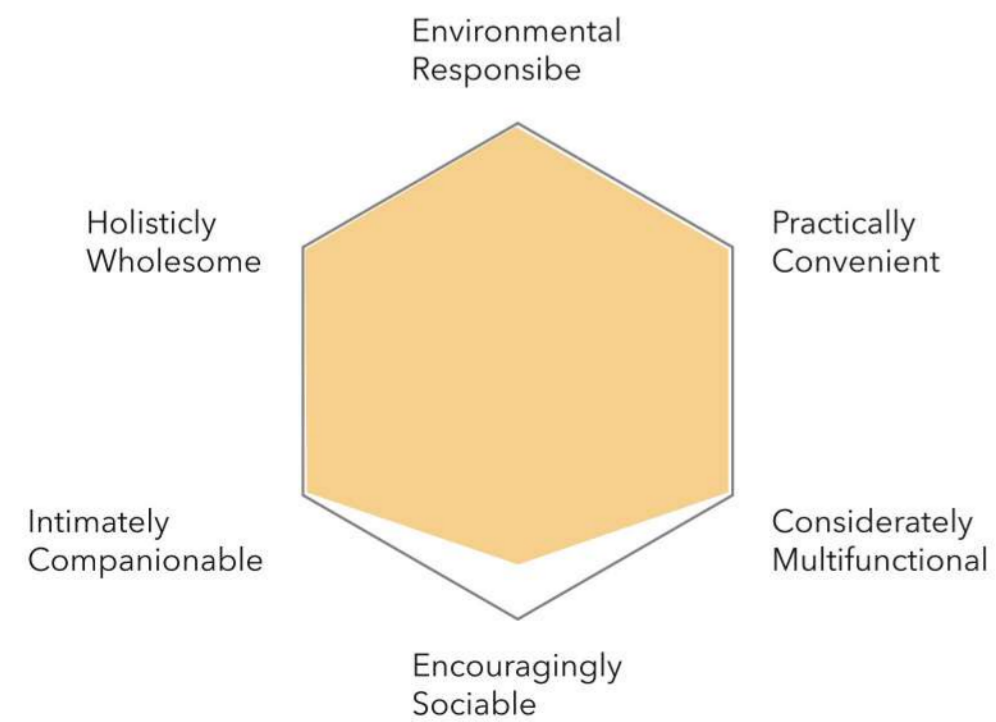
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

Roadmap



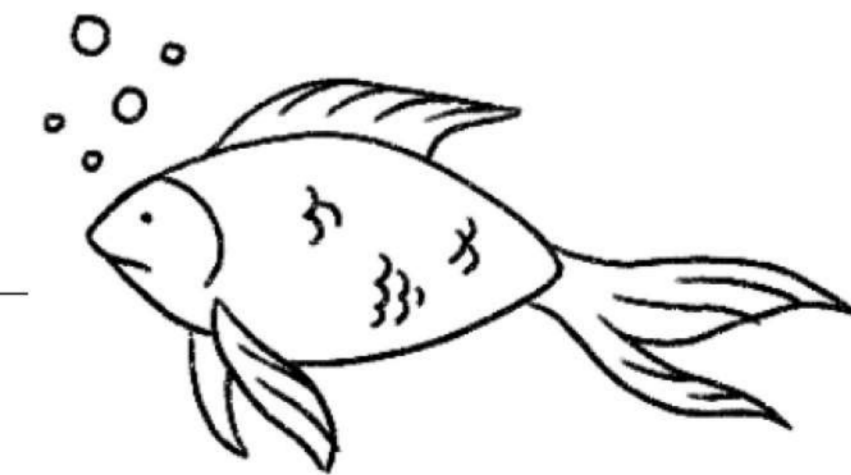
Brand Attributes Radar Chart



Detect riprieness and disease.



Detect whether fish is ill through the behavior



Food Swap

Fiskars offers a platform that allows users of the aquaponic garden to swap their vegetables, communicate, and share their growing experiences, which helps build friendships and encourage social interaction.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

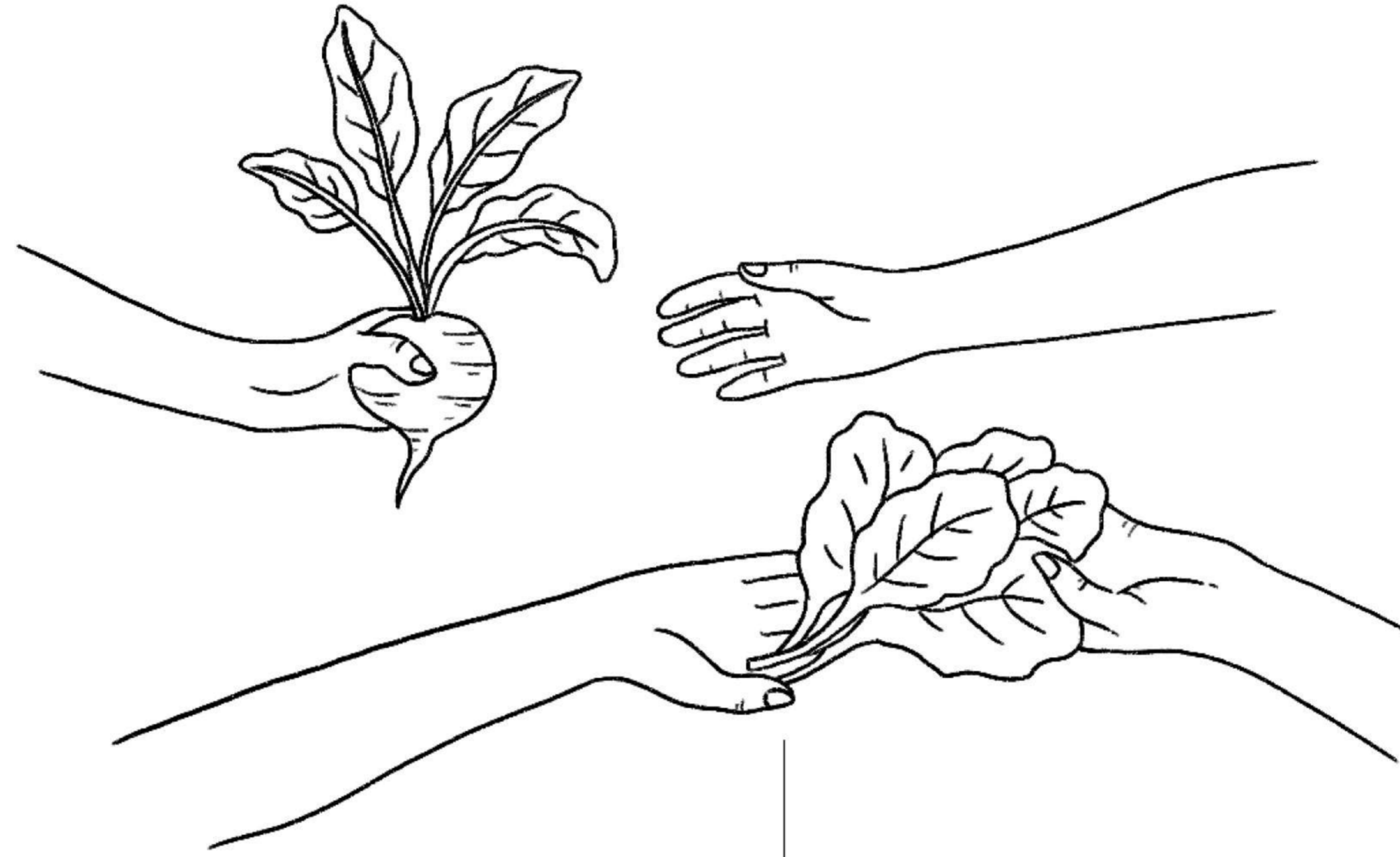
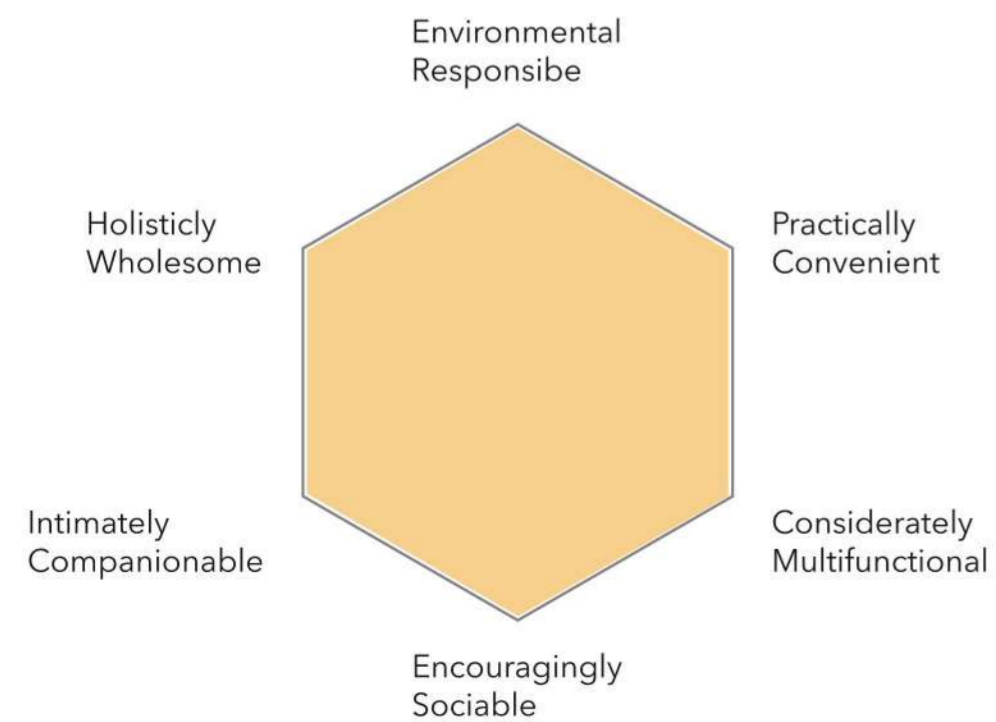
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap

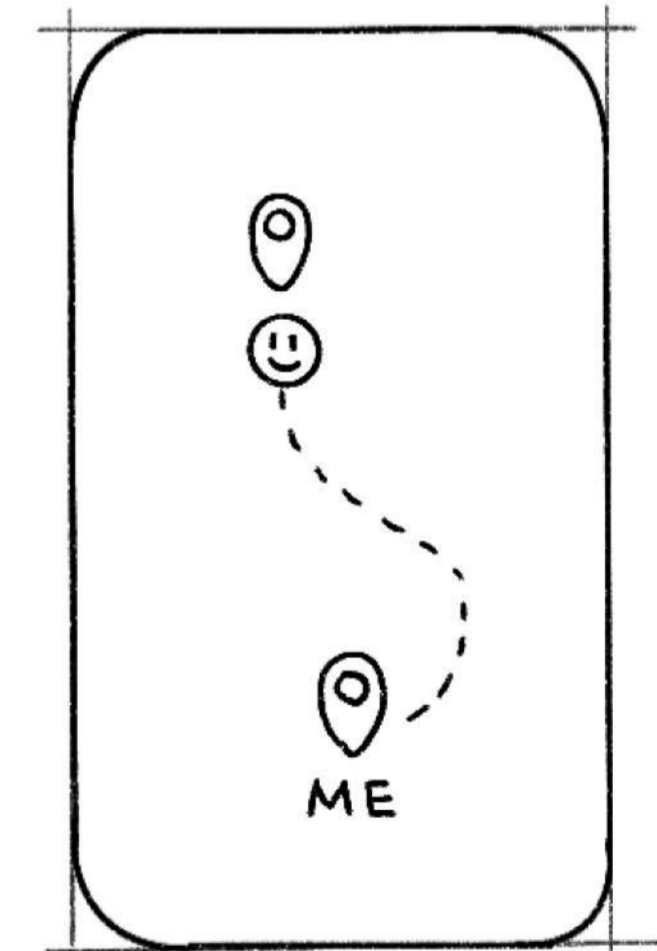
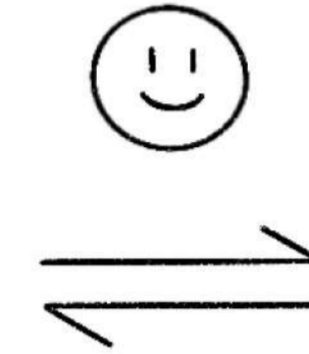


Brand Attributes Radar Chart



Food Swap
(Swap your own plants with each other)

An APP is linked with the Aquaponic System. People can see the nearby users, communicate the growing experiences, and swap foods.



RV Garden Glass

Fiskars offers smart glasses for your RV garden. It pairs the local ingredients with foods you have grown to provide healthy recipe suggestions while purchasing food. It also offers growing tips about the plants you see while traveling around.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

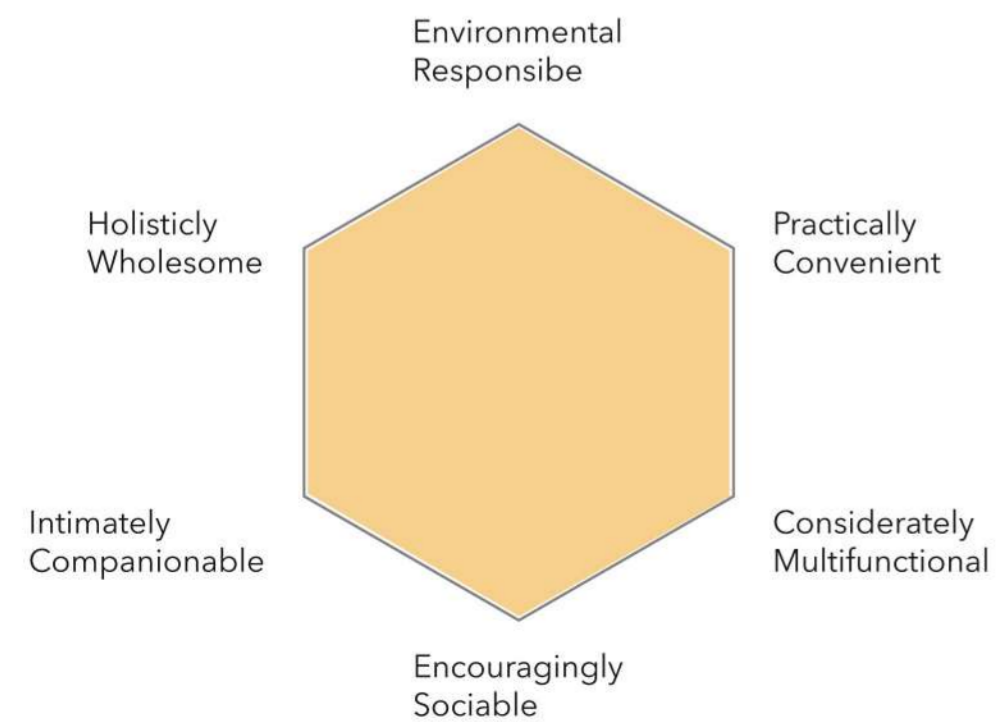
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

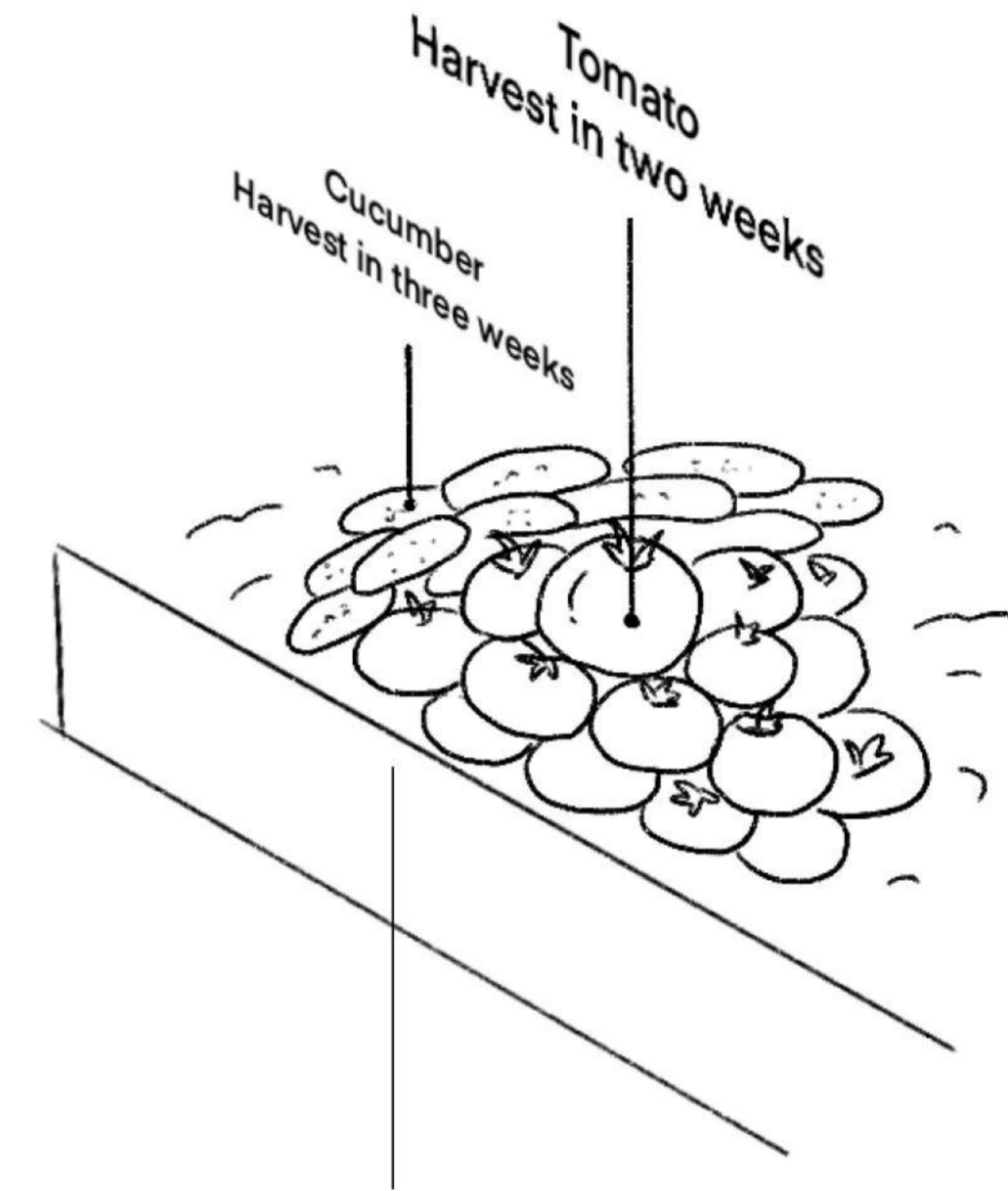
Roadmap



Brand Attributes Radar Chart

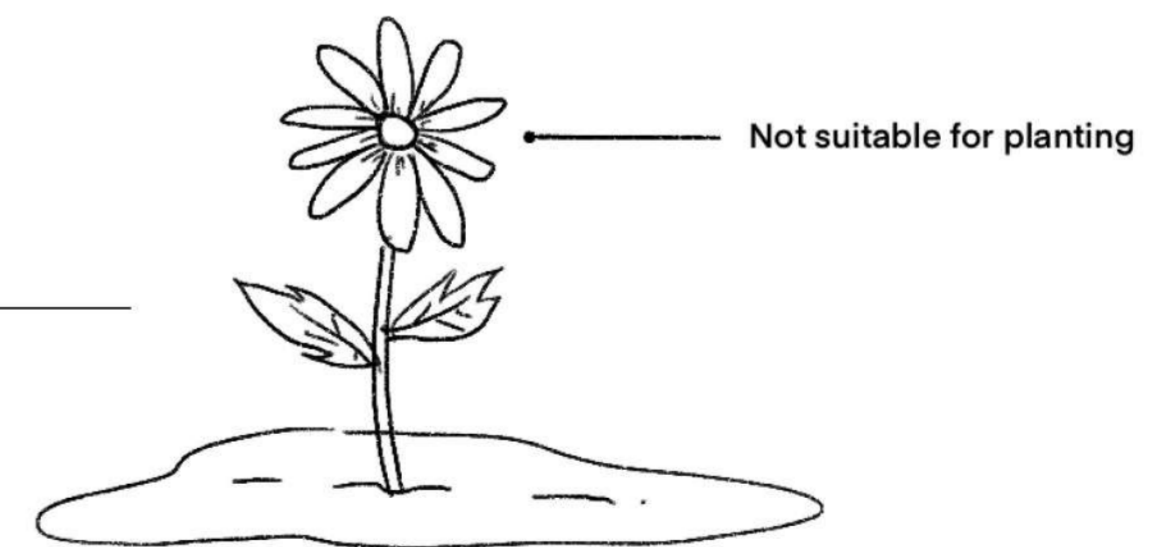


Pair the local ingredients with your vegetables from the RV garden, and provide suggestions on the recipe.



