

“ Reshape better experience for a sustainable culture ”

■ PRODUCT & USER EXPERIENCE DESIGN

■ SERVICE DESIGN & VENTURE INNOVATION

■ FORESIGHT STRATEGY & INSIGHTS DEVELOPMENT



Vision-Driven, Solution-based  
**Experience** Design professional  
Parsons MFA Design +Technology Alumna

■ My objective is to implement sustainable values among products and people, reshaping better experience with compassion, science & emergent technologies, sense of aesthetics in hybrids.

■ Portfolio.  
**Haijing Liu**

/-20  
Selected

# Product Designer @ CRM Features

Designing products as an Independent Contributor to support multiple of Porsche's business functions

## ► I Project . "Taycan Test Drive" @ Porsche China Event Dept.

"30 Days Go Live, Support Porsche China's Event Department

**Waiver Signature**      **License E-scan**      **Customer Event Info mgmt**

**UseCase A**

- Event Etiquette
  - Simplify Checkin Process
  - Improve Efficiency
  - Paperless & Lo-Carbon

**UseCase B**

- PCN Staff
  - Optimize Customer Info Mgn
  - Enable Enterprise Data Utilization

The diagram illustrates the flow from Waiver Signature to License E-scan to Customer Event Info mgmt, which then branches into two use cases: UseCase A (Event Etiquette) and UseCase B (PCN Staff). Each use case is supported by screenshots of the mobile and desktop applications.

## ► II Project . Customer Relation Mgmt @ Porsche Experience Center

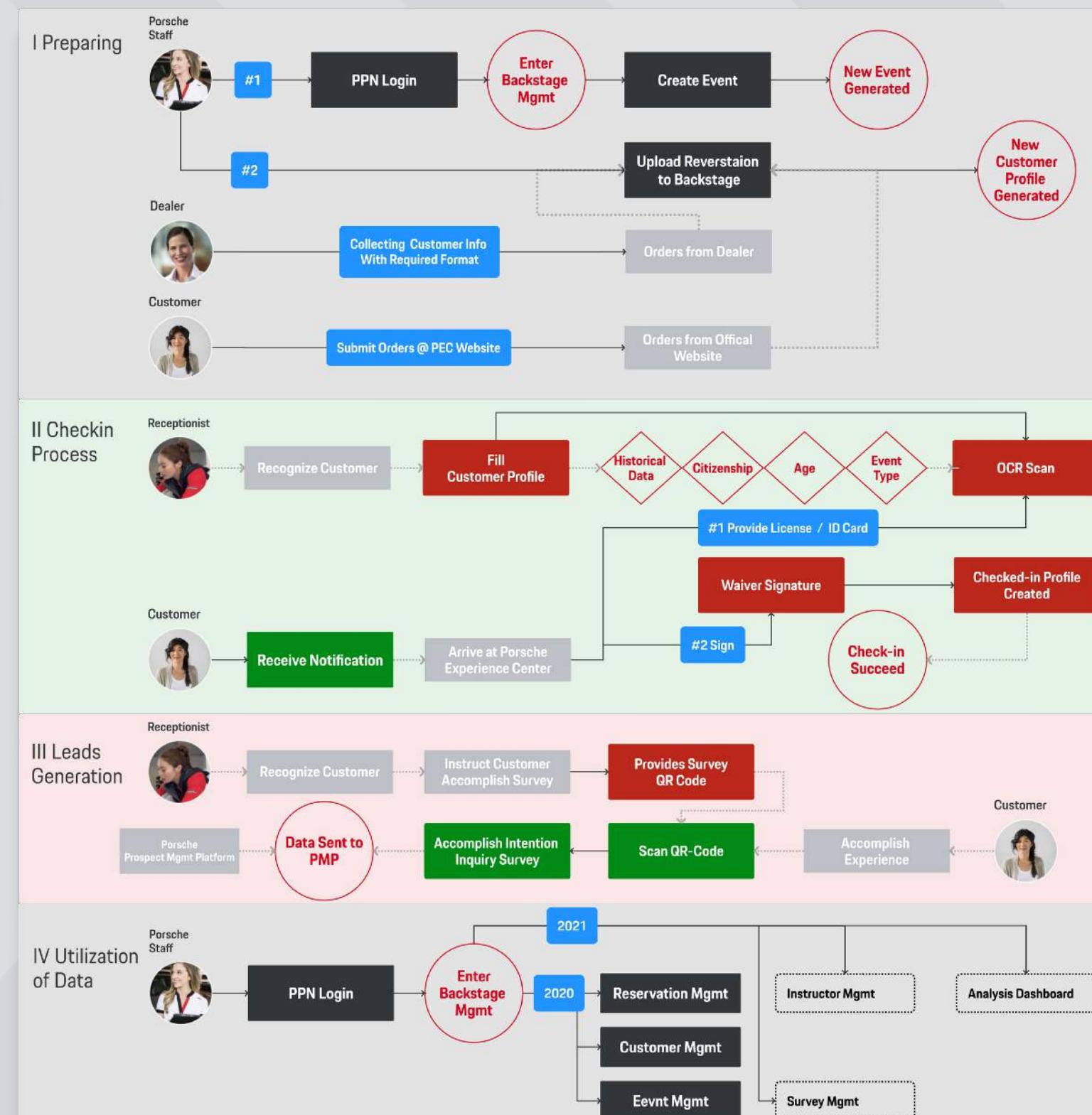
The diagram shows the integration of OCR Integration, Reservation Management, and Leads Generation. It highlights the 'OCR Information Verification' feature where a QR code is being scanned, along with other features like 'Reservation Mgmt' and 'Leads Generation'.

# CRM Journey & Service Blueprint for PEC

## Pain-Points, Solution



## 2020 User Journey @ CRM System for PEC



# Product Design - Checkin System



User: PEC Receptionist



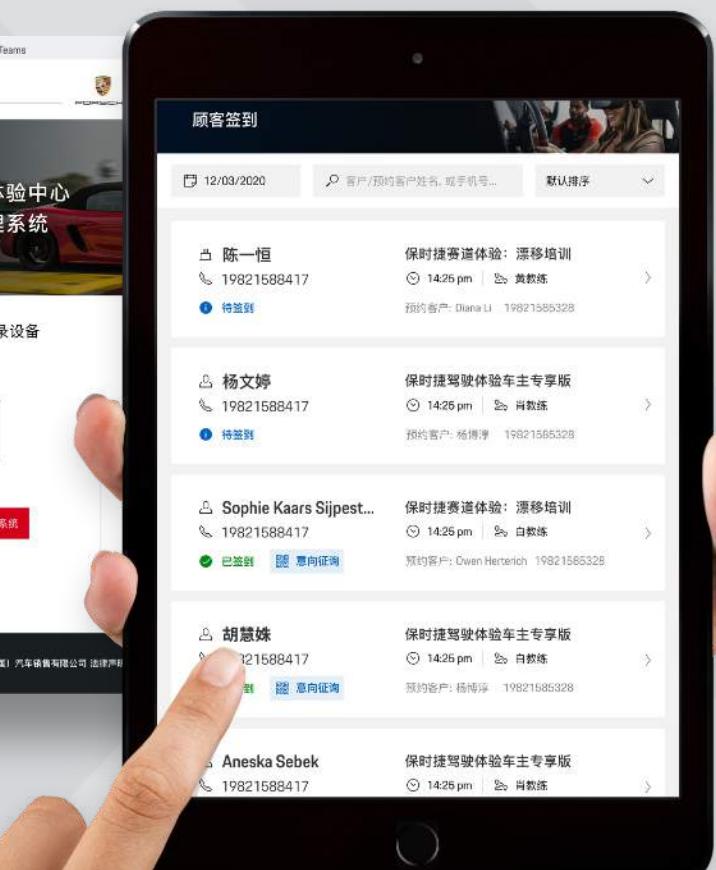
Efficiency Improvements with Features: Reservation Cards, Check-in with OCR, E-signature



## Reservation Cards Display

### Quick Look

- Today's Participants Display
- Customer Quick Search
- Customer Special Days' Notice



## Check-in

- Customer Information Edit
- Historic Information Reconfirm
- OCR Scanning of Driving License
- Individualized Waiver E-signature

- Age
- Citizenship
- Historical-Participation

保时捷体验中心签到系统

顾客签到

12/03/2020

客户/预约客户姓名, 或手机号... 搜索

默认排序

陈一恒	保时捷赛道体验:漂移培训	14:26 pm   黄教练
杨文婷	保时捷驾驶体验车主专享版	14:26 pm   肖教练
Sophie Kaars Sijpeste...	保时捷赛道体验:漂移培训	14:26 pm   白教练
胡慧妹	保时捷驾驶体验车主专享版	14:26 pm   肖教练
Aneska Sebek	保时捷驾驶体验车主专享版	14:26 pm   肖教练

请选择登录设备

PED 签到系统

OCR 去扫描

去扫描

OCR

顾客基本信息

顾客姓名 \* 陈一恒 称呼 \* 女士

身份证件 \* G22190968 是否成年 \* 是

国籍 \* 澳大利亚 联系方式 13888888888

所在省/市 \* 湖北/武汉 邮编 \* 请填写

详细地址 \* 保时捷体验中心签到系统

邮箱地址 yihengchen@porsche.cn 紧急联系人 \* 李妍

紧急联系人电话 \* 13777777777

顾客体验活动

参与类型 \* 试驾 活动名称 驶电而行

活动日期 09/01/2020 09:00 AM

驾驶证号码 \* 请填写 分组 Group A

预约客户姓名 \* 许瑶 预约客户联系方式 1228880007

顾客相关材料

选择相关证明材料 \* 驾驶证 其他材料

客户驾驶证 \* 请完成拍摄 客户驾驶证 (副页) \* 请完成拍摄

> 下一步

返回

E-Signature

OCR信息验证

请核对OCR校验信息，并勾选将覆盖的选项

<input type="checkbox"/> 全选	OCR校验信息
<input checked="" type="checkbox"/> 称呼 *	先生
<span style="color: red;">▲ 与登记信息不符合</span>	
<input checked="" type="checkbox"/> 客户姓名 *	陈一恒
<span style="color: red;">▲ 与登记信息不符合</span>	
<input checked="" type="checkbox"/> 国籍 *	澳大利亚
<span style="color: red;">▲ 与登记信息不符合</span>	
<input type="checkbox"/> 所在省市	湖北省 武汉市
<span style="color: red;">▲ 与登记信息不符合</span>	
<input checked="" type="checkbox"/> 详细地址	保时捷体验中心签到系统
<span style="color: red;">保时捷体验中心签到系统</span>	
<input checked="" type="checkbox"/> 驾驶证号 *	6101041770
<span style="color: red;">6101041770</span>	
<input checked="" type="checkbox"/> 有效期开始日期 *	2014/10/30
<span style="color: red;">2014/10/30</span>	
<input checked="" type="checkbox"/> 有效期结束日期 *	2024/10/30
<span style="color: red;">2024/10/30</span>	

OCR扫描

> 取消操作 > 确认操作

Generate Waiver

Check-in Succeed

客户基本信息

顾客姓名 \* 陈一恒 称呼 \* 女士

国籍 \* 中国 身份信息 \* 310000199010100000

联系方式 13888888888 邮箱地址 LiyanChen@pdc.com

所在省/市 \* 上海/上海市 邮编 \* 200000

详细地址 \* 上海市浦东新区保时捷中心

紧急联系人 \* 许瑶 紧急联系人电话 13000000000

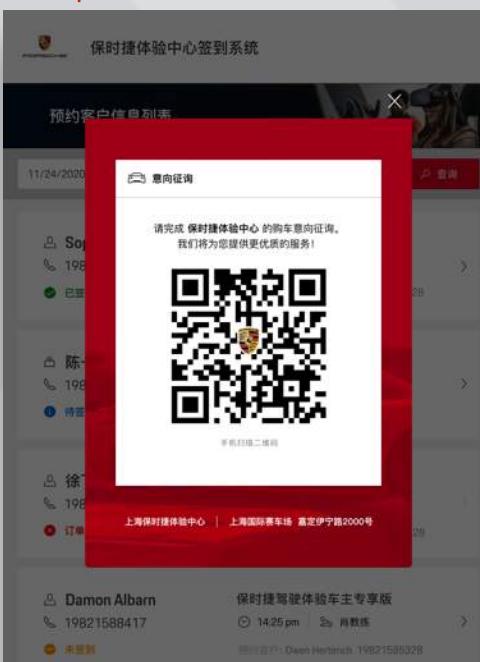
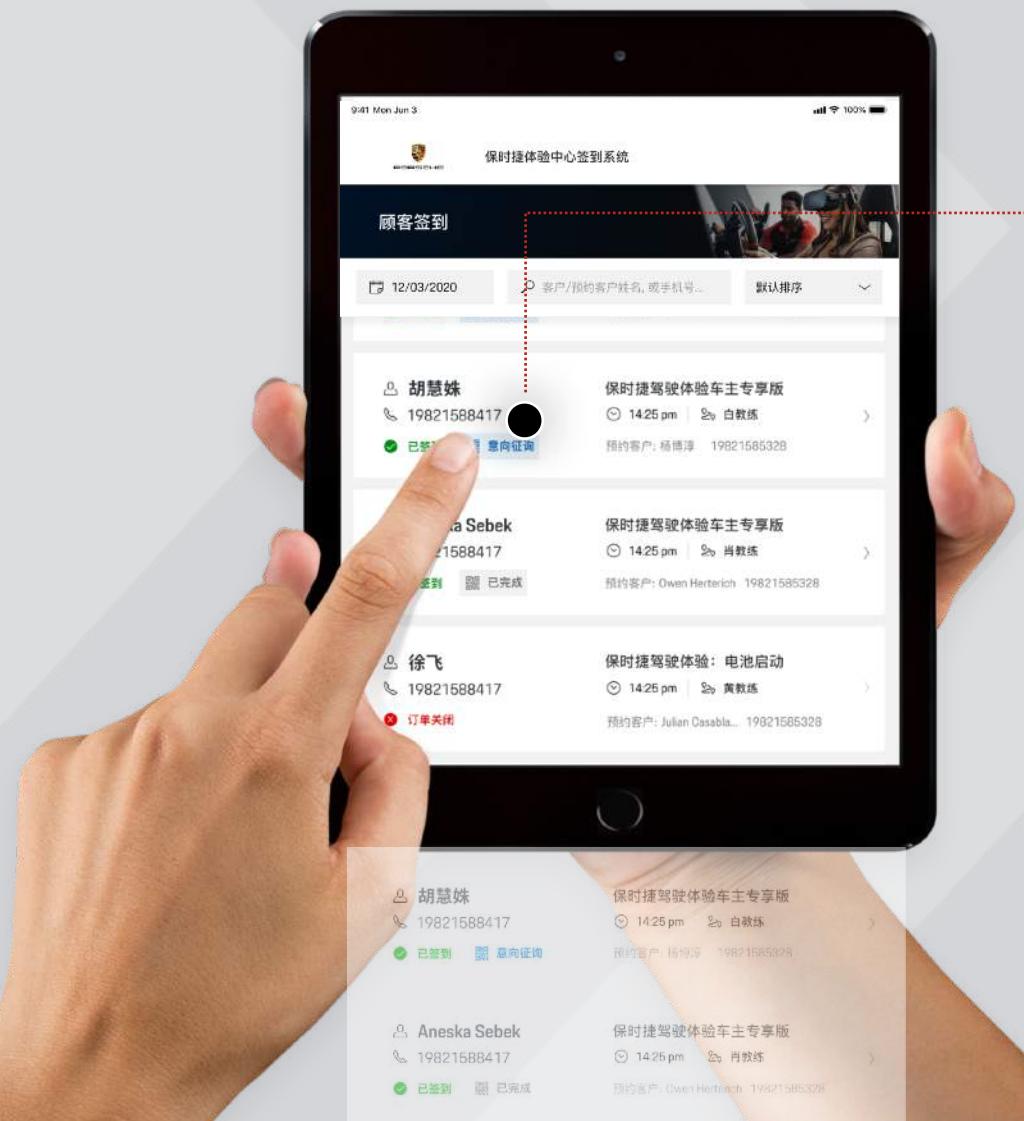
顾客体验活动



# Product Design - Leads Generation



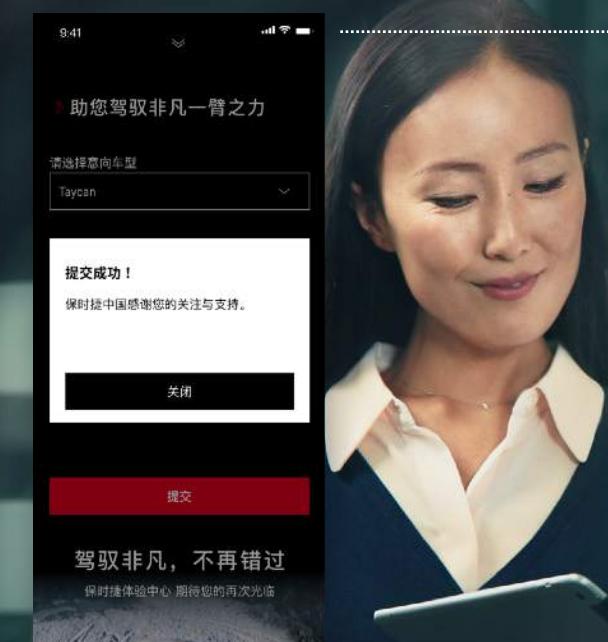
**Scenario:** Gathering Participants Purchasing Intention,  
Send Data back to Porsche's Prospect Management Platform  
Porsche's Sales Team will follow up with the further process



Instruct Customer  
Accomplish Survey



Scan QR code



- Prospect Data Mgmt Platform @ Porsche China  
Sales Team follow up with Potential Consumer

A Recap of Experience

Purchasing Intention Inquiry  
with Motor Type &  
Intended Porsche Center



# Product Design - Notifications



User: PEC Customer



## Scenario Analysis: Improve Experience with a user centric method.

Introduce User Persona UX Design Method in Porsche Digital China's Scrum Development Process.  
The Goal is to Amplify Customer Experience and to Guarantee a Qualified Leads Data.

Target Leads @CRM for PEC - A Designed Persona



Lily, 38

Manager @ Advertising Industry

Disposable monthly income: 30k ~ 45k

Porsche Experience Centre Test Drive  
Customer

Needs Analysis

Motivation

Replacement

Audi Q7 owners  
Consider replacing sports car  
Test Drive Experience to  
familiarize with the motor

Core Needs

Advice On Motor Purchasing Decision

Second visit to the Porsche Experience Center  
Booked "Porsche 911 Driving Experience" for the first time  
Fully-trust in the instructors of the experience center  
Hope to get more constructive opinions on car purchase-decision

User Evaluation

Essential Leads

Customer completes the survey,  
the system returns customer's  
data to PMP, and generates  
Leads @Porsche

Promoting features within the technique implementation scope as a UX Designer



Push @11.30 am

Push notification around lunch-time the day before event. A certain time that is more obvious to be noticed and customer will feel less bothering.



Rescheduling

Provide our customer an access of Reschedule due to Special Weather Condition



UV & AQ Index

PEC events requires a frequent outdoor engagement. the weather info by hours & AQI UV Index helps our customer better prepared and stay informed



Survey Integration

Amplified survey touch-points accessibility by placing its interface with the timing proposal that help Customers recall their fresh memories.



# Product Design - Backstage Management



User: Porsche Experience Center & Porsche Sales Staff



Launched Main Feature: Reservation Mgmt  
Customer Info Mgmt  
Event Mgmt

Developing: Survey Mgmt  
Instructor Mgmt  
Analysis Dashboard



Centralized Storage & Empowered the utilization of customer data

The screenshot shows the Booking Management section of the backstage system. At the top, there are tabs for Booking Management, Customer Management, and Activity Management. The current view is under Booking Management. It displays a list of bookings with columns for Customer Name, Phone Number, Experience Project, Participation Time, Group, Status, Booked Person, Booked Person Contact, and Booking Details. A specific booking for "我的名字很长" is highlighted. Below the list, there are sections for "Customer Basic Information" (including gender, name, contact, and address), "Experience Project Details" (listing project type, customer category, location, and responsible person), and "Order Add-on Services" (listing add-ons like "数据包(英文)" and "保时捷驾驶体验分享版"). At the bottom, there is a "Customer Checklist" button.

The screenshot shows the Customer Information Management section. It features a header with tabs for Booking Management, Customer Management, and Activity Management. The main area displays a list of customers with columns for PCN-Code, User Name, and Registration Date. A specific customer profile for "赵传赵传赵传" is shown in detail, including sections for "Customer Basic Information" (with a photo and ID card), "Booking Proof Materials" (showing a driving license), and "Customer History Activities" (listing past bookings). At the bottom, there is a "Customer Checklist" button.

The screenshot shows the Event Management section. It has a header with tabs for Booking Management, Information Management, and Activity Management. The main area displays a list of events with columns for Activity ID, Activity Name, Activity Start Date, Activity End Date, Activity Type, and Activity Manager. A specific event for "911 Driving Experience" is shown in detail, including sections for "Activity Details" (listing activity type, location, date, and responsible person), "Order Add-on Services" (listing add-ons like "数据包(英文)" and "保时捷驾驶体验分享版"), and "Customer History Activities" (listing past bookings). At the bottom, there is a "Customer Checklist" button.

## Customer Info Mgmt

## Event Management

The screenshot shows the Data Import module. It has a header with tabs for Booking Management, Customer Management, and Activity Management. The main area is titled "Import Customer Data" and includes a "Select Customer List" section with two radio button options: "Participate in Client List" and "Participate in Order List". Below this is a "Select Upload File" section with a file named "Participate in Client Template.xlsx" (0.000KB/0.000KB (100%)). A red circle highlights the "Import" button at the bottom right.

The screenshot shows the Data Import module after a file has been uploaded. It has a header with tabs for Booking Management, Customer Management, and Activity Management. The main area is titled "Select Imported Customer Data" and displays a table of imported customer records. The columns include Customer Name, Gender, Nationality, Contact Method, Identity Information, Address, Email, and Registration ID. Some rows have error messages like "无法识别服务无法匹配" and "客户姓名未填写" next to them. A red circle highlights the "Import" button at the bottom right.

# CRM Milestones @2020

## 5-Person Team In Scrum Process



# Design System China - Web

## Sprint Planning & Basic Examples

Initiate Design System China-Web Project from Design Chapter, Co-work with other designers to build a brand-consistent Porsche design language, developer-friendly UI Components, and guidelines to support cross-device/platform Porsche digital products

**Porsche Design System China Sprint Planning**

Created by Haiping Liu  
Last updated Nov 17, 2020 by Mia Xu • 2 min read • [Analytics](#)

The Porsche Design System unites digital Porsche products around a shared design system, enabling everyone to speak the same language, work with the same tools and use pre-built resources to efficiently create outstanding digital products: consistent, brand-appropriate and high-quality.

