

Portfolio

Baoling Yang

UX Designer

4 years+ experience | Full Stack

Introduction

Baoling Yang is a designer with full of passion and curiosity.

- 2019/02 till now NIO | Senior UX Designer
- 2017/07 to 2019/02 Meituan-Dianping | UX Designer
- 2015/03 to 2017/07 eBay | Full-stack Designer



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Project 1

Redesign the "Car" section on NIO App

NIO

Background

NIO App's "Car" section is where users browse cars, buy cars and use cars. We redesigned it to be more user-centered and improve the conversion rate.

Goal

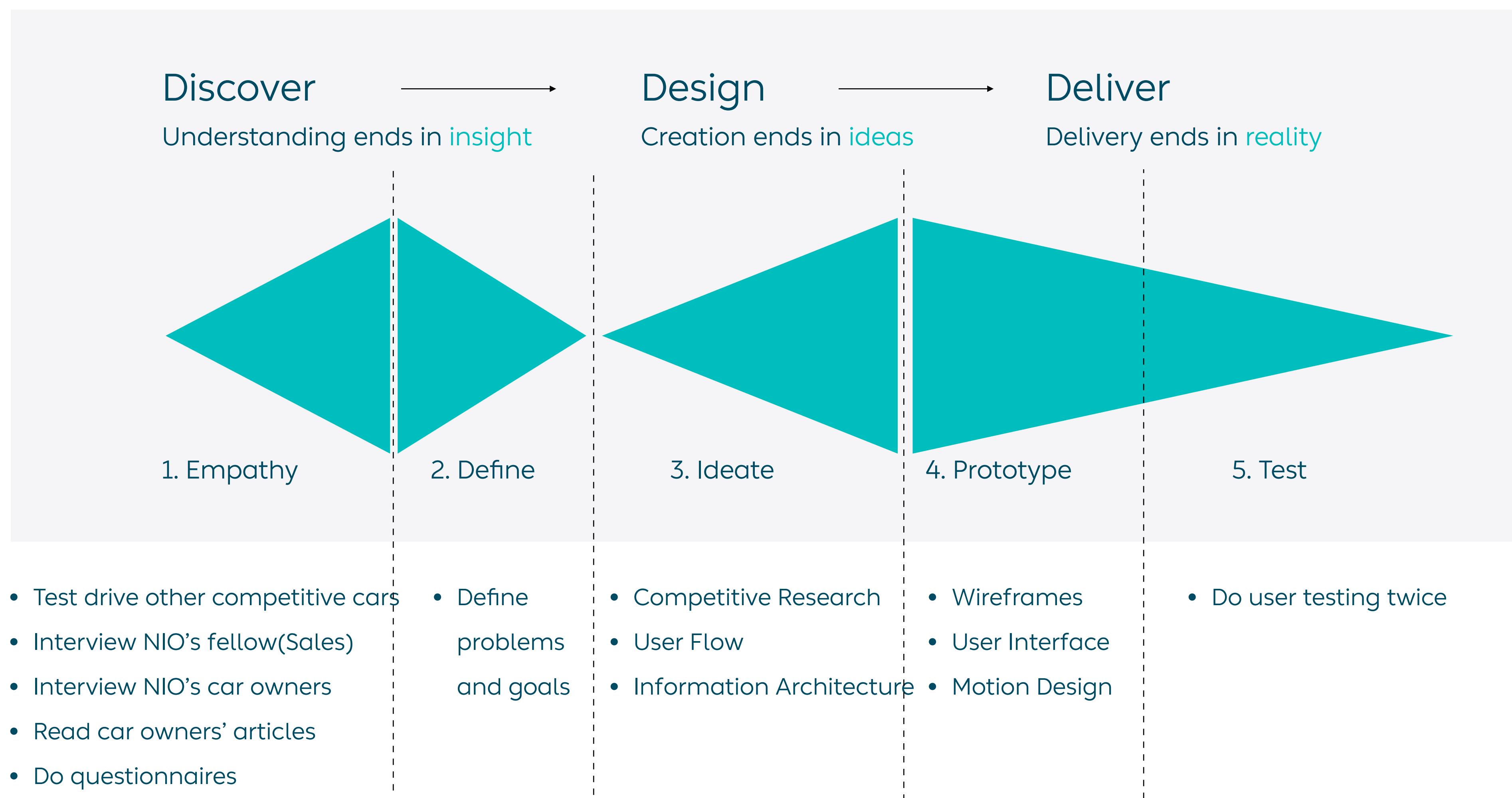
Improve the conversion rate of buying cars and test driving by 10%.

Challenges

- Understand different types of users and how they make their purchase decisions.
- Cross-department coordination, including the departments of Brand, Public Relations, Product Marketing, Power, Service, NIO Life, etc.
- Sort out the selling points of NIO's car.