Shows the growing time of the ingredients for your RV garden.

Teach you the knowledge and growing suggestions about the plants you see while traveling around.



Grow Your Own Meat

Fiskars offers a meat maker that allows users to grow the meat. There are different types of stem cell capsules stored in a machine. The users can conveniently grow the meat by putting the meat capsules into the petri dish.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

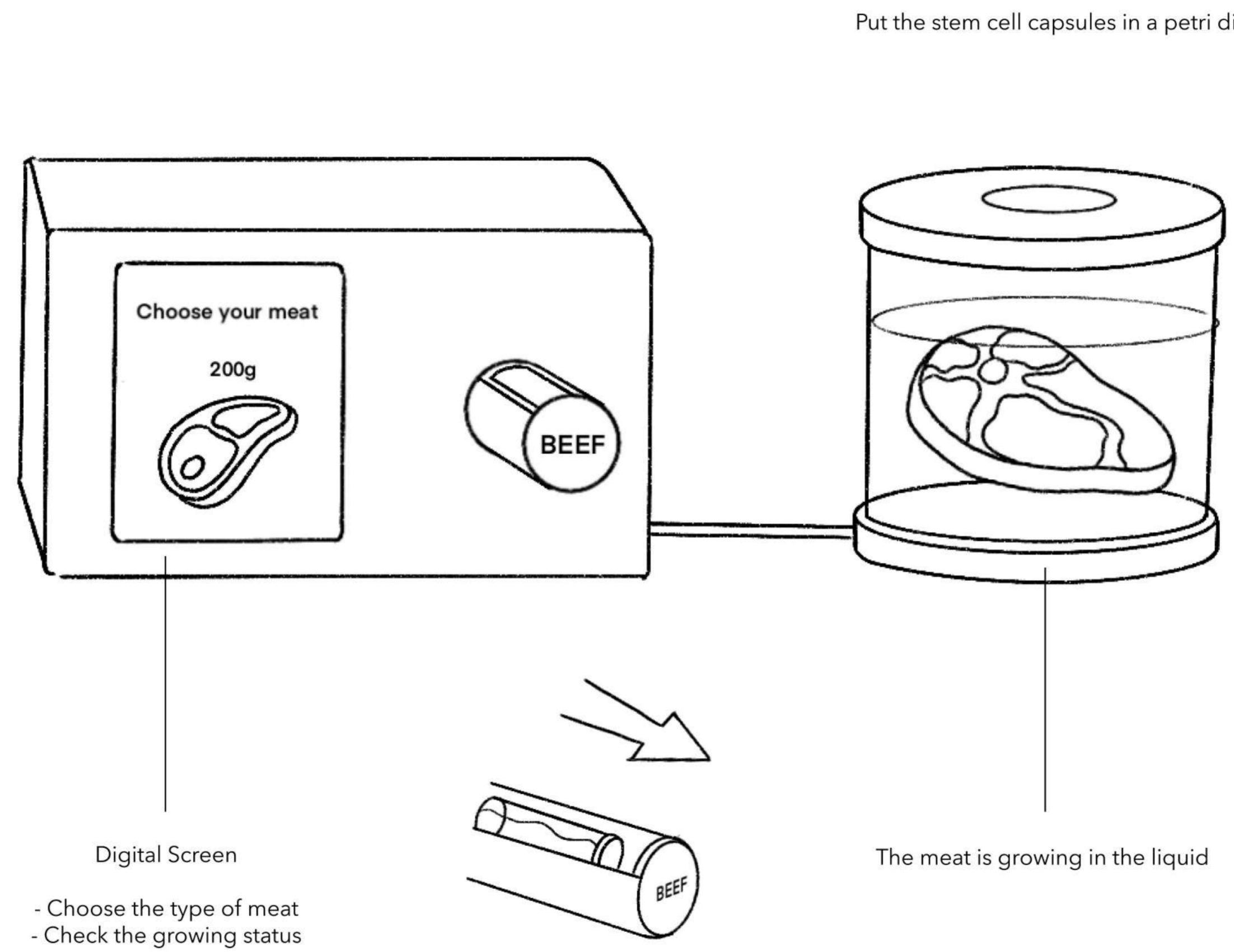
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

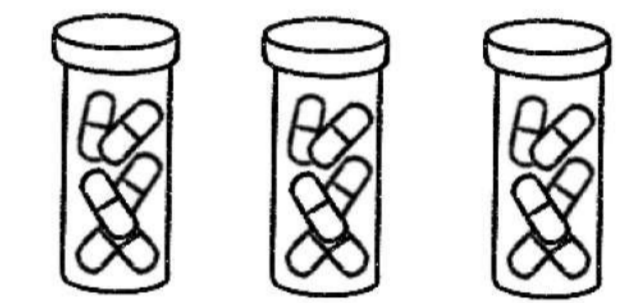
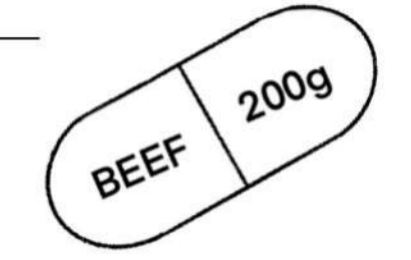
Roadmap



Brand Attributes Radar Chart



Put the stem cell capsules in a petri dish



Stem cell capsules



Bioprinting Meat

Fiskars offers a bioprinter that enables users to print the meat to eat. The users will use the control pad to operate the bioprinter. After selecting the type of meat and weight, the meat cell inks will automatically transfer into the bioprinter and print the meat.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

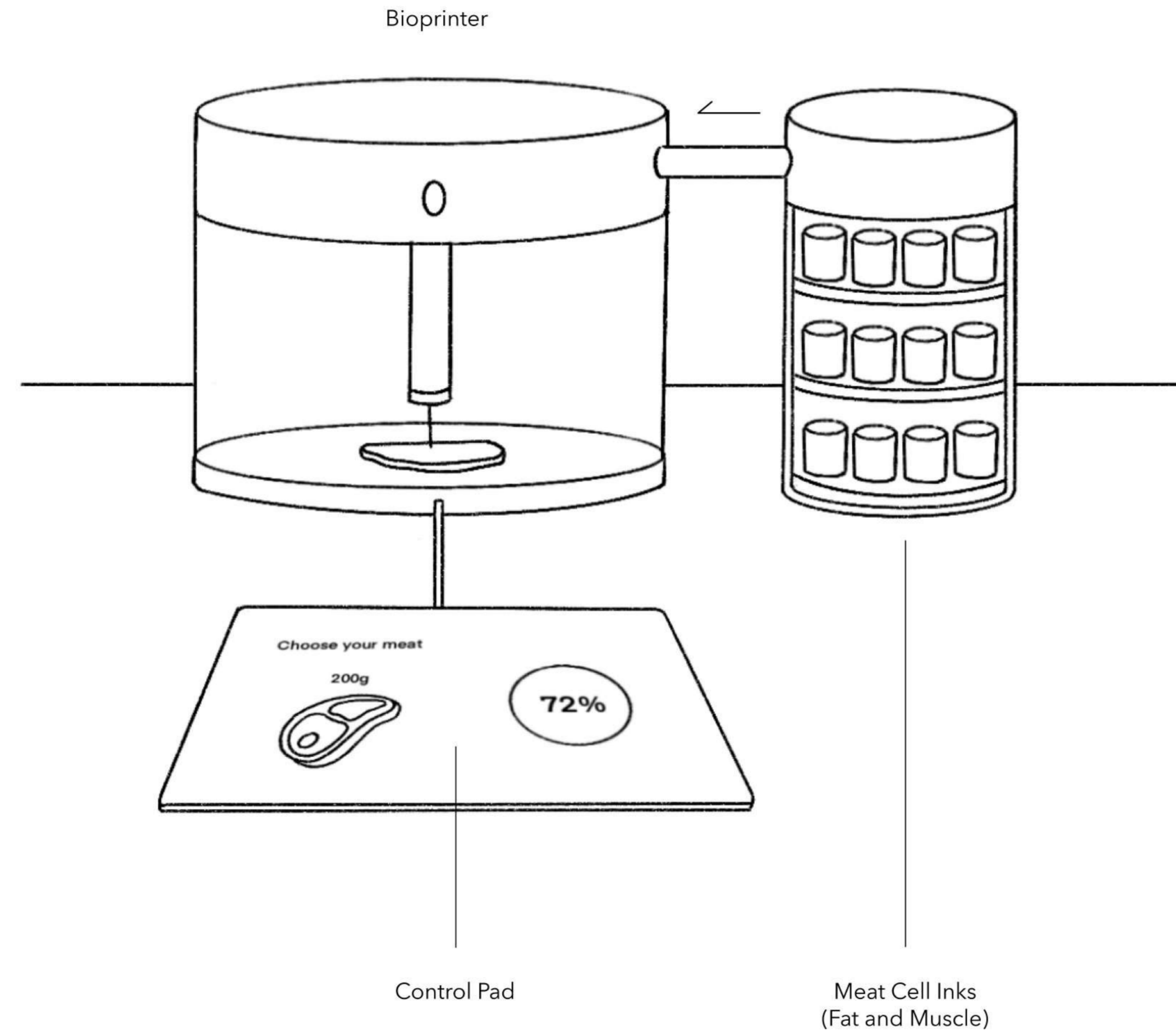
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

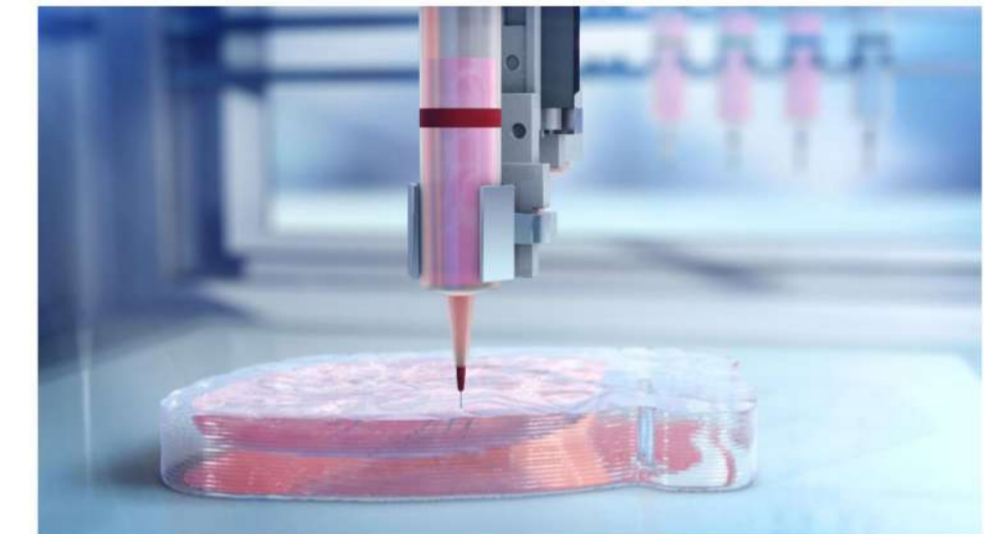
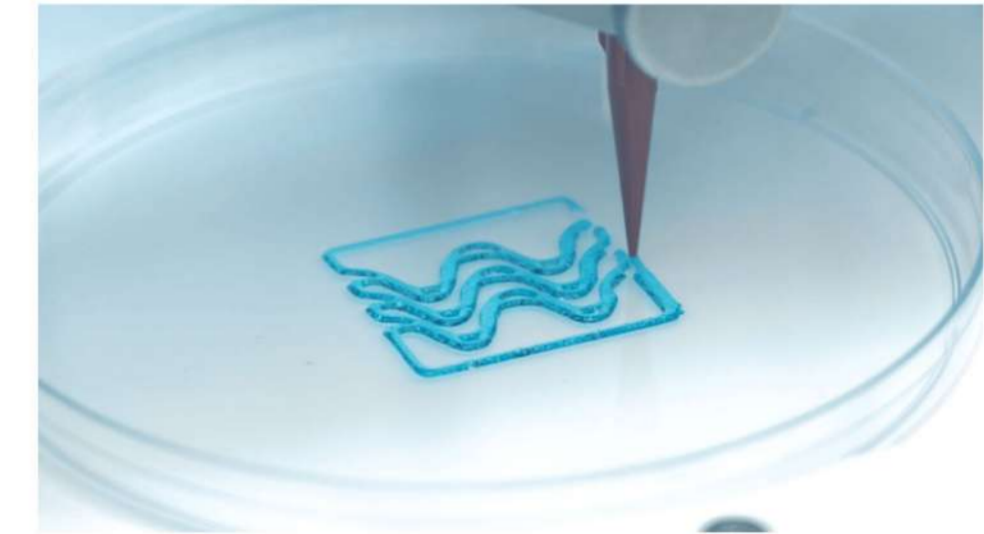
Roadmap



Brand Attributes Radar Chart



Bioinks



Vacuum Storage Garden

Fiskars offers a garden that can grow and prolong the freshness of foods by vacuum sealing. The garden can also collect the water that evaporates from the vegetables to be reused.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

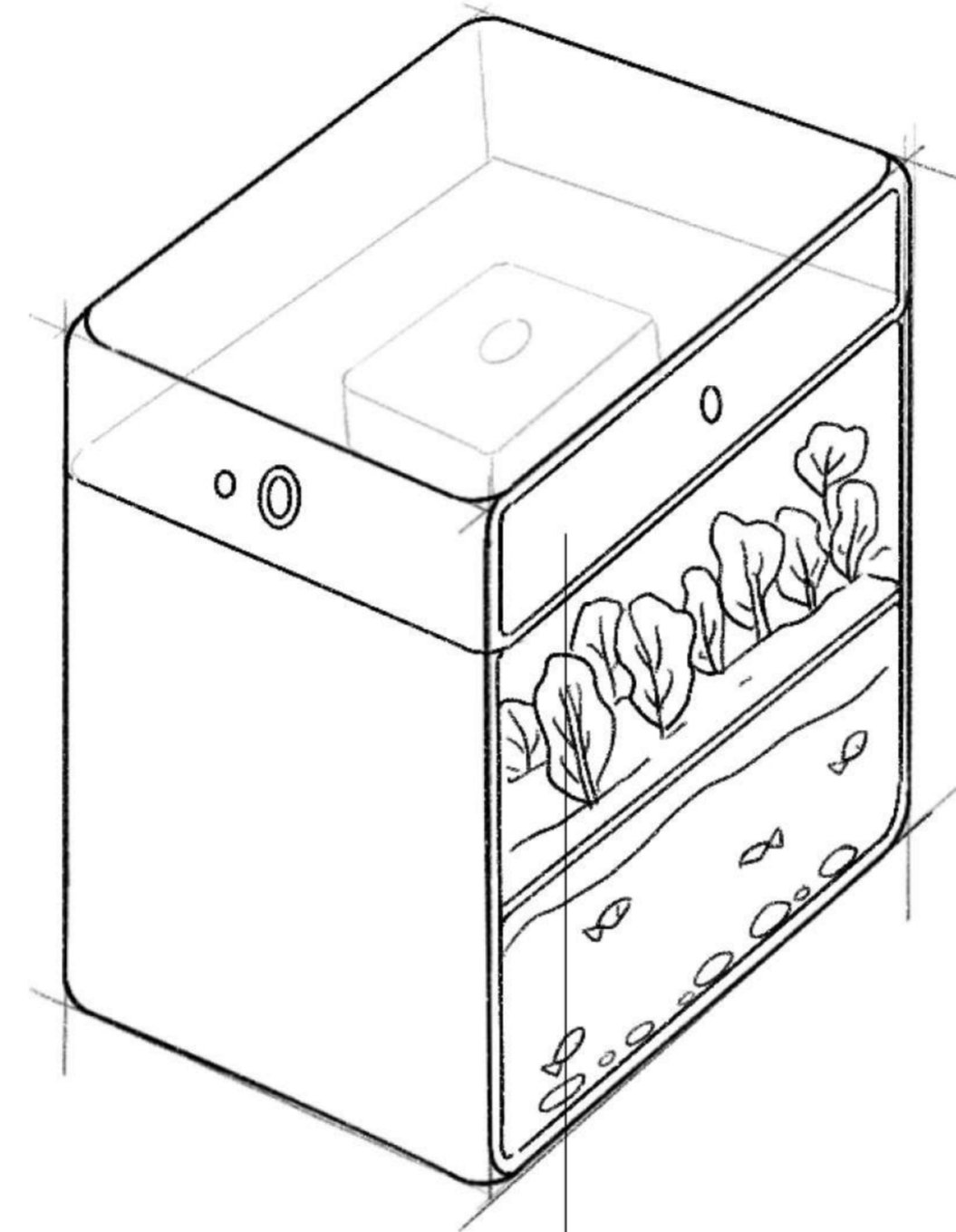
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