**Sprint Goal**  
Accomplish the localized version of Porsche Design System

**Output**  
**Design Platform**  
Figma

**Design System China**  
Ends  
iOS; Android; Desktop-Web; iPad-Mini; Windows Surface;  
WeChat Applet

**Full Version**  
Sync-Chapter: PDC Engineering

**Sprint Backlog**  
List of backlog items that we're committed to work on during the sprint.

**DSC**

- Porsche Design System CN Basic
- Porsche Design System CN App (Includes WeChat Applet(TBD))
- Porsche Design System CN Web (Includes Dark-Mode)

**Public Components**

- DSC "Public Components Project" KO Meeting
- Participants: PDC Engineering + User Experience
- Chapter-Sync Weekly Meeting (Framework + ContentSetup)

**Roadmap**

- Project Roadmap Jira

**Team & Roles**

**Porsche China Light Theme / Layer Styles**

更新时间: 2020-12-1 @Jiani

字体是UI设计中最基本的构成之一。字体系统的建立主要解决的是内容可读性以及信息的表达，同时选择不同的字体传达不同的设计风格。通过定义字体的使用规则在设计上达到统一性和整体性，从而在阅读的舒适性上达到平衡。

我们建议从下面四个方面出发：字体、字号与行高、字重、字体颜色

**字体**  
优秀的字体系统首先要选择合适字体，若无特殊需求我们优先推荐使用默认字体

**iOS 默认字体**  
中文：苹方-简 西文&数字：Porsche Next

**Android 默认字体**  
中文：思源-简 西文&数字：Porsche Next

**字号与行高**  
**行高**  
行距/行高 前端代码实现上，行距会自动平均分配到文字上下端，这里所说的行距/行高为每行字体占用的高度空间(如下图)

**间距规范**  
UI设计和开发过程中，任一元素（模块）与模块之间的距离，按照页面结构分类，可分成布局间距和模块间距两种

**基础间距说明 / Base spacing**  
为控制UI设计中的尺寸多变性，我们对UI设计的实际距离做了约束，保证全产品风格的一致性，单位为网格最小值4，且能被4整除。

间距	使用位置概述	示例
4px	较少情况下，用于符号和文字等同一元素	
8px	亲密间距，多用于横向相邻或同一元素	

**Porsche Typography**

此文件仅作为参考，您必须尊重此文件中所包含的所有设计，以确保一致性。此文件是整个产品的设计规范，因此请勿对其进行修改。

# Design System China - Web

## Components Examples

### 按钮

**概述/原则**  
按钮用于引导用户操作，避免失焦或出错。按钮的文案应当明確无歧义，并与即将执行的动作相融合。

**样式集合**  
按钮类型分为以下几种：

- 一级按钮
- 二级按钮
- 三级按钮
- 文字链
- 文字链

**一级按钮**  
一级按钮常用于页面的正向操作，或用于页面中优先级最高的操作，起到正确引导用户的作用。  
如果一级按钮需要搭配次要操作，可与三级按钮共用，通常将一级按钮放置于右侧。在同一页面中，应仅有一个一级按钮。

自适应宽度，左右内边距固定，文案不超过8字

Default	Hover/pressed	Disabled	Loading
一级按钮	一级按钮	一级按钮	一级按钮

**二级按钮**  
二级按钮采用中性色，用于无强引导的场景，可在页面独立使用。也可与三级按钮搭配使用。

自适应宽度，左右内边距固定，文案不超过8字

Default	Hover/pressed	Disabled	Loading
二级按钮	二级按钮	二级按钮	二级按钮

**三级按钮**  
通常与一级或二级按钮搭配使用作为次要操作。也可以在页面单独存在，表达优先级较低的操作。

自适应宽度，左右内边距固定，文案不超过8字

Default	Hover/pressed	Disabled	Loading
三级按钮	三级按钮	三级按钮	三级按钮

**按钮组**  
按钮组位于容器右侧，主按钮在右，次按钮在左。使用自适应按钮时，尽量保持文案字数相等。

### 单行文本框

**概述/原则**  
输入较少的字符总数，使用单行的输入形式。

**样式集合**  
单行文本框类型分为以下几种：

- 用户名
- 默认占位符
- 单行≤6个字 \*
- 默认占位符

- 请选择
- 已选择
- 单行≤6个字 \*
- 默认占位符

- 标签 \*
- 0/16
- 默认占位符
- 0/16

**组件构成**

1. 标签文字 (可选)  
2. 必填符号 (可选)  
3. 输入容器  
4. 点宽符 (未输入必显示)  
5. 提示信息  
6. 反馈信息  
7. 表达按钮 (可选)

**基础文本框**  
用户进行文本输入的区域，是文本框的必备单元。  
当表单简短，输入内容类别明确，无需强化字段名或者帮助信息时，可以采用此基础样式。

Default	Hover	Focused
用户名	用户名	用户名

**Inputting**  
输入内容超出输入框当前宽度时，输入中右对齐显示。  
Inputting

Finished Input
已输入的文字超出文本框所能显示的范围

### 吐司提示反馈

**概述/原则**  
一种轻量级的操作反馈弹出窗口，用于显示简短的非关键消息，直到经过指定的持续时间或用户将其关闭为止。

**样式集合**  
吐司提示类型分为以下几种：

- 中性文案
- 成功文案
- 警告文案
- 失败文案

**组件构成**  
吐司提示内容区域中，包括了提示信息匹配的图标、文字描述、和关闭按钮。

1. 16dp：快速告知用户吐司提示的反馈种类  
2. 16dp：为用户提供关于所指状态的详细信息和可采取措施  
3. 16dp：关闭吐司提示反馈  
4. 显示容器

**组件用途**  
默认吐司提示保持可见直到3000ms后消失，或用户选择手动关闭。除了关闭按钮外，用户也可以通过点击/单击它外部的任何区域将其关闭。  
总是出现在页面上方，与页面上 Margin 为80dp，与页面左右居中对齐。自适应宽度，左右内边距固定。  
当持续时间超时，组件将被自动关闭。

**Neutral**      **Success**      **Warning**      **Error**

- 中性文案
- 成功文案
- 警告文案
- 失败文案

**中性提示**  
用于态度中立的通知反馈，例如“共新增15项客户信息”新增数据反馈提醒。

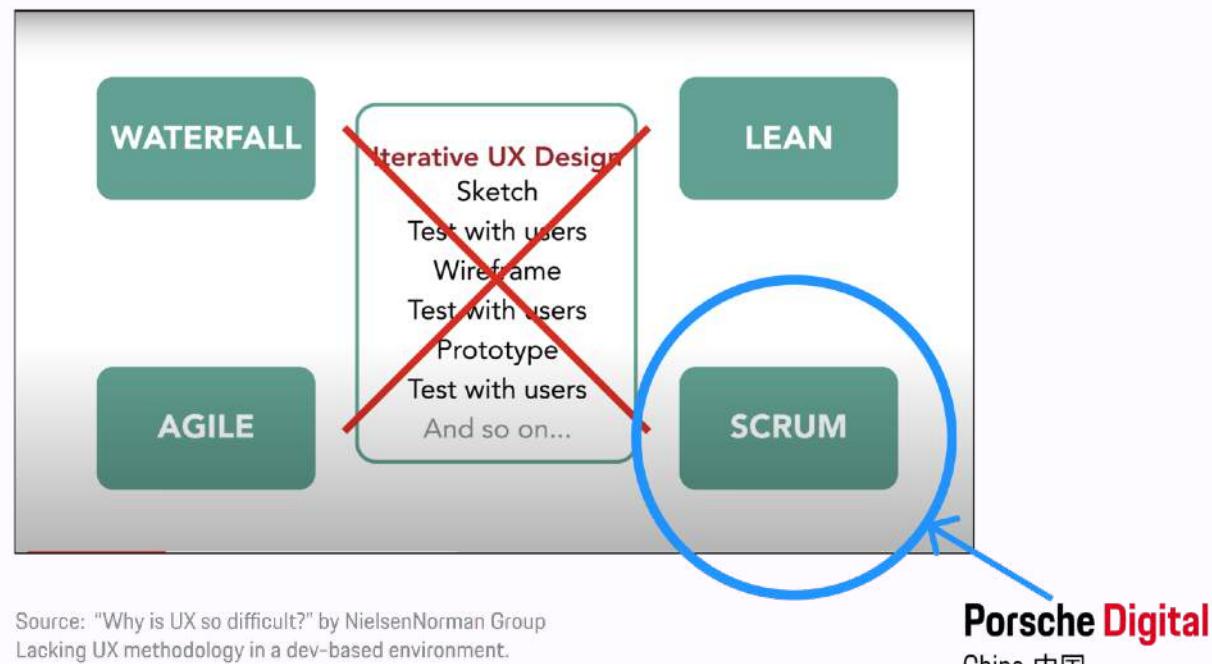
自适应宽度，左右内边距固定，文案最多不超过26个中文字符

Default	Content
中性文案	我是中性文案中性文案中性文案，中性文案中性文案中。

# Revamping Product Experience with Persona, User Testing, UX roadmap

Evangelize the user-centric design method in agile development process for Porsche Digital China

## Painpoints



## PDC User Experience Designer

### Phases in Product Development

1. Requirements	2. Building	3. Operation	Horizontal Execute
Indirect Needs Inventory 需求来自于敏捷流程中的产品文档 (user story)	Locked in the User Story 设计的意义是通过塑造界面实现 user story	Inadequate Users' Feedback 缺乏与真实用户的互动和信息反馈	Inappropriate Expectation of Role 团队共识为满足基本需求的界面实现, 以用户为中心的设计方法很难在项目中落实

## PDC Product Owner

### Phases in Product Development

1. Requirements	2. Building	3. Operation	Horizontal Execute
Indirect Needs Inventory 需求通常来自业务方, 非直接的用户, 颗粒度过粗	Implementing First 技术背景的PO在撰写User Story时通常只能满足到技术实现	Inadequate User Sample / Data 缺乏有效数据反馈, 以及对有效数据的应用	Lacking the knowledge of User Centric Design 不了解具体有效的以用户为中心设计的方法

➤ Self-initiate Project @ Design BiWeek Sharing

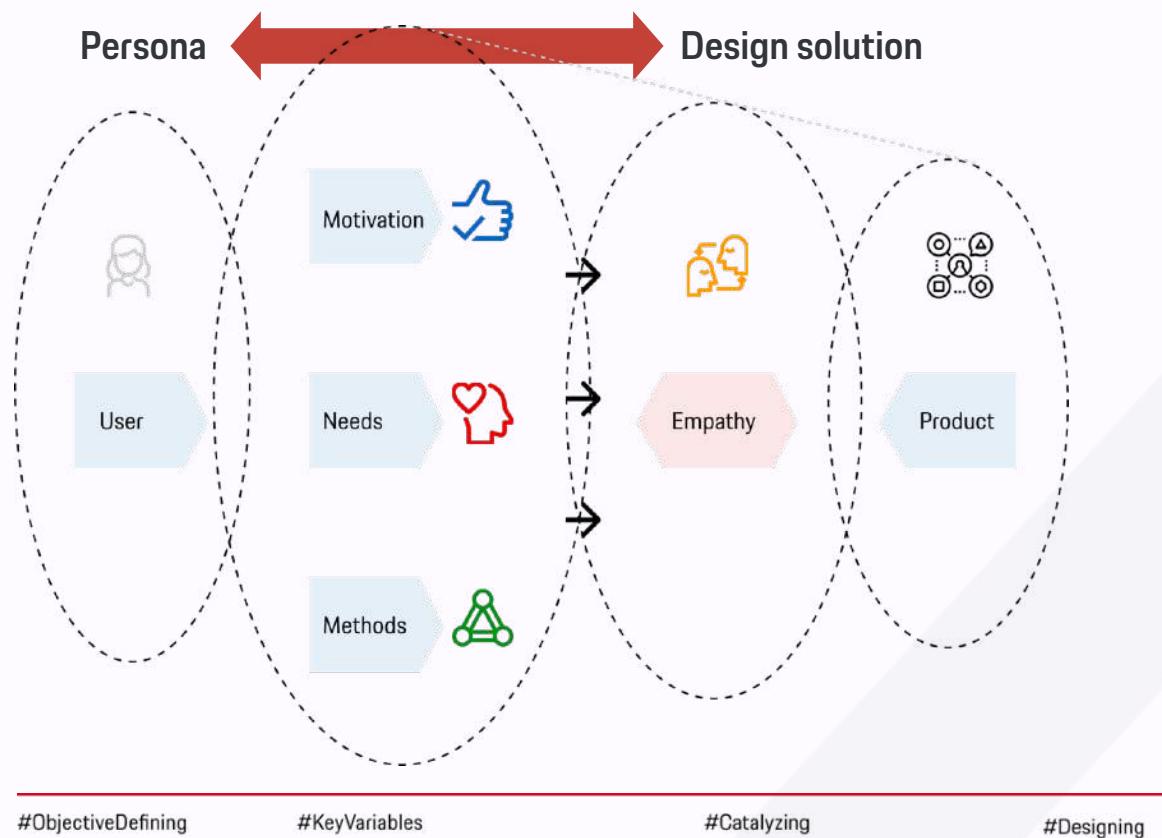
# ➤ Know How - Persona

Introducing An iterative user centric method help us defining and designing

## ➤ The Point of Persona

Summary of high-precision relevant data

- Based on real-user-data gathered with **qualitative/quantitative research methods** such as **user interviews, focus groups, ethnographic research, and surveys**
- Help Project Roles get rid of their own mental-model, immerse themselves in the role of the target user, to **related to problems from the perspective of user**



## ➤ Types of Persona



### Proto Persona

Help the team quickly reach a consensus on "who are our users", Not based on user research data. To a certain extent belongs to the designer's imagination works.

### Qualitative Persona

based on a small sample of qualitative research, such as user interviews, usability tests, or field visits. For very clear scenarios. Frequently required for Business-side product

### Quantitative Persona

With the influence of the initial qualitative research, survey data of a larger sample, was further collected and portrayed by statistical analysis.

### DOs

- ✓ **Easy to Remember, Executable, Distinguishable**
- ✓ Summarize the **primary needs** of different user groups, help the team quickly empathize user's situation
- ✓ A complete persona includes **scenario analysis** and **user story**
- ✓ Both Persona and User Scenarios can **be iterated** based on real feedback
- ✓ **Serves design decisions**

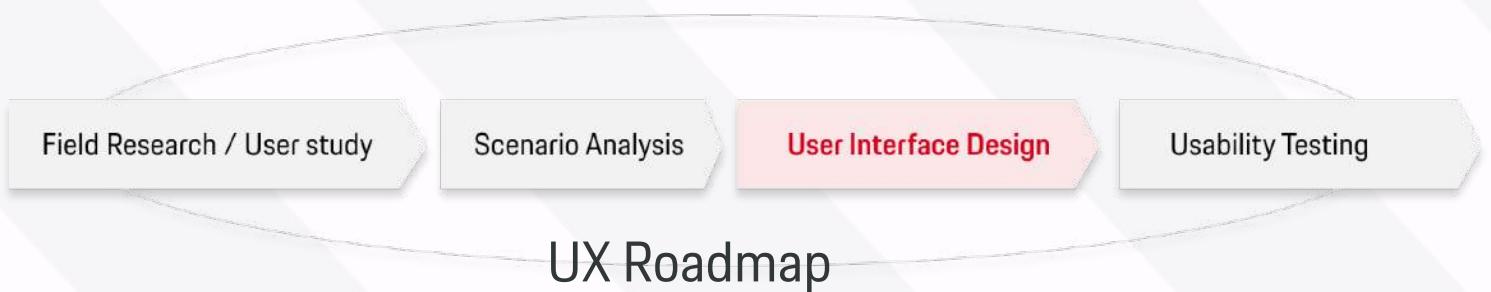
### Don'ts

- Does not need to be very detailed
- Does not need to be accurately classified based on multiple dimensions, such as psychology, demographics, and behavior patterns

# Know Step - UX Roadmap

Introducing An iterative user centric method help us defining and designing

## ➤ How to drive User Centric Method in the Agile Development Environment?



## ➤ The Point of UX Roadmap

Let us see an **experience driven product vision** instead of the trivial tasks of agile

RoadMap for 2021 V0.1			
Created by eff Date 11.2020 - 7 min read + list analysis			
序号	Sprint9 (2020-12-22~2021-01-04)	Sprint10 (2021-01-05~2021-01-18)	Sprint11 (2021-01-19~2021-02-01)
1	天气API(集成) 预约管理：数据分配	数据管理：客户评价	数据Mobile：客户评价
2	预约撤销 数据管理	数据Mobile：客户意向(归属)	
3	样式优化 (待定是否需要) 数据Mobile：PPN	与签管理	
4	数据Mobile：客户列表		
5			

UX RoadMap for 2021 V0.1			
序号	Sprint9 (2020-12-22~2021-01-04)	Sprint10 (2021-01-05~2021-01-18)	Sprint11 (2021-01-19~2021-02-01)
1	notification-情绪分析 数据地界研究	数据地界研究	用户满意度- 调研组
2	计划与场景的设计 计划与场景的初步产品设计	用户满意度- 后台工作人员	
3	问卷内容研究 用户问卷设计	用户满意度- 接待人员	
4		用户满意度- 消费者	
5			

序号	Sprint12 (2021-02-01~2021-02-21)	Sprint13 (2021-02-22~2021-03-08)	Sprint14 (2021-03-08~2021-03-22)
1	问卷内容整理 问卷整理	问卷填写页面(H5独立页面)	问卷填写页面(H5独立页面)
2		问卷填写页面(H5独立页面)	问卷填写页面(H5独立页面)
3			
4			
5			

序号	Sprint15 (2021-03-23~2021-04-06)	Sprint16 (2021-04-06~2021-04-19)	Sprint17 (2021-04-19~2021-04-30)
1	流量和满意度分析仪表板 流量和满意度分析仪表板	流量和满意度分析仪表板	release
2			
3			
4			
5			

Jira snaps

## ➤ The Features of UX Roadmap

### ✓ Multi-Dimensional

includes, persona, empathy map, information architecture, UI refinement, User testing plans

### ✓ Iterative

Meets the requirements of agile development process

### ✓ With Objectives

Understand goals of each UX backlog of what kind of problems it is trying to address

### ✓ Plan the goals of **user experience**

✓ Avoid design that only focuses on function utilization and be restricted in development-led agile system

✓ Finalize all UX-plans with the business owners approval and to be implemented as a Jira Ticket

> The goal is not to plan the product

> UX Roadmap Tasks are not specific UI design task within the scrum-sprint

2019.04 ~ 2020.08

### Full-Stack to End Experience Designer

Quants & Quals User Research, Requirement Analysis, User Journey, Workflow, Interaction Design, UI Design, Design System, Branding, UX Writing

Hardware as a service, Family Wellbeing Solution

*love +*

不在身边 依然陪伴

Innovative Digital Venture Powered By  Electrolux





Love+ drives Electrolux's IoT device business in China Market with mental & physical care solutions addressing the increasing ageing issue and structure-wise updates of the consumer groups.



## Ethno Background

The Elderly Market Segmentation in China



23%

Chinese Aging Population

They has been reached estimation of 23% and we expect that the number grow more in the future.

10,000 CNY / Year

Chinese elderly consume about 10,000 RMB a year on average (3,000 RMB, Average monthly income in China)

4,000,000,000,000 RMB

Total value of the elderly market was estimated at RMB in 2015 (\$ 600B)



Health

China is the world's third largest market for medicine and health care. Sales in 2014 were \$94 billion (up 14% year on year)



Education

There are 60,000 elderly education institutions and 7 million senior students nationwide



Digital

Over a third of 50-59 year old internet users in China identify themselves as being frequent technology users and this rises to 41% for the 60+



Tourism

40% of Chinese retirees are willing and able to go on holiday

### Electrolux Opportunities:

- Grow **Millennial Users (Young Professional)**'s brand loyalty since the structure of consumer groups for high-end home appliance are constantly updating
- Being a part of the **wechat eco-system** that serve billion-class users with unique wellbeing solutions
- Drive its **Selected IoT Device business** in China market as part of Global IoT Deploying Strategy

### 「 Love+ 」 Offerings In Brief



Millennials, Post80/90,  
Young Professionals



Daily Interactive Dynamics  
of Family Wellbeing Solution



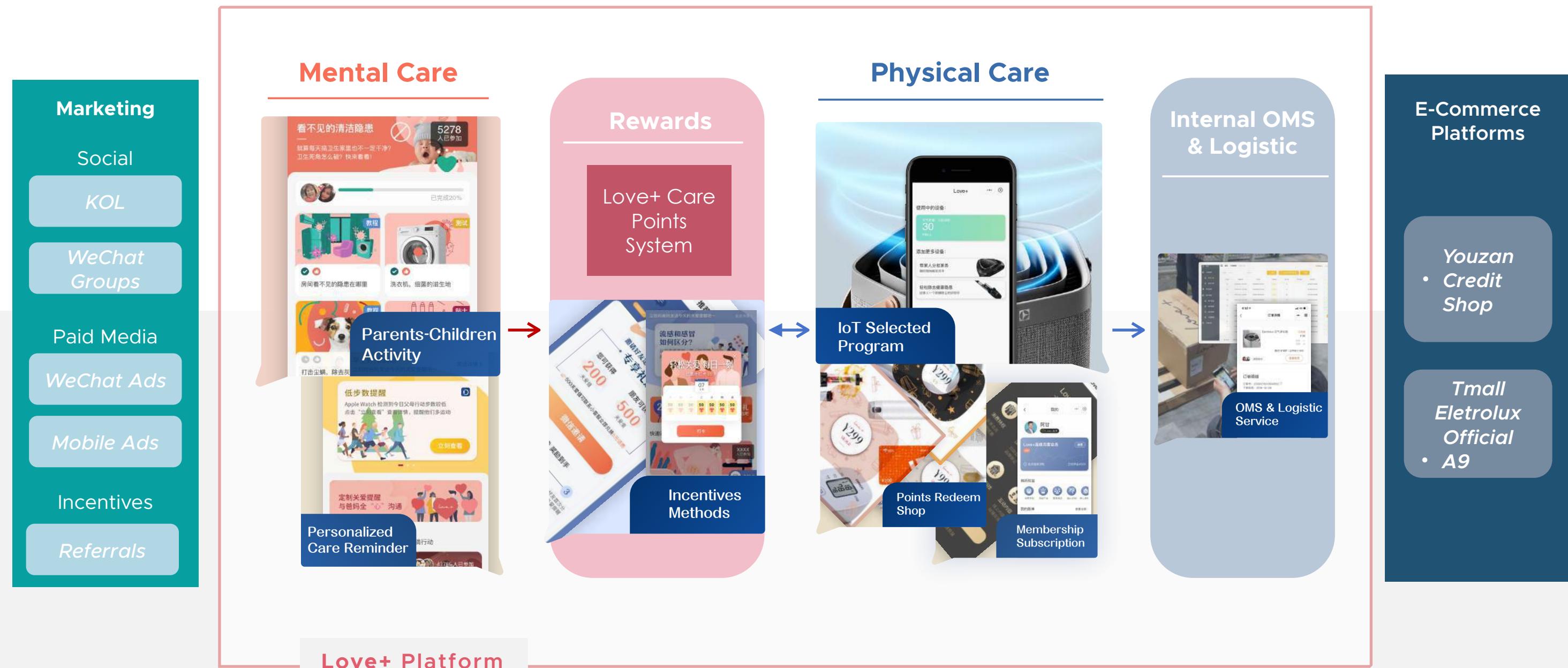
Neo - Retiree

Hardware as a service, for new caregivers who want to enrich the wellbeing life of their new retiree parents.

**Love+** provides a total wellbeing solution including customizable data-driven contents, gamified activities, IoT appliances with AI analysis approaches, caring points redeem store that synthesize mental and physical care program for the family's new retiree in a single platform.

# Business Model & Product Features Overview

Our Disruptive **New** Business Model that drives **Electrolux's** IoT Device Business in China Market, appeals to the rapidly changing channel system with both Mental & Physical Care Solution. Meanwhile **Mental care** is proposed as heart and soul of **Love+**



# Parents - Children Activity ( PCA )

## Overview

One product module of the **mental-care** section, provides content driven topics ranging from generation-gap, wellbeing tips, retiree fashion .etc, with various forms like tutorial, quiz, and a gamified playful system enabling children give care to their parents while having fun !



## PCA」 Type

**Tips**

Love+ 点滴行动  
50% 已完成  
帮爸妈认识新饭碗  
什么是直播博主？他们都在直播些什么？  
修正爸妈对年轻人的偏见

**Tutorial**

Love+ 点滴行动  
50% 已完成  
拯救爸妈的老腰  
告别在硬床或者瑜伽垫上  
哎呀老腰疼，试试“燕飞”新动作

**Quiz**

Love+ 点滴行动  
20% 已完成  
看不见的清洁隐患  
应该多久清一次空调？  
您选择了答案 A  
房间看不见的隐患在哪里？  
A 一年一次  
B 一年多次  
✓ 一年一次  
家用空调滤网上的灰尘及微生物数量相当可观，应每年定期请专业人士清洗，通常频率为一年一次。别让灰尘影响了健康哦！

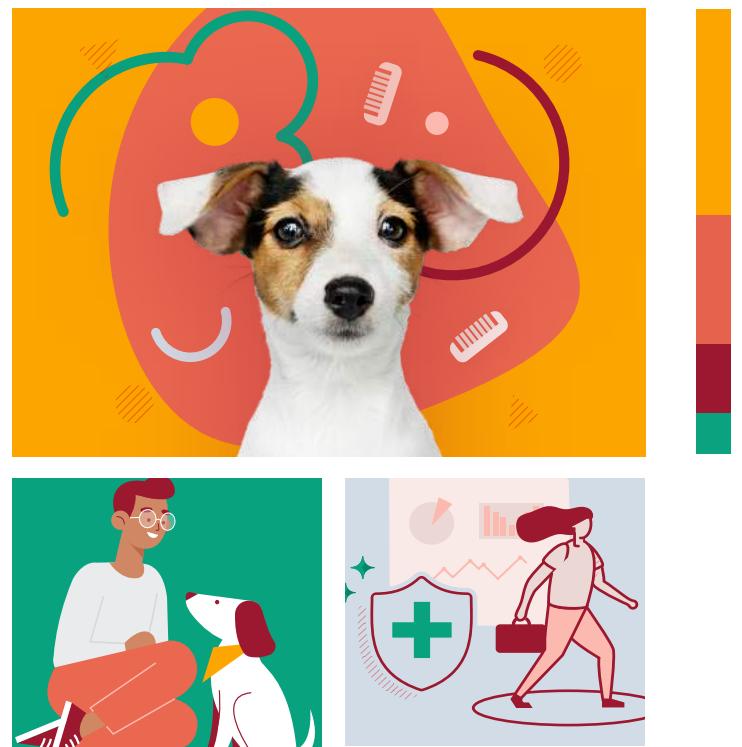
## Content Oriented activity

30+ Topics On premise of the version alpha



## Illustration Content Updates

The illustrative Content is planned to update with Love+'s New VI Guideline in 2020 sprints



PCA

## 2 end Clients Designed

Within the wechat based applet, Parents - Children Activity is designed to have two different end clients, and enable care giver creating fun and engagement offerings to their loved ones effortlessly.



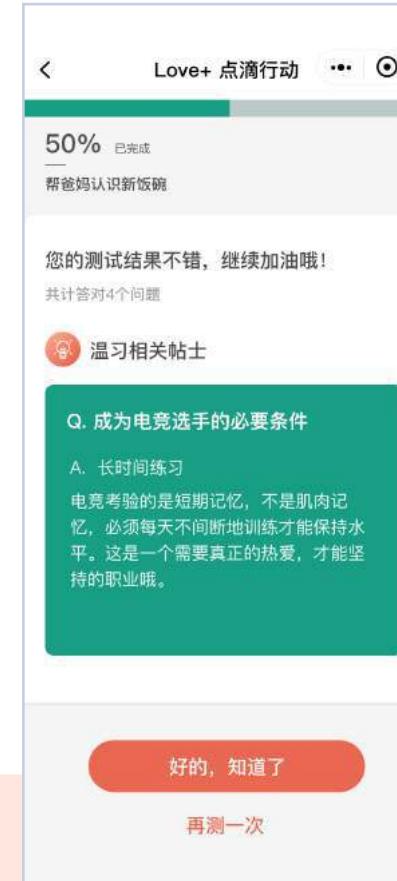
Care Giver



## Data driven iterative design



Care Receiver



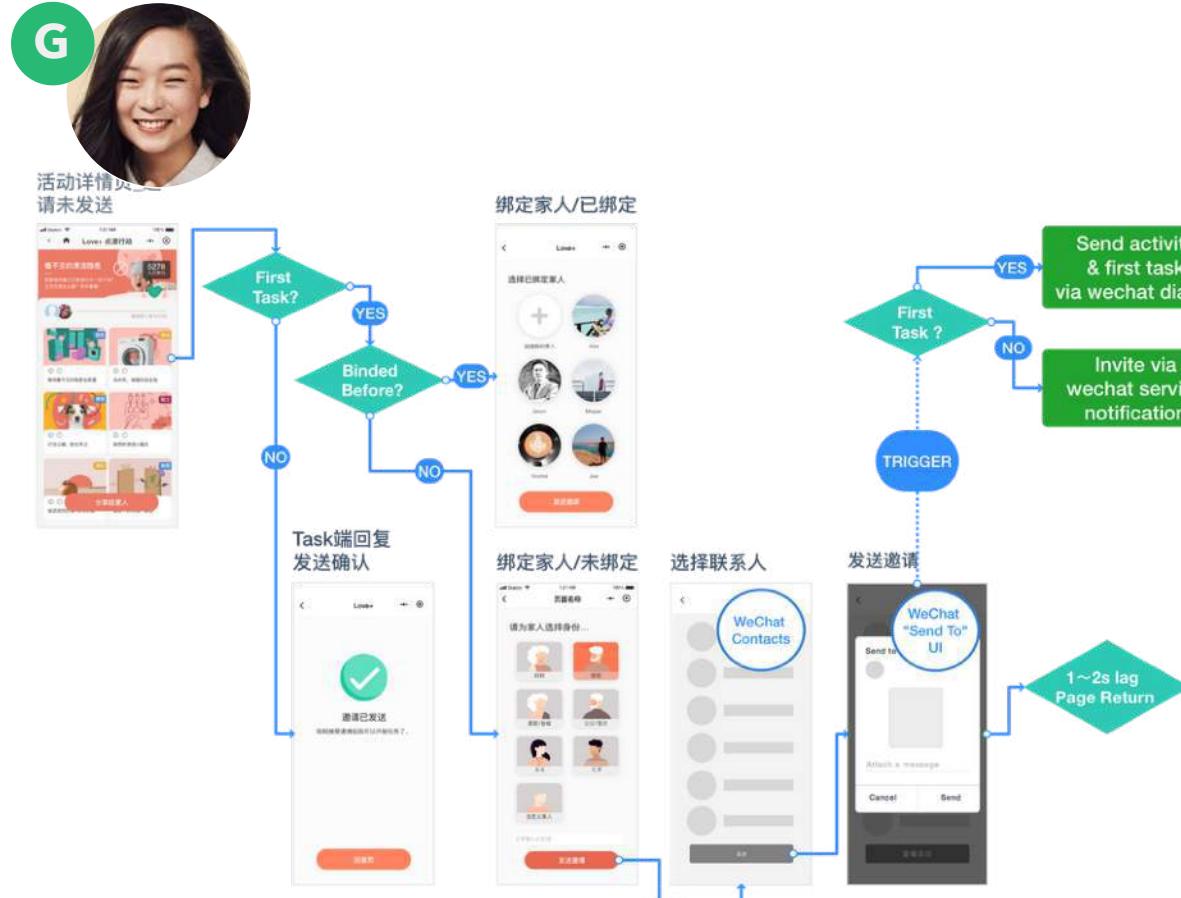
- Send task based activity to Care Receiver & receive notification once they finish one.
- Receive Care Receiver's Compliments

- Receive task-based activity within topics of Live Healthily, Moderating the Generation Gap, Fashionable Retiree.
- Give compliment to sender once accomplish a certain task or the whole stack activity.