Design Process



Part 1

Empathy

User Research - Read car owners' articles on Zhihu and NIO app

Free license plate, save money

8:43 PM 蔚来真实车主如何评价 ES8? 写回答 ...
100 个回答 < >

2、为什么选择电动车？为什么选择蔚来？

因为我是广州人，但没有广州牌^_^电动车可以不用摇牌、安静、省钱（电池终身质保的前提下）、免购置税、国家反补贴67500，车牌+购置税+补贴=15万，后来才知道车船税也免，所以也不知道多少钱。下意向金后的几个月我都处于观望状态，主要是看看创世版车主（白老鼠、第一个吃螃蟹的人）的驾驶反馈。期间看到很多车黑，心里也是犹豫不定的。

因为家里有一对双胞胎，我比较看重车内的空间，蔚来的女王副驾、第二排的空间、放倒后的储物空间都是吸引我的地方，其次就是整车的颜值（我老婆说颜值即正义）还有各项科技（虽然暂时还在bug以及功能还没开放）。车的安全性也是我非常看重的，毕竟你不撞别人也会被别人撞嘛，而最近几次交通事故也说明了ES8的质量杠杠的。

▲ 已赞同 243 感谢 25 收藏 评论 501

Practical car price

8:46 PM 蔚来真实车主如何评价 ES8? 写回答 ...
100 个回答 < >

首先说车价：创始版54.8万 - 4.5万国家补贴 - 2.25万北京补贴 - 5万顺义油换电补贴 = 43.05万

选择了电池租赁 车价减10万，相当于6年无息贷款，每个月还款1280元（用十万元做余额宝理财，每个月用余额宝直接还款1280元，6年也有相当可观的收益）

选择了服务无忧，1.48万元。（家里可以安充电桩，每天城里开够用，所以没有买能量无忧）

最终提车价格：34.53万。

购买前我对比了一下，油车有购置税，以最终提车这个价格去市场上选择SUV，BBA也没什么看得上的车。

▲ 已赞同 289 感谢 67 收藏 评论 44

8:43 PM 蔚来真实车主如何评价 ES8? 写回答 ...
100 个回答 < >

4、车价

我选了nomi、20寸轮毂、舒适套装、音响、抬头显示（这太重要了，否则36分都不够扣）。选完后大概是49万左右吧，减了67500的补贴，减了10万的免息分期，减了50000的订金，我最后是给了28万左右。辅助驾驶后面看看怎样吧，我也是非常期待的。

5、驾驶体验

开着就两个字~舒服。软件暂时虽然渣渣，但未来可期。硬件杠杠的，简单地说就是成々々给你的。提速快，变线流畅。下面是我大儿子友试驾体验（他情不自禁来了一句粗口，请见谅）



▲ 已赞同 243 感谢 25 收藏 评论 501

Thoughtful service and experience

8:44 PM 蔚来真实车主如何评价 ES8? 写回答 ...
100 个回答 < >

结语

买油车的人会学到很多东西，什么积炭啊、机油的类型啊、怎么开才省油、怎么才能避免被4S宰！而我买了蔚来只学会找fellow！老是有人笑我们交了智商税，我就笑了！你们觉得我们买车的钱都是天上掉下来的？？？还是努力奋斗继承遗产？？？