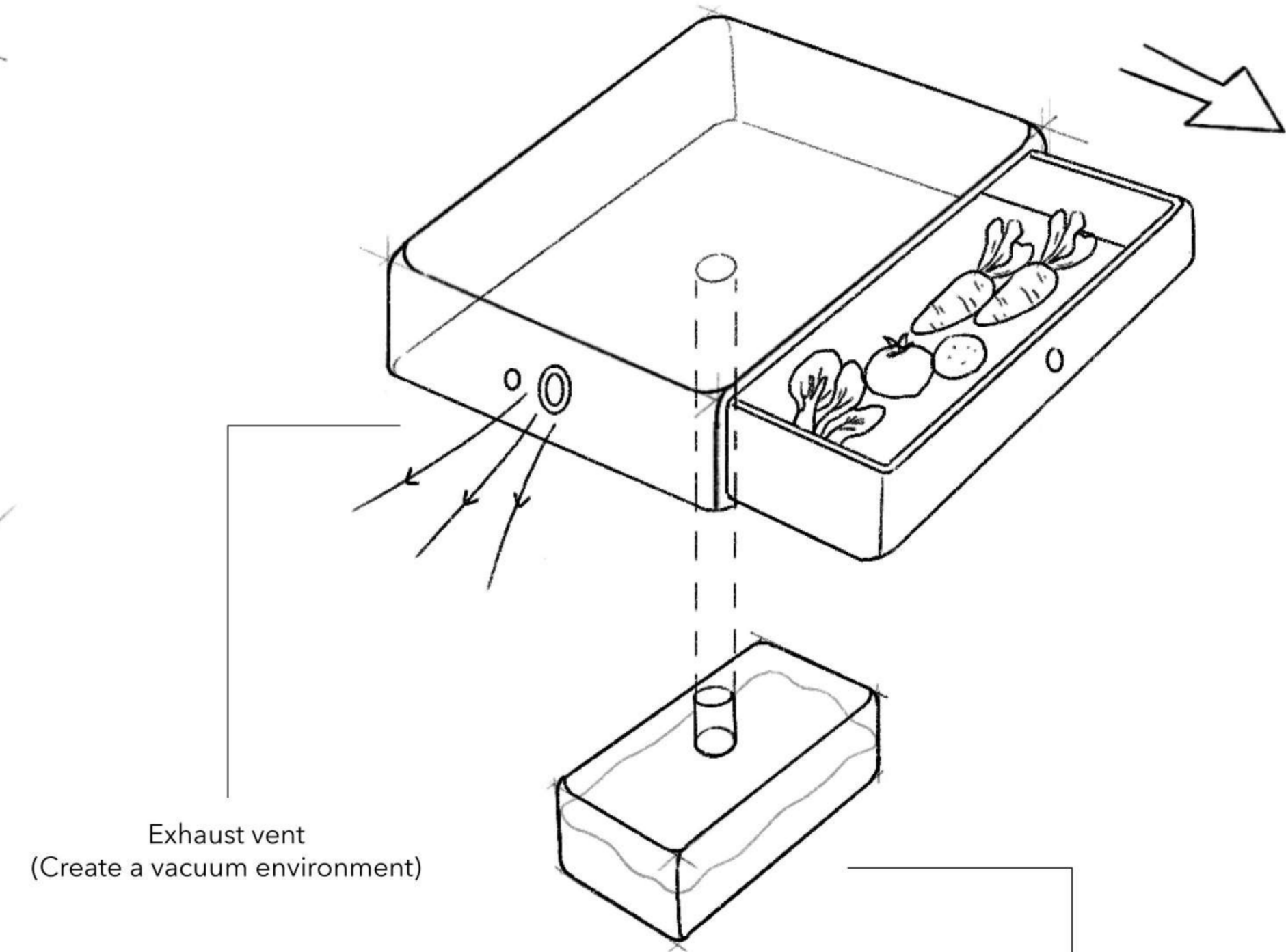
Roadmap



Brand Attributes Radar Chart



Store mature food



Exhaust vent (Create a vacuum environment)

Water collecting tank

Food Storage Garden

Fiskars offers an RV garden that can store foods by creating a cool environment through transpiration, saving space and power for van traveler.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

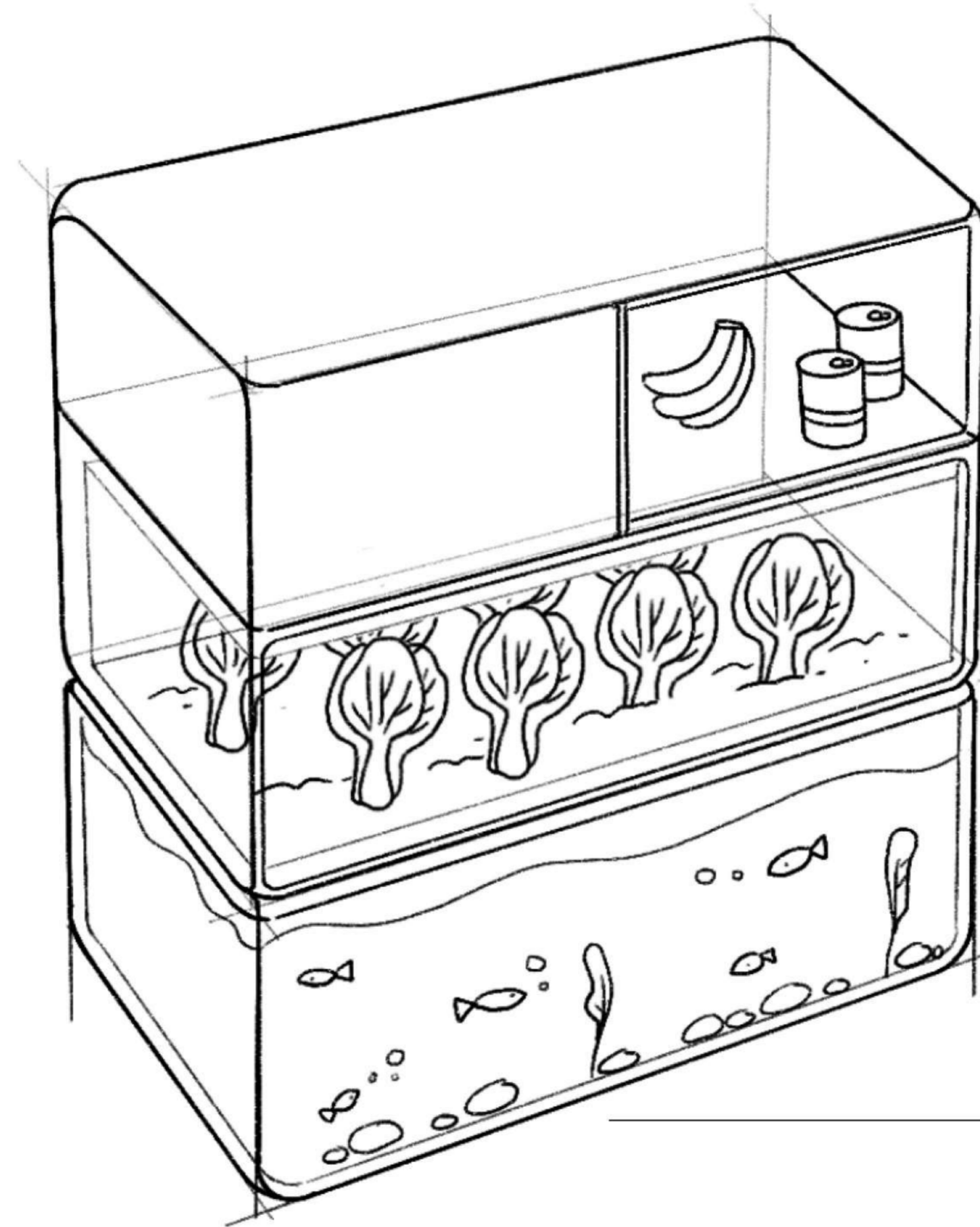
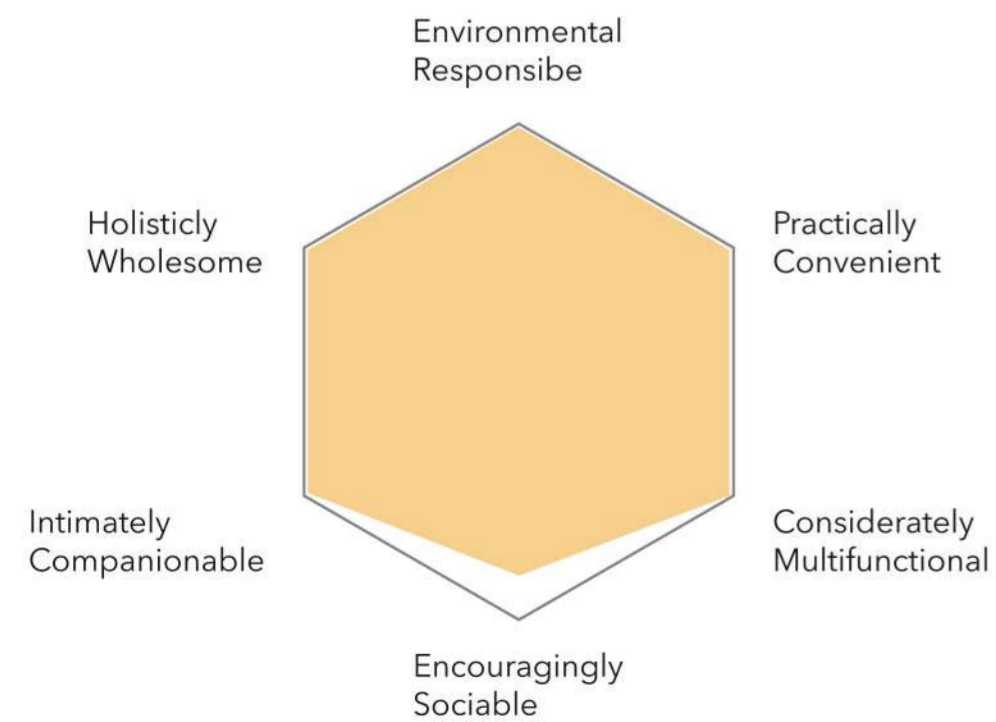
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



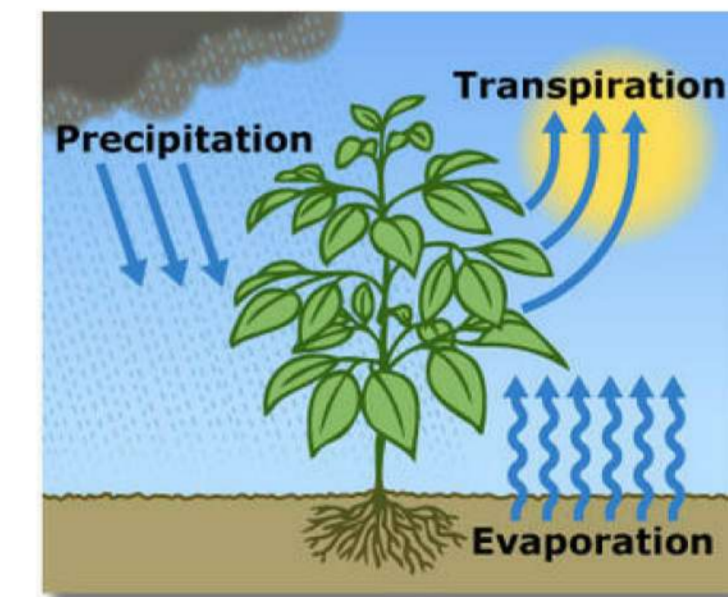
Brand Attributes Radar Chart



— Create a cold environment to store food



— Plants can cool their surroundings through transpiration by releasing moisture into the air



— Provide food for plants

Micro Coffee Garden

Fiskars offers a micro coffee garden that lets users make coffee and grow plants simultaneously. The used coffee ground will automatically fertilize the microgreens.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

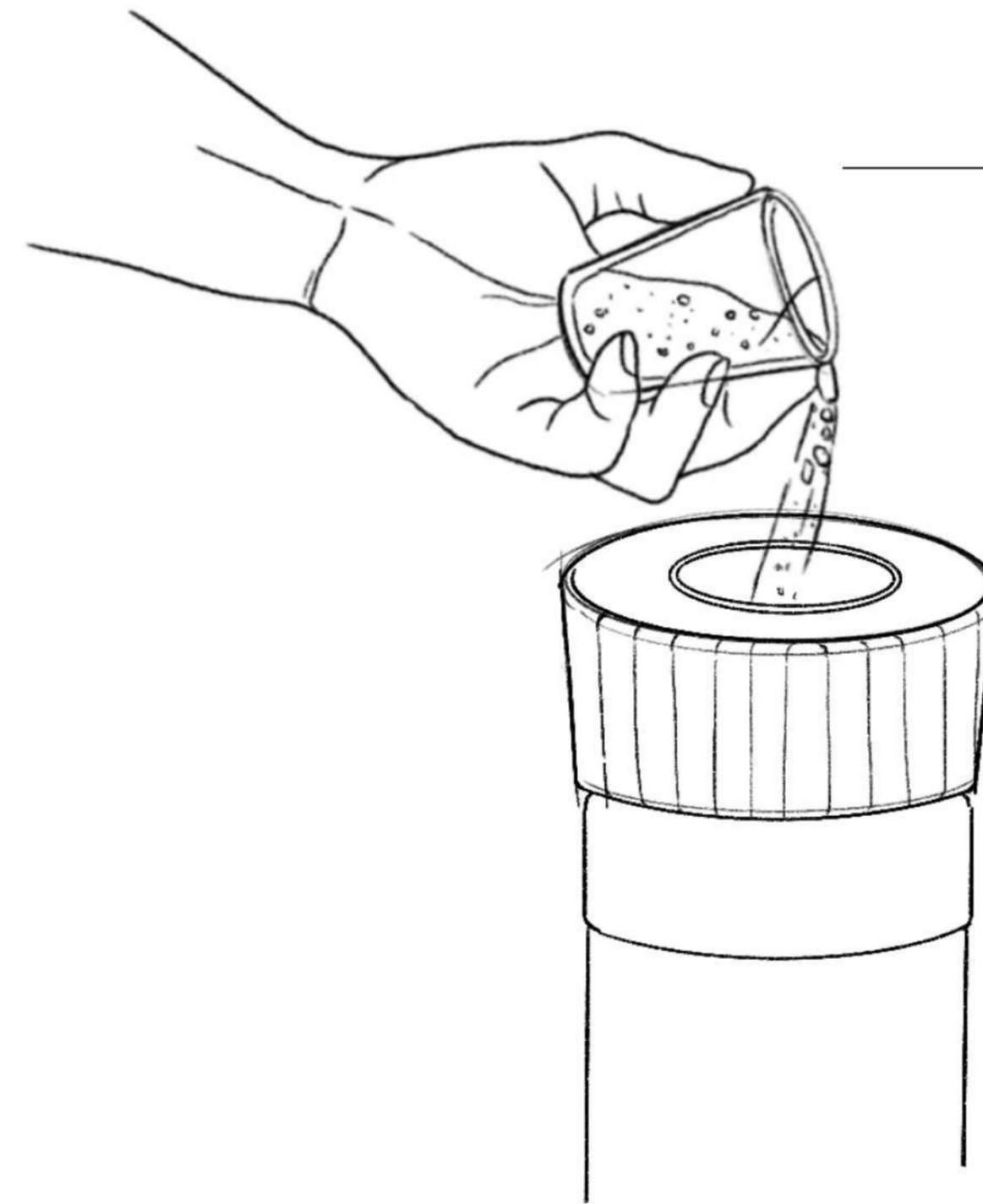
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



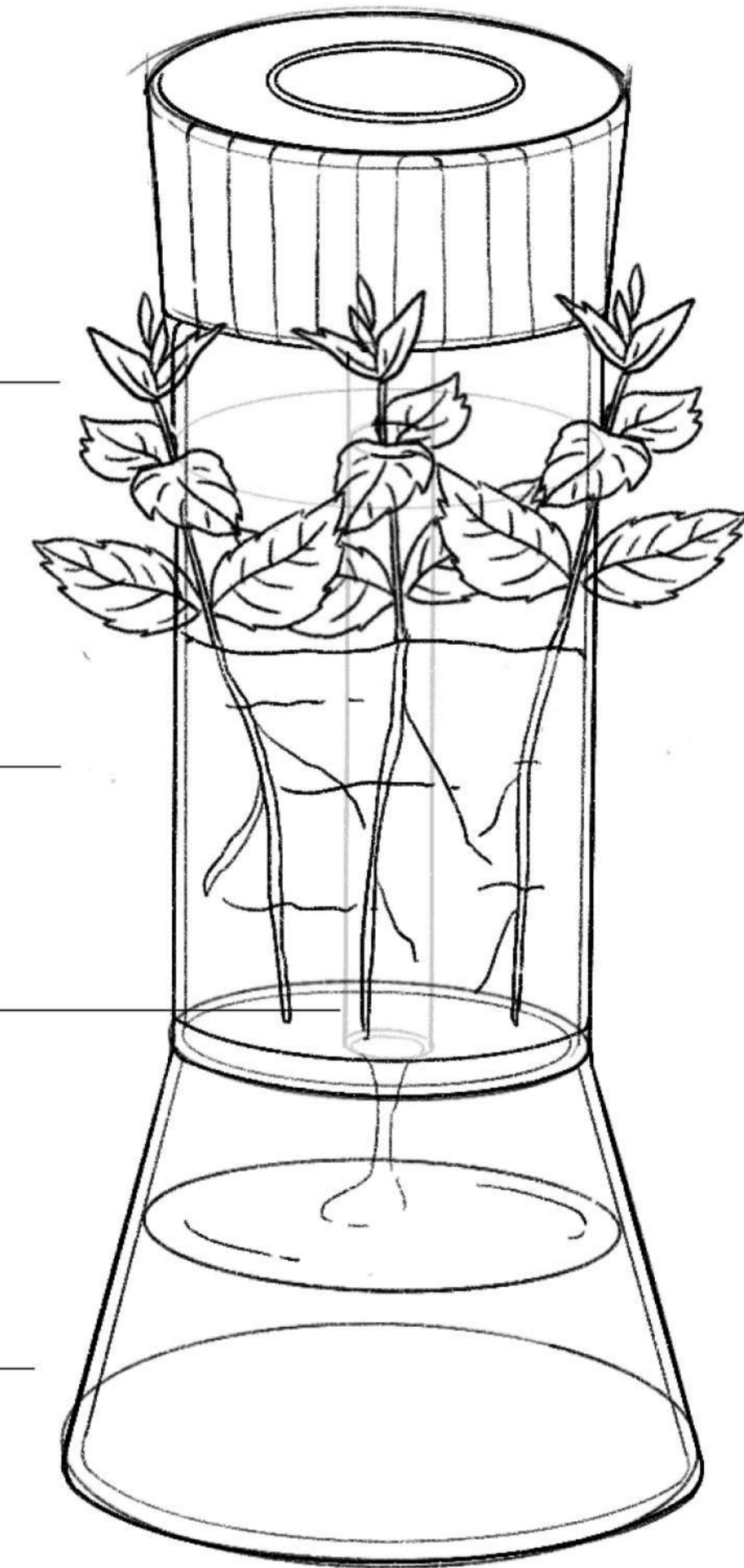
Put the ground coffee into the machine to make coffee.