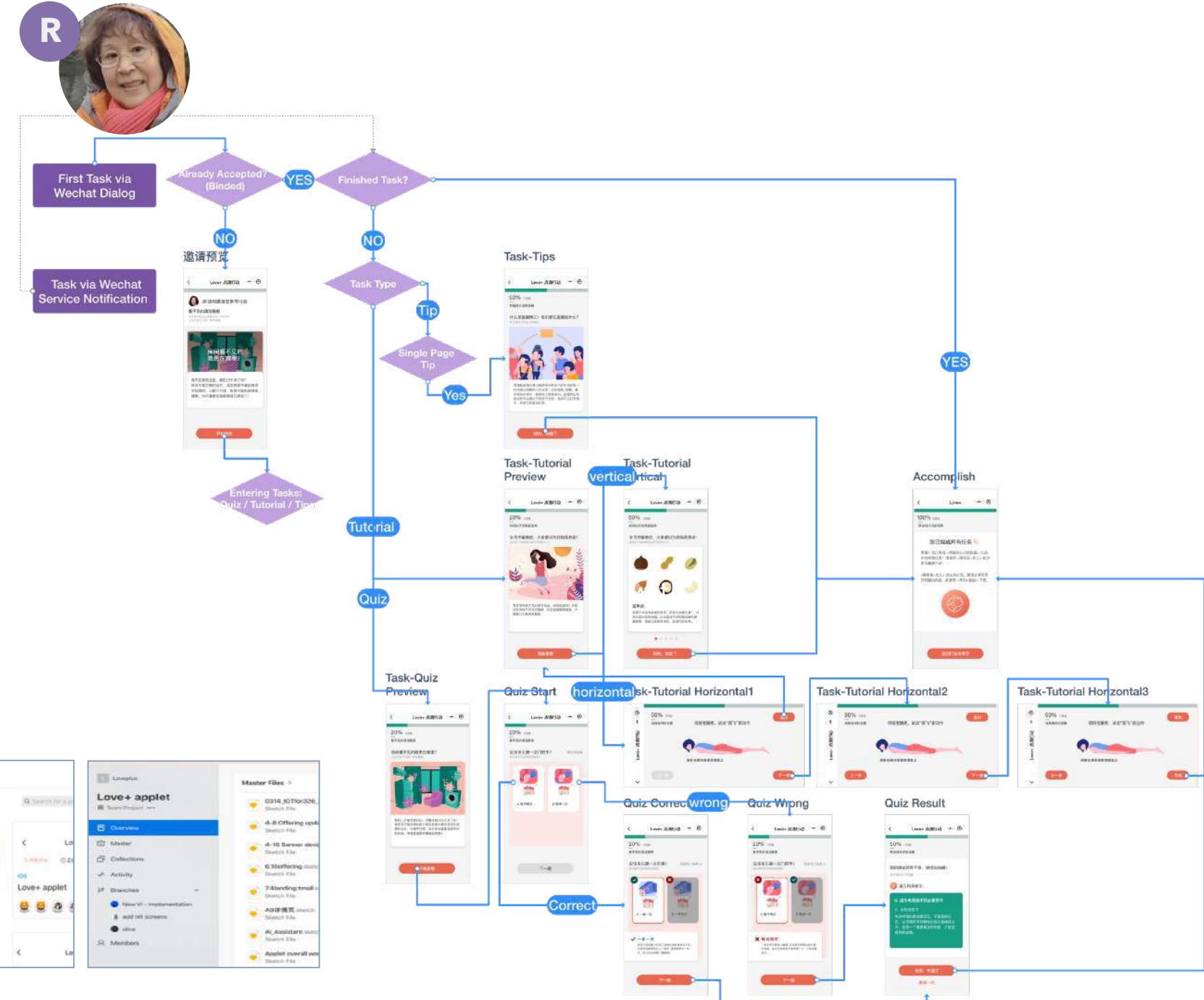
Love +

# PCA - Major work flow & Agile design stack ( + deliverables to engineering team

## Scenario1: Binding & Send Task



## Scenario2: Accepting & Task Overview



## Synergetic Methodology & Agile Design Tool-Stack :



Scenario Journey & Workflow Diagramming



Seamless Design Spec to meet Engineering Requirements



Version Control & Synergetic Tool in Design Management



MVT Prototypes & Motion / Micro-interaction Demoing



Cross-Functional Task Management / Design Sprints



Love +

# Caring Reminder

The automation system collects parents **location**, **birthday & health info**, generates reminders during special weather/occasions specifically. Care Givers are now enabled to remind their parents when there is a truly need.



Living away from parents,  
caring about their current situation?  
Did they wear masks during the haze day ?

## Customizable Caring Reminder



Special Weather Alarm



Holiday Greetings



Wellness Tips



## Beta Users' Feedback



“ very useful, My dad praised me filial and considerate on wechat last night! ”

XIN (Post 90)



“ Now I'm like to send beneficial tips to my parents every day, and they love it! ”

Tony (Post 85)



“ Since shared recipes few times, my mom was so pleased and started preparing hearty dinner ! ”

Mermaid (Post 80)



# Caring Reminder

## Type 1 - Personalized Reminders

How Does Personalized Reminder Work ?



E.g.  
Haze, AQI > 200  
Dad has respiratory problem

👉 ( Scan or Click Link Below )



MVT Prototype

Love +



“

Alpha ver. Trigger by **18** events with **15** special weather types associate with parents health info accordingly and **3** special holidays.

Example cases



# Caring Reminder

## Type 2 - Bite-Size Articles



**Non Conditional** reminder defined as Bite-size Article, generate **7 times per week**

This **daily basis** wellbeing content with topics such as Recipe, WellnessTip, enable Children give care to their parents **timely!**



# Care Reminder

## Working Mechanics & Trigger Rules

### Trigger Rules

Rule	Description	Condition & Priority
Notification Daily	At most once a day	Birthday #1 Holiday #2 Special Weather #3
Weather data Refresh	At 7:30 am everyday	Tag 3-high, Diabetes #1
Push time	Personalized: 7:30am / NonConditional: 12:30pm	CVD #2
Notification Weekly	N / A	Skeletal #3
Multi - Condition	Corresponding to the condition with highest priority	Respiratory #4
Rule of + TAG	Tag > Generic , Weather by "#" sequence	Sleeping #5
Avoid Repeating	Condition remains the same the day after, No Triggers	Generic #6

### Content Framework

# Condition	MSG Generic	3-high, Diabetes	CVD	Skeletal	Respiratory	Sleeping
#1 Father Birthday	✓		N/A			
#2 Mother Birthday	✓		N/A			
#3 Thanks Giving	✓		N/A			
#4 Heat wave	✓	✓	✓			N/A
#5 Temp Soaring	✓	✓	✓			N/A
#6 Cold Wave	✓	✓	✓	✓	✓	N/A
#7 Temp Dropping	✓	✓	✓	✓	✓	N/A
#8 Haze III * AQI>300	✓	✓	✓		✓	N/A
#9 Haze II * AQI:200-300	✓	✓	✓		✓	N/A
#10 Haze I AQI:100-199	✓	✓	✓		✓	N/A
#11 Continuous rainfall	✓		N/A	N/A	✓	N/A
#12 Continuous rain ends	✓		N/A	N/A	✓	N/A
#13 Continuous drought	✓		N/A	N/A	✓	N/A
#14 Continuous drought ends	✓		N/A	N/A	✓	N/A
#15 StrongUltraviolet *UVI >6	✓		N/A			
#16 Non-Conditional						7/Week daily basis

👉 ( Click & view the Product Requirement Documents, 中文  
<https://shimo.im/docs/hkWKDvg6rC9x9Vtc>

# Caring Reminder

## Work-flow & Function in MVP

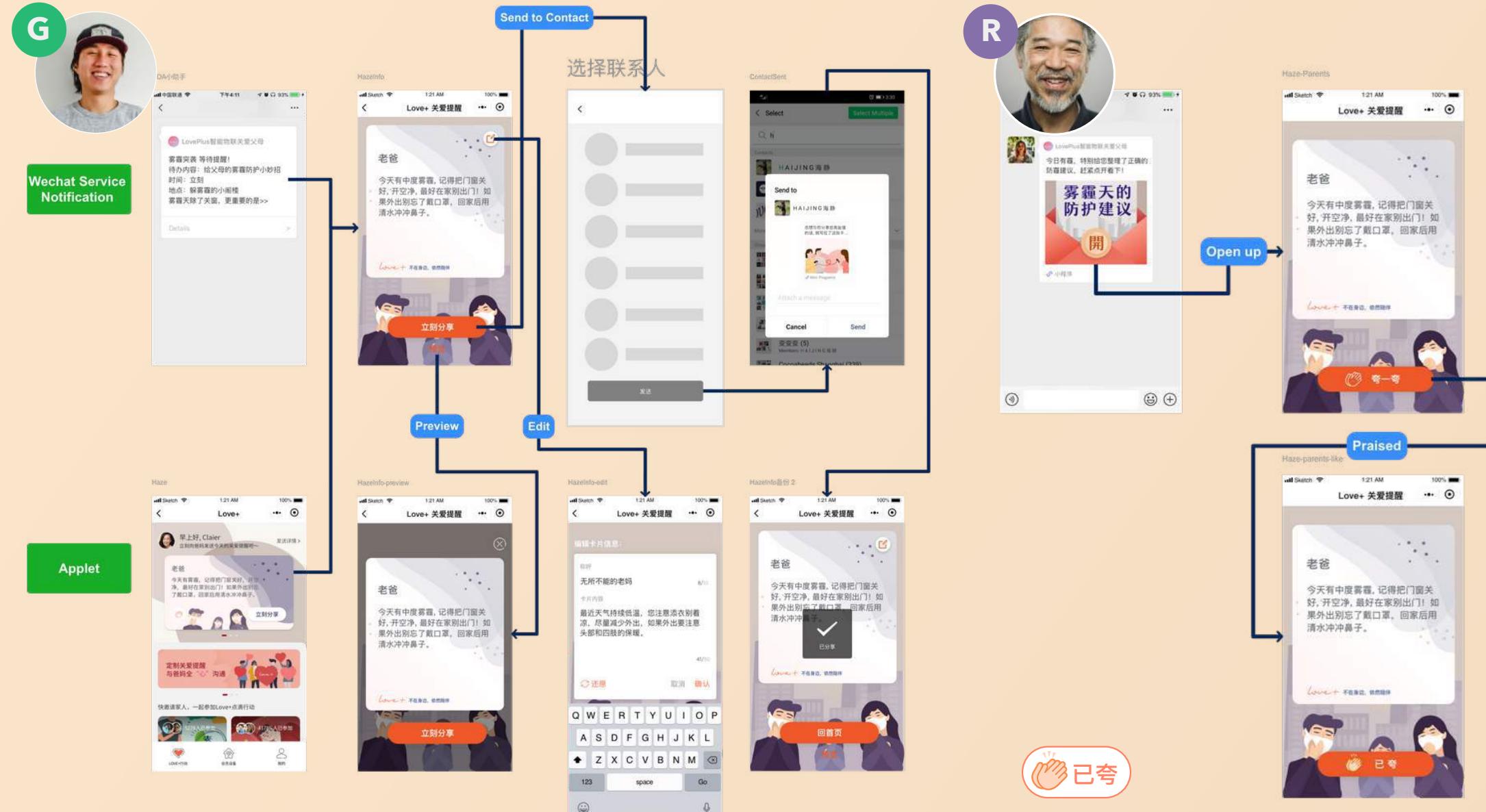
## Scenario1: On boarding & Set up



- Referred by a Friend during the wechat conversation
  - Opened dialog box, orientated with the features & benefits of Reminder by the PopUp window



## Scenario2: Send Reminder & Receive



- Submit Parents Info & Manage Parents Profile timely



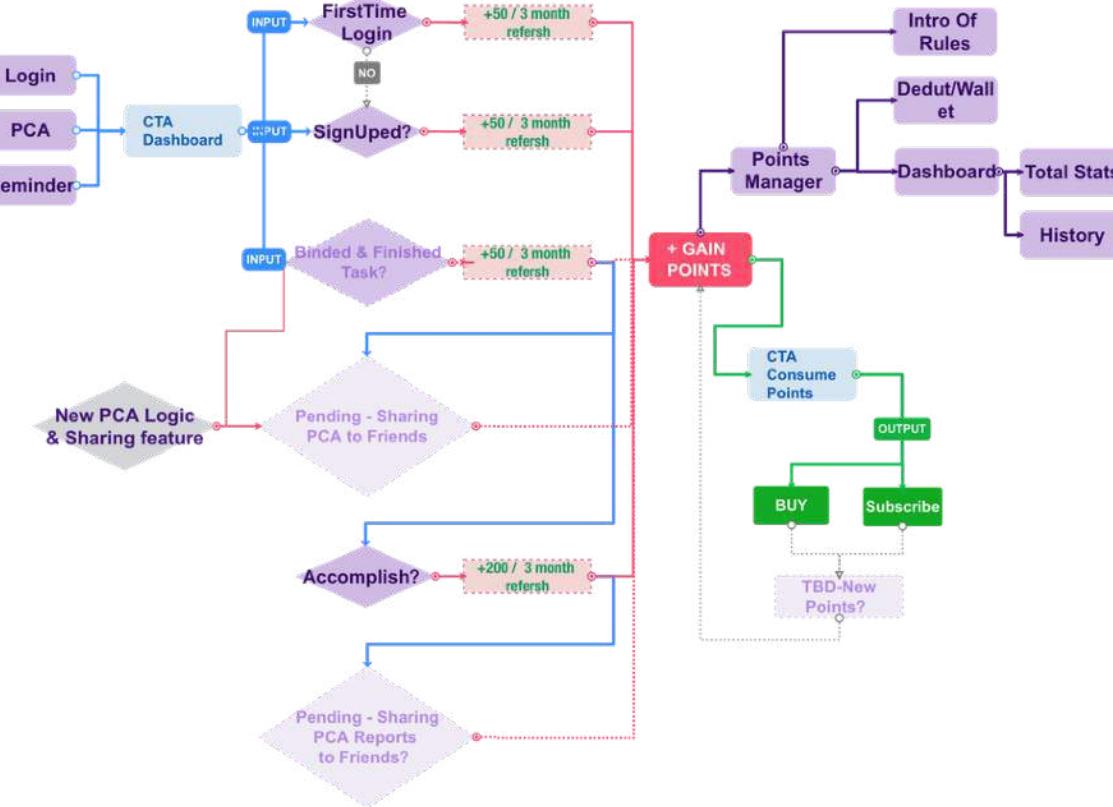
# Care Points System & Redeem Shop

# Concept, Logic & Closed Loop System

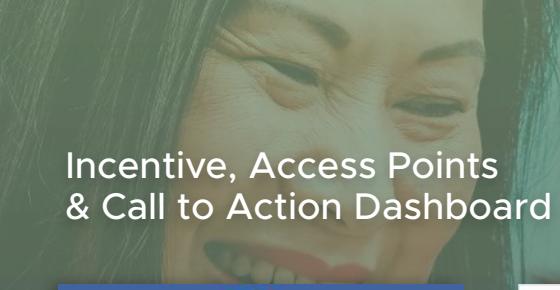
- “

  - increase **retention & conversion rate** of free users
  - increase **renewal rate** of paid users
  - increase product **user activity**

## Loop system overview



love +



## Incentive, Access Points & Call to Action Dashboard



Points Deduct &  
Redeem Shop



# IoT Device & Paid User

## IoT Device Platform & Stories of how we design it



First Launched Device



The Coming-soons

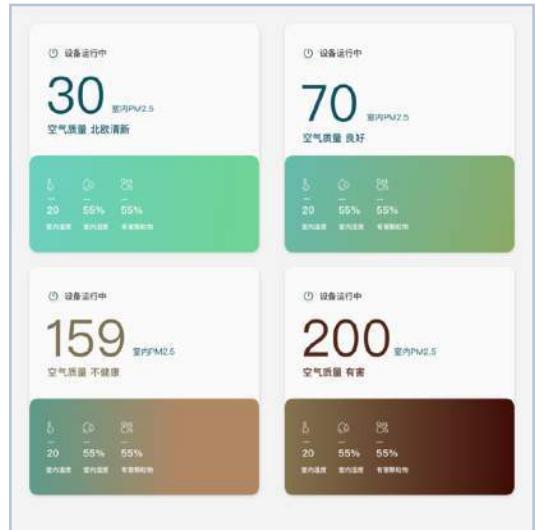


Device List Page

Snap-screens



Air Purifier Control Panel



Multiple Status Indication Cards



Gifting Card Info Submit



Love+

Despite all the common controlling features that other smart-home device enabled,

**Love+** provides a **unique access** that Children can remote control those device for their Parents, as we expected from our ethnographic research, that seniors' unfamiliarity with digital device and their kids as tech savvy could always do them a favour.

**Pure A9 Air Purifier** launched at **Love+** firstly that was tailored to the current air polluted situation in Mainland China

Beyond that, the device ordering flow offers children **setting up WiFi as pre-configuration** and writing their blessing words as **gift card** for their loved family members.



# Love+ Stages of Agile Venture Development

0 to 1 Innovative Venture with Electrolux Group's full-invest and BCG Digital Venture incubation since 2018



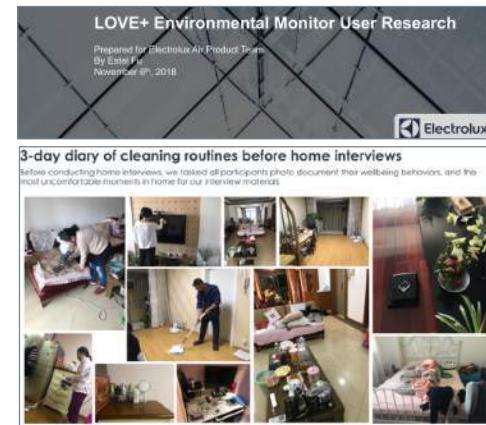
# How Research help a new business initiative boot & grow

## Focus Group, User Research Sessions on Q1 ( 3 week)

Role: Design Researcher ( Interview framework, Prototype, Insights)

### Immersion Sessions & Alpha Stage

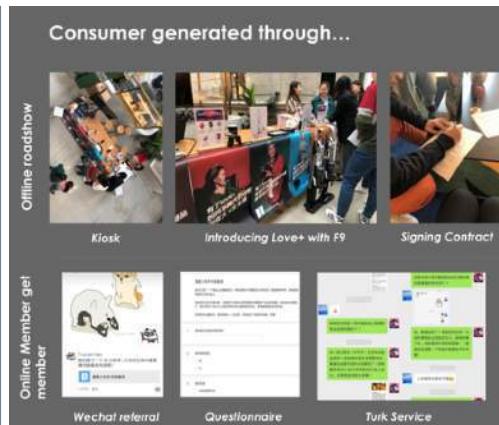
#### Ethno-study



#### Design-hypo



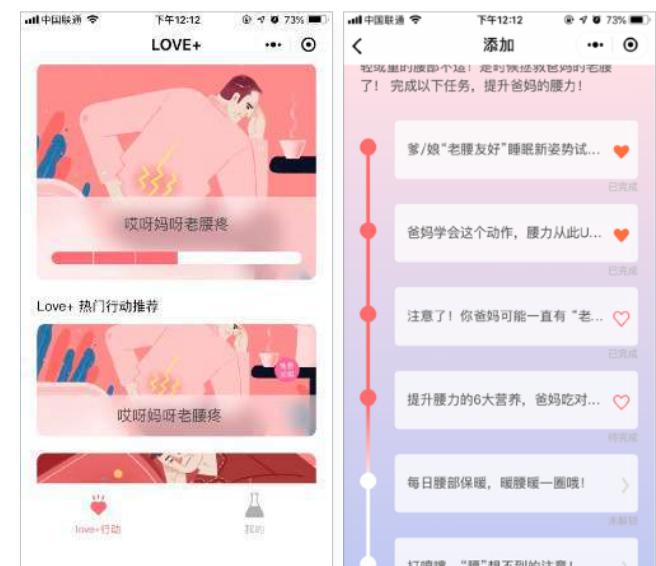
#### MTurk- experiments



After sessions of ethno-research, Love+ alpha is launched with **2-key module** with validated journey design, data insights from MTurk experiments, they are:

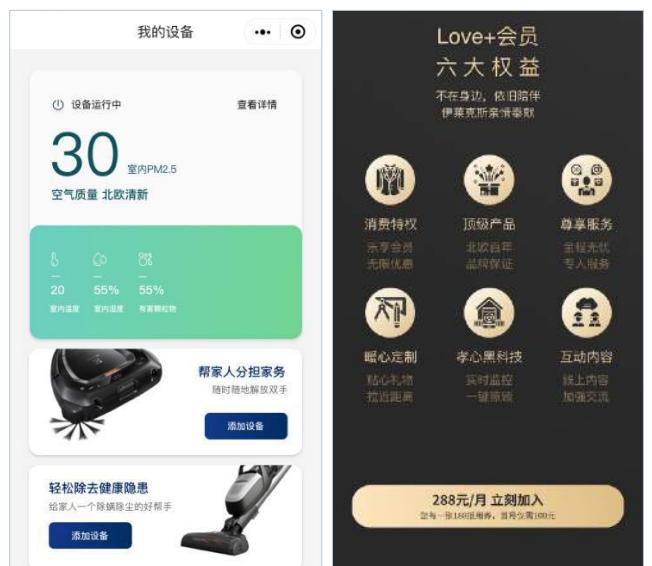
#### Mental-care

Parents Children Activity  
As Gamified wellbeing contents



#### Physical-care

Selected IoT Device Offerings  
Membership subscription



### Focus Group

#### Objectives

- Understand user preferences on Content topics
- Find directions to improve existing content forms
- Discover new opportunities

#### TA Recruiting

10 PPI  
28-35 year old  
Experienced PCA module with parents

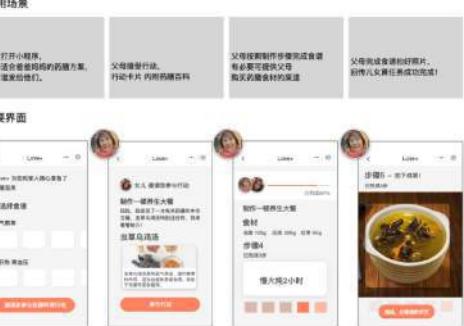
#### Discussion



#### Voting



#### Prototype Stimulus



#### Testing Metrics

##### Love+ First Impression

##### Content Preference & Usability

##### Renting Offering Model

##### Potential Product Opportunities

#### Key Learnings

- Intimacy Communicator
- Access of New knowledge
- Shopping Platform

- Task Interaction are too complicated
- Text-form is not friendly for the elderly's sight

- Membership is appealing with Diverse Content, Beneficial Offering, & Shopping access
- Direct-purchase is Preferred

- Instant health manager for medication on-time
- Healthy Recipes
- Healthy Lifestyle Tips
- Shopping Wishlists

#### Next To-Dos

- Develop emotional bond for **3-generation** family
- Designing Promotional hook for AP in Haze weather
- Simplify task-binding process
- Improve Usability of Task Receiver's Ends
- Highlight washable filter replacement

- Medication Reminder is a promising new feature for ROI
- Gifting Channel is Desirable