最后，祝大家身体健康，事事顺利！

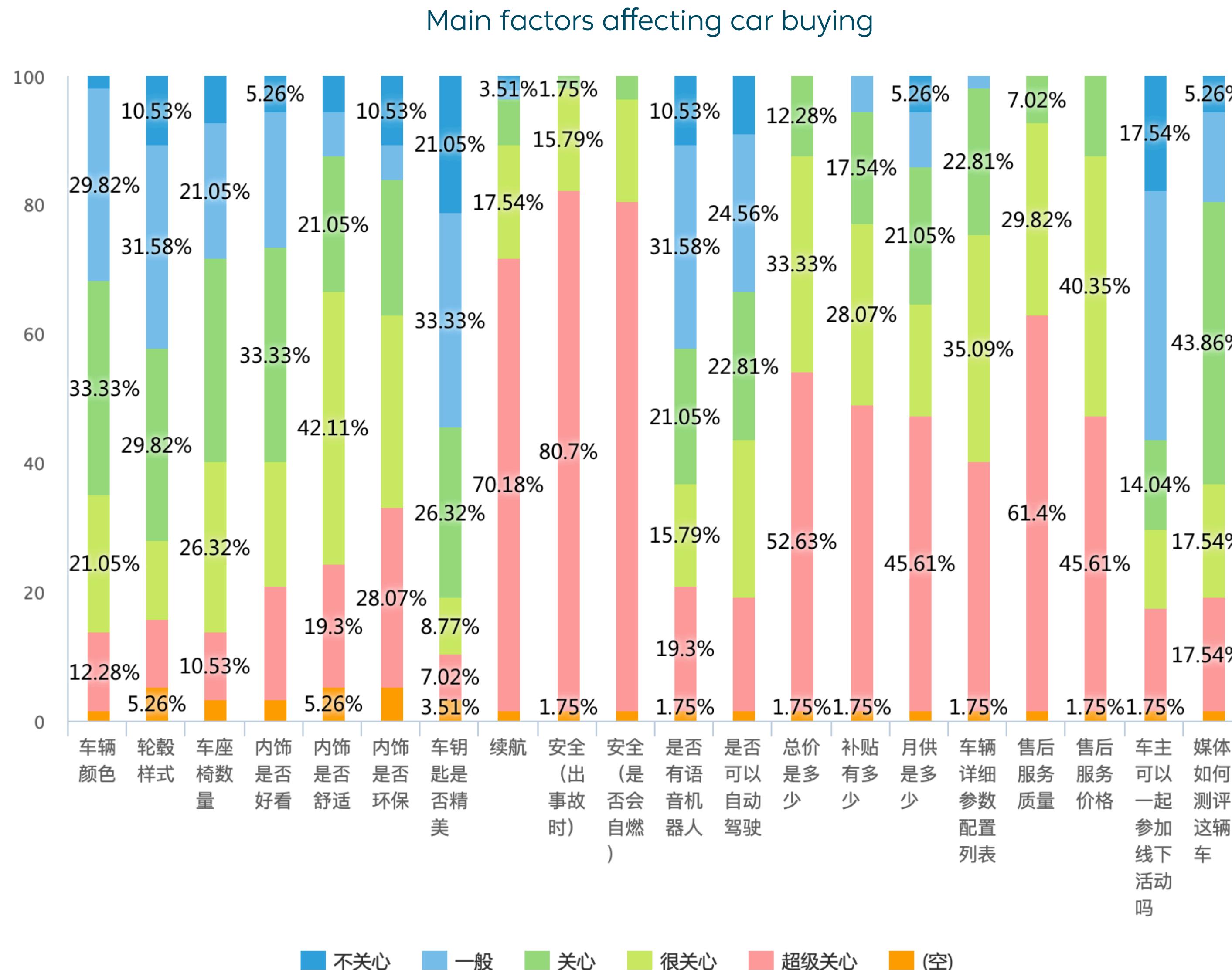
附上一张全家福



▲ 已赞同 289 感谢 67 收藏 评论 44

Questionnaires on main factors affecting car buying

Main factors affecting car buying



1. Safety (car accident)
2. Safety (self-combustion)
3. Battery lifespan
4. After-sales service
5. Total price
6. Subsidies
7. After-sales service price
8. Monthly mortgage
9. Specs of cars
10. Eco-friendly interior material
11. Voice interaction robot
12. Appearance of interior
13. Self-driving
14. How media review this car
15. Number of car seats
16. Off-line activities of car owners
17. Color of cars
18. Type of car wheels
19. Appearance of car keys

Fellow Interview

Goal

Get to know how users make their purchase decisions by interviewing NIO fellows, so that we can improve the conversion rate accordingly.

Objectives

3 fellows from NIO House in Taikoo Hui
2 fellows from NIO House in Shang Center

Result

1. User Type

Males are the majority (around 70%), family users are more than single person, age around 30-40.

2. Source of Users

1. From car owners' recommendations. The recommendation rate is far more than other car companies.
2. Those who walk into NIO House directly.
3. Know NIO from online information (news, NIO app, NIO website), and then go to the NIO House.

3. Users' Concern

1. Self-combustion of electric cars. →
2. Short battery lifespan, concern about charging facilities around their house. →
3. Whole environment for new energy is not mature enough. →
4. Can NIO last for long in the future? →

Design Points

1. No design for this, just let it pass.
2. Show charging map, convenient charging and battery swap methods.
3. Add the section to introduce new energy.
4. Add the section to introduce NIO.

4. Selling Points to users

1. Car Intelligence. NIO Pilot and NOMI etc. →
2. Feeling of manipulation. Users tend to buy after driving. →
3. Cost-effective. It's cheaper comparing to other cars. →
4. License plate of new energy is a key selling point. →
5. Charging network and battery swap in 3 minutes. →

Design Points

1. Mainly focus on the intelligent part.
2. Guide users to go to NIO House and test drive.
3. Add comparison between different cars.
4. No design, assuming users know this.
5. Improve the introduction of charging section.

Persona

Car Player

- 男性：90%
- 35岁以下为主，占52%
- 月收入42万以下家庭收入占比65%
- 单身比例高：15%
- 本科及以下：52%
- 个体经营业主/自由职业者：26%
- **• Great driving experience, high power.**
- 生活状态：生活精彩纷呈，活力十足
- 消费特征：冲动、潮流、关爱自我

“我不是名校毕业的，我不会那么拼，但我需要持续的学习提升自己，然后每天健健康康地保持健康。”

• Beauty of the interior and exterior of car.

购车观：开得快是刚需，空间和舒适是加分项

• Combination of technology

酷：外观、内饰有颜值
and car.

嗨：科技+车的结合

爽：动力表现佳，感官刺激，驾驶激情

主要对比品牌：特斯拉(22%), 奔驰(14%), 宝马(10%), 雷克萨斯(9%)。

主要对比车型：Model X, 奔驰GLC, 宝马X5, 雷克萨斯ES。

Family users

- 男性：91%
- 40岁以上为主，占34%
- 月收入4万以上家庭收入占比58%
- 二胎比例高：44%
- 本科及以上：81%
- 私有企业/创业公司：54%
- **• Big interior space, and security.**
- 生活状态：生活与家庭并重
- **• High price-performance ratio.**
- “我再国企上班，朝九晚五，可以家庭和工作兼顾，上班的时候就认真努力上班，下班就好好陪孩子。”
- **• Low usage cost and maintenance price.**

购车观：一辆属于全家人的三排大空间SUV，而且不妥协个人驾驶

• Considerate service makes up the anxiety for battery lifespan.

家用：一辆属于全家人的车

实用：高性价比，综合型的车

好用：实用成本低，维护成本低

主要对比品牌：特斯拉(26%), 宝马(16%), 奥迪(9%), 沃尔沃(6%)。

主要对比车型：Model X, 宝马5系, 沃尔沃XC90, 奥迪Q7。

Rich people who is always busy

- 男性：91%
- 30-39岁为主，占56%
- 月收入8万以上家庭收入占比33%
- 本科及以上：79%
- 私有企业/创业公司：54%
- 生活状态：兴趣爱好多样，生活多彩，注重自我兴趣
- **• No worry about car usage because of NIO's considerate service.**
- 消费特征：有钱任性，要买买买，喜欢买设计精致，做工精良的东西，喜欢买奢侈品。

“我经常关注科技，体验新科技产品，车也是一样，从前的车比的是性能，未来的车比的是智能。”

• NIO House provides them with a new living space.