The used coffee ground will automatically fertilize the plants.

Grow microgreens such as mint

The tube that contains coffee goes through the soil.

Brewed coffee is stored in the container.



Meal Planning Garden

Fiskars offers an intelligent garden robot that allows users to grow food and plan their daily healthy meals based on the food they have grown.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

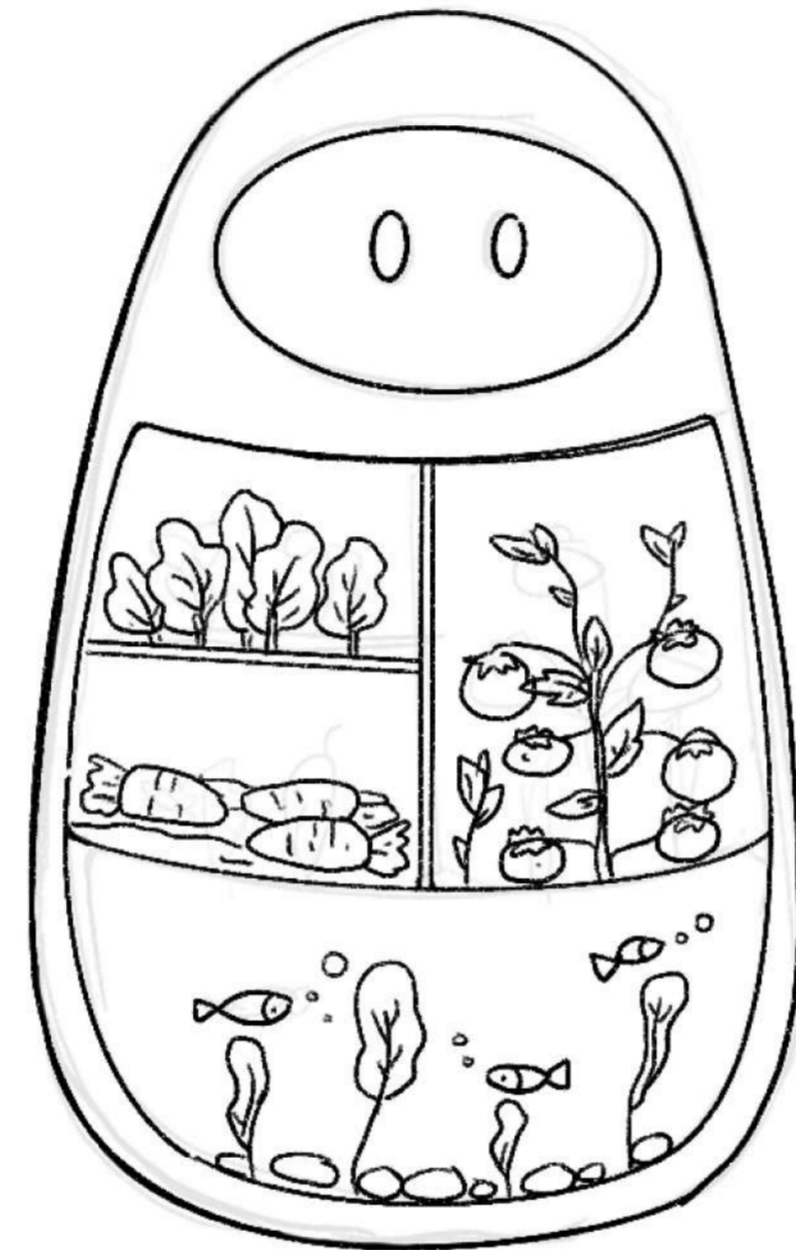
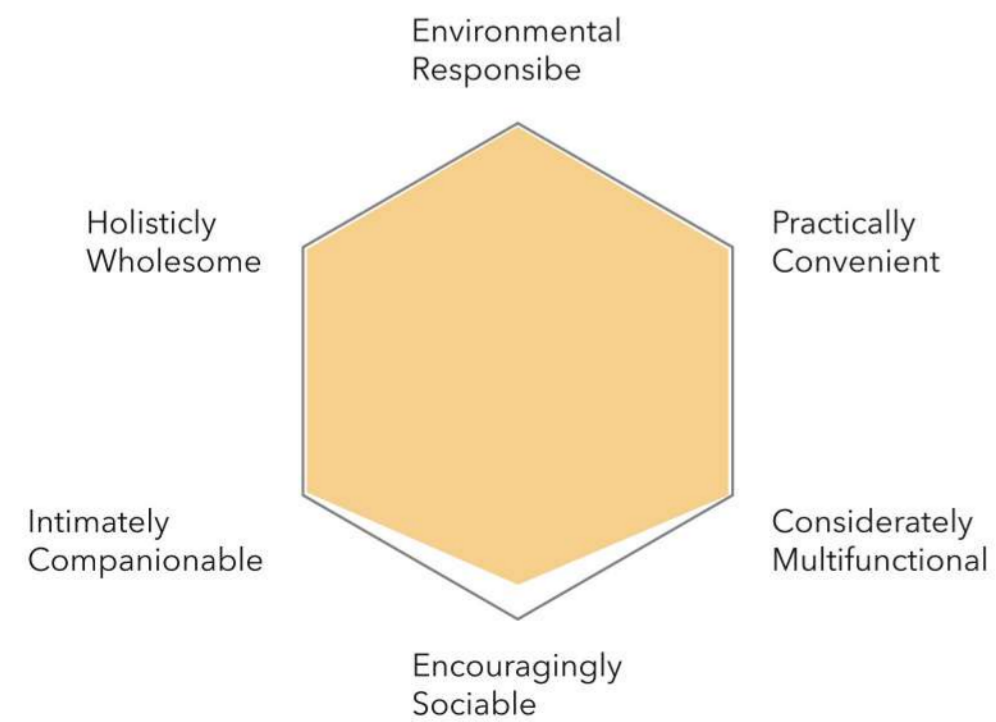
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



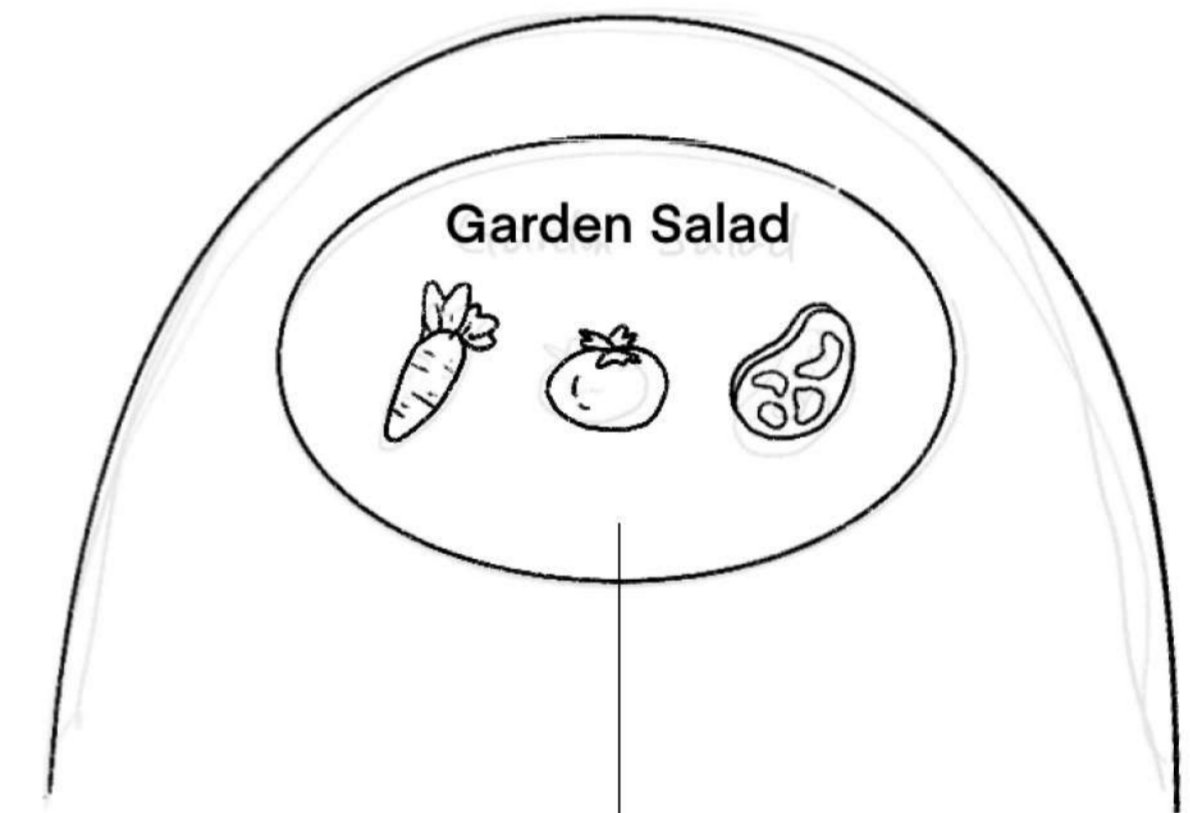
Brand Attributes Radar Chart



Smart garden keeper robot



I want to eat healthy salad today



Plan the daily meals for you based on the food you have grown.

Greywater Aquaponics

Fiskars offers an RV aquaponics system that recycles the grey water into fresh water for plants and fish. There is a purifying system at the bottom of the aquaponics, which has a pipe connected to the greywater tank and purifies the grey water into fresh water.

Persona

Digital Nomad

Painpoints: Loneliness, Not always having access to fresh vegetables, Travel Fatigue, Limited Space, Cultural Shock.

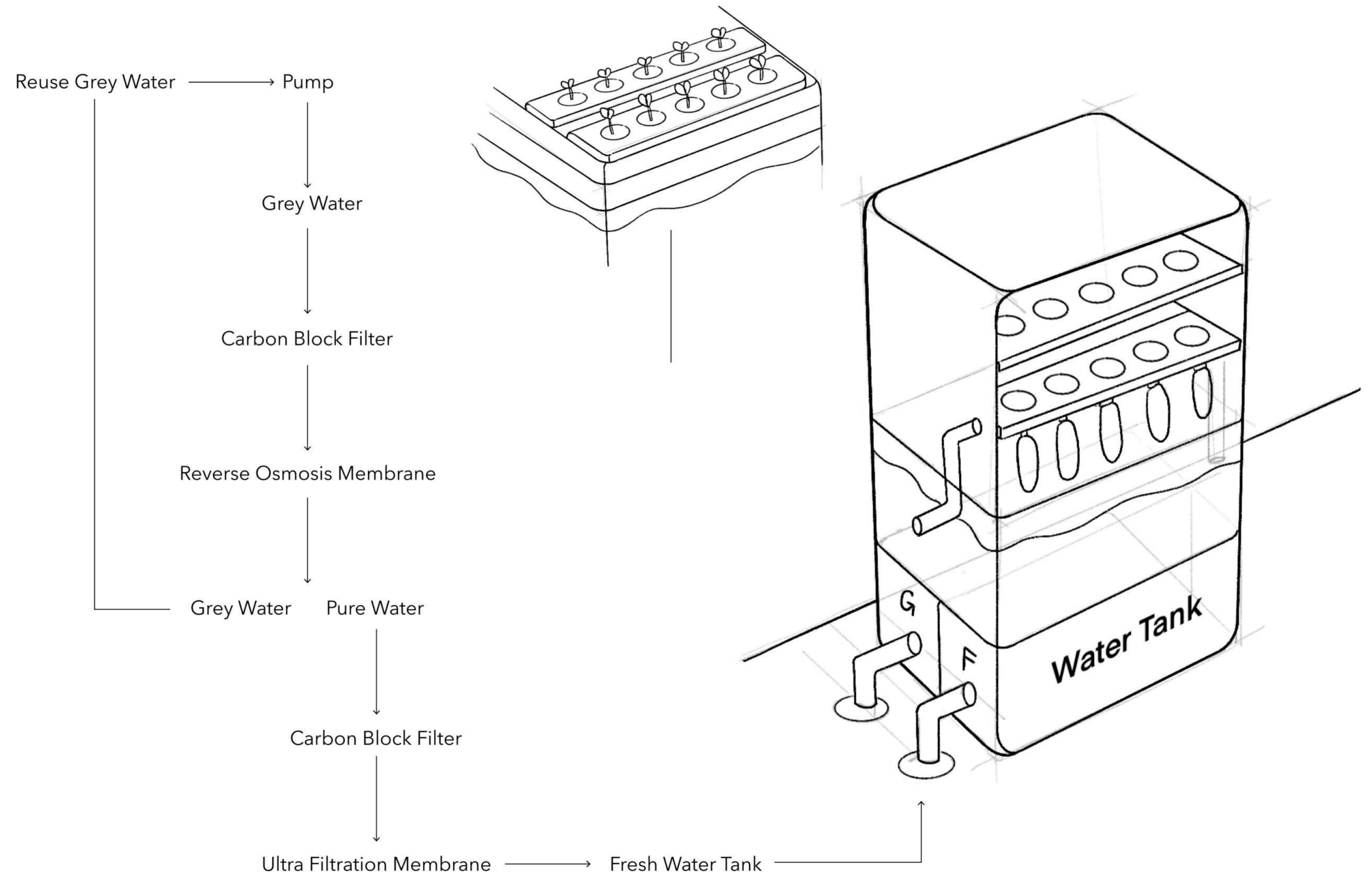
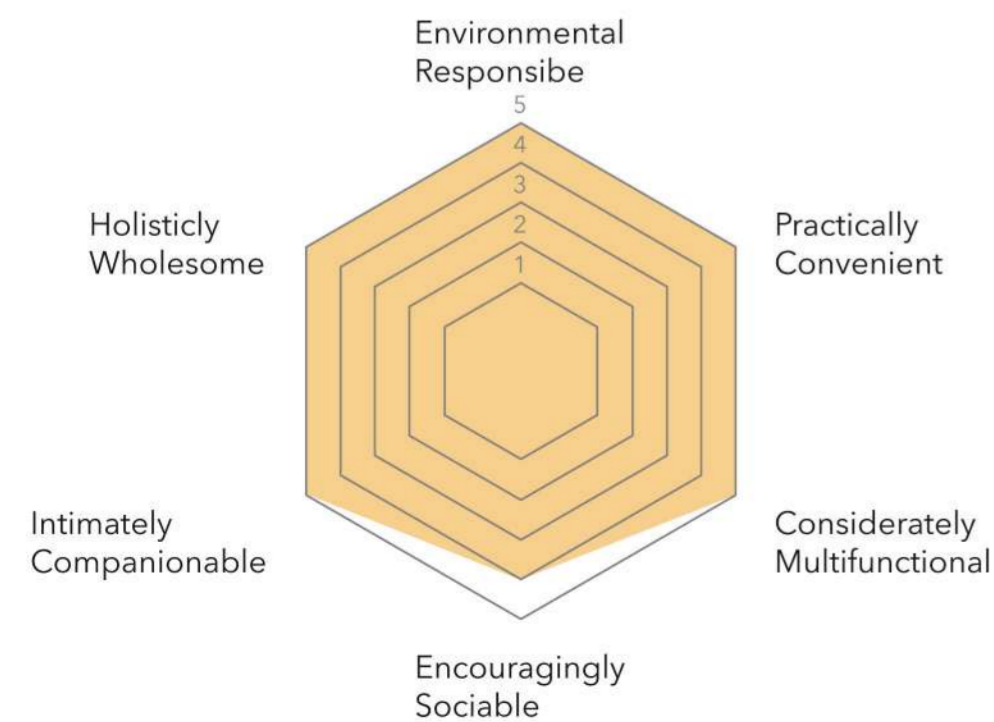
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



RV Gardening APP

Fiskars offers an APP for the RV garden which enables users to monitor the status of plants and fish and swap fresh food.

Consumer Archetype

Digital Nomad

Painpoints: Loneliness, Not always having access to fresh vegetables, Travel Fatigue, Limited Space, Cultural Shock.