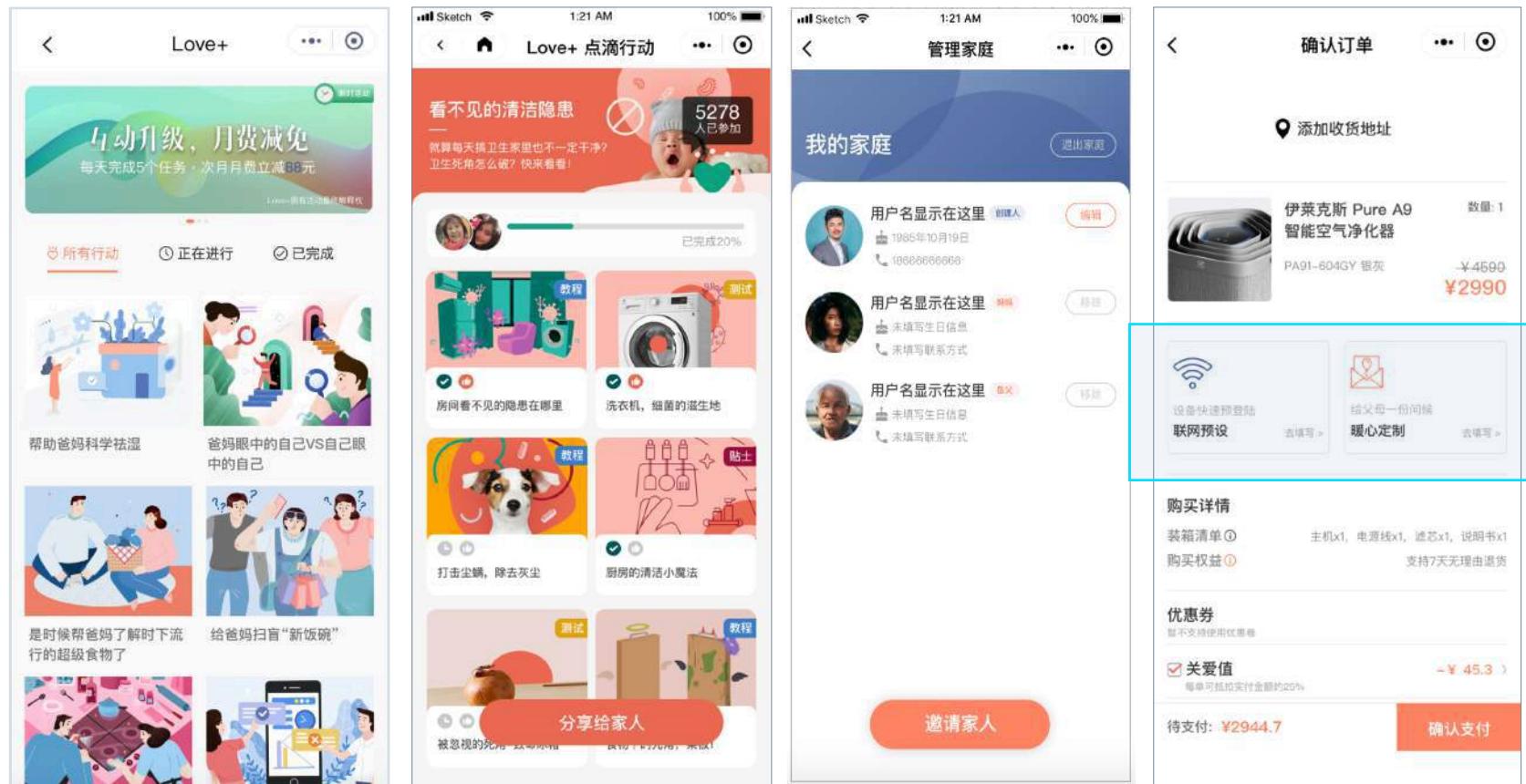
Love+

# How Research help a new business initiative boot & grow

## Focus Group, User Research Sessions on Q1 ( 3 week )

Role: Design Researcher ( Interview framework, Prototype, Insights )

### Iteration on Beta Sprint



Classify activities as on-going / finished

Promoting, Prioritizing Health-related topics as how TA are expected

Tasks are specified with labels

Allow users browse & send any specific task

Simplified Binding flow

Improved retention & DAU rate

Add family-group management module

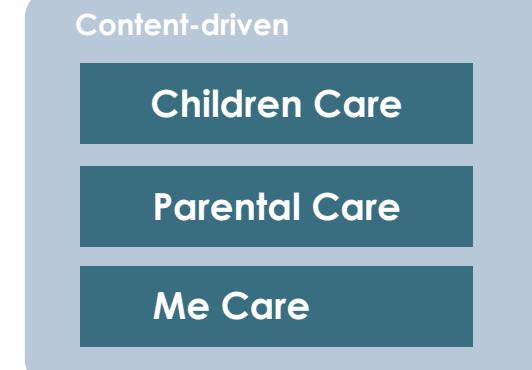
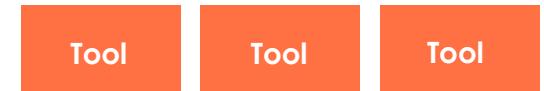
Improved Pre-configuration flow

Integrate Wifi-Setting & Gift Card submit in the ordering process as optional items

### Strategy & Further Proposal

#### Mental-Care next stage

Improve product structure with accurate scenario carving



Set of **tool-based kits** solving actual problems E.g. family calendar, medication on-time, wish-list, etc.

#### Refine TA & Core-needs

For **3-Gen** families, “**children care**” is a friction topic causing high frequent family communication

Give **Mental-care** from 2nd gen’s end to their parents tackling China’s increasing aging issue

Emphasis **self-wellbeing value** among young professionals, fits their everyday goal, appeals to current social trends.  
eg "996/ICU", outdoor yoga community, Lo-carb food etc



UX Implement



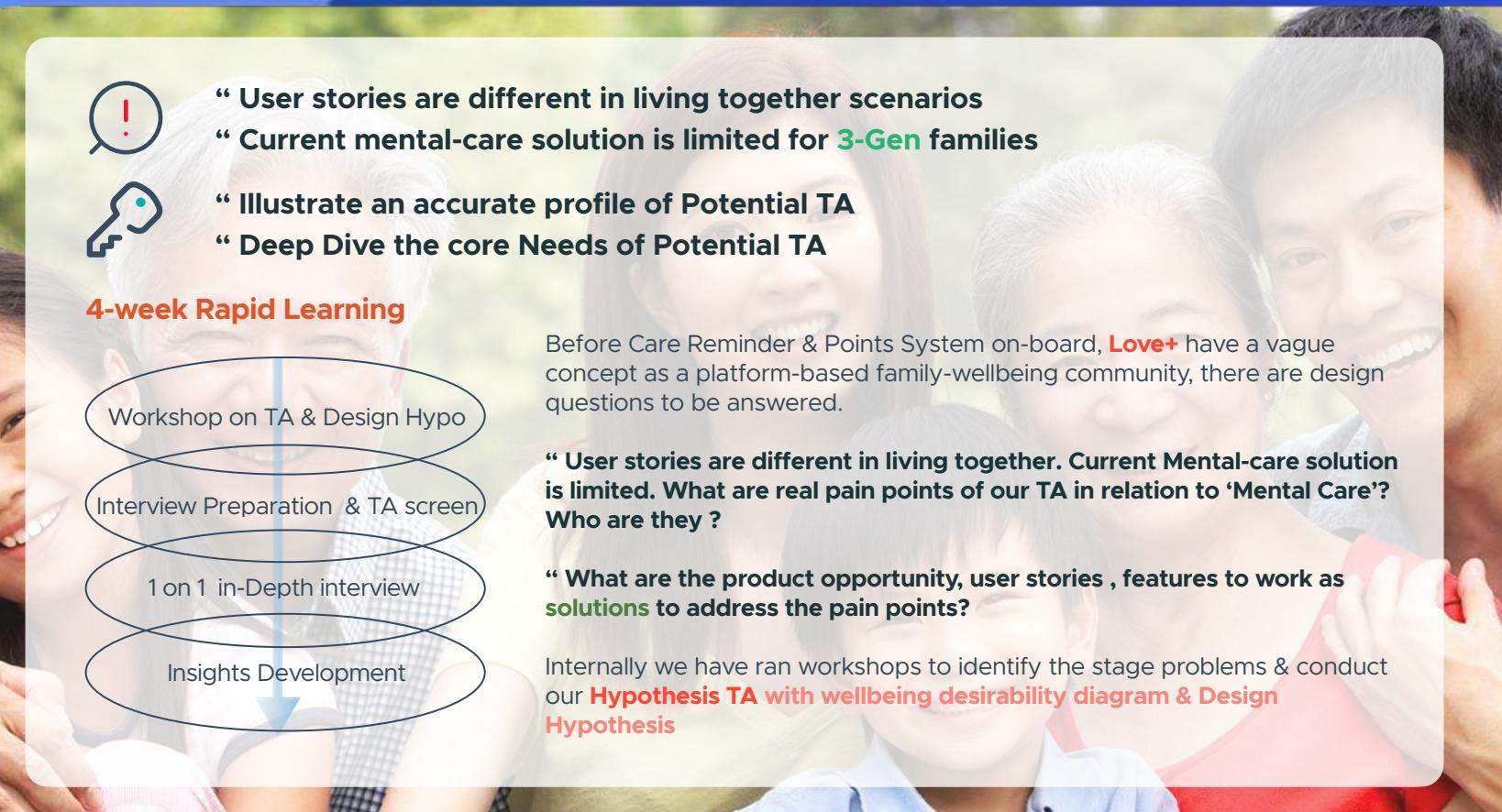
\* Accelerate Product Development Progress with Effective Design Thinking Methodology

Love +

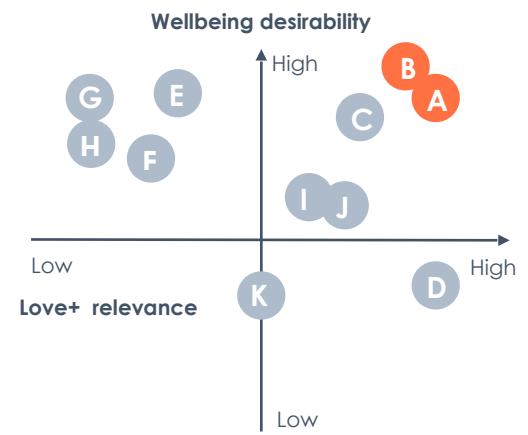
# How Research & Prototyping help to conceptualize potential opportunities

## 'Living Together' In-depth Interview, Research Session on Q2/3 (4 week)

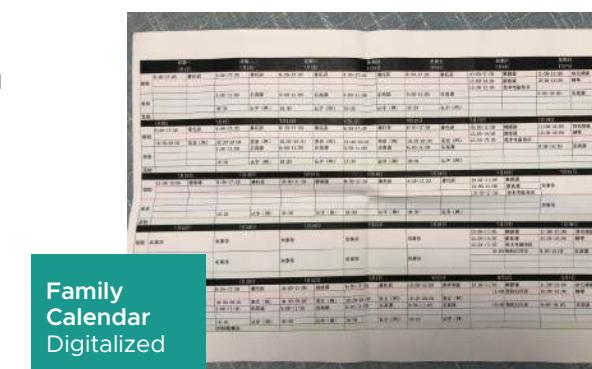
Role: Design Researcher (Workshop, Interview framework, Prototype, Insights)



### Living Together, TA Hypothesis



### DESIGN Hypothesis



For 3-Gen Family, it's desirable to have a solution to coordinate, update daily routines and activities for family members, especially when kids have activities to attend

Love+

### In-depth Interview

#### "Living Together & Family Calendar Validation"



### Objectives

- Understand current status of 3-Gen families. Capture Pain-points/Opportunities, especially how they interact with the elderly at home.
- Validate the concept of Family Calendar, define MVP



### TA Recruiting

- 10 PPI
- 28~37 year old, married & have children
- Lives in the same city with their parents



### Interview Questions

- How did TA group live together with their parents? What kind of family affairs are they mainly involved in?
- When is the opportunity to gift parents? What are the purchase channels? How are decisions made?
- Is family travel frequent? What are the destinations? How to manage itineraries?
- What are the pain points and opportunities for the three generations living together?
- What problems do they have in coordinating the 3rd-generation's activities? Is the Idea of Family Calendar valuable?



# How Research & Prototyping help to conceptualize potential opportunities

## 'Living Together' In-depth Interview, Research Session on Q2/3 (4 week)

Role: Design Researcher (Workshop, Interview framework, Prototype, Insights)

### Potential Opportunities



#### Generation Gap

Build a bridge between 2-generation with relevant topics



#### Relationship Cultivation

Help family members develop an ideal relationship mental-model



#### Wellness Monitoring

Health data aggregation/synchronization, medication reminder



#### Gifting

New feature opportunities, GiftingChannel



#### Traveling as a Lifestyle

New feature opportunities, introducing traveling related topics & services.



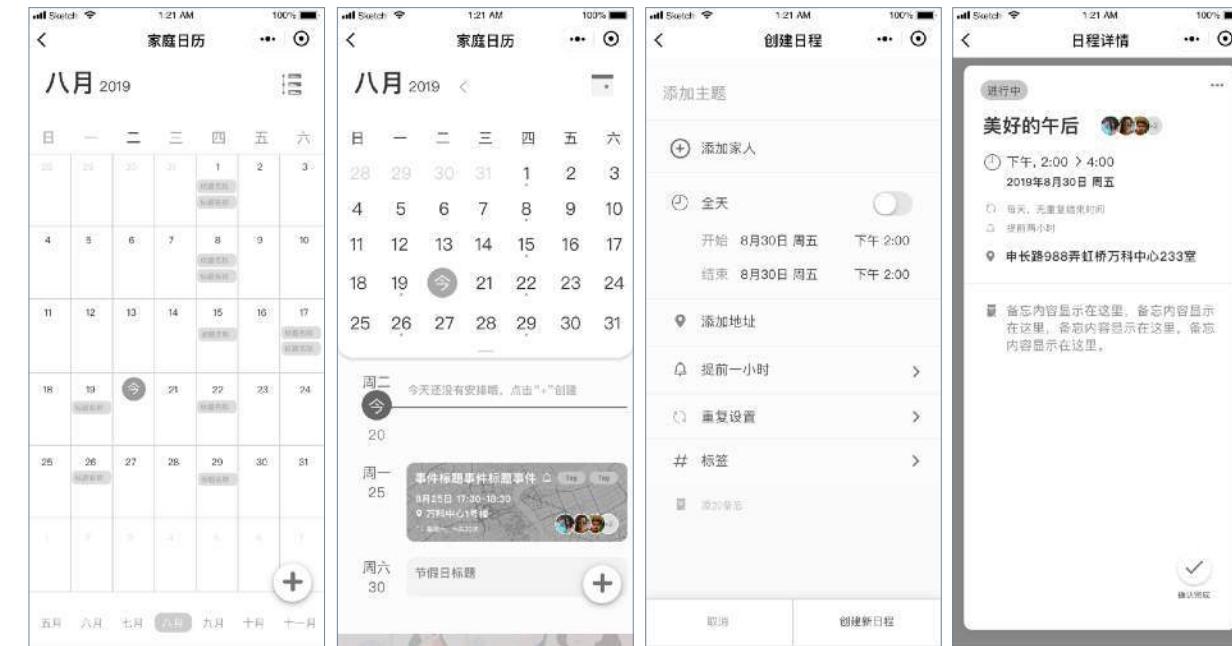
#### Family Calendar

3-Gen families have great demand for events coordinates. Multi-directional Reminders, Info-Synchronizing are key needs. Templating basic function to adapt to different scenarios, eg. Medication on time, Children pickup etc.

Love +

#Key learnings Deep Dive

### Family Calendar - Minimum Viable Product



#### MVP Prototype implication

- A concise "+" to create events efficiently by date, with repeating option is preferred
- Labeling, to classify and shorthand the corresponding events is necessary
- Define two roles, **Master** and **Helper**, with different function preferences regarding scenarios / task requirements.
- Master** focuses on efficiency, incident management, **Helper** focuses on participation
- Print & Share events/calendars is recommended

#### Gaps & Further Plan

In terms of scenario positioning, three generations living together means more offline communication, and online communication requires efficiency

How to leverage the content between children and the elderly, and strategically maintain Young Professionals user base acquisition?

### Content Strategy

Conflicts between 2-generation have occurred from time to time. Eg for parenting, most 2nd-Gen adopt a scientific way, and the majority of 1st-Gen tend to spoil their grandchildren; Different views on financial, money management

#### Next To-Dos

- Resolve conflicts between 2-Gen in curated content
- Peer paradigm KOLs to positively influence parents' thinking & behaviour patterns

### Gifting

Reciprocity is a very common socializing way in Chinese society. Gift forms are various but to express care is a common goal. Cost performance is concerned. Most respondents identify their family members' needs proactively when preparing the gift.

#### Next To-Dos

- Launching Gifting Channel with Incentives integrated
- Quantify the contribution records of 1st-Gen incentivize 2nd-Gen to give actual gifts
- Gift suggestions on specific days

### Traveling as a life style

All respondents have experienced family travel typically like foreign / domestic self-driving tours. Not a high-frequent event but a conversation entry point. Scheduling is essential. During early stage, respondents use digital tools such as Excel, memos or traveling platforms making itinerary arrangements and strategies

#### Next To-Dos

- Family-Travel Content
- Traveling as a gift
- Family Calendar fits travel-related scenarios

👉 ( Click the link below & view the Original Report  
<https://shimo.im/docs/hkWKDvg6rC9x9Vtc>

# How Research Help to Make a Business Decision

“New Business Model Preference” Conjoint Analysis, Research Session on Q4 ( 4 week

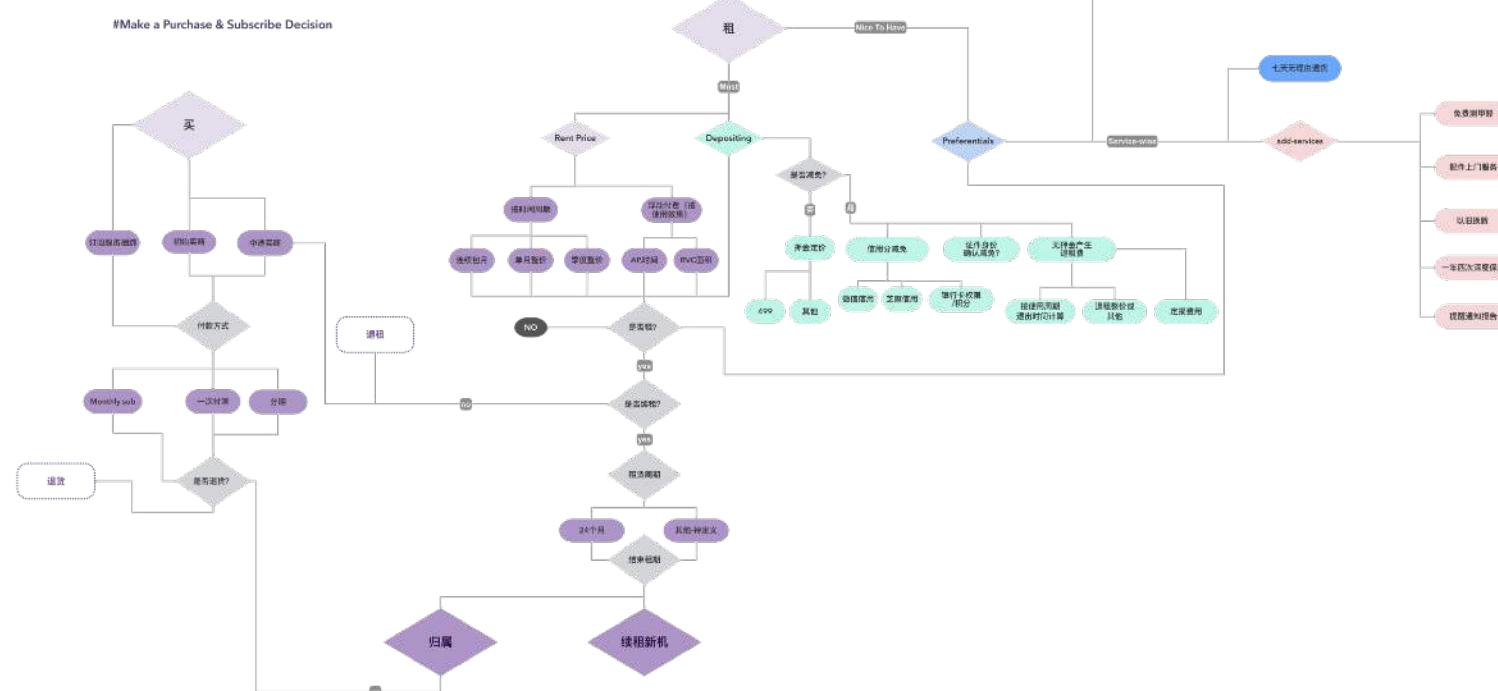
**Role: Researcher & Analysts ( Attribute Analysis, Survey Design, Data Monitoring, Insights Development, Strategy**

## Background & Attributes Definition

We previously designed the **subscription membership monetize model** with **free-filter Renew** & other service-stack such as **24 hours hot-line, free maintenance** etc, since our initial goal is to **grow user activity** via **Love+** platform.

However the **retention rate of paid user** is not as ideal as we expected, so we start to explore new potentials of our further service-stack. The Market preference research we adopted was **conjoint analysis**. Non-like Generic Surveys Types, conjoint-analysis requires **multi-variable attributes**, conducts a relatively precise market preference with **quantified results** thru the complexities of a service system & target groups.

**It was a rapid cross-functional piloting experiment** collaborated with Electrolux Group IT team. I was responsible for Clarify Testing Attributes, Survey Design, Testing-Tool Research and Insights Monitoring.



Subscription & Purchase flow Map with varied service-stack that helped us decide **Testing Attributes** we may use in the further conjoint analysis



We finally compact critical factors into **two testing attributes**, they are “**Consuming Model**” & “**Preferential Service**”

With a quick google search and a nimble desktop research I decided use **conjointly** a saas application as the efficient, low-cost and agile tool to monitor this research.

Within 2 weeks distribution via internet especially **wechat-based private domain traffic** we got 300+ feedback as our preliminary data.



A small yellow icon of a hand holding a pencil, positioned next to the survey link text.

( Check link or scan QR code view our Survey

[run.conjoint.ly/study/51607/q0it6xwtui](http://run.conjoint.ly/study/51607/q0it6xwtui)

## Conjoint Question Examples:

**Love+「空气净化器」新消费模式 用户意向调研。来自瑞典，秉承100年制造工艺**

您更青睐以下哪种「消费模式组合」？请选择。			
	选择 A	选择 B	
I. 消费模式	【随心租】 三个月起，全新滤芯 订购两年换原装滤芯服务 (共3次)	【全额购】 一次性付款，全新机器 元	【全额购】 一次性付款，全新机器 订购两年换原装滤芯服务 (共3次)
II. 滤芯 (优惠/服务)	¥ 188元/月	2999元	3999元

	选择 A	选择 B	选择 C
■ I. 消费模式	【全锁购】 一次性付款，全新机器  订购两年换原装滤芯服务 (共3次)	【随心租】 三个月起，全新滤芯  订购两年换原装滤芯服务 (共3次)	【分期购】 月付，共24期，全新机器  订购两年换原装滤芯服务 (共3次)
◎ II. 滤芯 (优惠/服务)			
¥ 价格	3999元	188元/月	188元/月

\* ¥5799/台 为该款空气净化器中国大陆地区的市场单价

\* 每档模式下您均可享受 Lquat 平台的独家优惠

www.bsp.org/tariff-and-charge

• 滤芯价值499元/副

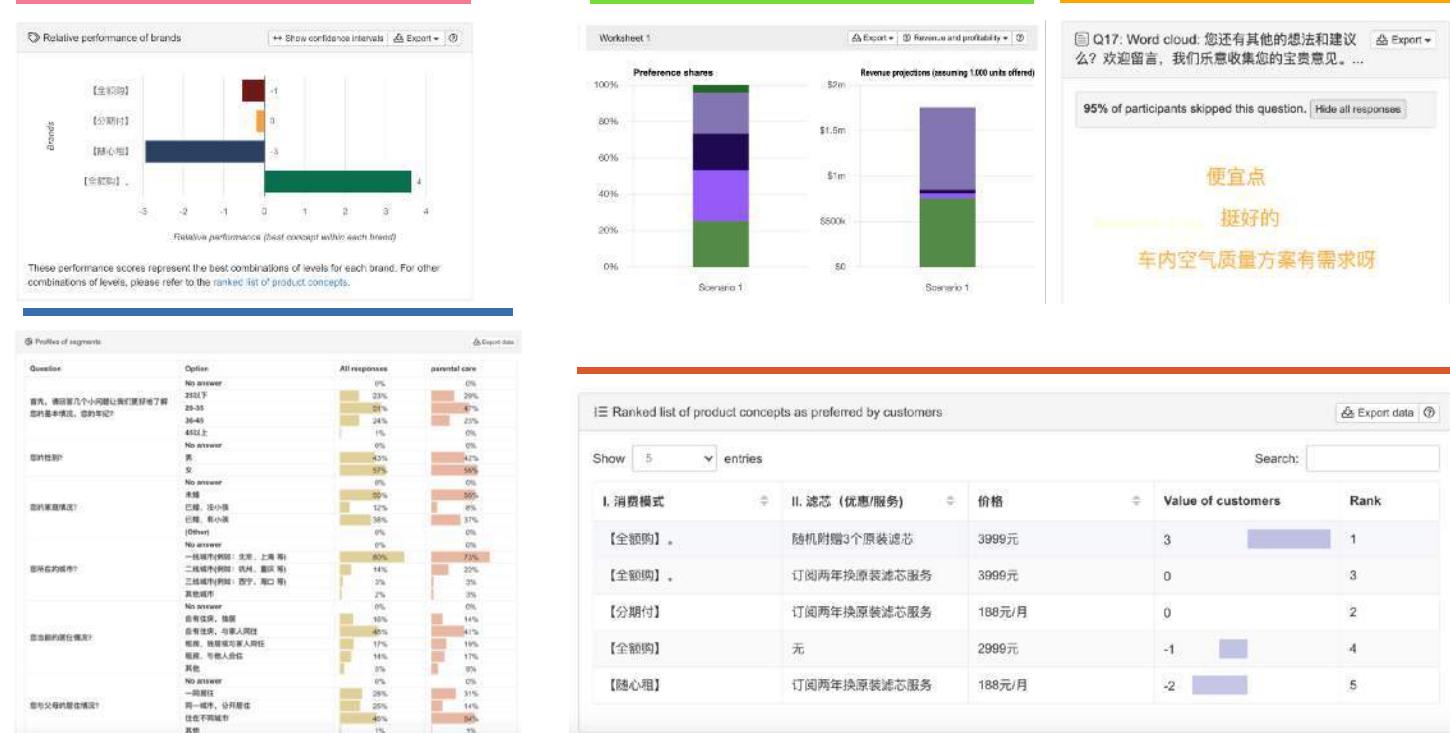
# How Research Help to Make a Business Decision

## “New Business Model Preference” Conjoint Analysis, Research Session on Q4 ( 4 week)

Role: Researcher & Analysts ( Attribute Analysis, Survey Design, Data Monitoring, Insights Development, Strategy)

### Insights

138 samples' stage of our preliminary data



### Key learnings (overall)

- Direct purchase including 3 filters' is the most preferable offer, 'rental with filter service' is the least appealing one
- 56.5% respondents are willing to buy AP for their parents or other family members
- over half respondents show interests in 'quarterly home cleaning service' and 'filter cleaning service'
- 'trade-in' is mostly preferable, MGM is the least appealing one

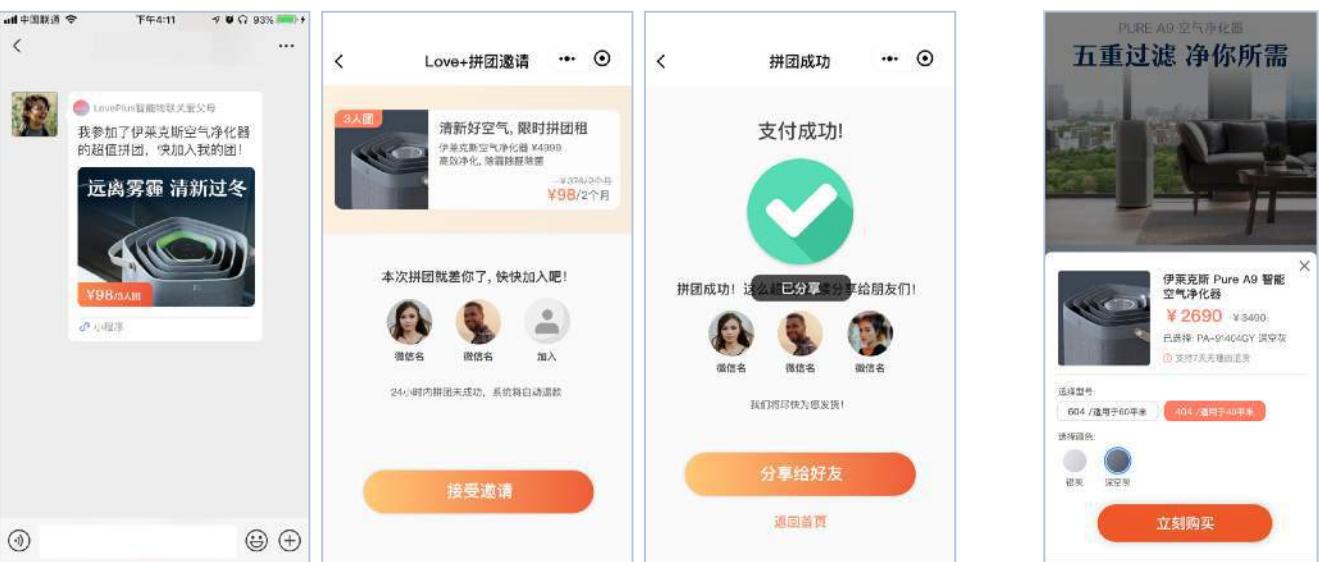
### Rental

- For respondents renting house, they have higher desirability in subscription and rental offering
- 91% of this segment live separately with their parents, and has relatively higher desirability to buy AP for their parents or other family members (8% higher than overall)
- This segment has lower desirability or awareness of AP (only 44% have AP or plan to buy)

### On Product Agile Iteration

As the result, we redirect our paid-user strategy from subscription membership renewal into **direct purchase** and **rental 2 models**, accordingly we removed membership feature temporarily and launched group buying & direct purchase in the next two sprints.