购车观：要买就买最新车型，要买就买新科技。

购车需求：

新：新产品，新品牌，新科技

潮：外观颜值高，引领潮流，趋势

特：自带话题度，品牌独树一帜

主要对比品牌：特斯拉(27%), 奔驰(15%), 宝马(13%)。

主要对比车型：Model X, 宝马5系, 奔驰GLC。



NIO

Conclusion - Main factors affecting users's purchasing decision

Advantages of NIO

Product Performance

Price-Performance Ratio

License Plate of New Energy

Good Service

Convenience of Charging

Beauty of Exterior and Interior

Disadvantages of NIO

Brand of NIO

Battery Lifespan

Self-combustion

Sustainability of NIO

Part 2

Define

Define Goal

PM's Goal

Improve the conversion rate of car buying.

- 1. Improve the test drive rate.
- 2. Improve the rate to go to stores offline.
- 3. Improve the interaction rate with fellow.
- 4. Improve the car configuration rate.

User's Goal

1. Get precise information to decide whether to buy the car.

- 1. Improve the authoritative of information.
- 2. Provide relative information according to users' persona.
- 3. Improve the reliability of information.

2. Buy a car with the lowest price.

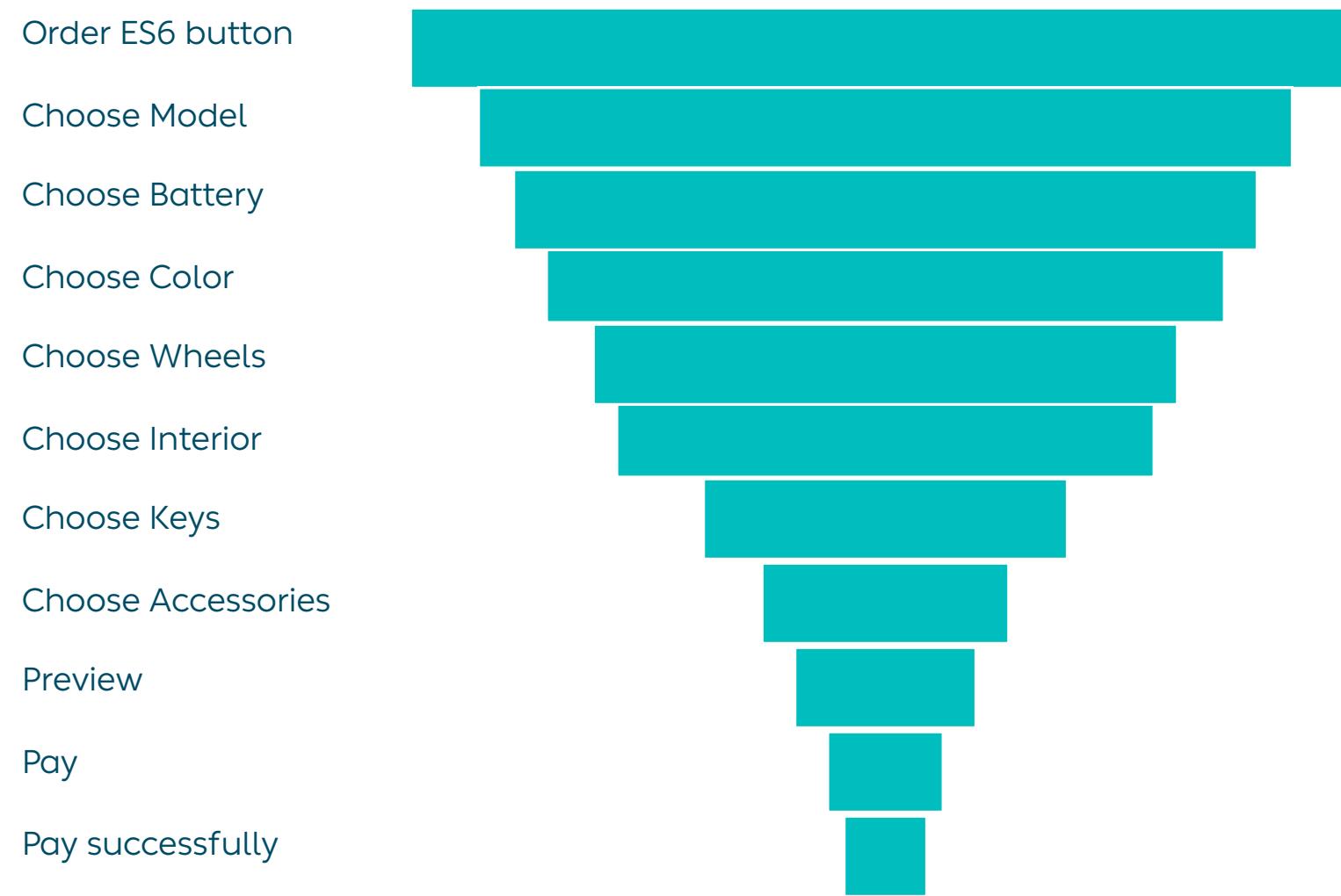
- 1. Improve the attractiveness and exposure of discount information.
- 2. Improve the exposure of car usage privileges.

Metrics needed to monitor design result

1. Click rate of all entrance

Entrance	UV-CTR	PV-CTR
Order ES6		
More About ES6		
Order ES8		
More About ES8		
Address		
Address - navigation		
Test Drive		
Contact fellow - IM		
Contact fellow - Phone		
Articles - NIO Power		
Articles - NIO Service		
Articles - other		
Tools		

2. Conversion rate of buying car



Part 3

Ideate & Prototype

Problem Analysis of Original Pages

Non car owners (fans)

No car configuration



No attractions on homepage,
Two secondary buttons
confuse users which to push.