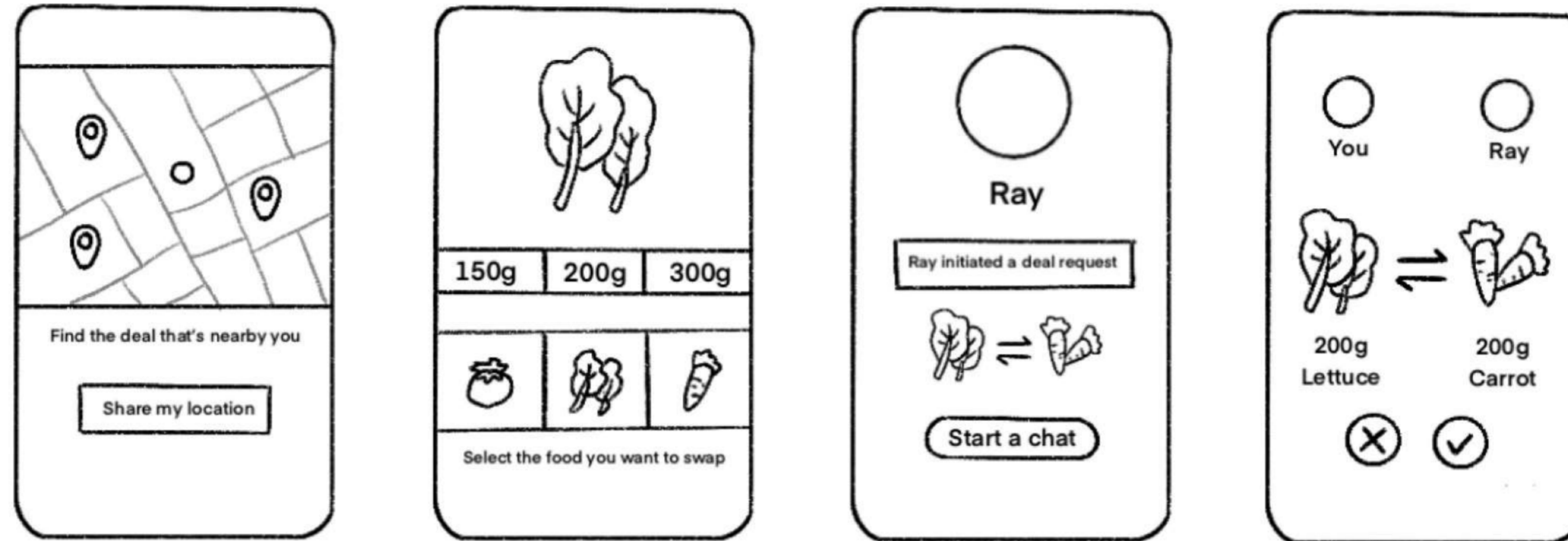
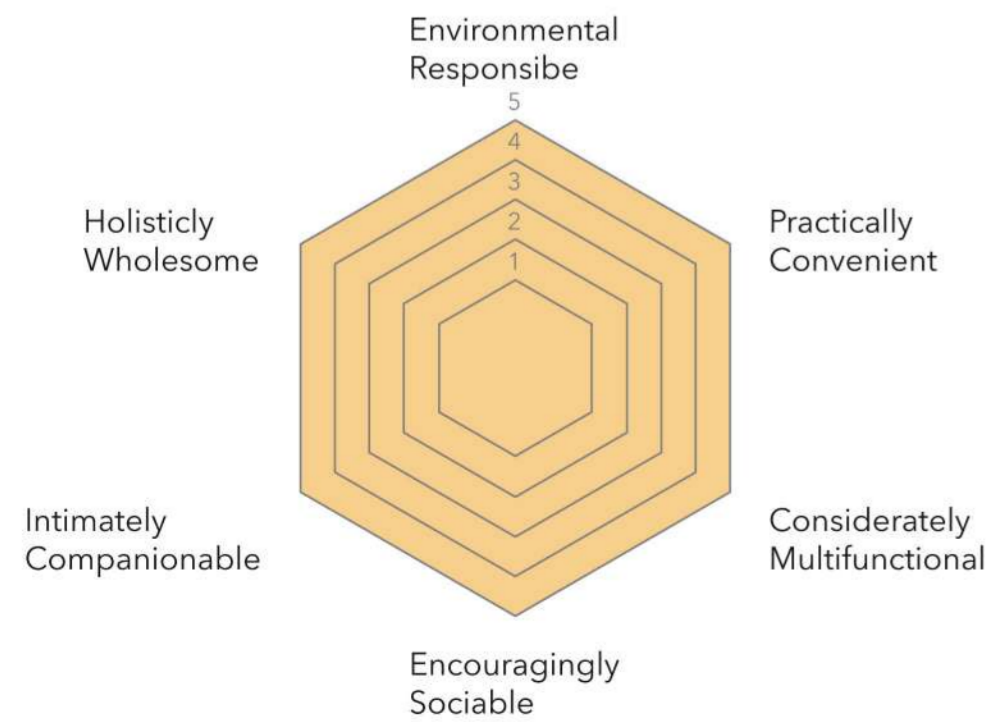
Needs: Confortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space, Work-life balance

Roadmap

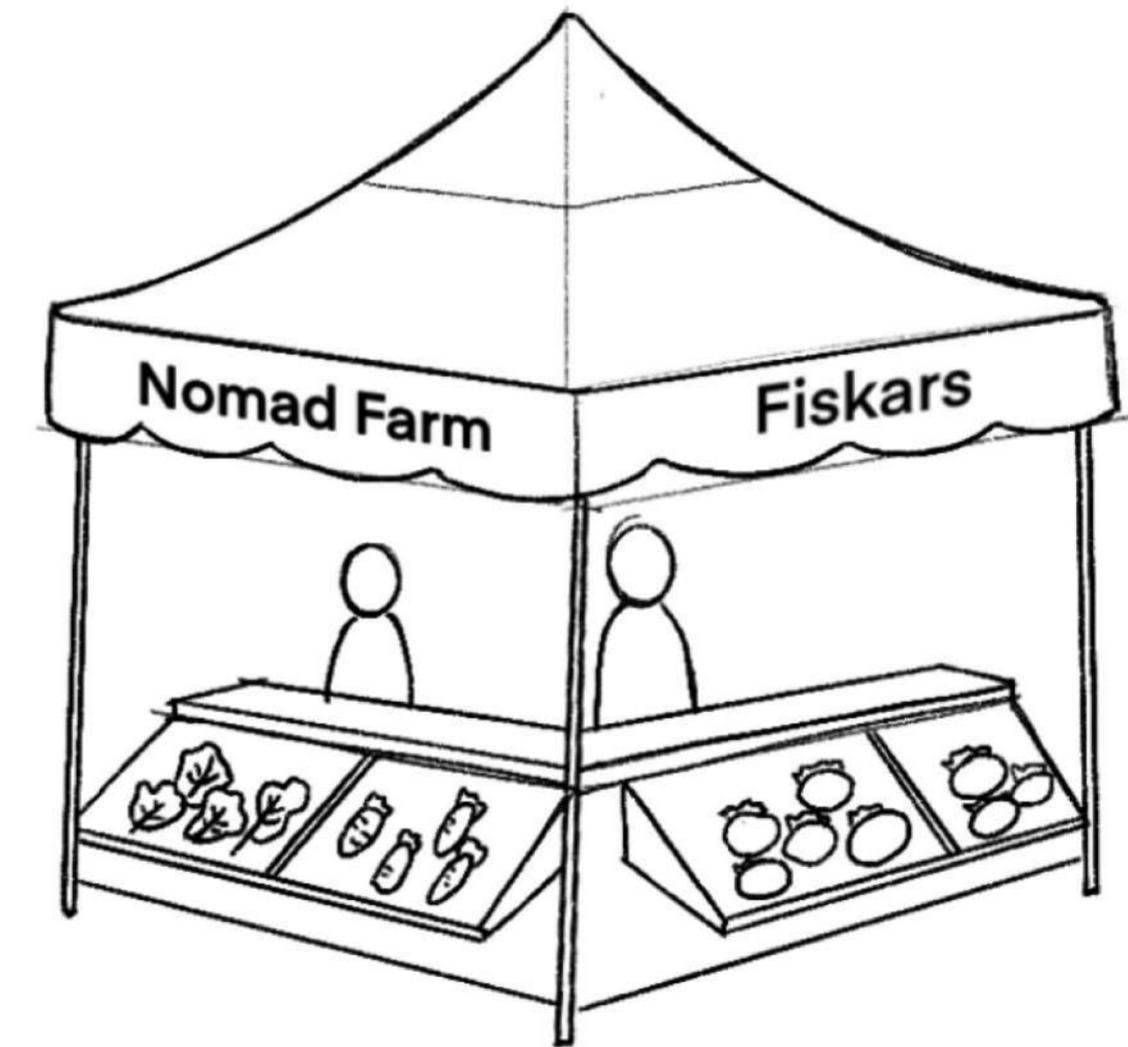
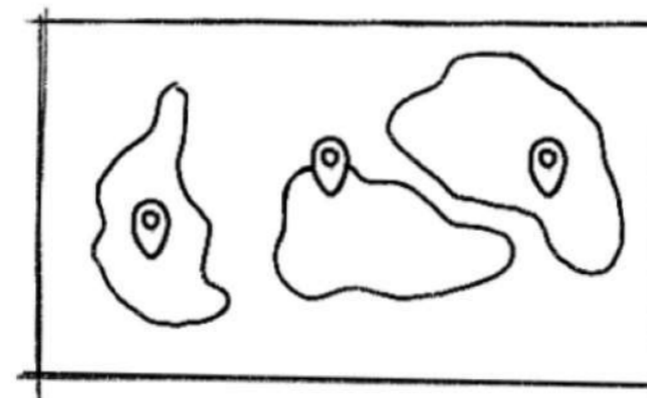


Brand Attributes Radar Chart



- RV gardening APP.
- Monitor the status of plants and fish
 - Swap food with other gardeners
 - Start a chat with other gardeners

Fiskars hosts a gardening market twice a year to gather RV garden users from everywhere to socialize. People can swap or trade the food they have grown and make friends.



Filtration System

Fiskars offers a greywater recycling system that purifies the greywater into clean water. The RV garden connects to the filter box, and the purified water will transfer to the fish tank by the pump.

Consumer Archetype

Digital Nomad

Painpoints: Loneliness, Not always having access to fresh vegetables, Travel Fatigue, Limited Space, Cultural Shock.

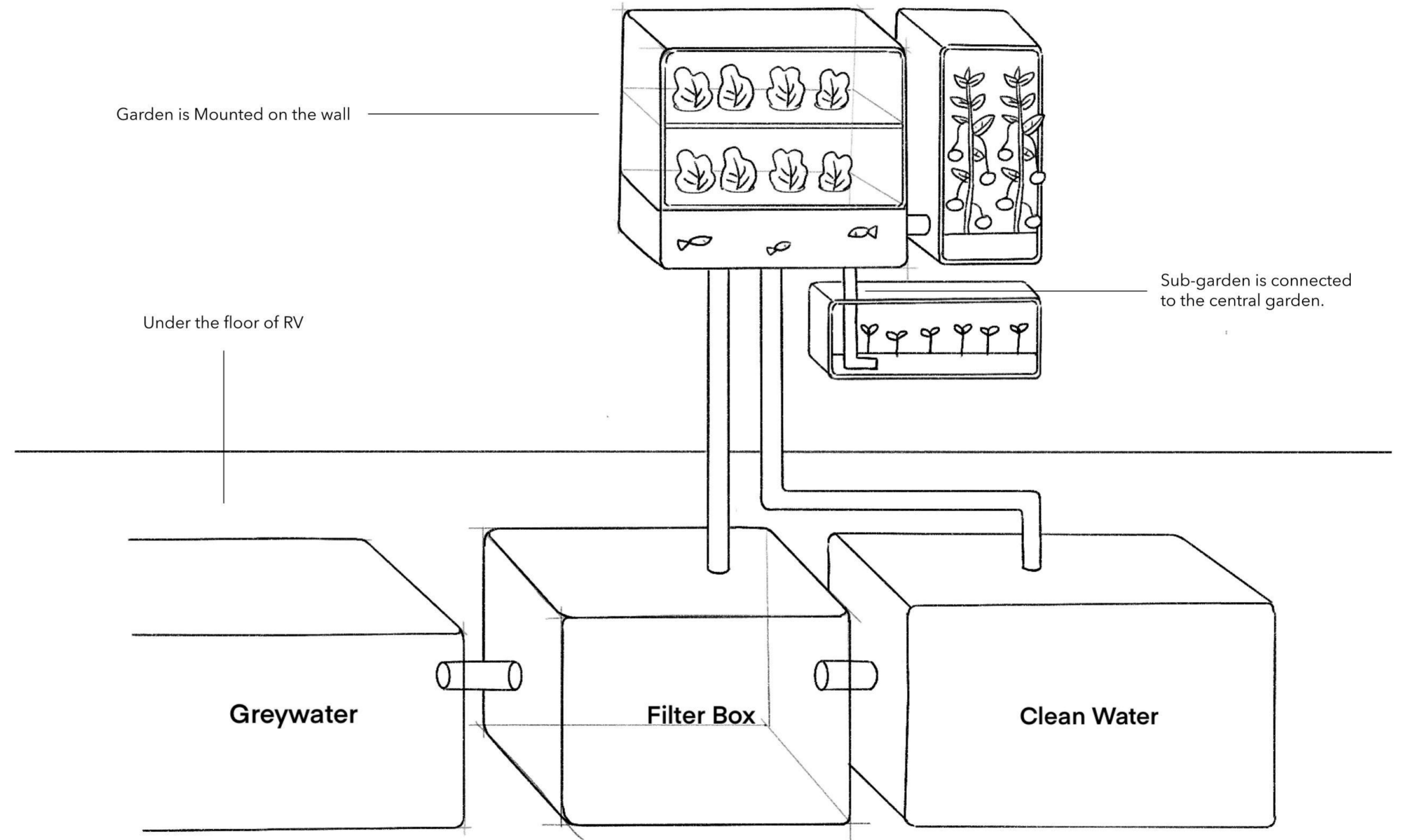
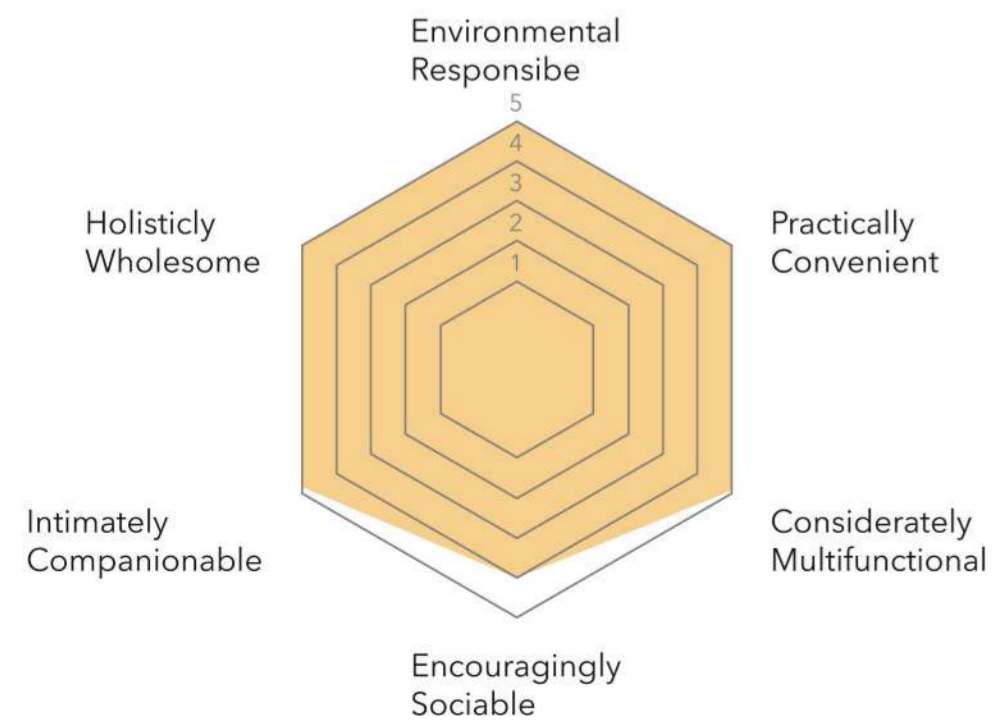
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



Wall-mounted RV Farm

Fiskars offers a space-saving wall-mounted farm. The farm consists of the main garden, a sub-garden, and a fish tank. Users can slide out the gardening layer and fish tank to harvest vegetables and feed fish.

Consumer Archetype

Digital Nomad

Painpoints: Loneliness, Not always having access to fresh vegetables, Travel Fatigue, Limited Space, Cultural Shock.