### Group Buying & Direct Purchase



### Channel Marketing Strategy ( UX Supporting growth )

Banner adds put on to wechat ecosystem thru influential KOLs /official accounts to our **retarget** groups: Pet Owner, Family with Toddlers or Pre-college students



## 2018 — 2019 Shanghai

Service, UX Design | User Research | Design Strategy @MideaGroup User eXperience Innovation Center (UXI,CRC)

Joined in Midea Corporate Research Center as an in-house UX Design Consultant with a focus on Product Experience Innovation. Multi-taskingly collaborated with Midea's other Business Units, eg: AI Research Center, IoT, High-end Brand COLMO. Constantly generate insights and design solutions to meet different project objectives

### /Featured Projects

03 — 07	STRATEGIST / PRODUCT DESIGNER	SMARTII - IOT INNOVATION FOR MILLENNIAL LIFESTYLE	INCUBATING
05 — 10	RESEARCHER / INTERACTION DESIGNER	MEIJU APP - SMART HOME MOBILE ECOSYSTEM	LAUNCHED
07 — 12	UX STRATEGIST	COLMO UX STRATEGY & DESIGN 2.0	LAUNCHED
08 — 11	UX STRATEGIST	SENIOR WELLBEING-CARE EXPERIENCE PLANNING	INSIGHTS
11 — 2019	DESIGN RESEARCHER	MIDEA 2020 - 2025 DESIGN TREND RESEARCH	INSIGHTS

## Smart Home Mobile ECOSYSTEM

**Meiju** -the Total App Project

Role: Design Researcher / interaction Designer

**OBJECTIVE** Define new smart mobile ecosystem and develop new concept, design, scenario, +feature for 2018/19 market.

**ACHIEVEMENTS** Successfully Delivered the design solution to Midea's IoT Business Unit, is now launched & growing on various application stores/shops



Try at #AppStore

<https://itunes.apple.com/cn/app/id948600146>

8  
Smart Home Apps (IOT)



9  
AQ Apps



8  
BU / Financial service Apps



6  
E-commerce/ Brand Apps/



### Key Issue:

Midea Group entered China's fast changing IT service market as its business-transform strategy. Before the total app Project, Its own business units builded their own minor apps for variated purpose, the whole smart ecosystem was missing a holistic approach as branded experience towards Users.

**User Experience Innovation** Team of CRC, collected all promising features from BU and created an integrated map. We ran series focus-group sessions with BU stakeholders to evaluate features' value, make decisions in the further developing-scope that was collaborated with Midea's IoT department, since they will be this project's future product owner.

Analysis & Scope Define

Workflows & Interaction

Visual Design Guideline

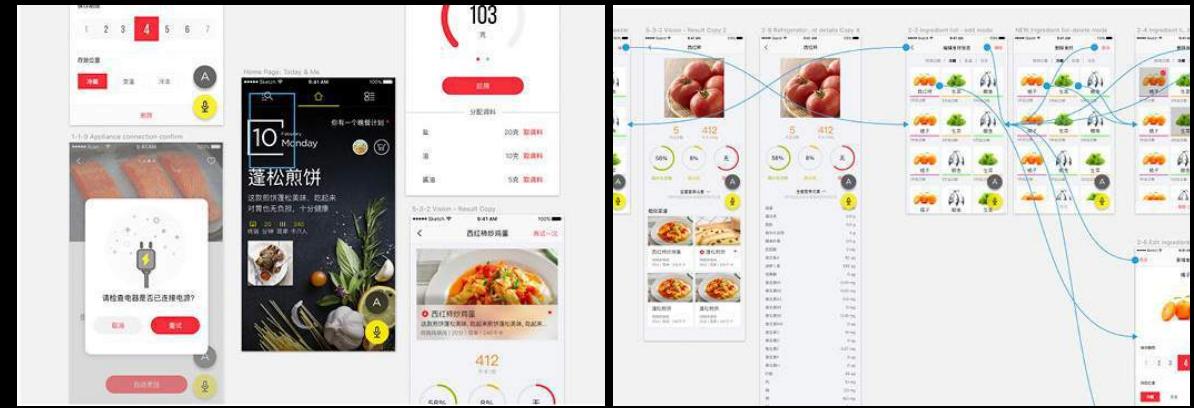
Midea IoT Handoff

# Smart Home Mobile ECOSYSTEM

## Meiju -the Total App Project

Role: Design Researcher / interaction Designer

from Requirement Analysis, Prototype to Design Implementation  
As an Agile Design-Sprint process



Sort out the common needs across 9 business divisions, integrate them as the most valuable product features with paper prototype

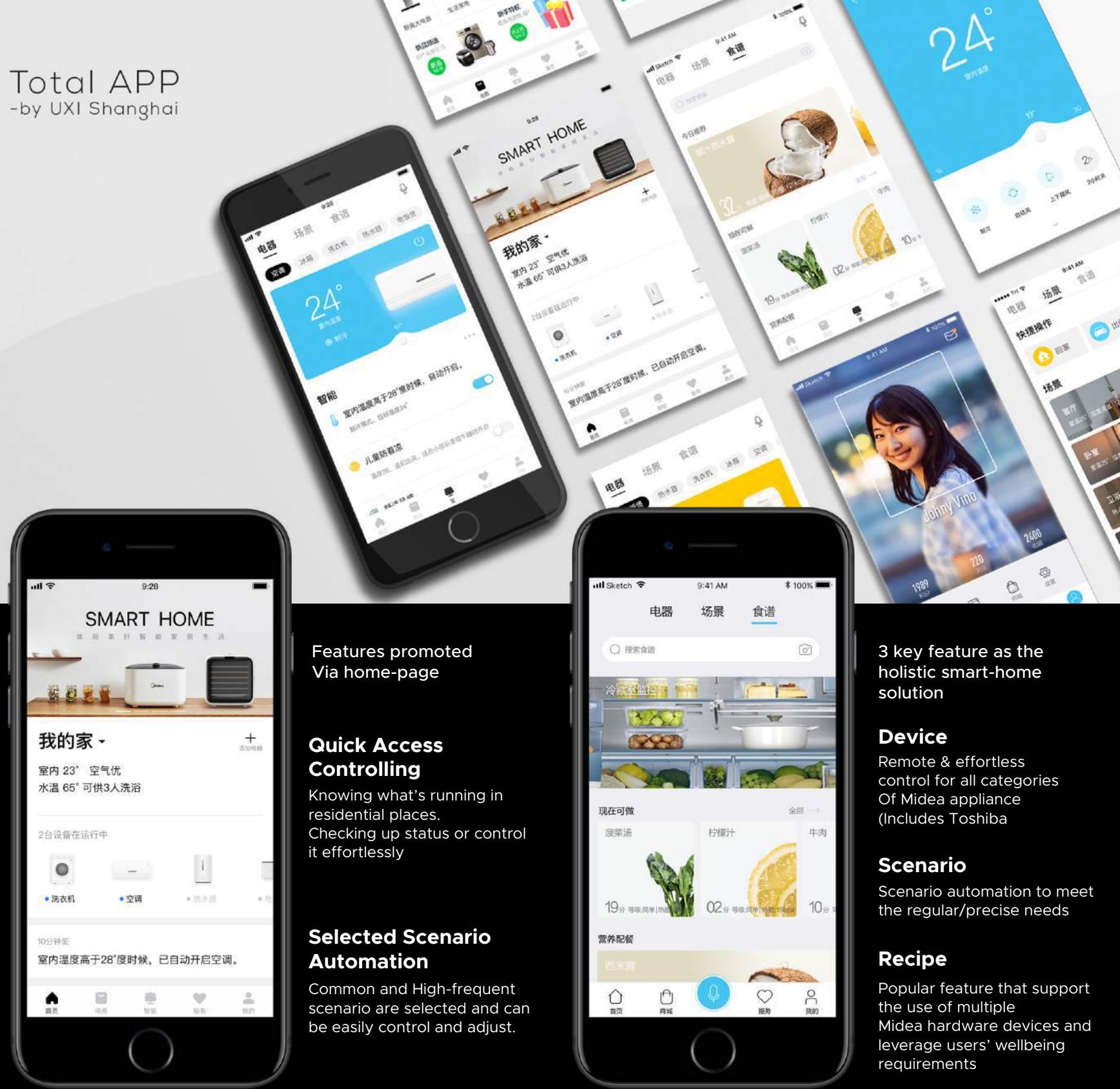
*“ Requirement analysis & Rapid Prototyping”*



Run workshops with BU stakeholders, testing usability and design feasibility, align consensus in further development, summarizing testing feedbacks agilely

*“ Paper Prototype Piloting & Workshop Moderating Co-Work with Midea’s BU”*

## Total APP -by UXI Shanghai



Features promoted  
Via home-page

### Quick Access Controlling

Knowing what's running in residential places.  
Checking up status or control it effortlessly

### Selected Scenario Automation

Common and High-frequent scenario are selected and can be easily control and adjust.

3 key feature as the holistic smart-home solution

### Device

Remote & effortless control for all categories Of Midea appliance (Includes Toshiba)

### Scenario

Scenario automation to meet the regular/precise needs

### Recipe

Popular feature that support the use of multiple Midea hardware devices and leverage users' wellbeing requirements

## Brand Positioning

COLMO

品牌精髓  
Brand  
Essence品牌承诺  
Brand  
Commitment用户利益点  
User Benefit

简约且别致的理性美学设计

功能利益点  
Functional  
Benefits

直观并功能完备的人机交互



人性且持续演进的智能体验

信任的理由  
RTB

专业且精益求精的专业品质

品牌个性  
Brand  
Personality

源自世界顶尖工业设计团队的创意与灵感

信念  
Belief

整合所有智能终端的One-Touch交互设计

自信  
Confident

基于多维度消费者数据与云计算深度智能学习平台

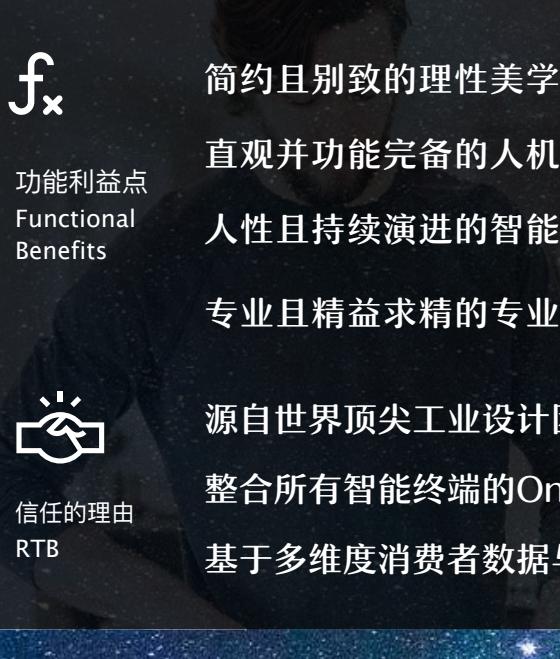
进取  
Progressive理性  
Rational魅力  
Intriguing

生而非凡

Simply Extraordinary

缔造非凡生活

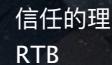
We Make Life More Fluid &amp; Extraordinary



简约且别致的理性美学设计

功能利益点  
Functional  
Benefits

直观并功能完备的人机交互



人性且持续演进的智能体验

信任的理由  
RTB

专业且精益求精的专业品质

自信  
Confident进取  
Progressive理性  
Rational魅力  
Intriguing

源自世界顶尖工业设计团队的创意与灵感

自信  
Confident

整合所有智能终端的One-Touch交互设计

进取  
Progressive

基于多维度消费者数据与云计算深度智能学习平台

理性  
Rational魅力  
Intriguing

卓越的科技创新源自对非凡生活地不懈追求

Exceptional Innovation comes from the pursuit of Extraordinary lifestyle

## Brand Experience Strategy

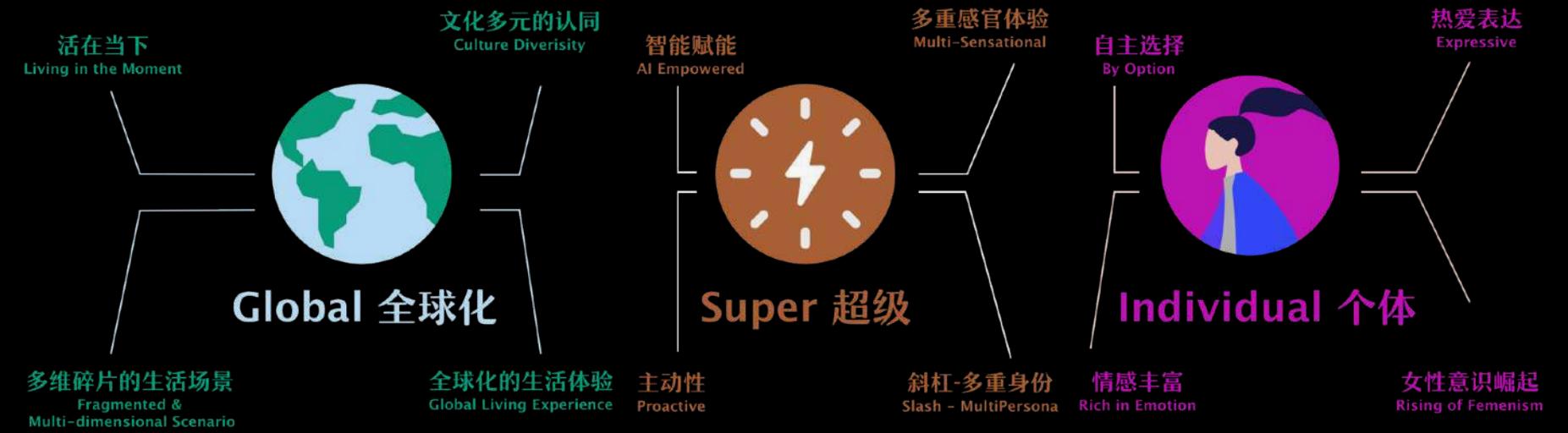
Identify Product Market Fit



Colmo Experience



## User Advocacy



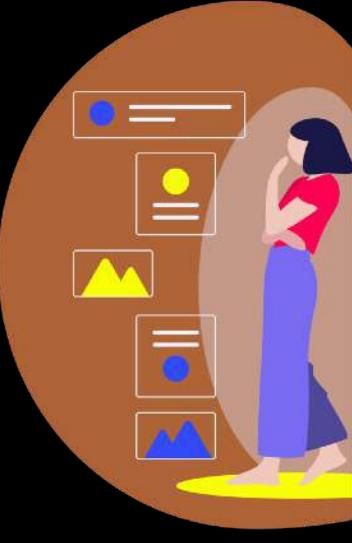
## Value &amp; Key Traits

**高流动性的世界人**  
Global Citizen with High-Mobility

需求明确，善于管理  
Clear Demands, Good at Management

工作生活场景交织多变  
Work-Life Interwovenly Changing

追求品质生活并赋有鉴赏力  
Pursue a Qualified Life with Discerning Taste



## #KOU Persona

新兴创业者，青年行业领袖

Emergent Entrepreneur  
Young Industry Leader



独特，具有创新基因，敏锐洞察 & 开创精神

unique & genetically-innovative, keen insight & pioneering spirit

思维开阔敏捷，迅速发现商机、整合资源

open-minded and agile, quickly discover opportunities, integrate resources

迅速成长为新兴行业中的创变客

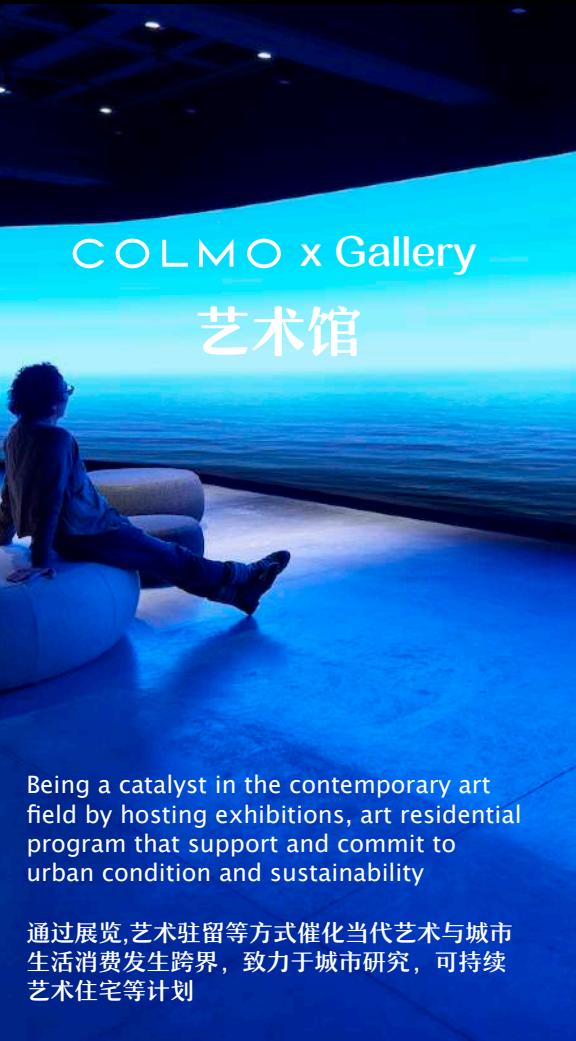
rapidly become game-changer in an emerging industry

“支撑我的是自我实现，希望有更多的创造体验，更丰富的人生经历，希望遇到更多优秀的人”

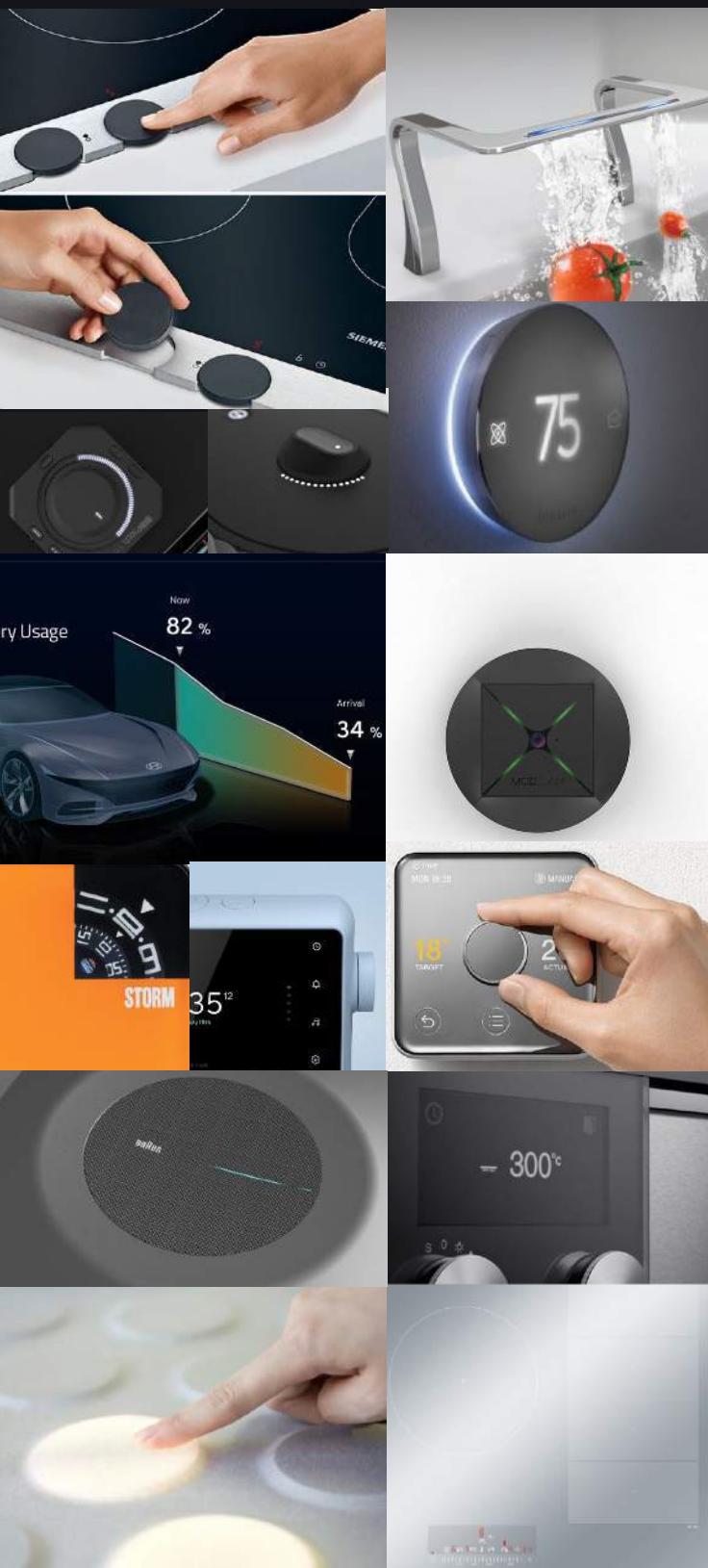
“What always supports me is self-realization. I want to enrich my experience with creativity, and I look forward to meeting more inspirational people”

— 张一鸣  
Yiming Zhang

<https://www.colmo.com.cn/index>



## Design Research &amp; UX Strategy

**NEO LUX**

Lighting Indicator

Branding Behind the Interface

**TECHNO PRECISION**

Augmented Knob

Virtual-physical Resonance

**RICH SIMPLIFIED**

One show One Screen

## UI Design Proposal Sample

## Water Heater



## Oven



## Fridge



## Hood



## Smart Home Foresight Strategy INNOVATION

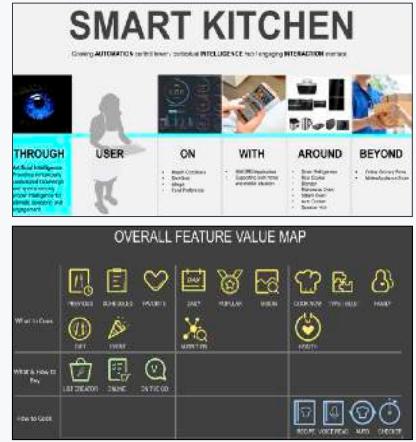
Role: Researcher / Strategist / Product Designer

### whole-scope

**“** Midea smart home foresight strategy innovation is a series of **Project Planning Initiative** that contributes impetus of Midea Group's **product innovation** and **business transformation**

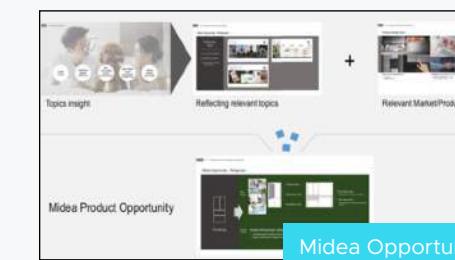
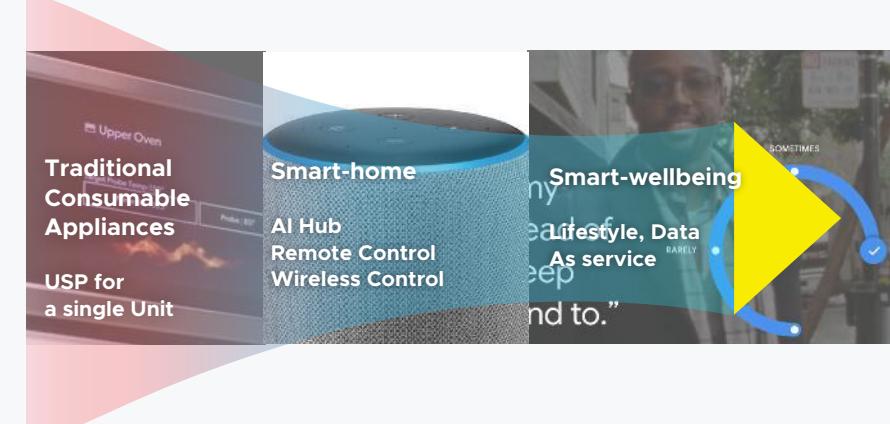