Some users don't know
there are more content by
scrolling down.

Repetition on
homepage, and 2 price
for a car confuses users.

Test drive entrance is too far
behind and of low attraction.

Confusing article titles.

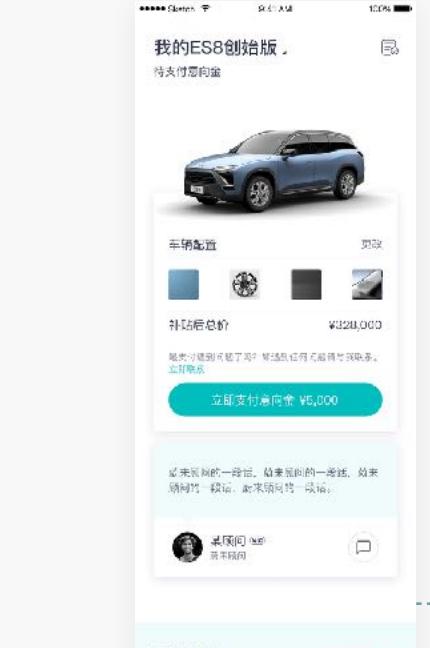
Another confusing title.

Carousel of articles
distracts users'
attention.

Tools with no attraction.

Wishlist

Earnest money to be paid



Same content with the
“No car configuration”
stage, doesn't satisfy the
needs of current users.

These 2 entrances of
cars are too behind
and takes up too
much space as well.

Tools are put too far
behind that users need to
scroll far to get them.

Earnest car owners

Earnest money paid



This order section repeat
that on the top right corner,
it's of no meaning.

Same content with the
“No car configuration”
stage, doesn't satisfy the
needs of current users.

Tools are put too far
behind that users need to
scroll far to get them.

These 2 entrances of
cars are too behind
and takes up too
much space as well.

Deposit car owners

Deposit paid

This order section repeat
that on the top right corner,
it's of no meaning.

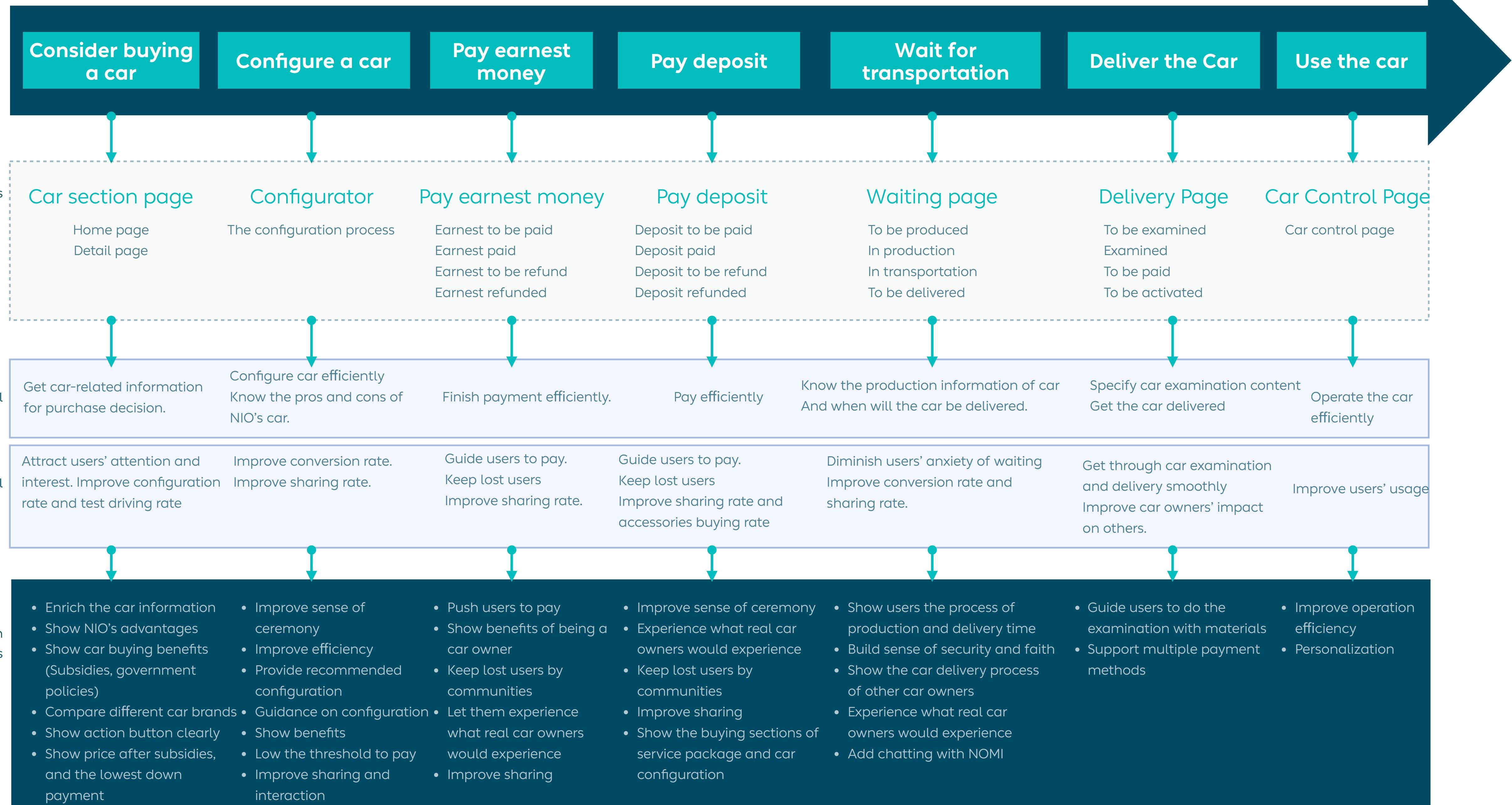
Same content with the
“No car configuration”
stage, doesn't satisfy the
needs of current users.