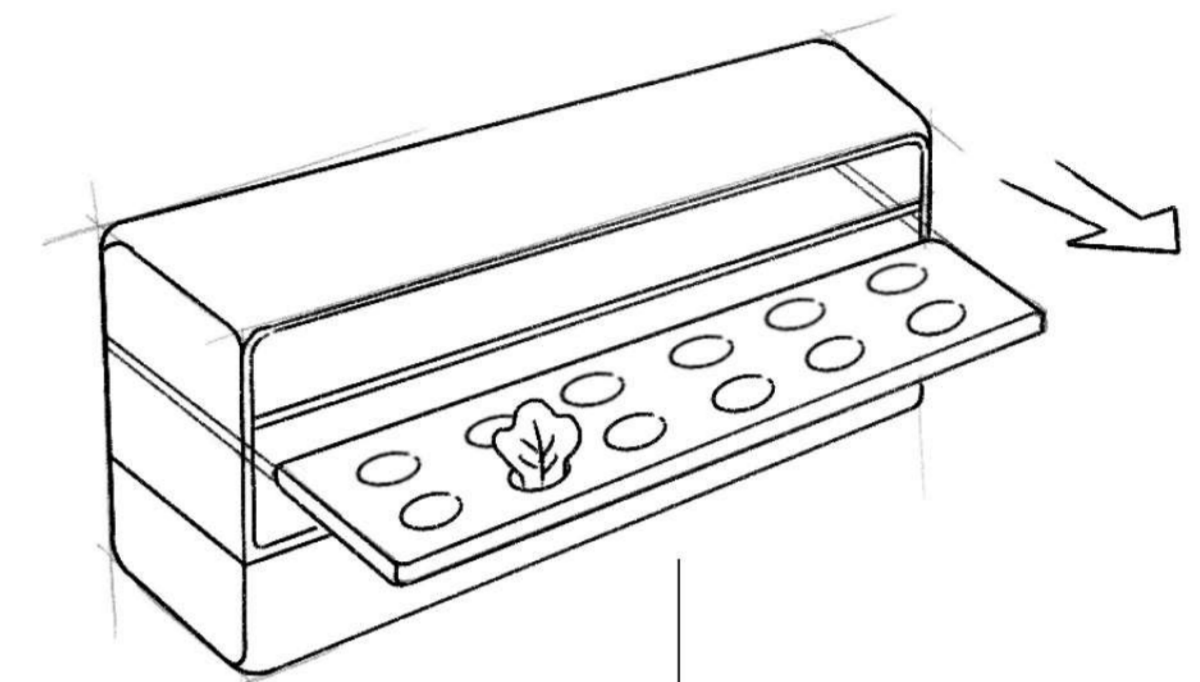
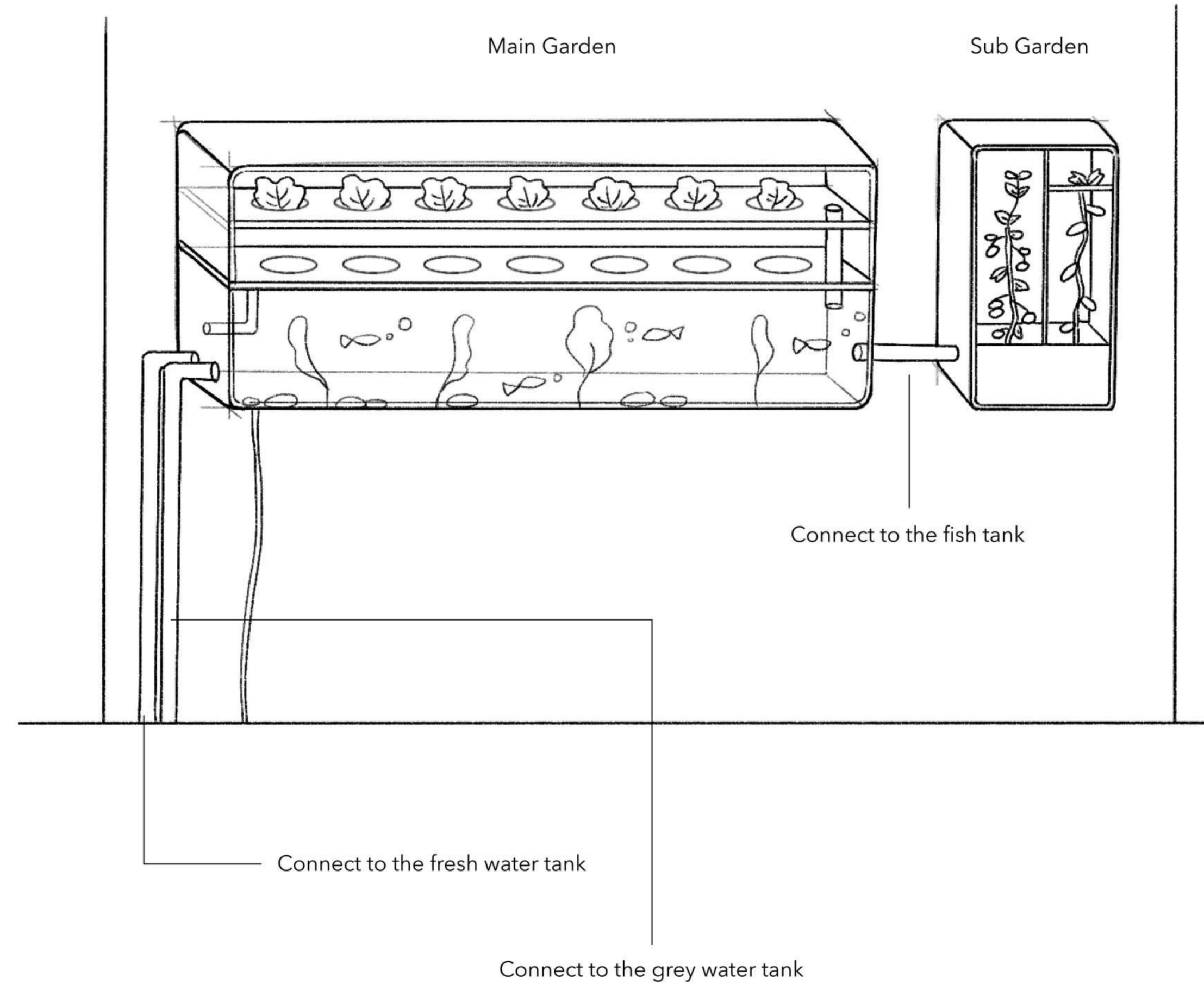
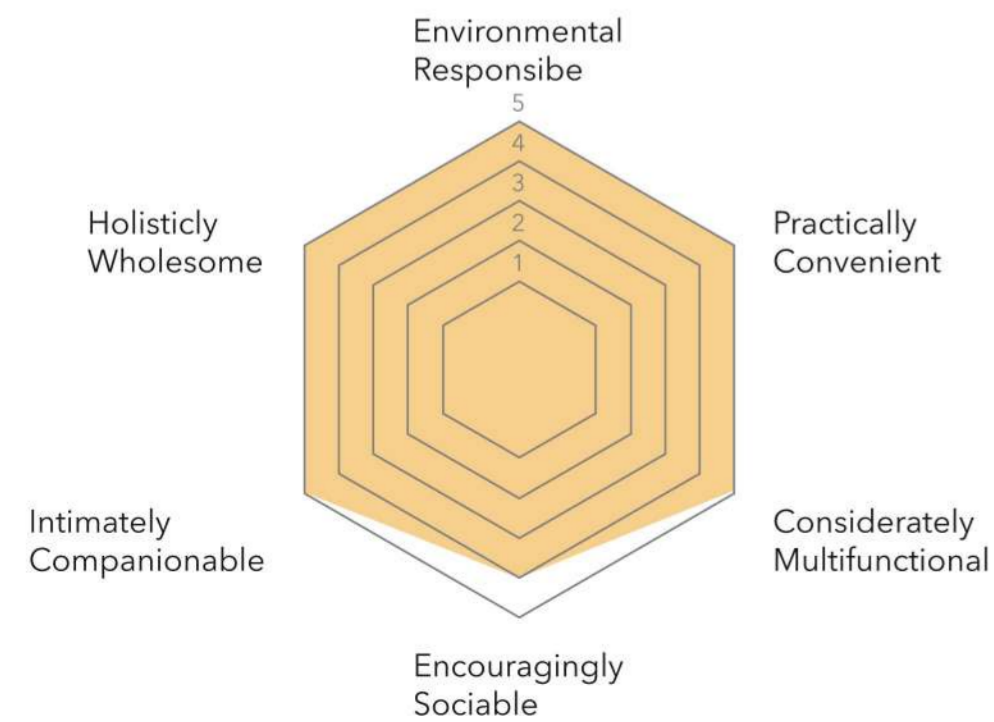
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

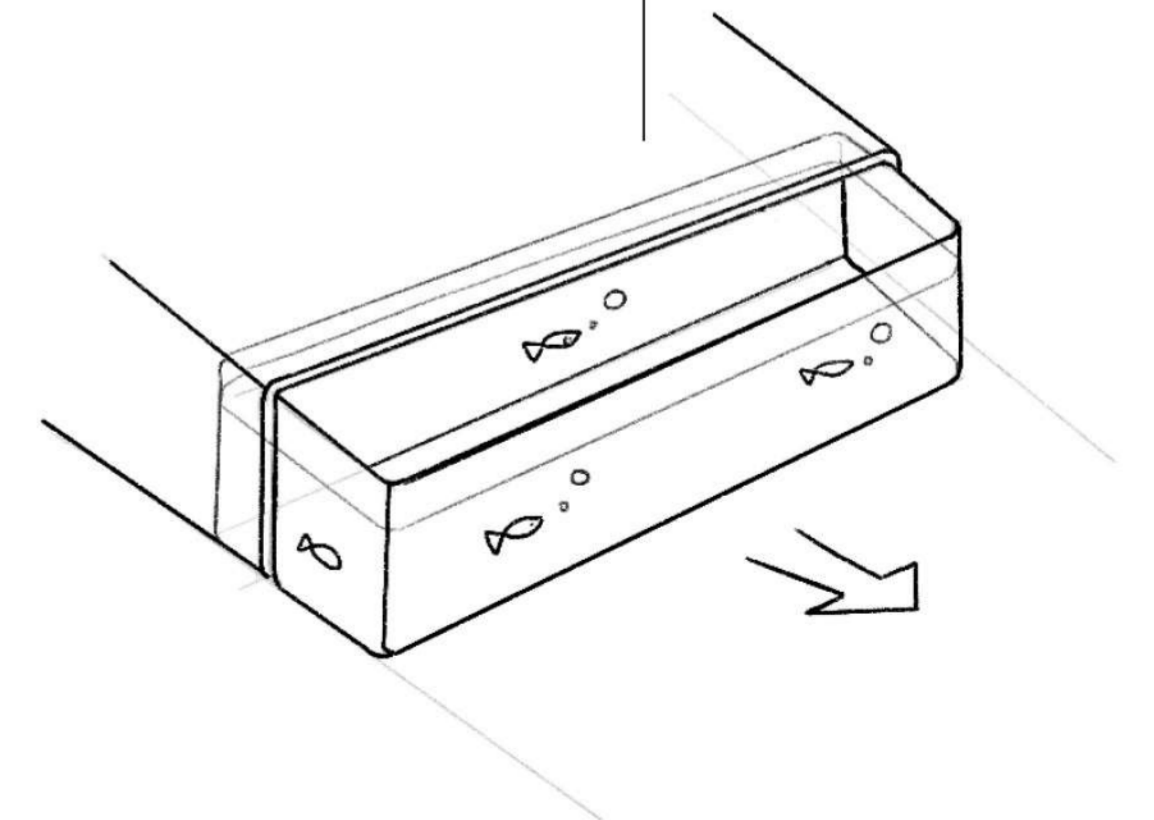
Roadmap



Brand Attributes Radar Chart



Work like a drawer. The garden and the fish tank can slide out.



Modular Wall Garden

Fiskars offers a modular wall garden that allows users to install the appropriate size and number of gardens based on the size of their RV. Each garden has a water pipe and pumps connected to the main fish tank.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, Loneliness

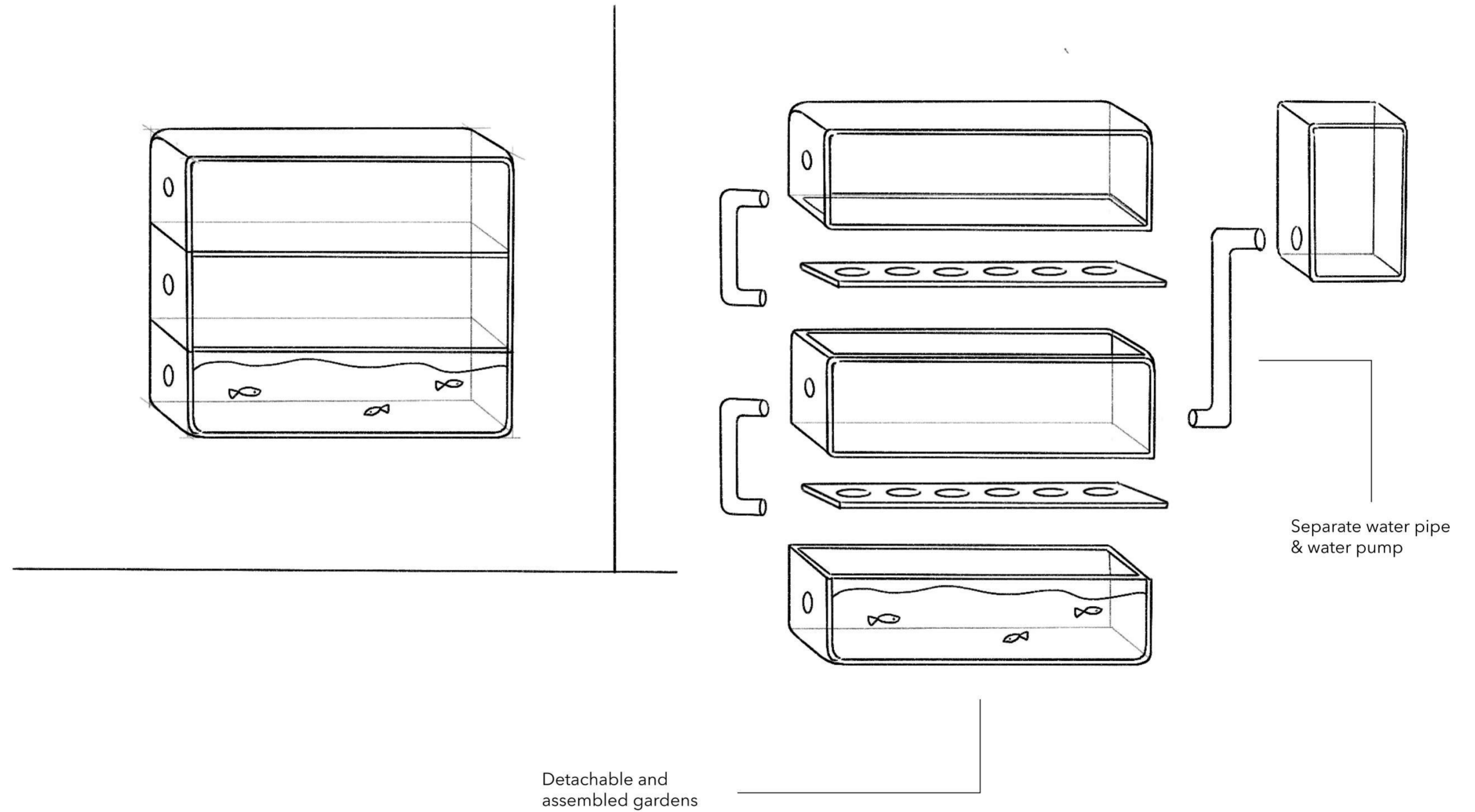
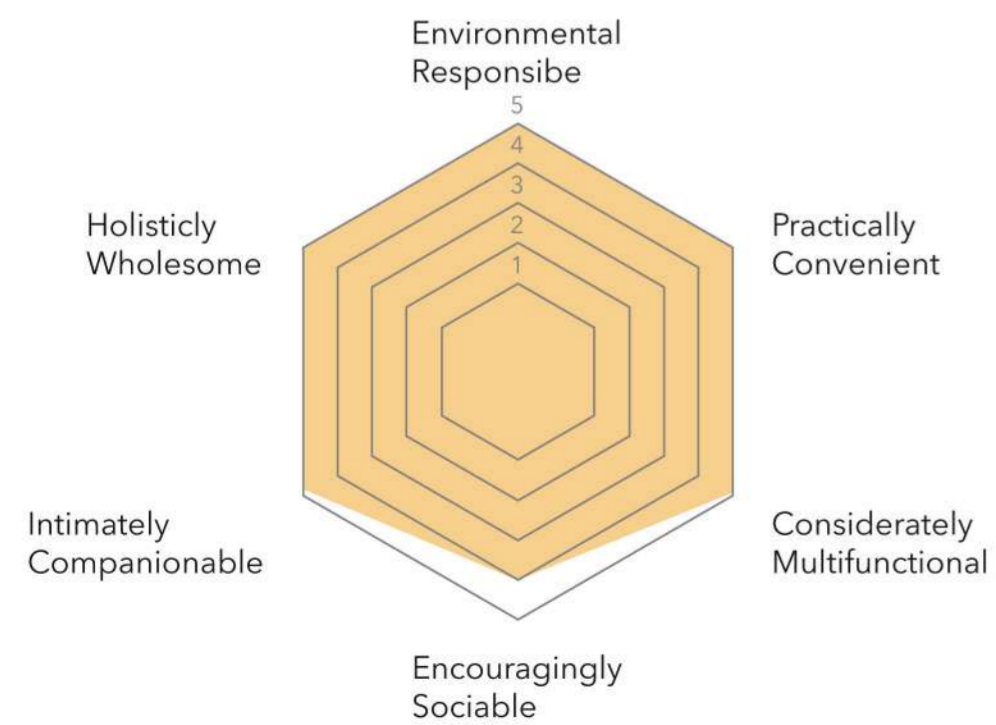
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



Fish Monitor

Fiskars offers an AR glassed and an underwater monitor to detect the fish's disease by observing their behaviors.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