- Examples of Project/Product **Innovation** initiatives

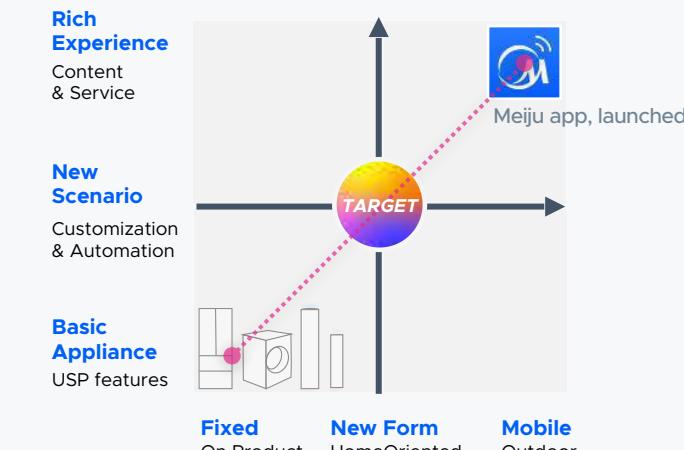


### “ Project - Millennial Lifestyle From Consumer Insights to Product Innovation

#### Trends in HA/CE



**Goal** Leveraging consumer's value gap of Midea's smart home solution and Midea's traditional products



#### Vision & Value

New Approach for MIDEA's smart appliance & new business

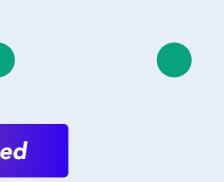
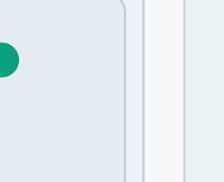
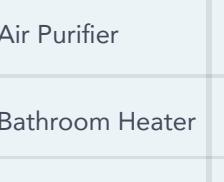
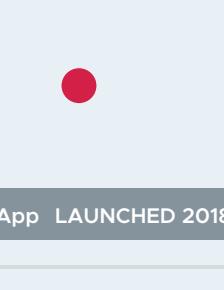
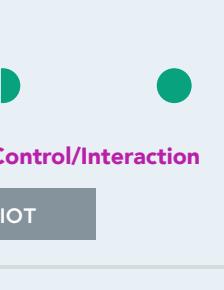
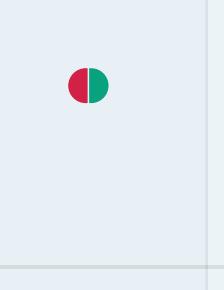
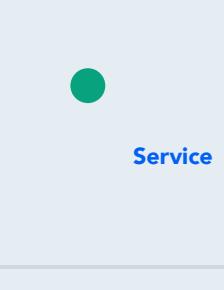
- **Intuitive Interaction**  
voice, user identification, gesture
- **Scenario-based Lite Smart Xperience**  
automation & customization
- **Personal Content &Service**  
E-business & assistant & data service



Background: smartii is planned to prototype and run roadshow during Midea group's internal "Tech season" (on every mid-July to mid August)

# “ New Hub New Portal | SMARTII the bridge Product experiment of Midea Cloud 2.0

On Product Value Proposition & Product Capacity Definition

Values	Contextual Control		Intuitive Interaction		Content & Service		
Features	Product Control	Customization & Automation	Voice Enable	Sensors	Inspirational	Management	
Basic function	Basic function	Customized program	Dialog	AQ	Recipes	Auto diagnose, maintenance, updates	
	Extended function	Scenario Automation	Info Inquiry	Multi Mic	Sleep Tracking	Supplies Purchase	
	Monitor & notification	n/a	Notification	n/a	E-Commerce	Utilities	
	n/a	n/a	n/a	n/a	NearbyO2O Service	CRM	
Capability Chart	● Capable		● Inadequate				
Front-end	 Smartii Incubating 2019 planned		   		 		
Clients	 MEIJU App LAUNCHED 2018   IOT		   		<b>Control/Interaction</b>  <b>Service</b>		
Back Stage Infra-	 N/A N/A N/A N/A		 		 		
	<a href="https://www.midea-group.com/Our-Businesses/SmartHome">https://www.midea-group.com/Our-Businesses/SmartHome</a>		<b>MSmart Cloud Fast Developing</b>				

## Core Functions On Product Demo 1.0

# Values	Contextual Control		Intuitive Interaction		Content & Service		
# Features	Product control	Custom -ization	Voice	Sensor	inspiration	MGMT	
Air Conditioner	Quick Product Switch & DirectControl on 1st depth, wind speed	n/a	n/a	n/a	n/a	n/a	n/a
Air Purifier	Performance Visualization	n/a	n/a	AQI	n/a	Filter alert & Purchase	
Bathroom Heater	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Bathroom AP	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Laundry	Notification	Favorite Course	Dialogue (Weather inquiry)	n/a	O2O liquifier	n/a	
Garment Care	Cloud Course Process Visualization	n/a	n/a	n/a	n/a	n/a	n/a
REF	Fridge room Temp setting by ingredient	n/a	Recipe Recommend	n/a	RecipePurchase accesss	Kitchen Timer	
Thermo	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Water Dispenser	n/a	Favorite Beverage	n/a	n/a	n/a	Gas alert	
Oven	Auto Cooking Recipe	Recomend Rating				n/a	
One Control	Non-smart device control	Night mode Away / sterilization	n/a	n/a	n/a	Wireless -Charge	



Data Source: Millennial LifeStyle Insights Report

## “ SMARTII USP DEFINITION

As a **bridge Product** experiment of Midea Cloud 2.0 we defined Smartii's USP according to the study of our Target Group's Core Needs



### “Design 4 Millennial Behavior

#Customization

**Highlighted** easy to find button helps users customize features and access easily. This Button is a bridge from physical and digital usability.



### “a Branded NEAT Xperience

#Efficiency

**Unified controller** are designed to interact with features with unified & compact depths, task flows, Information architecture etc.



### “Product Highlights

#Authenticity

Highlighted rounds-deco with **Featured CMF** is associated with a product signature button

## Scenario 2 : Health Monitoring



### Currently

Work in a fortune 500 company, have busy-schedules & intensive job contents. Share apartment with 2 female roommates in the city downtown.

### Major Interests

#Fashion #Personal-Growth #Travel

### Painpoints

Prefers a work-life balance lifestyle, however has severe sleeping problems like intermittent insomnia, and snoring.

- **Intensive work pace**  
Barely leave a work-life balance ideal life
- **Insomnia & Snoring**  
Minor distraction occurs, heard roommates complaints
- **Cook for Self for being healthy**  
Can not deal with the recipes on the daily-basis

### Hub 2.0's Effectiveness

- **Sleep monitoring & sleep data statistics**  
Bring the sense of awareness of her own issue
- **Medication notifications & task-based supervising**  
Stay on the healthy path while having a busy working schedule
- **Recipes tailored to a specific wellbeing requirements**  
Save time in making decision on cooking for daily

## Michelle's Journey:

### a Health Monitoring Focused Cloud Experience - Meiju x Smartii via Midea Cloud Hub 2.0

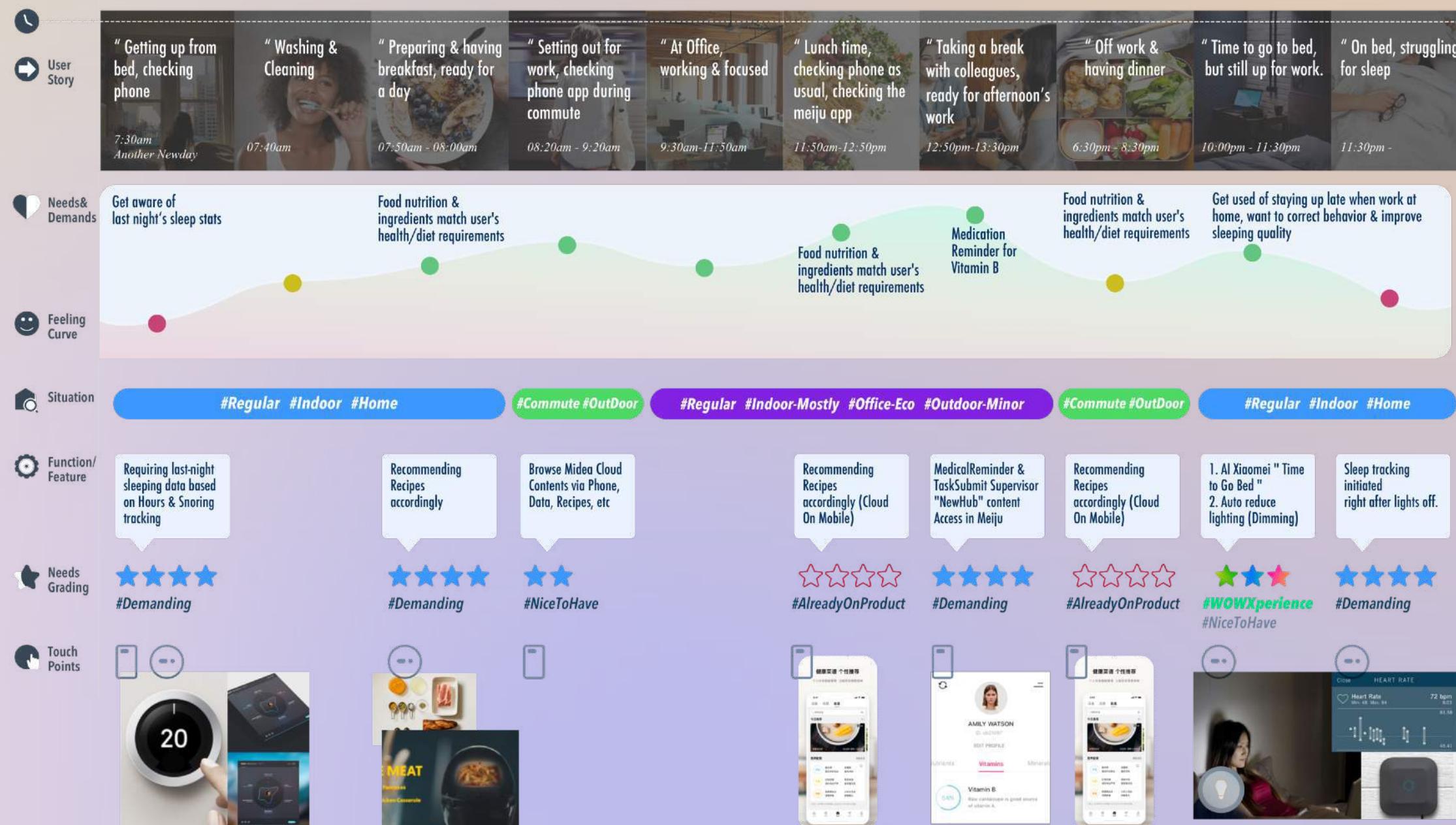
#### Michelle's Relationship with Technology

Advanced Internet User

Own 3 social media accounts

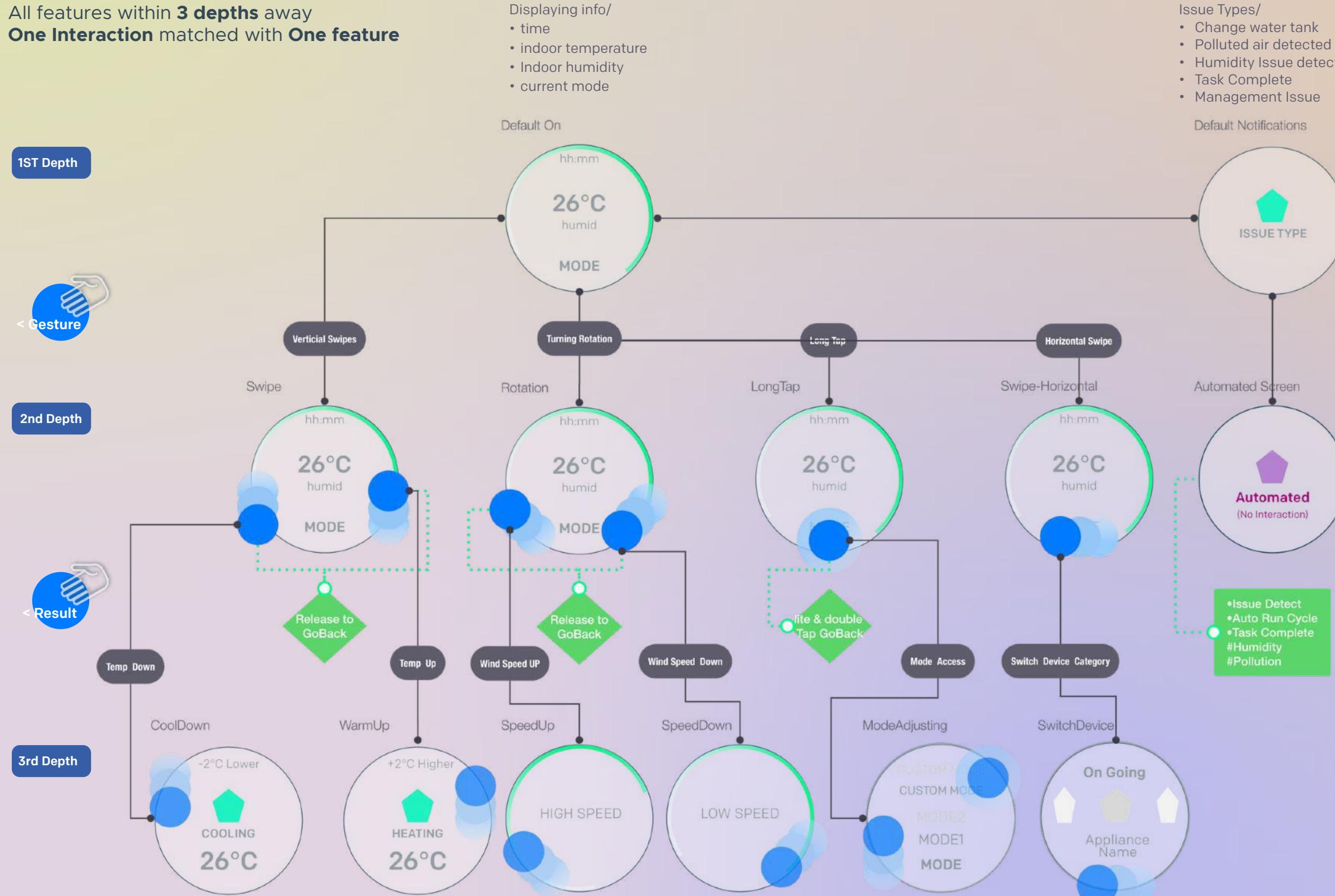
E-commerce savvy

Mac & iOS Platform User

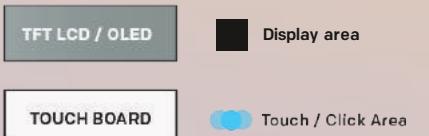
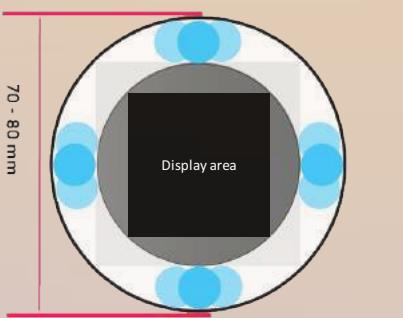


# Gesture Control & Basic Function

All features within **3 depths** away  
**One Interaction** matched with **One feature**



## Design Spec



**Appearance**

- Dimension: 70-80 mm (tentative)
- Thickness: <25mm

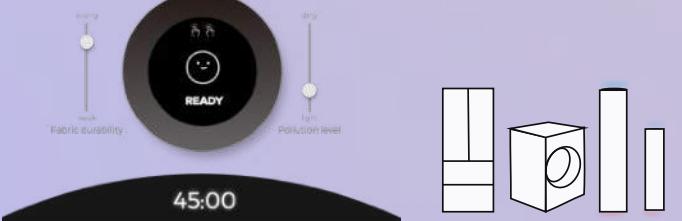
**Display**

- Square, color TFT LCD, color OLED
- Display area is not touchable (tentative)

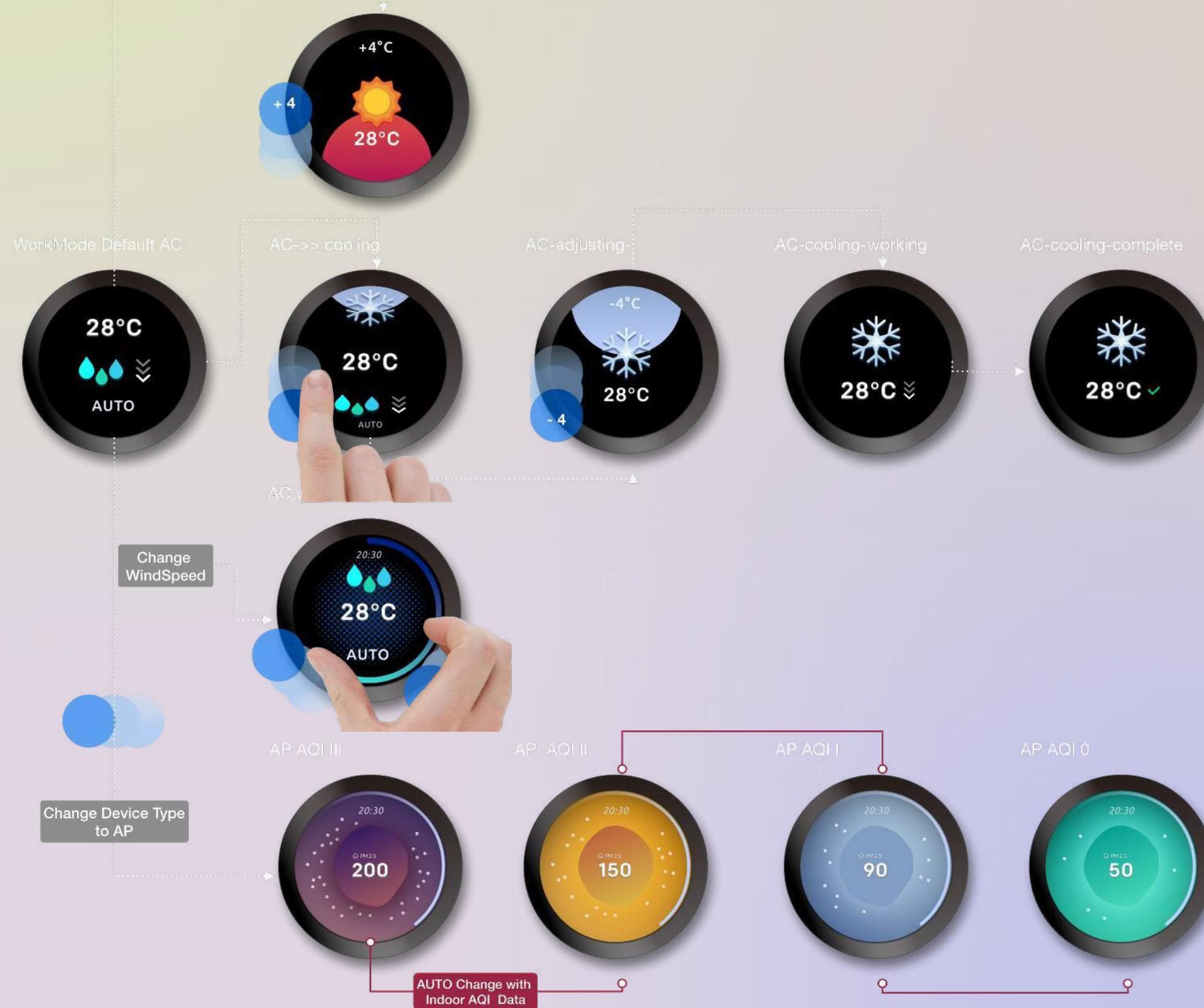
**Control method**

- Touch Wheel
- 4-point-click

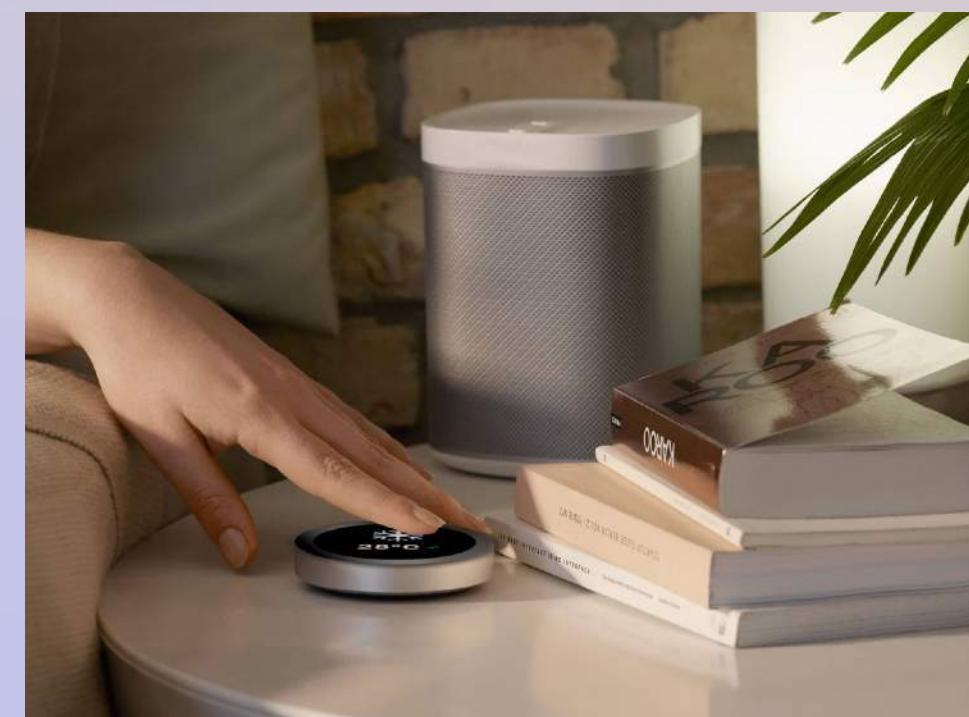
**Design Consistency with Midea PI Platform**



## Key-Screen Visual Direction



## Detachable Portability



Role: Design Researcher ( Content Direction, Insights development, illustration, Editing )

# Smart Essence

2020 - 2025 Design Trend Handbook for Midea Group

UXI Insights



## Project Mission

**Define the direction of Midea advanced design** at 2020, through forecasting design trend for 3~5 years in future  
通过 3-5 年 未来趋势研究, 设定美的集团 2020 年设计方向

**Propose Potential Action Items** that are capable to lead market as innovative players

以创新企业身份, 挖掘前瞻性项目主题

**Build Design References** which influence the next generation PI and PD's Innovation Seed Projects

持续为集团 PI 和 PD 迭代方案建立设计智库

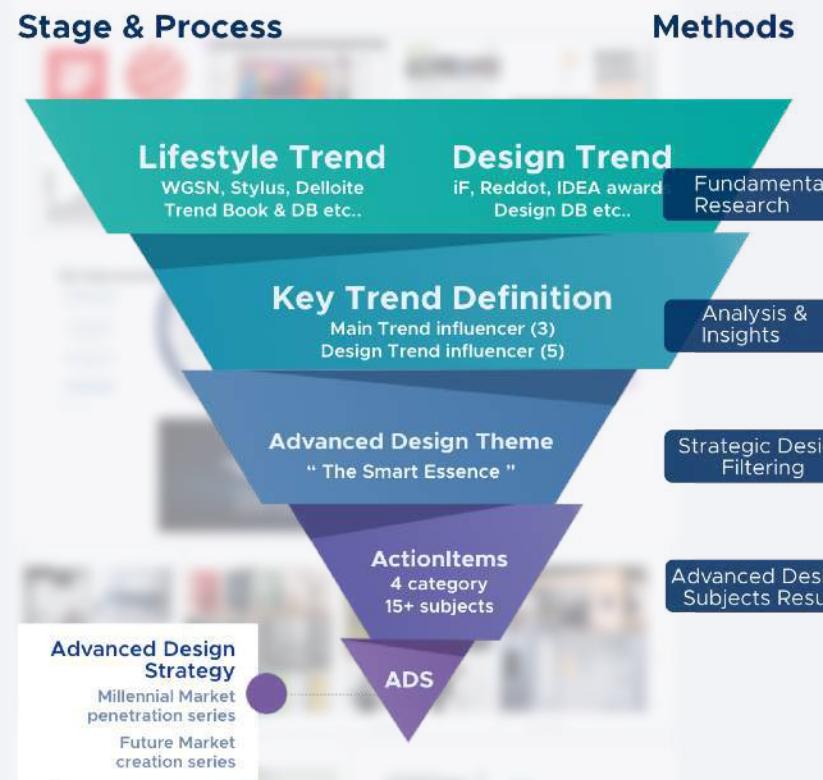
EXPLORING

INCUBATING

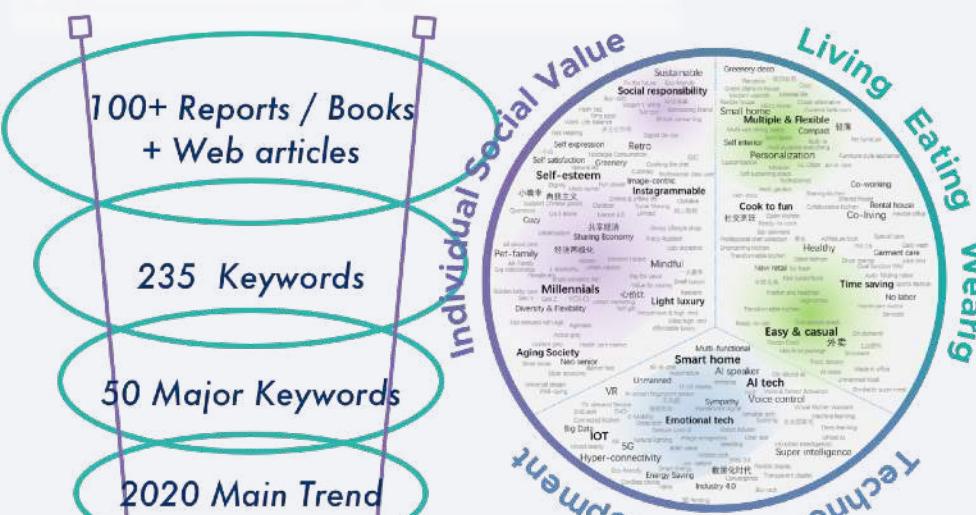
LEADING



# Overall: Methods, Domains & Stages



## Domain Signals & MainTrends Extraction



# Main Trend Influencer Extraction

## Audiences

### Key Opinion Consumer

#### Millennials & Neo Senior

will be the most influential customer  
千禧一代和新老年人群将成为最具影响力用户



#### Expressive Self-esteem & Fulfillment

as a growing consumable demands  
表达自尊及自我满足的消费需求不断增长

#### Diversity and flexibility

for life styles and consuming attitudes  
生活方式及消费态度方面呈现多样性及灵活性



## Products

### How to achieve their values ?

#### Social responsibility

as a critical assessment of brand culture  
更加关注品牌文化所传递的社会责任

#### Image-centric communication

through the new world of SNS  
以图像为核心的新SNS社交传播语言

#### Hyper-connectivity & Super-intelligence

for life styles and consuming culture  
高级智能及多维连接的数字生活方式



## Building Experience

### Midea Touch Points

#### Living

Living in Smaller but more flexible and multi-functional smart space  
居住在小但更灵活，多功能的智能空间中