Tools are put too far
behind that users need to
scroll far to get them.

These 2 entrances of
cars are too behind
and takes up too
much space as well.

Formal car owners

Design Opportunities



Competitive Research

Brands\ Features	Car Comparison	Test Drive	Find Retailers	Order online	Financial Solution	Subsidy Policies	Specs	Security	Technology Introduction	Eco-friendly	After-sale service	Car owners community	Media Review
NIO	x	●	x	●	●	●	●	●	●	x	●	x	x
Tesla	x	●	●	●	●	x	●	●	●	x	x	x	x
Xiaopeng	x	x	●	●	●	●	●	●	●	●	●	x	x
Weima	x	●	●	●	x	x	●	x	●	x	x	x	x
BYD	x	●	x	●	●	x	●	x	●	x	x	x	●
Volkswagen	x	●	●	x	●	x	x	x	●	x	x	x	●
Mercedes Benz	●	●	●	●	●	x	●	●	●	x	x	x	x
Porsche	●	●	●	x	●	x	●	x	x	x	●	x	x
BMW	x	x	●	●	●	x	x	x	x	x	●	x	x
Honda	x	●	x	●	●	x	x	VV	VV	●	x	x	●
Toyota	●	●	x	●	●	x	●	●	x	x	x	x	x

● With this feature

x Without this feature

VV This feature is prominent

Information Architecture



Exterior

“It looks cool”
“I would be so proud to drive in it”

Conversion

“Let me get a test drive now”
“Find a store and go there to have a look”

Product

“Wow, the car parts are of so high quality ”
“It’s also an intelligent car! ”

Power

“The map can guide me to charge”
“It can swap batteries in 3 minutes”

Service

“I don’t have to worry about my usage anymore”
“Car insurance is included.”

Interest

“I can make so many friends in this community”
“My life becomes so colorful”

Buy

“So many beneficial policies”
“I can even pay 0 down payment”

Information Architecture

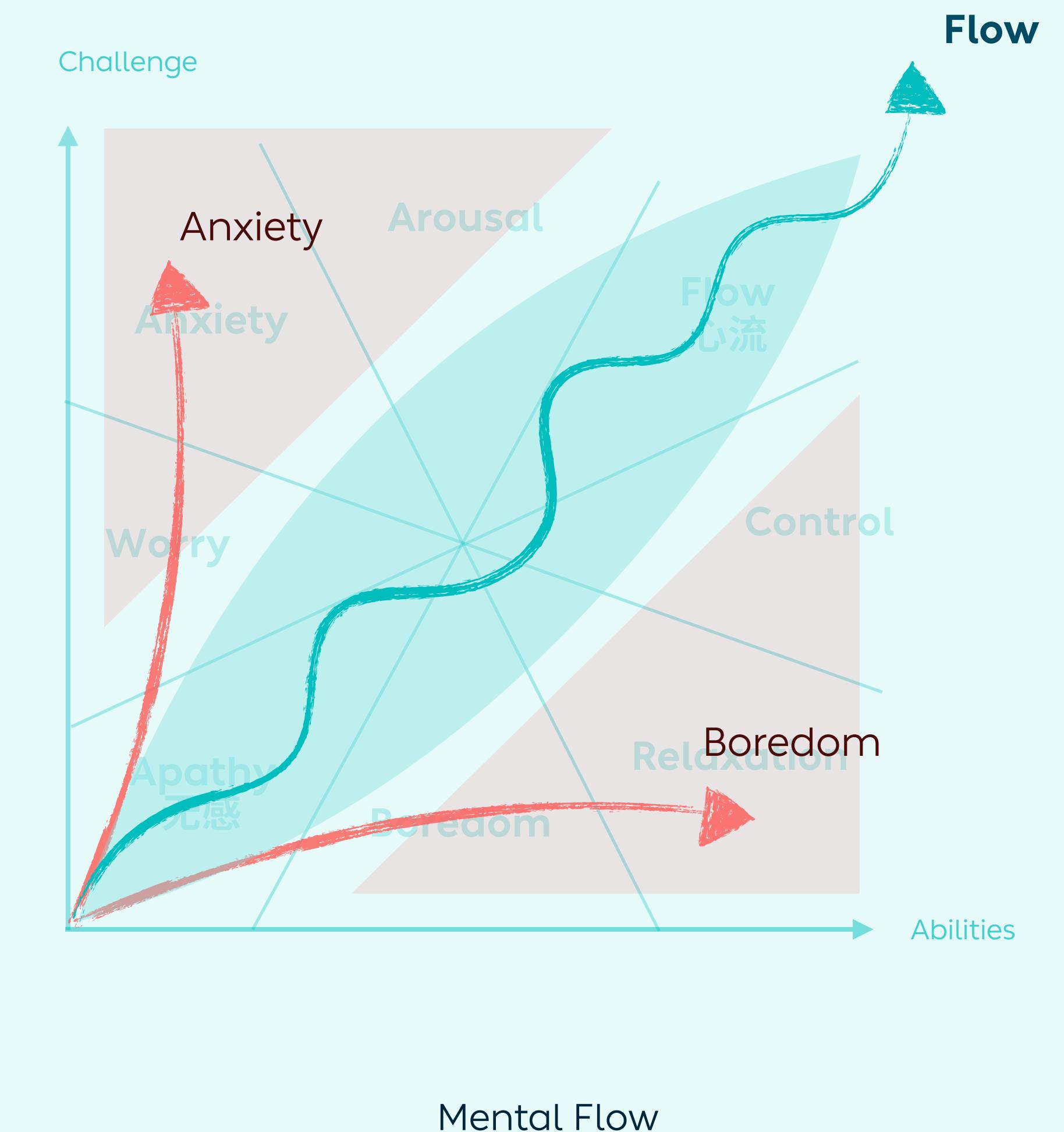
Exterior → Conversion → Product → Power → Service → Interest → Buy