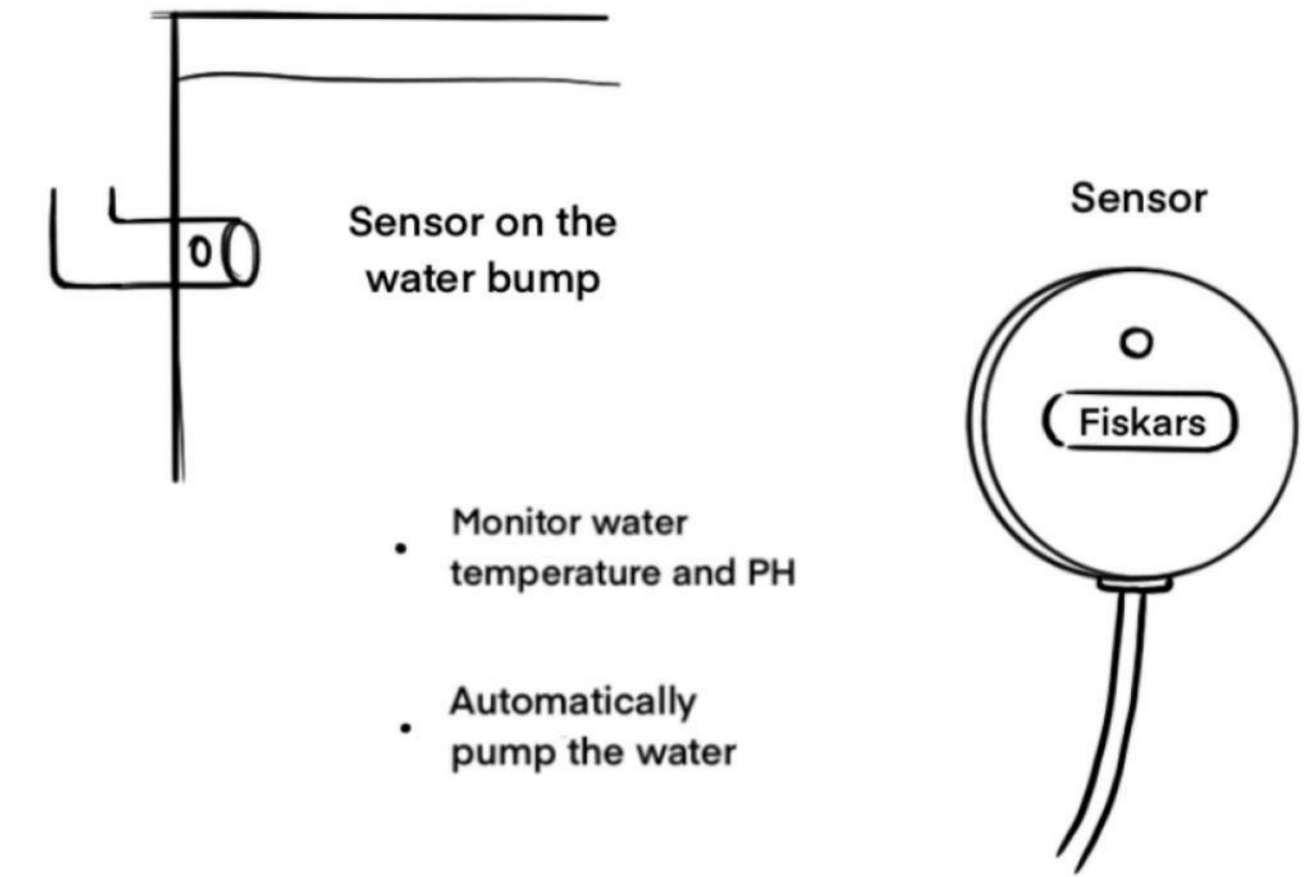
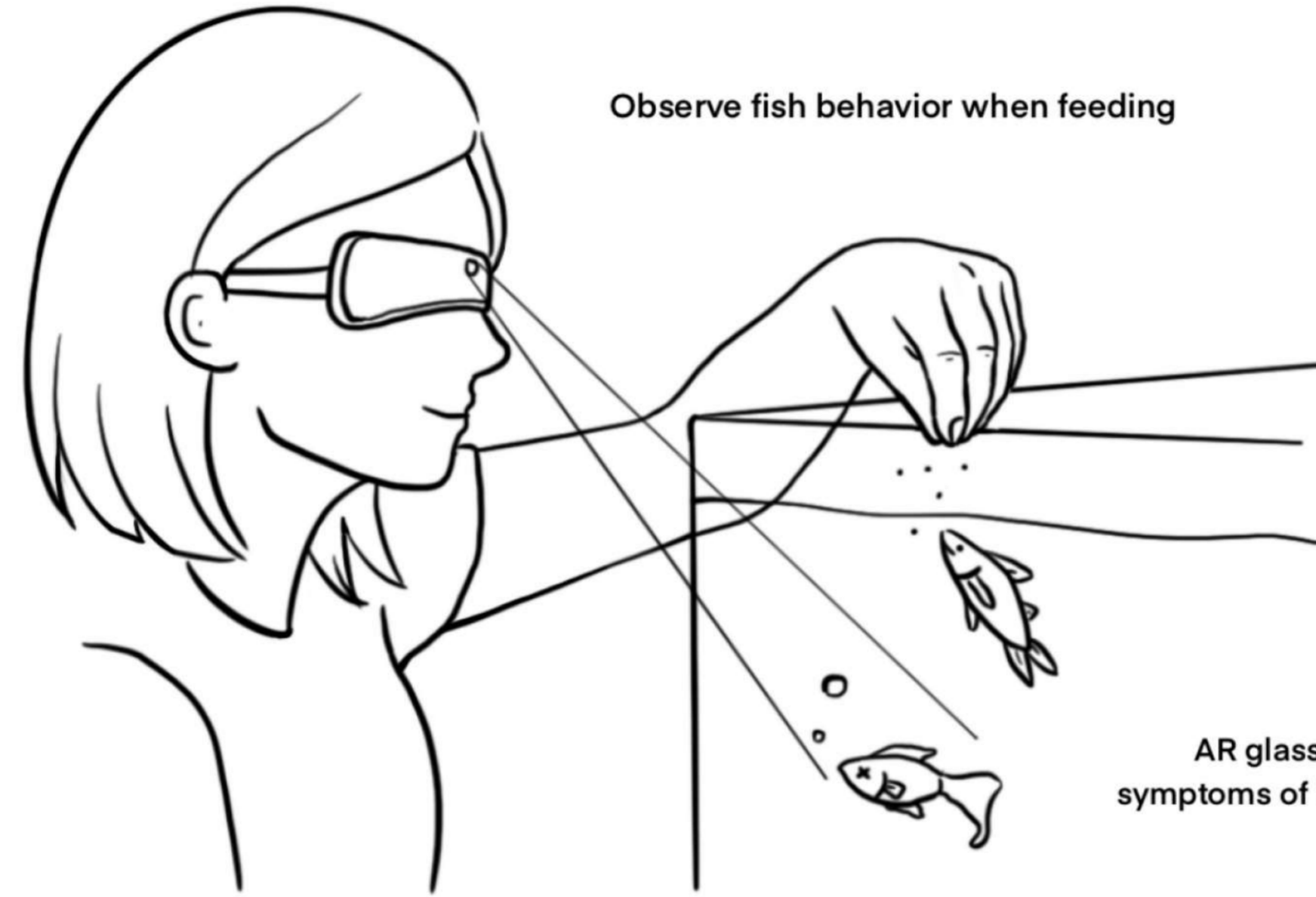
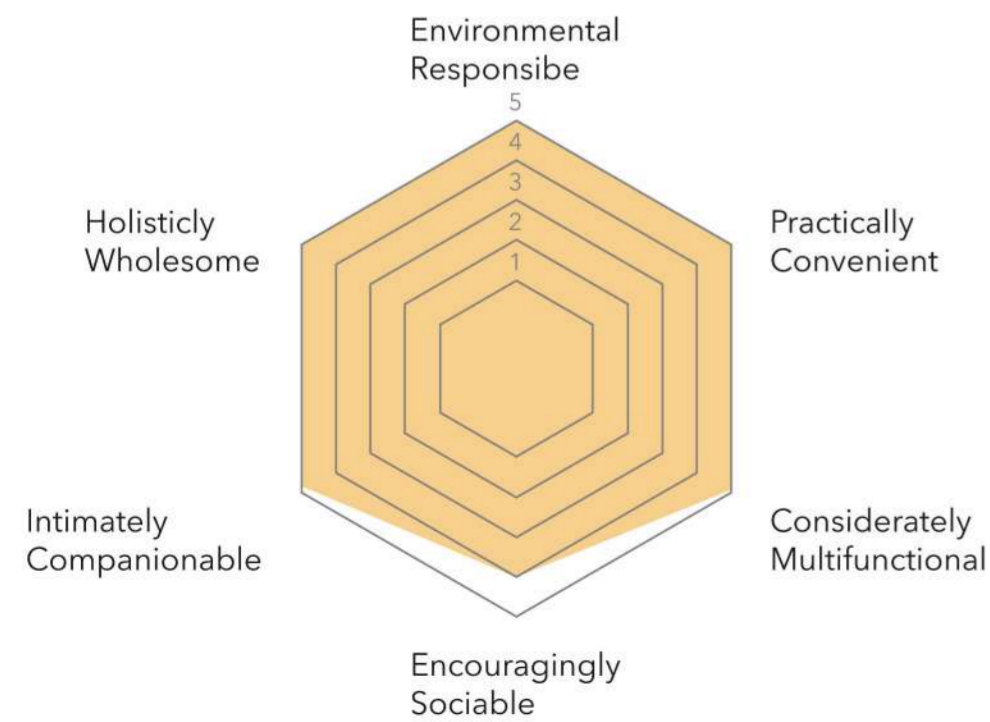
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap

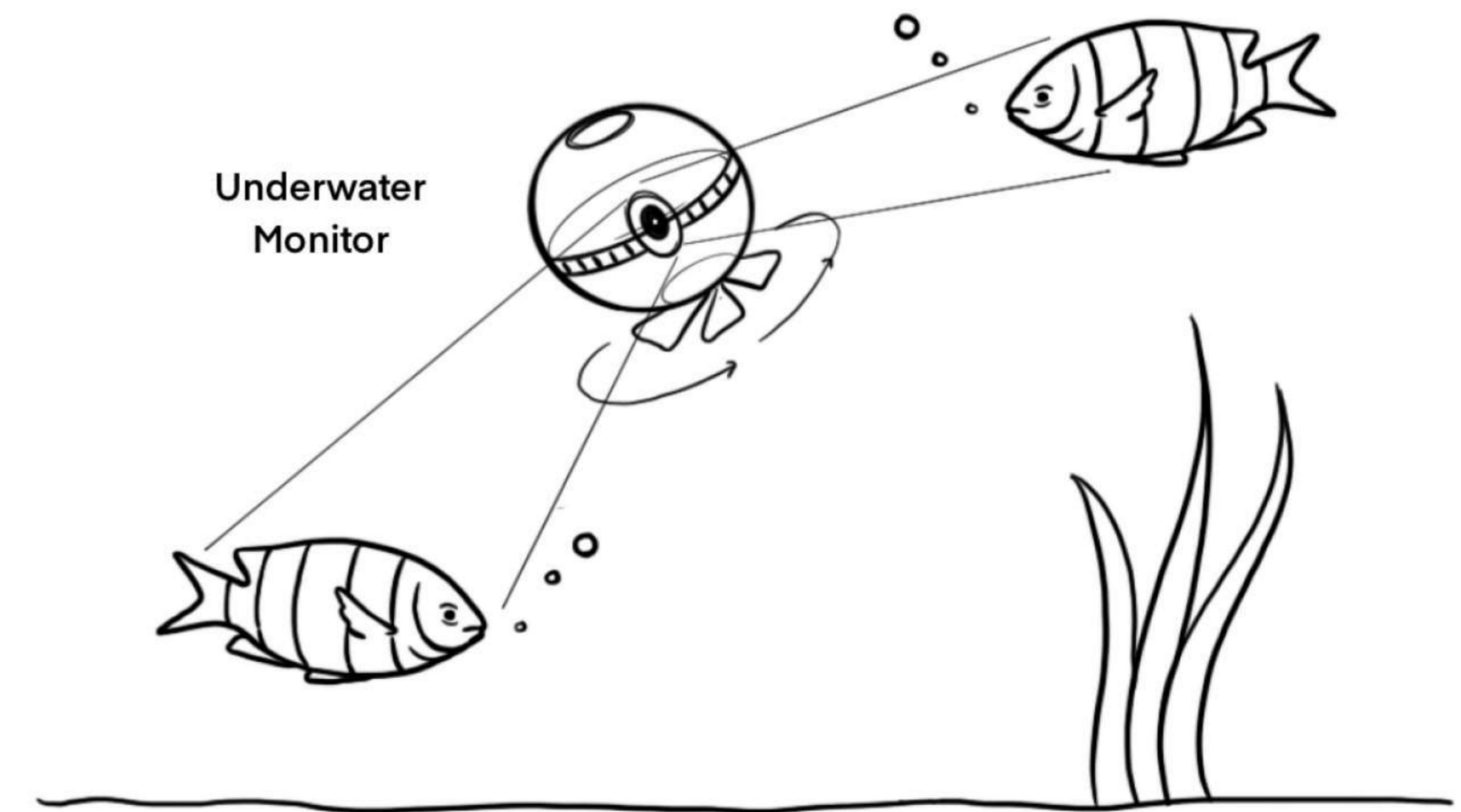
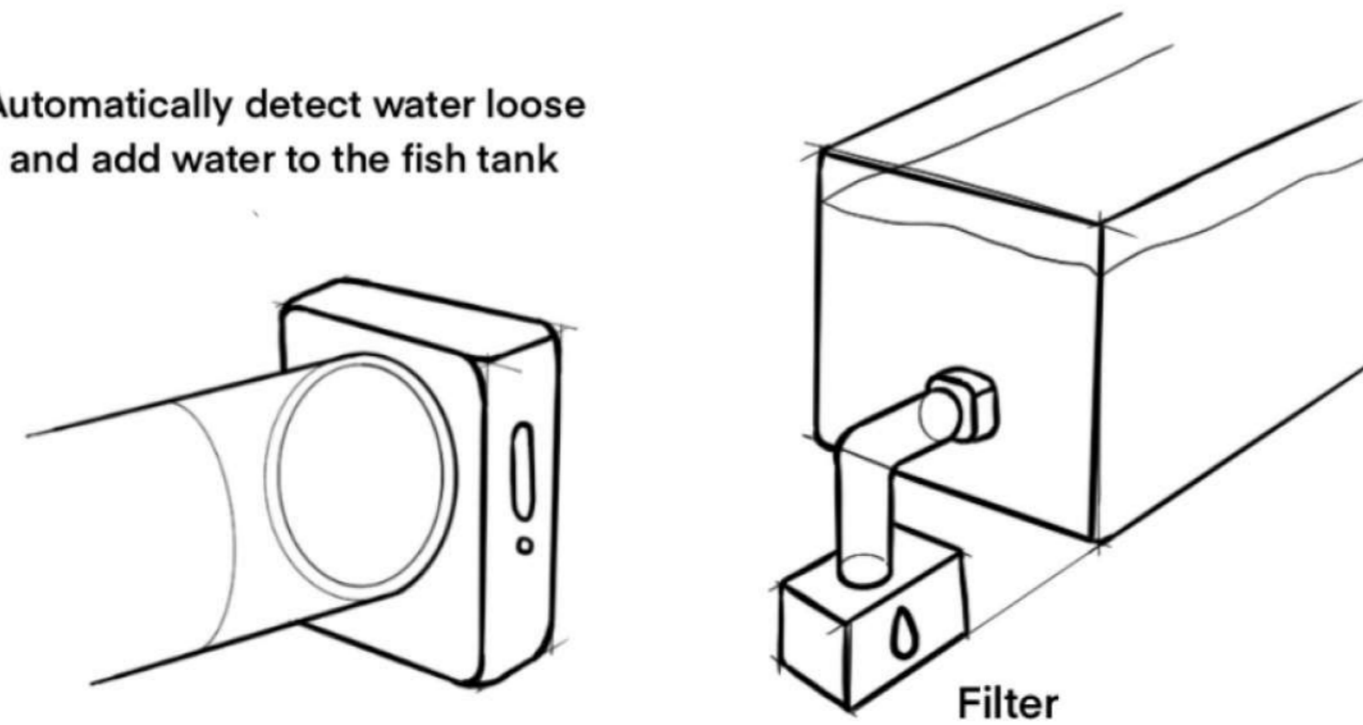


Brand Attributes Radar Chart



AR glass detect any symptoms of stress or disease

Automatically detect water loose and add water to the fish tank



Rotate Aquaponic Garden

Fiskars offers a rotating aquaponic garden that can self circulation and prevent insects. The photocatalysis fan and UV light can boost air circulation and eliminate bacteria.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

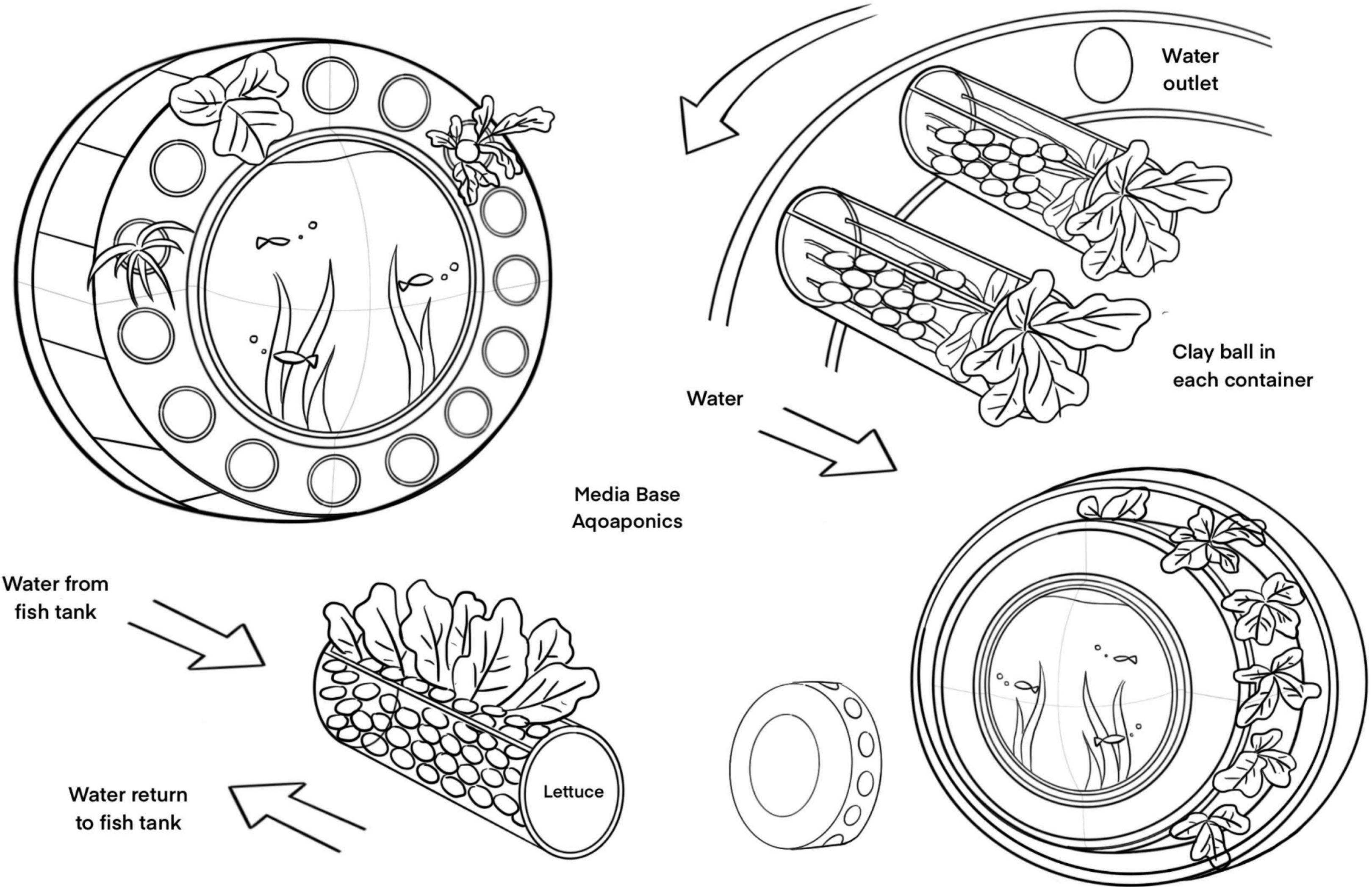
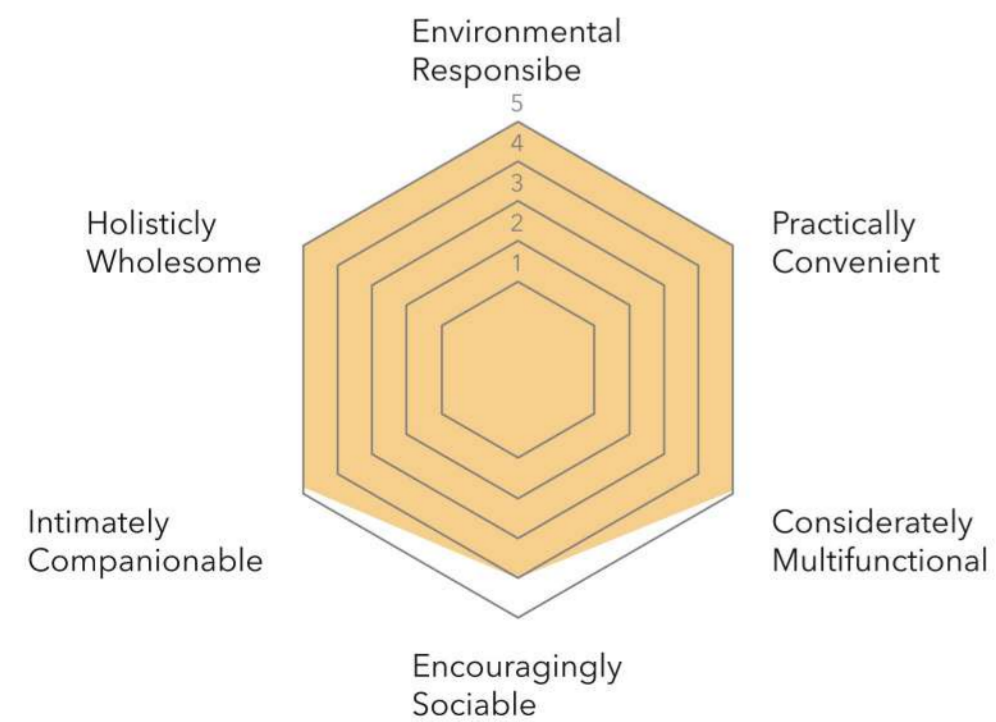
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart



Enclosed Garden

Fiskars offers an enclosed garden that can automatically control the humidity and temperature and prevent insects from the plants.