**Self Interior** Make home fit to their life and their taste  
使家空间更适应自己的生活需求及品味

Urbanization, increasing rental & sharing house for small households  
城市化进程增加了出租及共享居住的小户家庭数量



#### Eating

**Easy & Casual dining**  
with new food-tech and retail system  
在新食品技术及零售系统的推动下饮食变得更方便轻松

**Cook for fun** and creative eat-tainment  
为了娱乐和自我满足的烹饪更加流行

Smart tech is your sous chef  
智能烹饪技术当你的副厨师



#### Wearing

**No washing, delicate care** by cross-over technology  
基于跨界智能技术下的免洗及精细护理

Daily quick and light washing  
每日快速及少量的清洗需求不断增长

**Time & labor-saving** easy maintenance around washing process  
清洗过程省时省力，维护方便



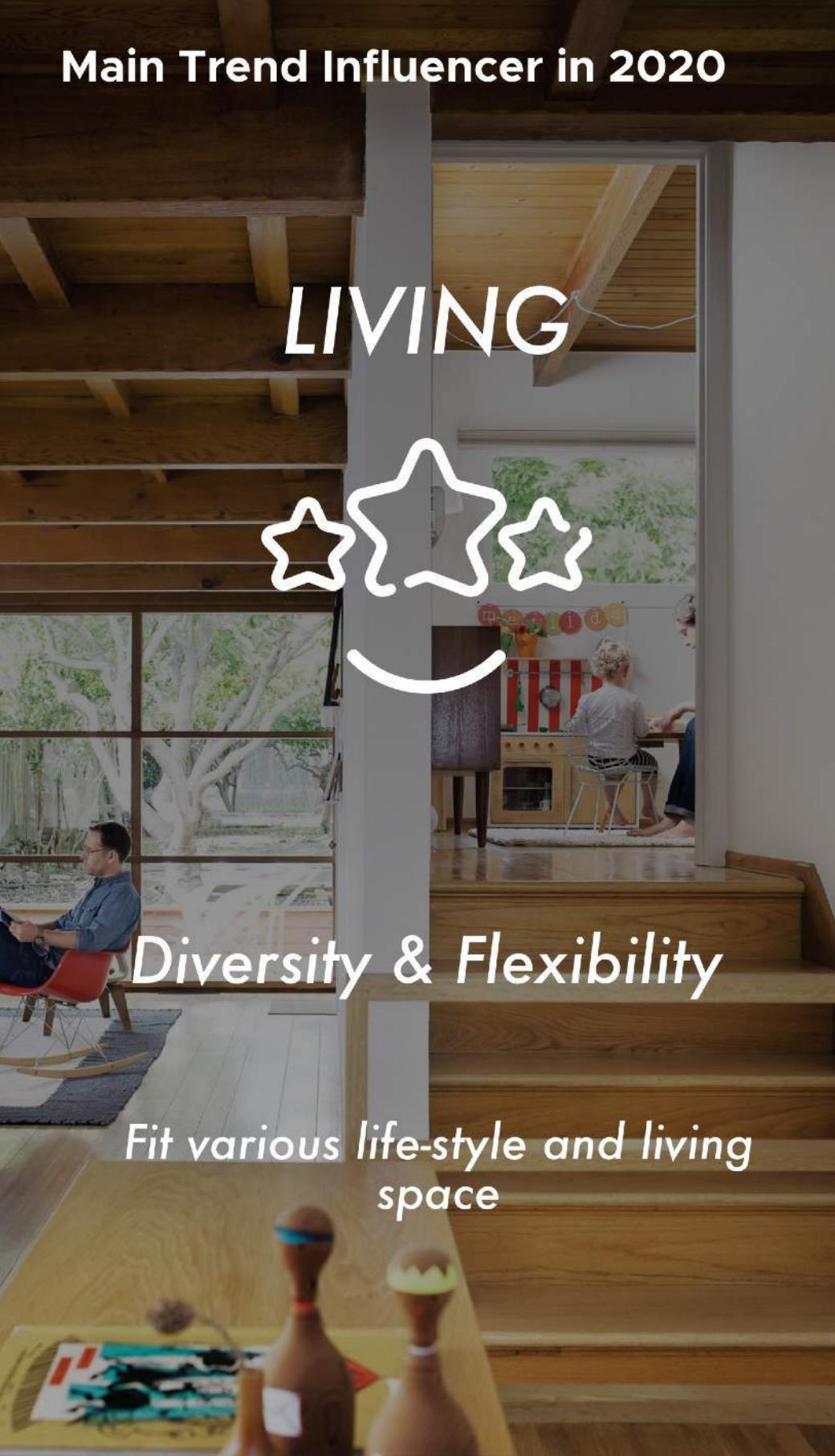
# Main Trend Influencer in 2020

## LIVING



*Diversity & Flexibility*

*Fit various life-style and living space*



## VALUE



*Self-esteem & Mindfulness*

*Meet Consumer's emotional needs*



## TECH



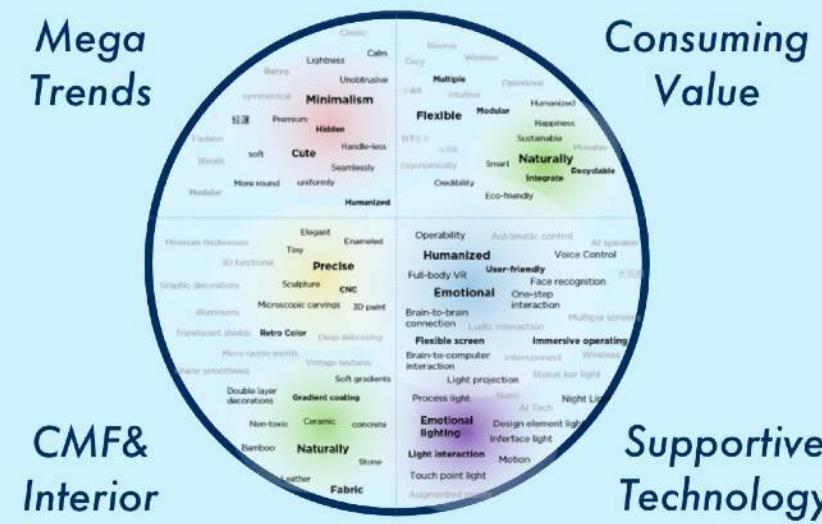
*Adaptive & Empathetic Intelligence*

*Empower a holistic humanized experience*

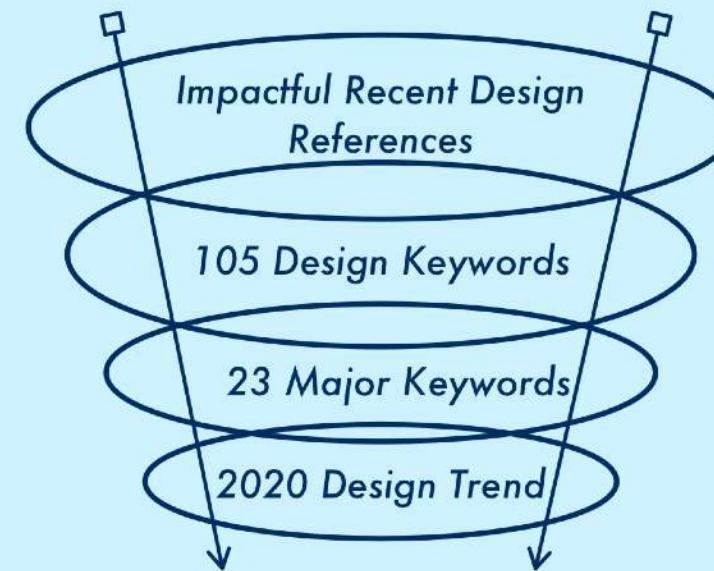


## Design Trend Influencer, Method & Extraction

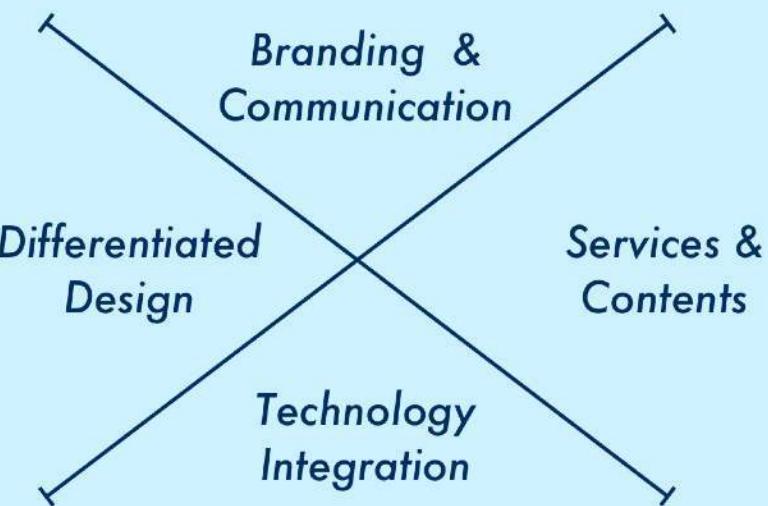
## Domain Signals



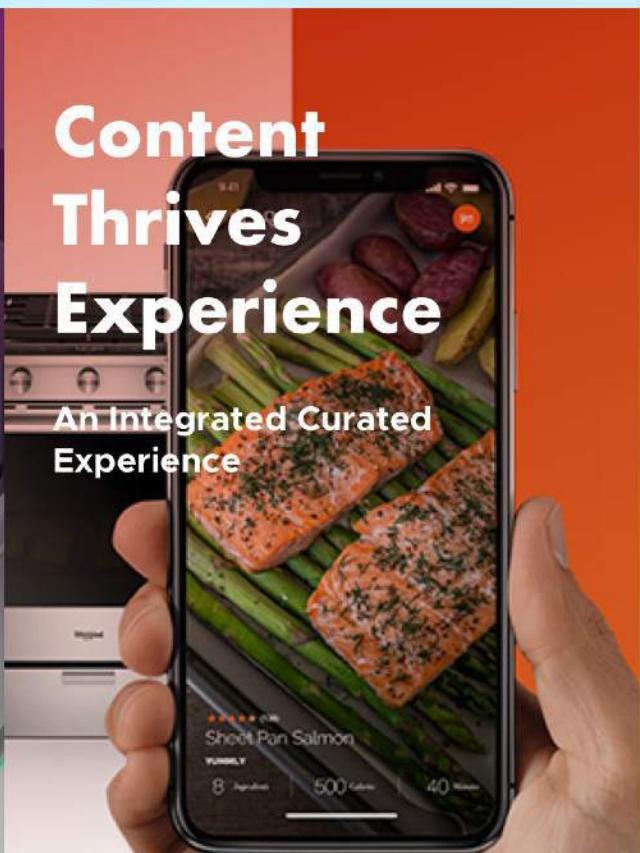
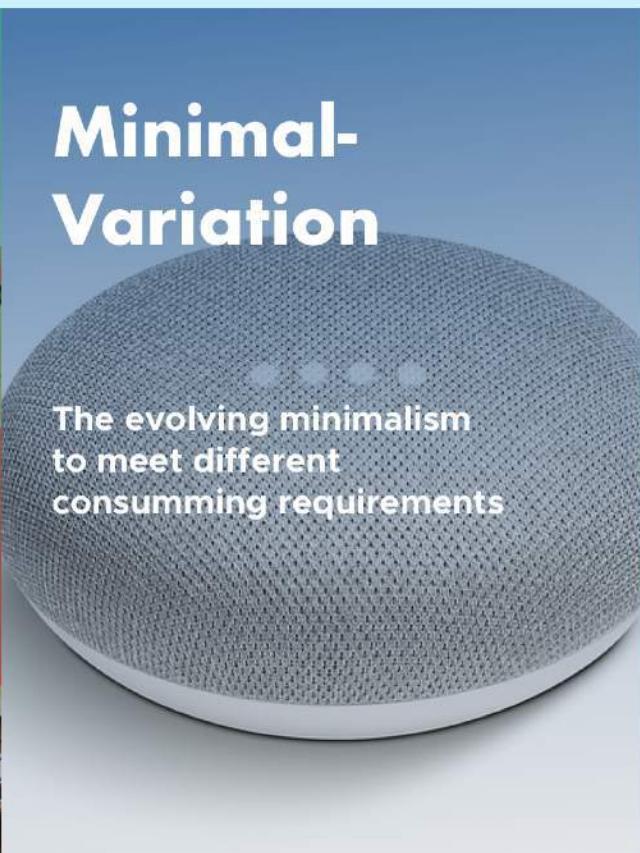
## Design Trend Extraction



## Value Coordinates



## Design Trend influencers in 2020



# “2020 Smart Essence” Advanced Design Direction & Action Items

## Redesign Your Space



### Maximize your space, Maximize your life

Compact, integrated - appliance for small households  
大幅度利用，针对集成化小型生活空间的设计方案

### Electro-Furniture

Transforming and combining furniture as a home appliance  
电器化家具

### Always clean and healthy bathroom

Automated sanitizing, dehumidification, cleaning system  
自动技术保持浴室清洁健康

## Respect Your Life

**Self-evolving usability** with big data, machine learning, new display, lighting tech  
自主进化的可用性，以大数据，机器学习，新显示/灯光技术实现

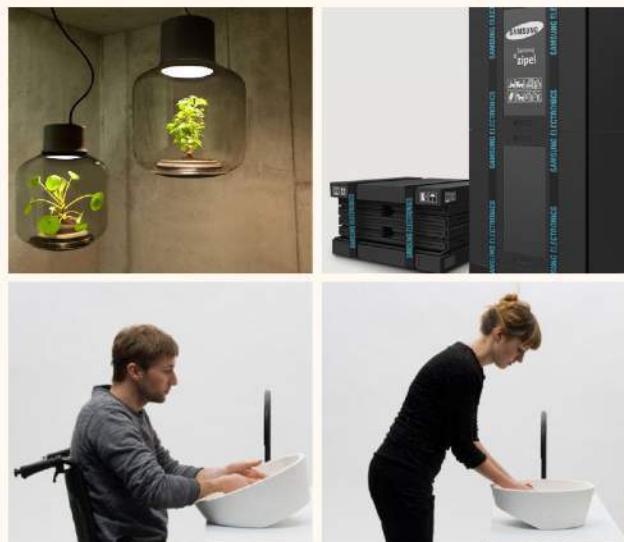
**“Espresso”** Condensed Professional & Premium Suite for small households  
针对小户型家庭设计的“浓缩”专业家电设备

**“Changeable” suite** Easy changeable appliance cover adapt to apartment-deco  
适应居住环境，方便更换设备外观的设计方案

**Living with Pet** Appliance Design for living with pets  
家有萌宠，适应于和宠物同居的家电使用方案



## Mindful “Good”s



**Home-interior** Blending Natural for healing  
融合自然元素的治愈型设计

**Fundamental research for Smart Senior**  
Universal Design guide-line and new business opportunity like silver town suite  
老年人群的基础研究，以城市老龄化人群的智能产品为对象，对其进行通用型设计和新市场机会研究

**Re-Pack, Re-Use** Package Design for easy storage, re-use on the perspective of a urban nomad life  
针对城市游牧族的生活方式，推出支持再利用的包装设计

**Design & Manufacturing for Sustainability**  
可持续的设计与制造

## Beyond Home

**New appliance scenario & integrated cloud residential eco-system**

in the Expanded Public Spaces. eg, Hotel, hospital, school, office with B2B solutions for efficiency, enhanced experience

针对酒店、医院、学校、办公室等场所的电器使用场景，设计集成的云端体验方案，B2B的解决方案



2013, 2015 — 2017 New York / Beijing / Shanghai

**Product / UX Designer & Startup Entrepreneur**

After graduating I took three-year practices in the industry, designed and served products from AI & Educational based family robot to SaaS software, play roles as both UX Designer and Startup Entrepreneur (@Spacechat) that I tried to make a LBS product angel-funded and grow.

## / Featured Works & Experience

2017 — 2018	PRODUCT /UX DESIGNER	LINKFLOW SaaS, workflow automation	LAUNCHED
2015 — 2016	CO-FOUNDER / PM &DESIGN	SPACECHAT, Inflight & Scenario based ChatApp	LAUNCHED
2013	ONCAMPUS INTERNSHIP	Mozilla Lab, HoneyComb Firefox cross-platform Innovation	PROTOTYPE DEMO

On Campus & Post Graduate Industry Experience

Role: Co-Founder, COO & Product/UX Designer



**Meet friends from the future !**

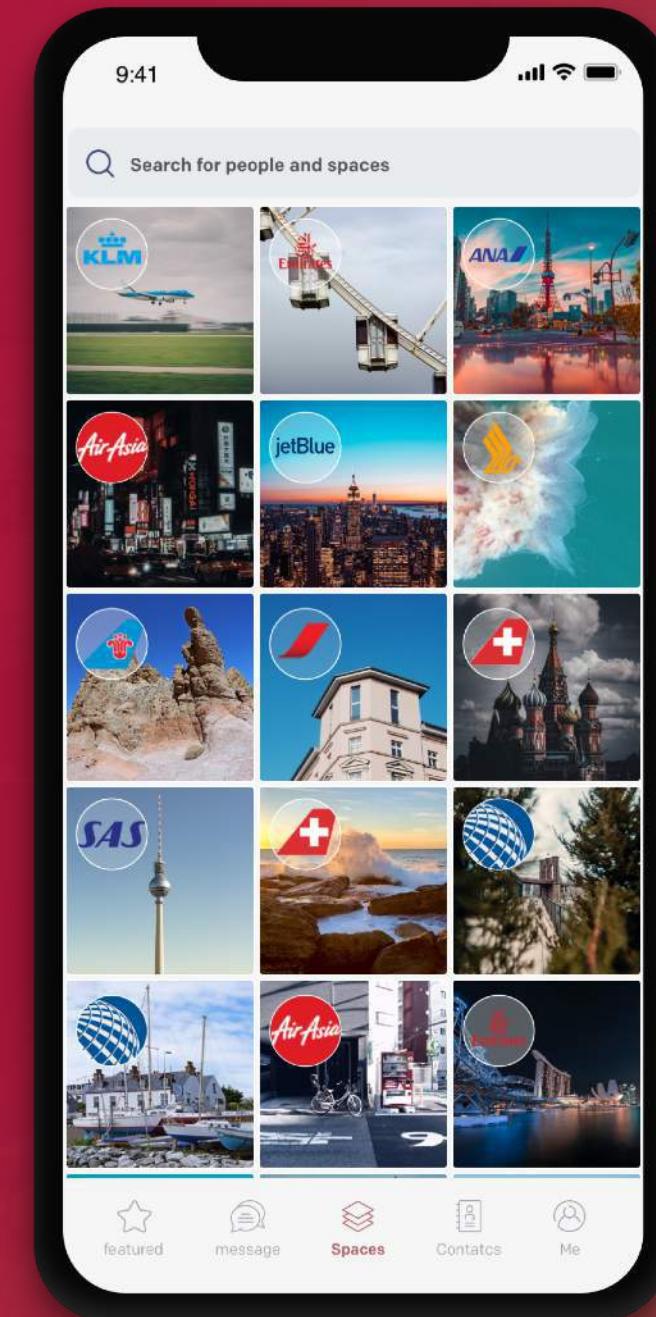
Scenario-based chatapp



App Store Launched

**Achievements:**

- Zhenfund AngleInvest Intention 真格基金天使投资意向书
- Technode Report 动点科技创业版报道
- GWC Innovators Fund Invitation GWC 2017年邀请函



**TechNode**

TechMedia Press about "Spacechat"  
click "TechNode" check the report

**“ Millions of people wait for their flights everyday at different terminals in different countries on this planet 每天，有数千万人，在世界各个航站楼搭乘飞机**

Airlines Provide inflight-WiFi 全球提供WiFi的航空公司



- 国际航空电讯集团（SITA）2015年3月发出《航空旅行展望》
- 报告显示：2016年航空旅程将面对一个完全移动和社交化的环境
- 90%的航空公司和机场将提高服务的移动性和社交化程度
- 2020年，移动平台、社交媒体等渠道将占机票销售的40%份额

According to a report from SITA on March 2015, in 2016, flight journey is going to land on a mobile and social-networked circumstance, that 90% of airlines and airports would improve their services in a mobile and social networking structured environment.

**By 2020, mobile platform and social media would become the major flight tickets purchasing channel**

尝试进入社交网络新时代的航空公司-空中社交大战即将开启

### Time for the airline social-media battles & the age

2015.11.12

东航率先在上海往返纽约，洛杉矶，多伦多航线上开启空中互联网服务，成为国内首家在国际远程航线中为旅客提供空中上网服务的航空公司

China Eastern Airlines is the first to open air internet on routes between Shanghai and New York, Los Angeles, and Toronto, becoming the first domestic airline to provide passengers with in-flight Internet services on international routes

2015.07.20

春秋航空发布非公开发行股票预案，已募集资金45亿元，其中37亿用于购置21架空客A320飞机，另8亿用于互联网航空建设

Spring Airlines issued a non-public share offering plan, and it has raised 4.5 billion CNY, of which the other 800 million was used for Internet aviation construction

2014.04.16

国内两架航班首次开启“空中宽带系统”体验之旅

Chinese Domestic Airlines Started “Air WiFi System” Experience

2014.02.13

维珍美国航空推出了一项服务，允许飞机上的乘客通过Facebook, LinkedIn或者Twitter和同航班的客人在万米高空进行网络社交

Virgin airline provides their passengers a social net-work service by sharing Facebook, LinkedIn profiles

2012.02.28

荷兰皇家航空公司发布了“相遇 & 同坐”服务，乘客可以把facebook或者LinkedIn相关资料关联到航班预订流程中。

KLM's "Let's Meet" let passenger sharing their LinkedIn profile in the ticket ordering process

约3.9亿中国乘客在航班上度过了10亿小时，WIFI服务将带来巨大的新商机  
尤其在社交与数据服务领域

approximately 390 million Chinese passengers have spent 1 billion hours on flights, and WIFI service will bring huge new business opportunities. Especially in the field of social and data services

# HoneyComb — moz:la NYC Lab 2013

Product & User Experience Innovation

Role: Product Designer ( Team )

## Background

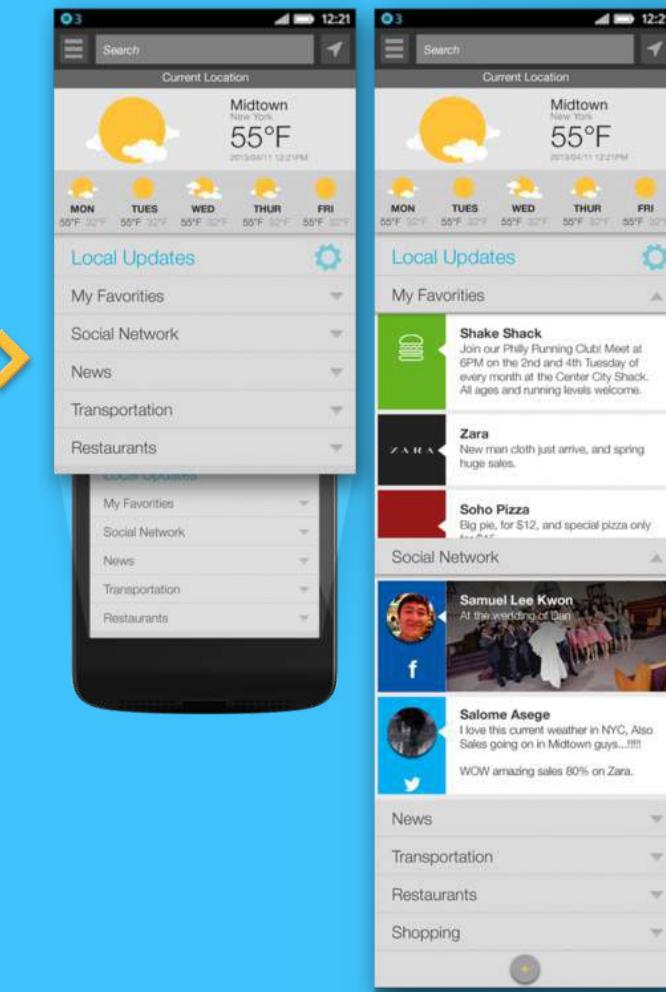
**Mozilla NYC Lab** Innovation Project for fire-fox phone in cross-platform productivity, Our team were assigned to make a never existed product with **content curation** feature in cross devices capability.

Content Curation + Cross Devices



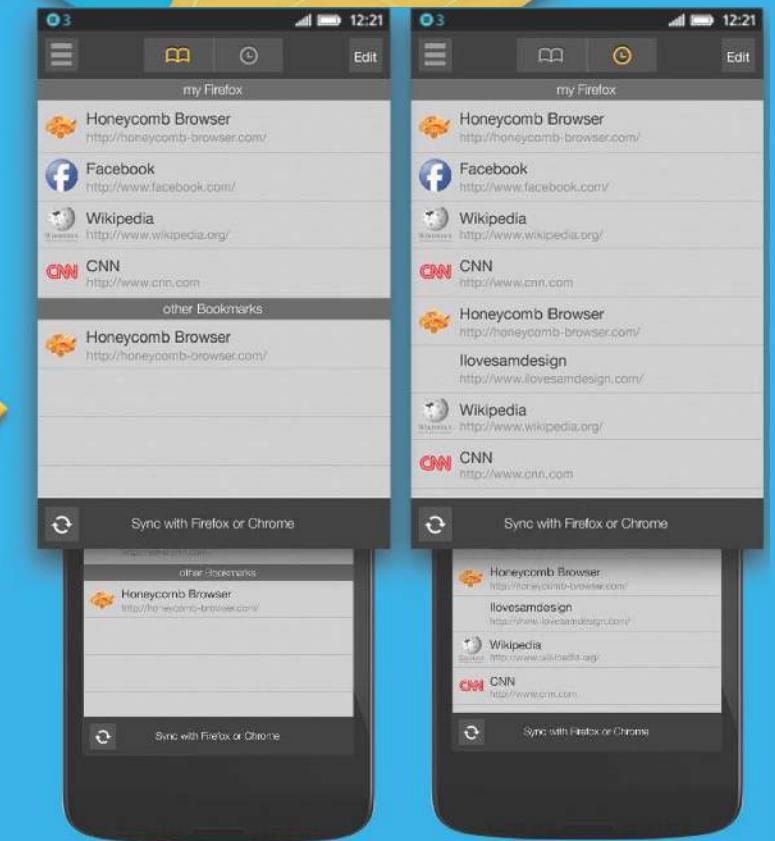
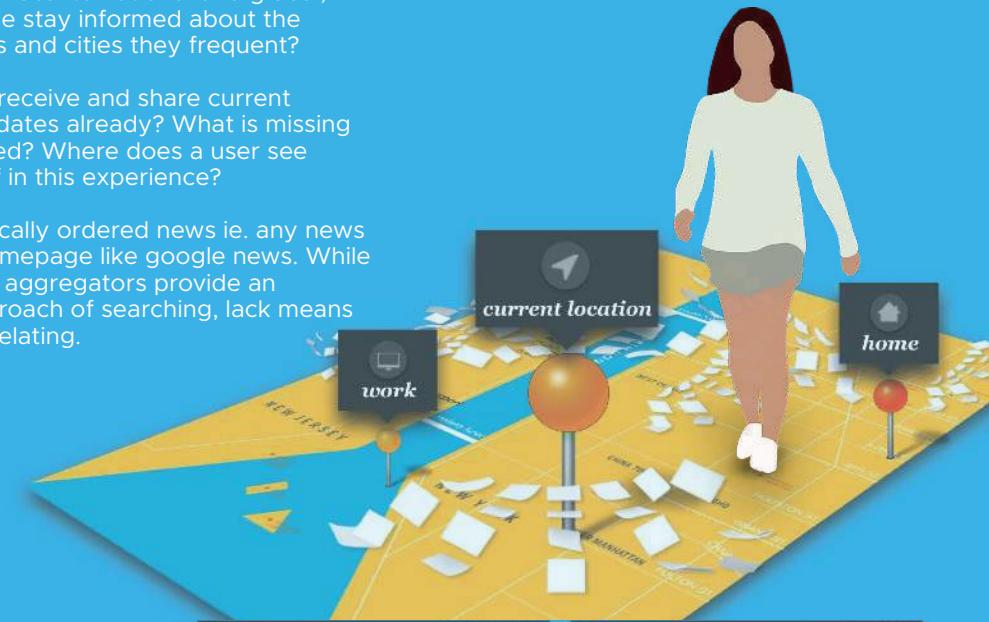
Honeycomb

News that is contextually aware, not only allows users to stay up to date with the information that matters, but also curates a narrative of the environments



## Design Questions

- If news is tagged geographically, how can it be used to stay in touch with friends and family?
- From the hyperlocal to national and global, how can people stay informed about the neighborhoods and cities they frequent?
- How do users receive and share current events and updates already? What is missing or can be added? Where does a user see himself/herself in this experience?
- Show categorically ordered news ie. any news aggregator homepage like google news. While these types of aggregators provide an organized approach of searching, lack means of personally relating.



Honeycomb, with a visualized mapping of [ news ] information, creates a centrical experiences to better illustrate the user-defined landscapes.



# HoneyComb — **moz:l/a** NYC Lab 2013

## Persona / user stories



**Jill** is an **early 30s** professional, who commutes daily from her apartment in Greenwich Village to her workplace in midtown Manhattan by train. Her commute usually takes 25-30 mins one way.

During this time, she likes to use her phone to get a head start on what has already happened that morning. Jill is at once able to **receive traffic, local, and social news during her short commute to work**. She can use **Honeycomb's mapping feature** to find the news happening along.

#Commute #Transportation



**Alex, 24** is an international graduate student studying in New York City from Brazil.

Although he is excited to make new friends in his program and to learn more about how a different city operates, he still wants to **maintain strong links to his hometown and country's affairs**. Alex is able to **receive news feeds from both locations** by designating a hometown on his profile. He enables Honeycomb's option to sync to his current social networks

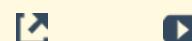
#News #International\_News



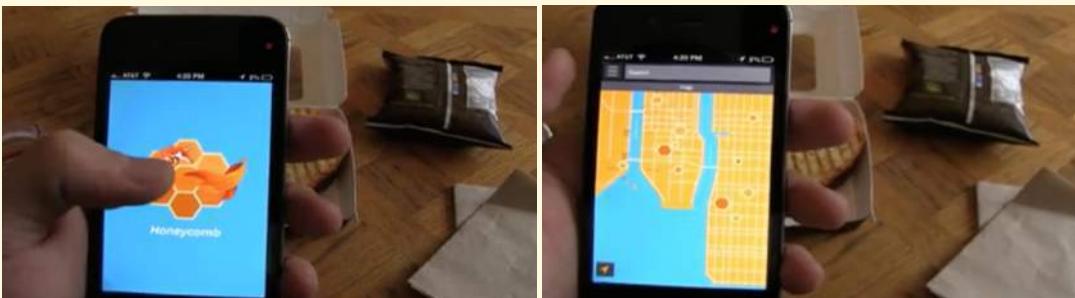
**Lina, 42** is a mother of two who is trying to plan a birthday party for one of her children.

The morning of the party she uses **Honeycomb to check news updates for the the party venue, weather, and pizza parlor**. She sees that the rain might not make the ideal party space an ideal situation so she calls the the space to see if they can reserve a space inside. And although she's already considered picking up

#Retail #Neighborhoods #Events

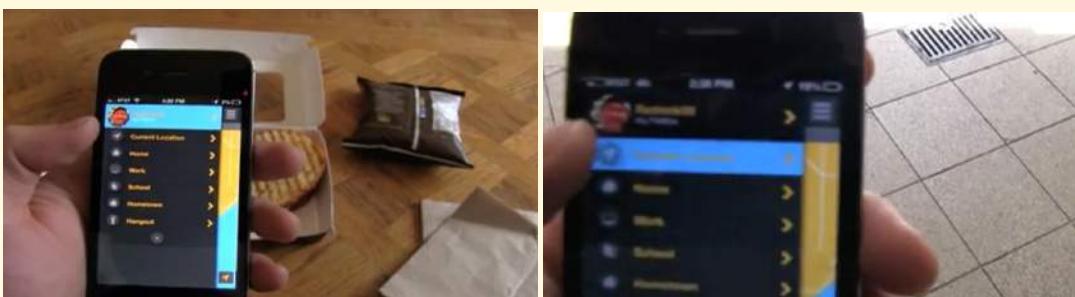


## Features



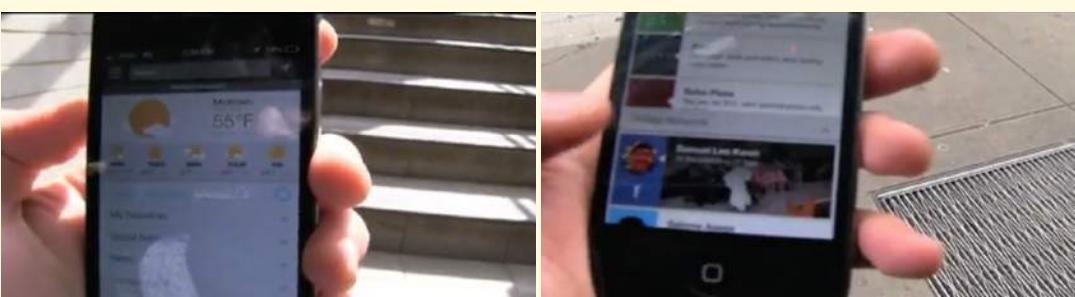
- HOME

- Combs curated by user defined landscape



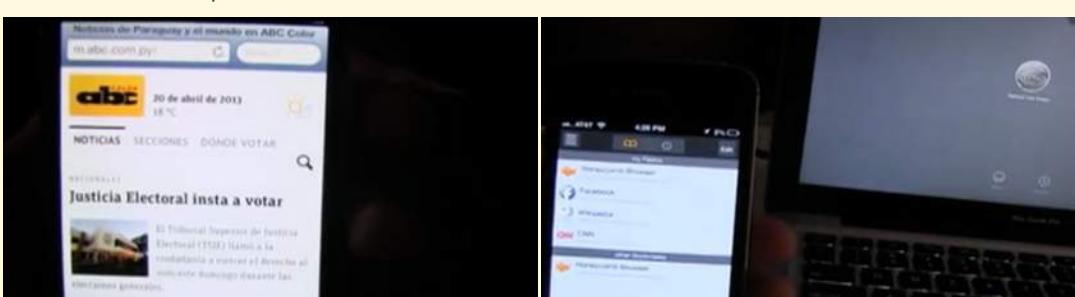
- User-Centric label-marks to stay informed

- COMMUTE Info



- Check weather updates

- Social Media Updates



- Cross platform features

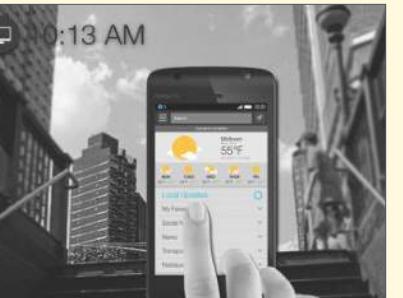
- Media & news data aggregation pages

## Day in a Life user journey



**HOME 8:02 AM**

Just woke up and I have to get ready for the day. Let me check **Honeycomb** to see what is happening in my comb. Looks like it's going to be a bright day!



**COMMUTE 10:13 AM**

Just got off the train and I want to grab a quick coffee before class. Let me check my favorite coffeeshop has any specials in my **School comb**.



**CURRENT LOCATION 02:34 PM**

Looks like I have some time before I have to go to my internship. Maybe I'll sit in the park for a bit and see what my friends are up to. (**Social Network**)



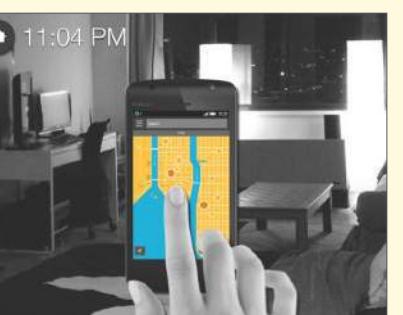
**WORK 10:13 AM**

-A coworker and I planned to hang out after work. Let's see what shows and things are happening in my **Work comb**. (Arts + Culture section of an online mag)



**HOME 08:47 PM**

Just got home. I should post that **Blog entry** for class. I bookmarked something to include in it yesterday.



**HOME 11:04 PM**

Such a long day. I wonder what was happening back home. (News updates from another city in a different country according **Map navigation**)

2012 — 2014 New York City, US

### MFA DESIGN+ TECHNOLOGY DEGREE CANDIDATE

**MFA Design & Technology @Parsons** is a **STEM designated** graduate program, with Immersive Studio-based course in an interdisciplinary approach in the field of:  
HCI | Computational Art | Innovative Engineering | Strategic Design System | Speculative Design Practice

@MFADT I specifically explored **how imaginative narratives & technological components** interfering, that bring audiences a poetic and delightful experience on everyday life. I also acquired practical skills e.g. **rapid-prototyping, advanced web-coding** ( HTML,CSS,JS,NodeJS, Arduino Micro-controllers Programing )

## /Works & Projects

Wish Message

PARSONS MFADT THESIS

*Speculative Design / Art Installation / IOT / Tangible Interface*

Future Driving

DESIGN FOR THE CENTURY

*Smart Urbanity / Experience Design / Design Research*

Translation

SYNOPTICOFFICE COLLAB

*Print / Editorial / Web*

Sprayit

CREATIVE CODING

*Webapp / Art / NodeJS*

Data, Sensors, Code + Art/Design practice

### DESIGN+ TECHNOLOGY

Parsons the  
Newschool for Design  
帕森斯设计学院 ( QS World #2/3)



## MFAD+T/ Thesis — Wish Message 2014

Role: Designer / Developer



## My Observation : Digital Isolation or Digital Solidarity?

Movie < Her > Samatha &  
the nostalgic Interface



“ We are actually disconnected and isolated ourselves by a very infertile way of organic connections we had before. ”

— Alone Together. Sherry Turkle

## My Design Hypothesis

### What if building a Playful Physical Interface

execute function  
that would normally  
done through a keystroke  
without thinking

### What if creating an Interaction Method

building connections between  
users, devices and digital  
property in a physically  
nostalgic way.

### What if crafting a Network-Experience

could happen in a co-related  
emotional context.



## My Design Prototype : The Digital Nostalgic

Bamboo Copter Trigger  
Realtime Twitter Twits



Analog playing with bamboo copter



## Work Schematic



- The Interface Is built with arduino fio board with wifly shield and an accelerometer sensor.
- Projected screen is a web app, built with google map API & twitter stream API, web-socket allows the latest twitter data talks to the interface via wifi.
- after users spinning the bamboo copter, #wishes appear on where they come from.

## Technology Stack



Google Map API



Node.js engine



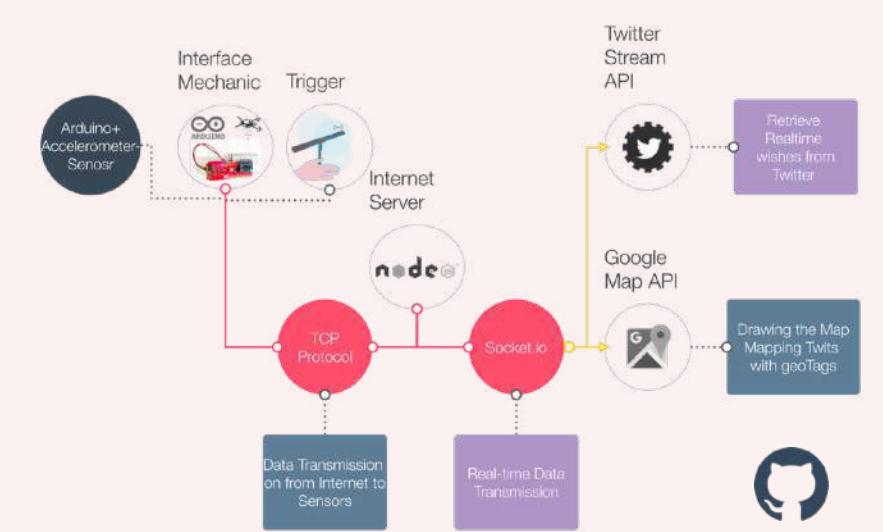
Arduino



Twitter Stream



Accelerometer



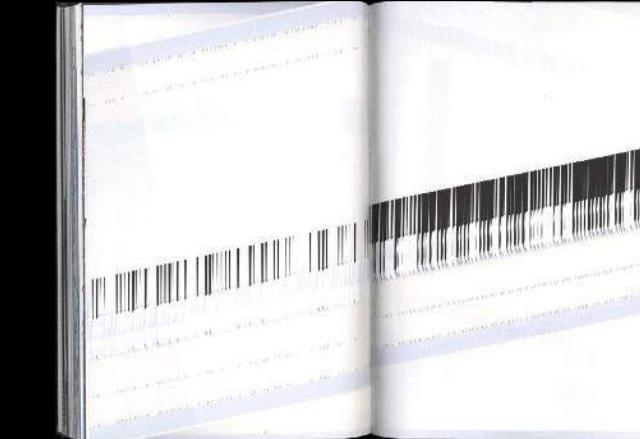
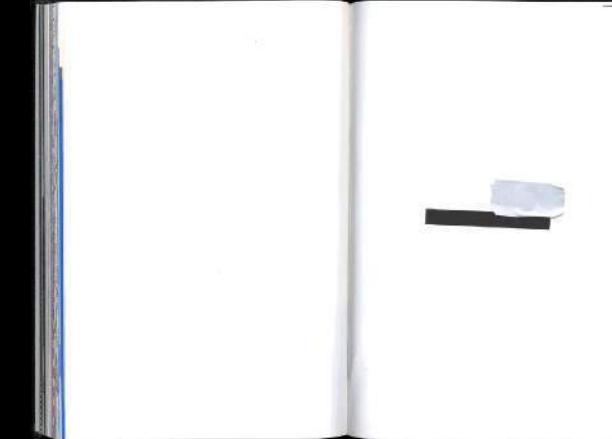
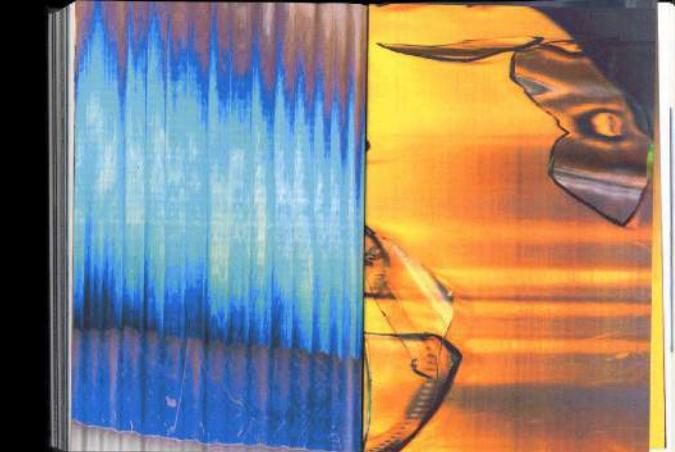
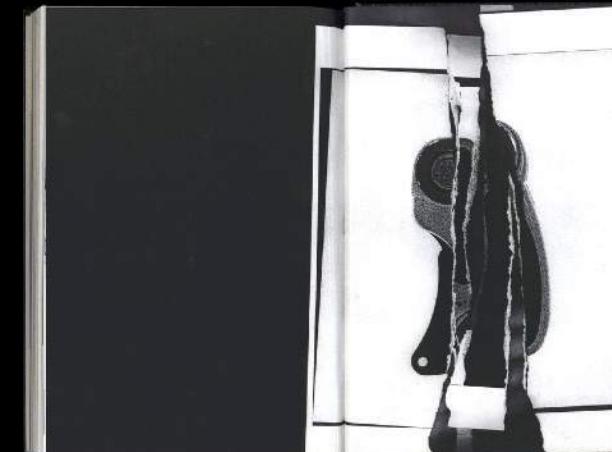
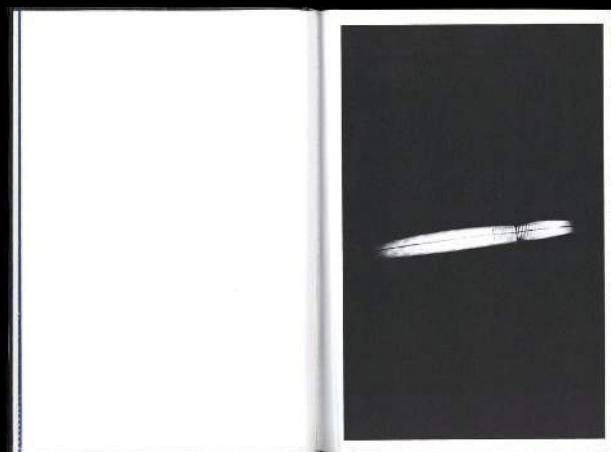
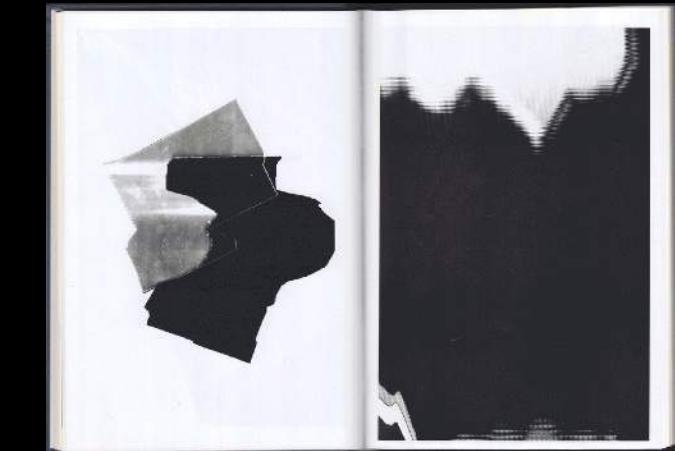
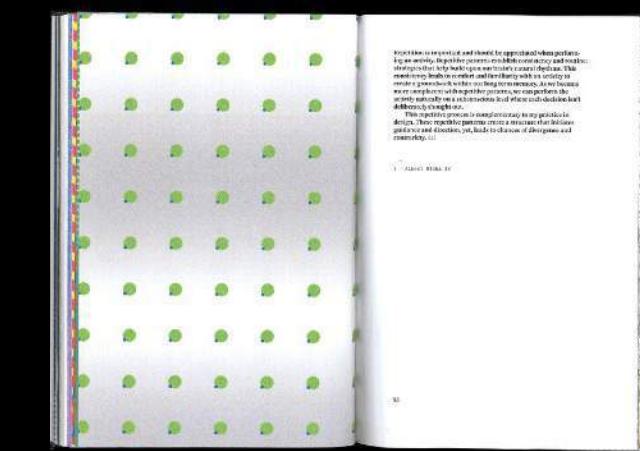
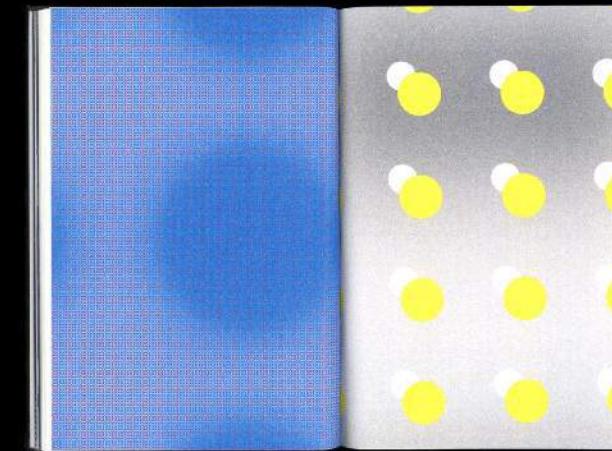
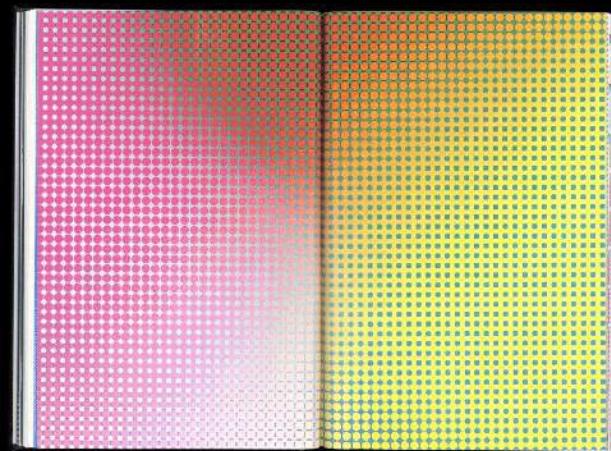
view full-code  
of this project

Experimental design seminar examining the relationship between analog and digital tools to discover and create visual forms that were only made possible through the heterogeneity of current production techniques.

Forms were created through a process of collection, curation, and oscillating rounds of visual translation between printed and screen-based techniques. Three anthologies of collected visual material were published.

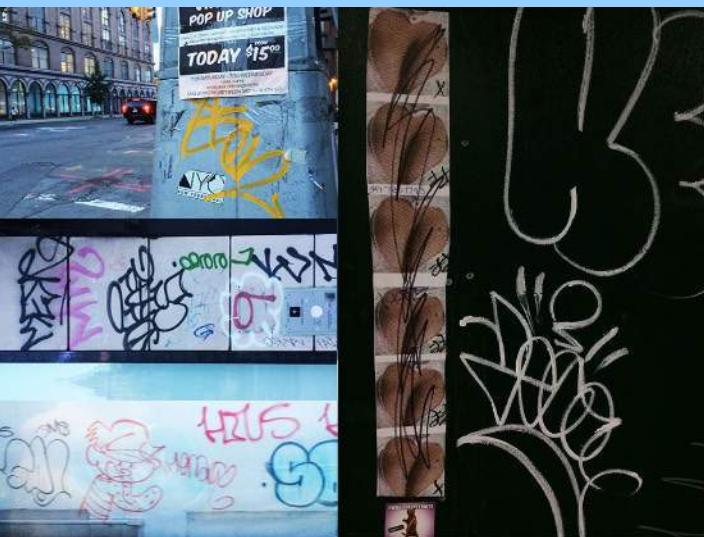
Collaborated with Fabiona Einhorn and Angelica Jang under the direction of Caspar Lam and Yu June Park of Synoptic Office

The book compiled our experimenting outputs in the digital manipulations of the subjects



# Spray it — Web application 2014

Role: Artist / Javascript Developer



SprayIt, Spray together is a web application with **#multi-user, real-time** features.

This app tries to bring users an online experience of the New York City's Graffiti Scene.

#Drawing-Tool #Front-end #Web-socket #Javascript #HTML5 Canvas #Heroku



“ Further Works Upon request via liuh494@newschool.edu

TEL        86 - 1982-1577-417 CN  
WeChat    haijing28th  
Email      liuh494@newschool.edu

DESIGNLENS.INFO