Consumer Archetype

Digital Nomad

Painpoints: No fixed work place, Travel Fatigue, Cultural Shock, Unhealthy sitting posture, loneliness

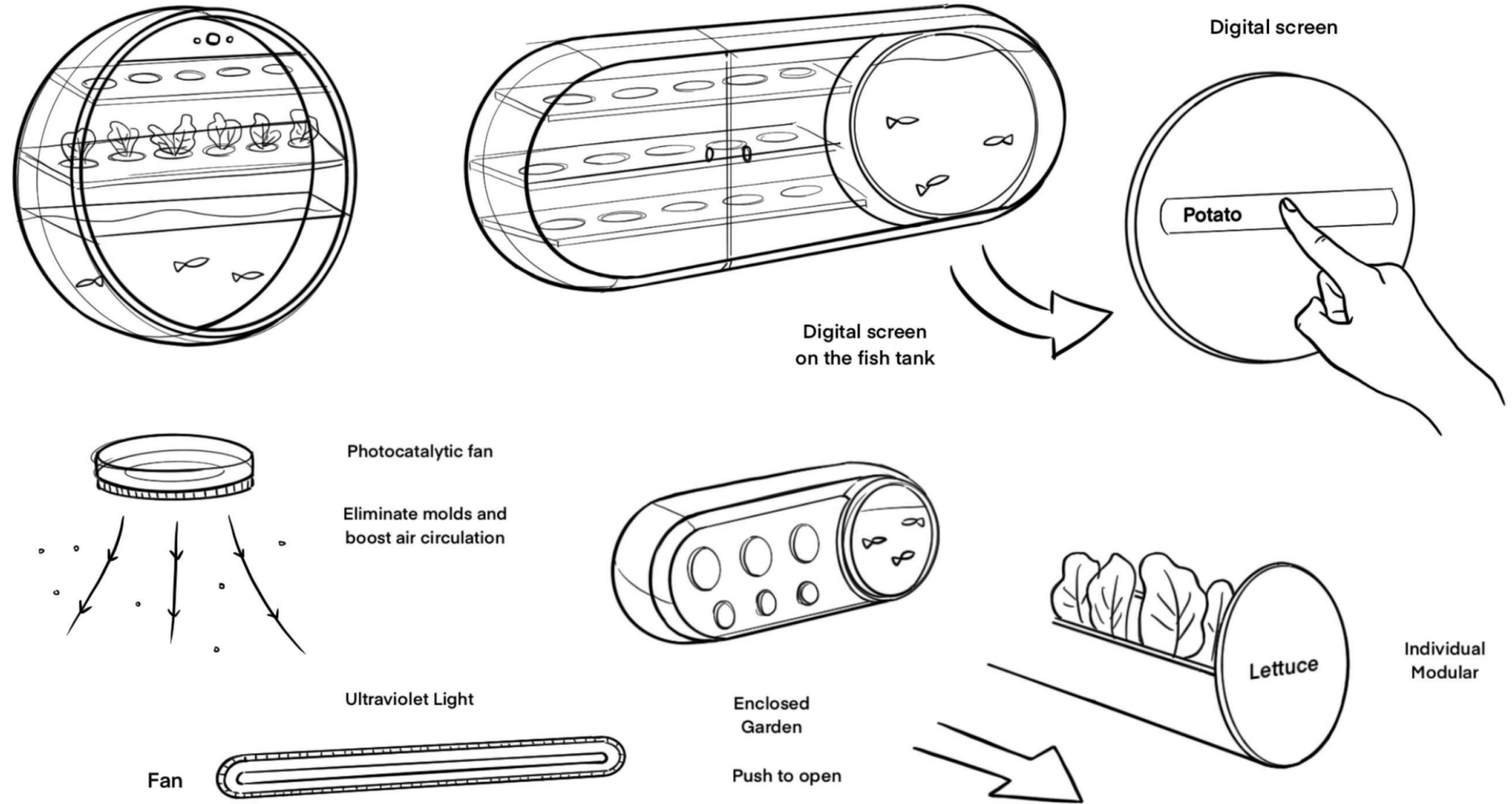
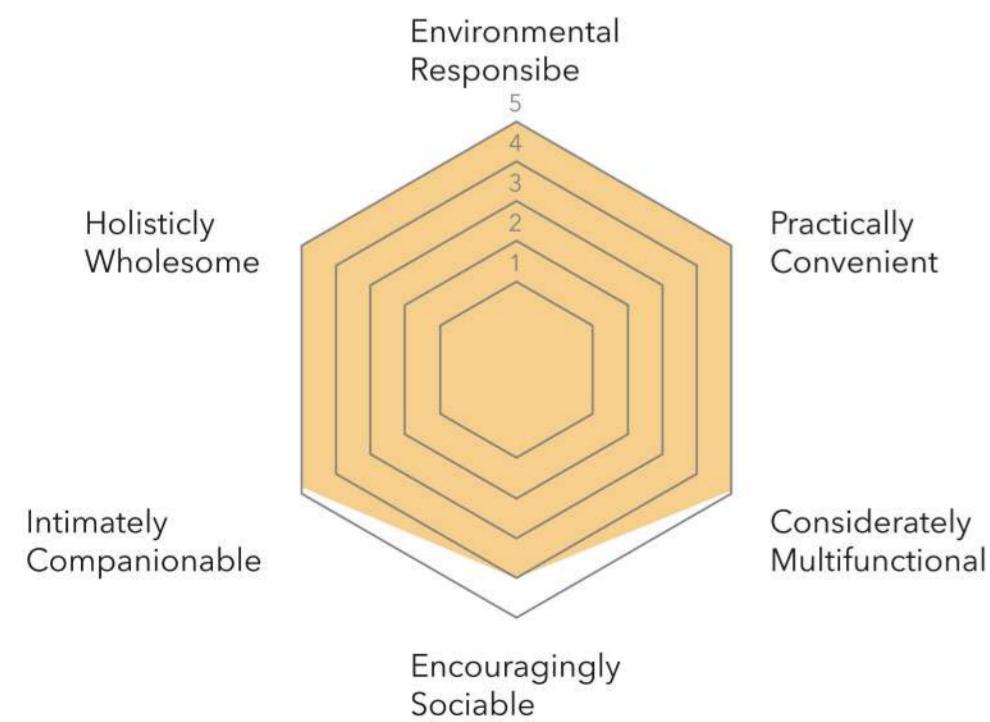
Needs: Comfortable working space, Portable power charger, Social interaction

Motivations: Freedom, Private working space

Roadmap



Brand Attributes Radar Chart

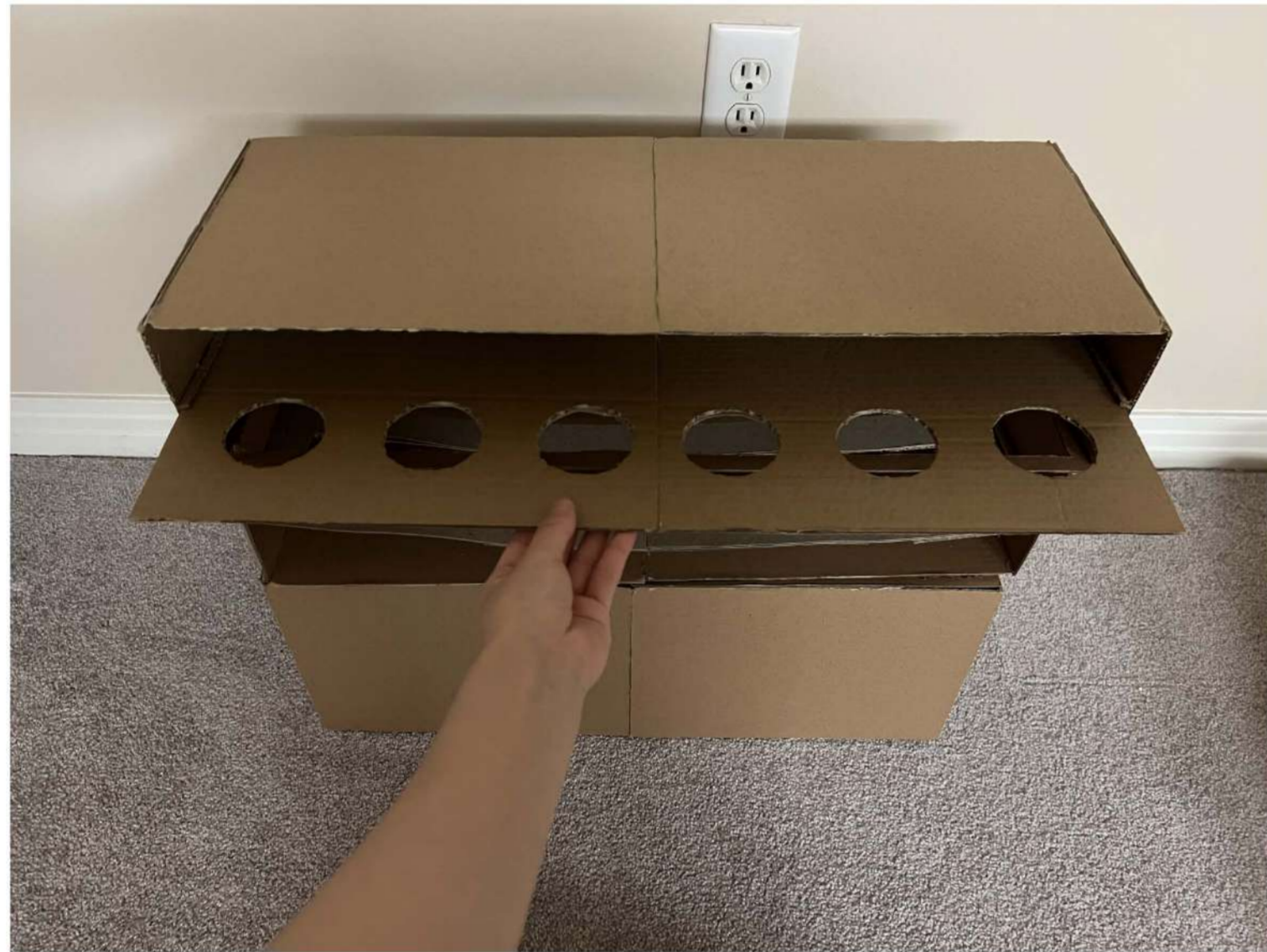


PROTOTYPING

RV WALL GARDEN



RV WALL GARDEN



Slide out the planting sheet

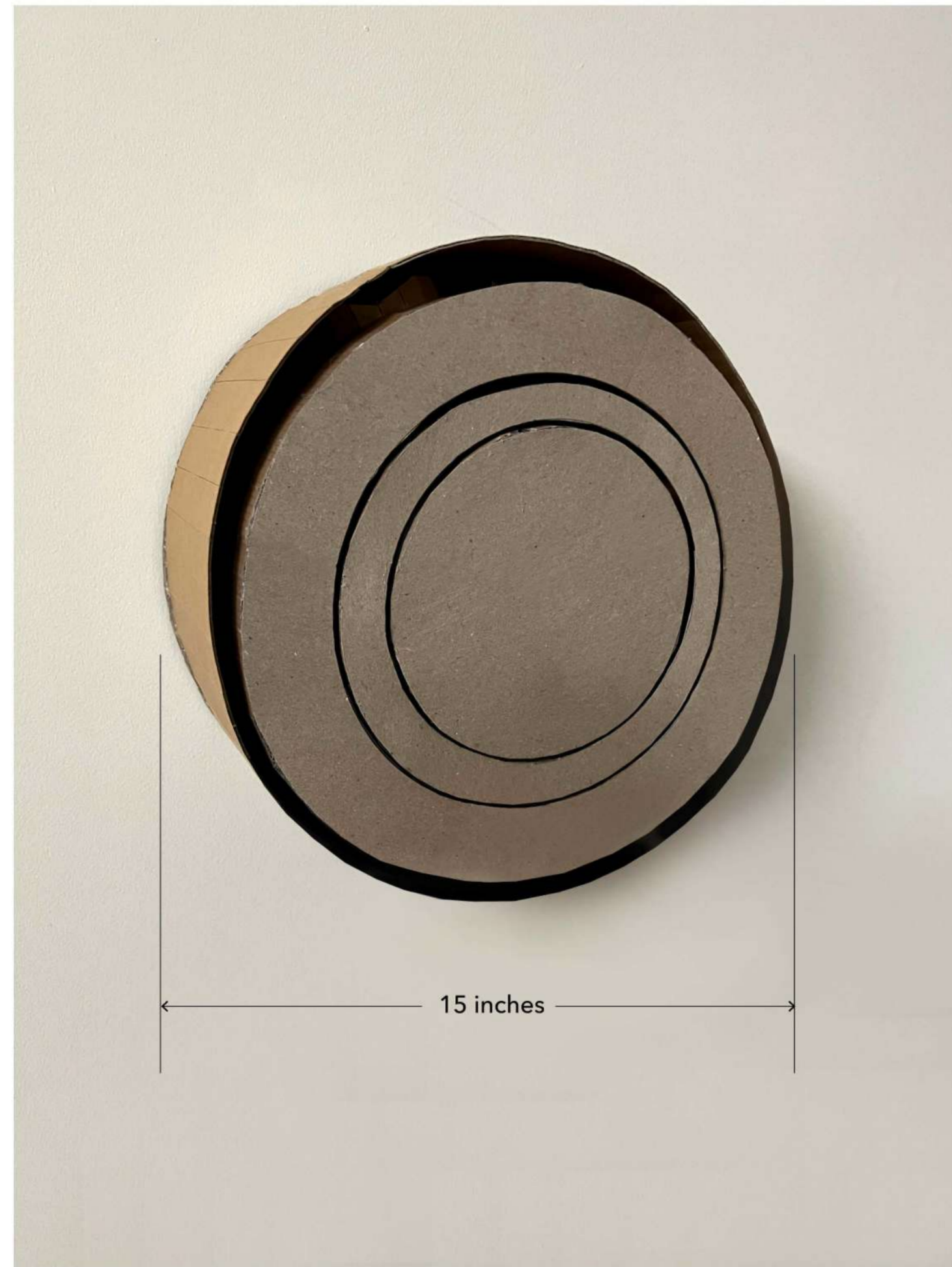


Each planting sheet has a different layout for growing various vegetables.



Fish tank with water pipe and pump.

WALL-MOUNTED AQUAPONIC GARDEN



- Water-efficient
- Space saving
- Prevent Insects
- Individual grow baskets
- Self-circulating ecosystem
- Automatic temperature and humidity control

WALL-MOUNTED AQUAPONIC GARDEN



1 Growing basket & grow media



2 Put the clay balls into the basket.



3 Put the cover on the clay ball.



4 Put the seeds into the basket.



5 Put the secondary cover.



6 The seeds are set up.



7 Slide out the media bed.



8 Put the basket in each modular.

WALL-MOUNTED AQUAPONIC GARDEN



9 Seeds germinate after one week.



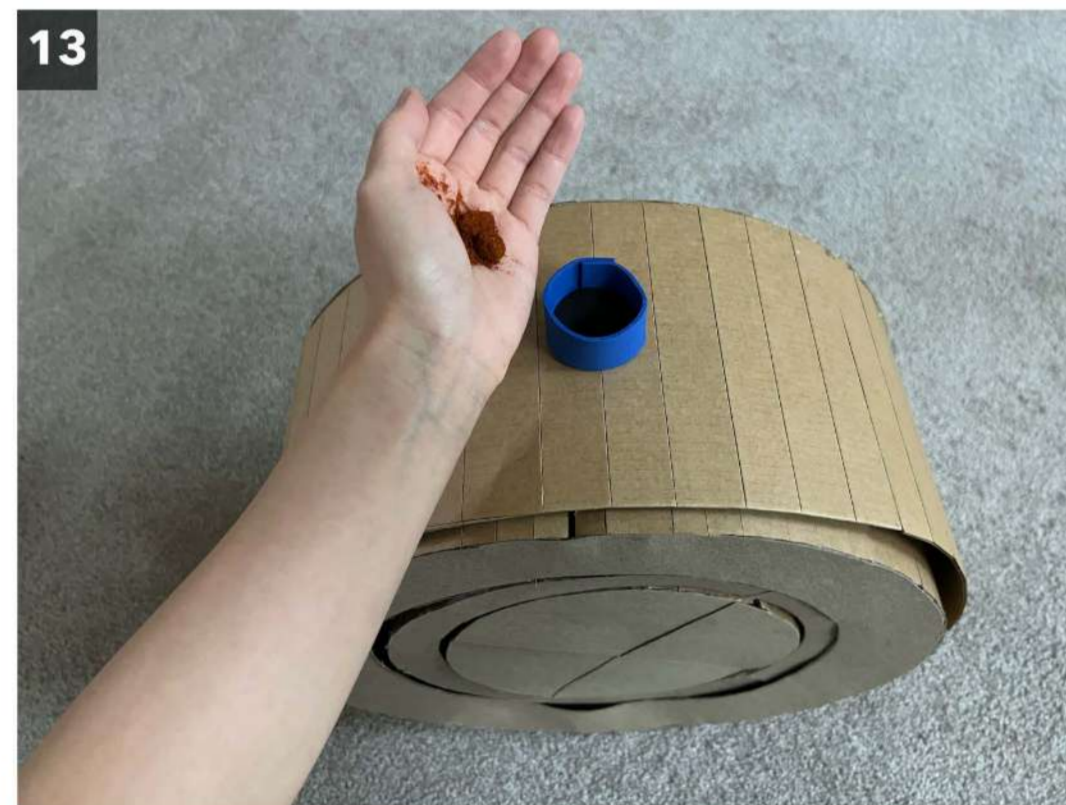
10 Take out the grow basket.



11 Remove the secondary cover.



12 Put the basket back on the media bed.



13 Feed the fish through the top pipe.



14 Water from the fish tank is transferred to the box through the water pipe & pump.



15 UV light and photocatalysis fan are on the top.



16 The media bed will rotate to circulate the water.

FORM DEVELOPMENT



Thank You