Product Name	Product Price	High Quality	Charging methods	Service on one click	NIO House	Financial Solutions
Exterior	Product Highlights	NIO Pilot	Charge on one click	Service Rights	NIO Life	Beneficial Policies
Product Highlight	Financial Solutions	Nomi	Charging Map	Service Center	Car Owner	Basic Rights
	Beneficial Policies	Smart cockpit	Charging Rights		Community	

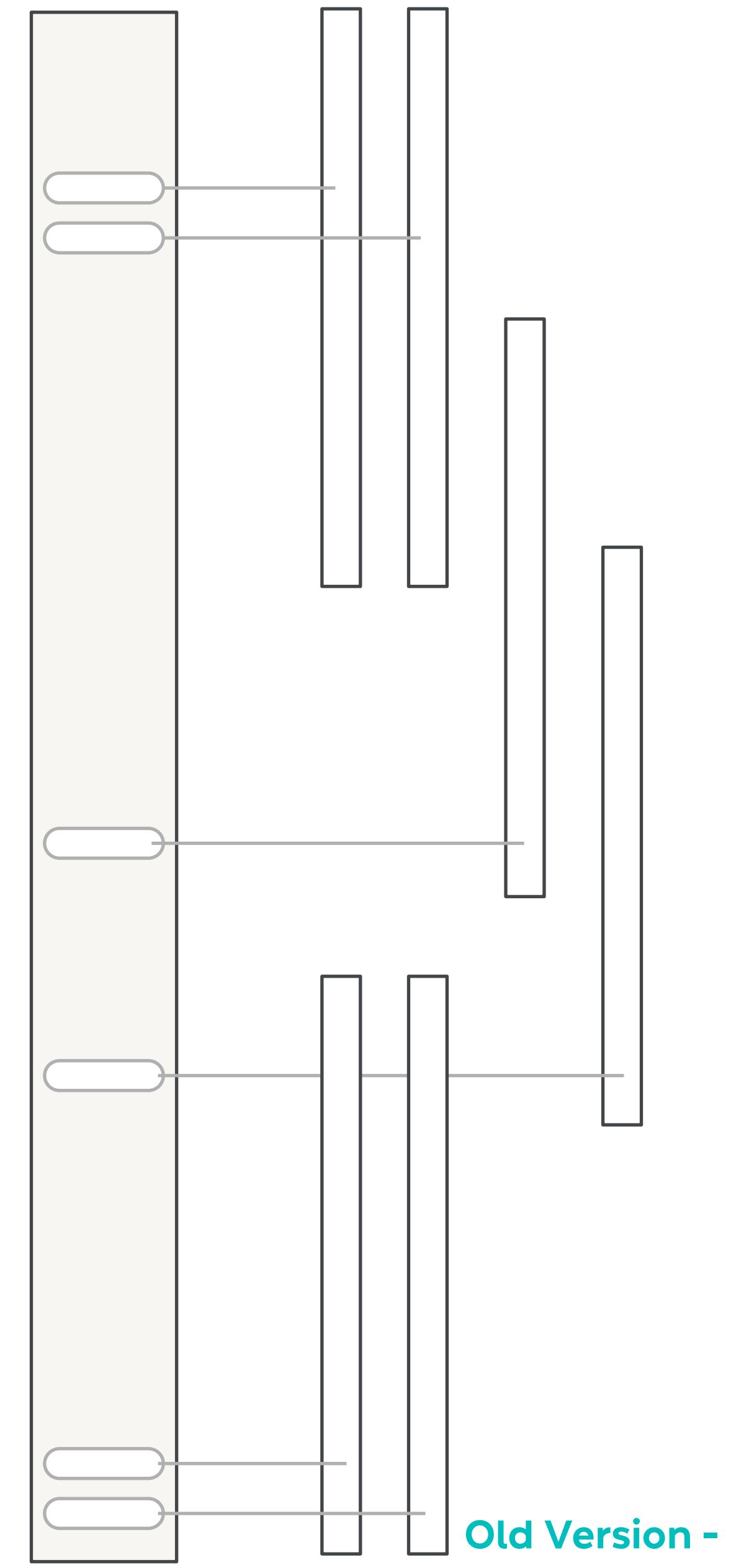
Wireframe

Make wireframe based on Mental Flow

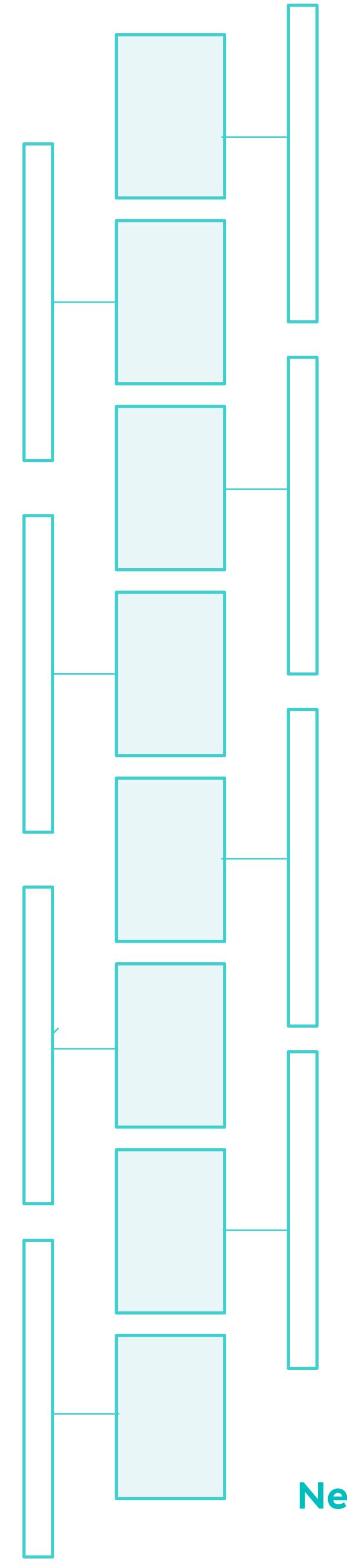
Based on the theory of “mental flow”, we make an immersive design, let users immerse in it and get the information we try to deliver.



Wireframe



Old Version - Long page

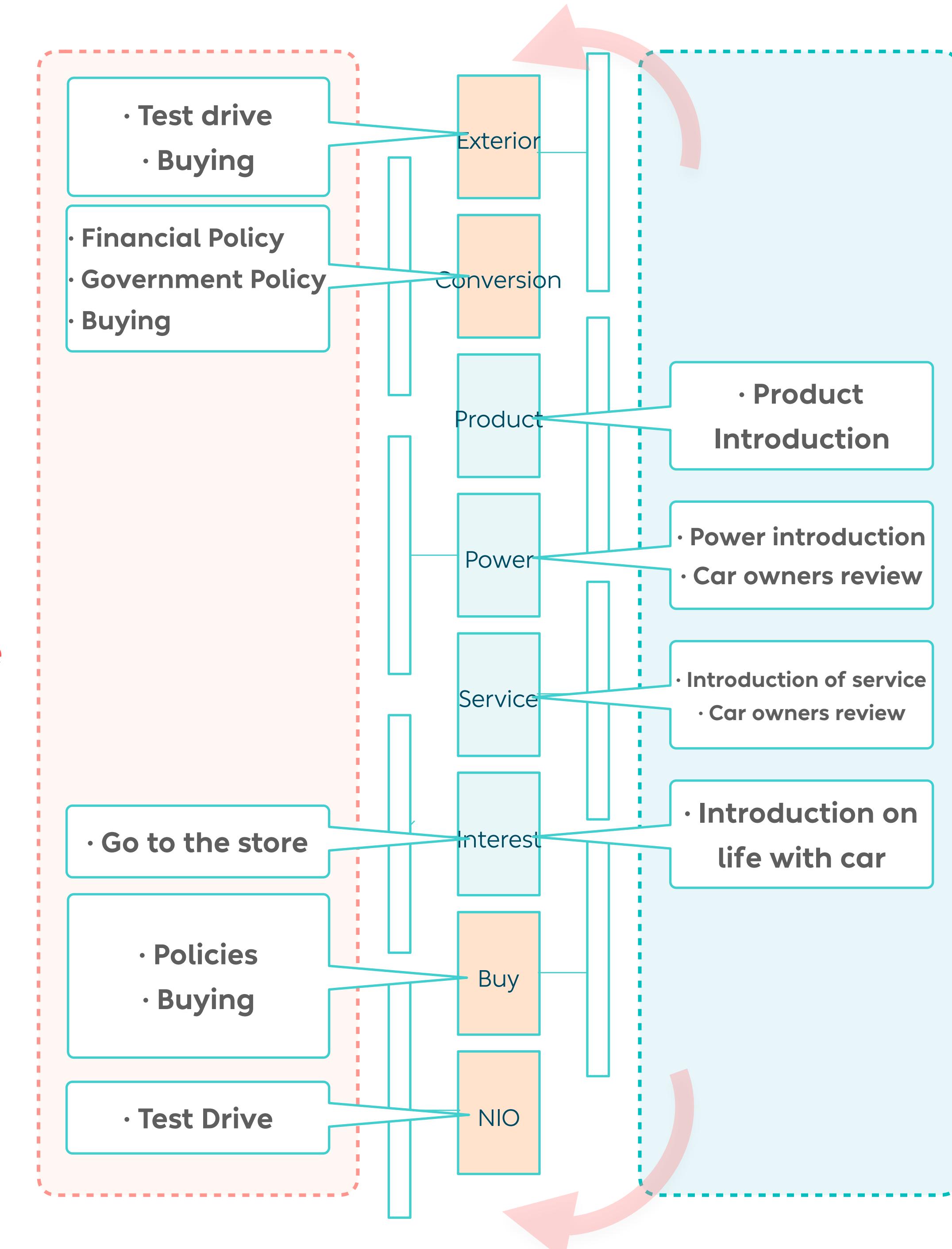


New Version - Immersive page

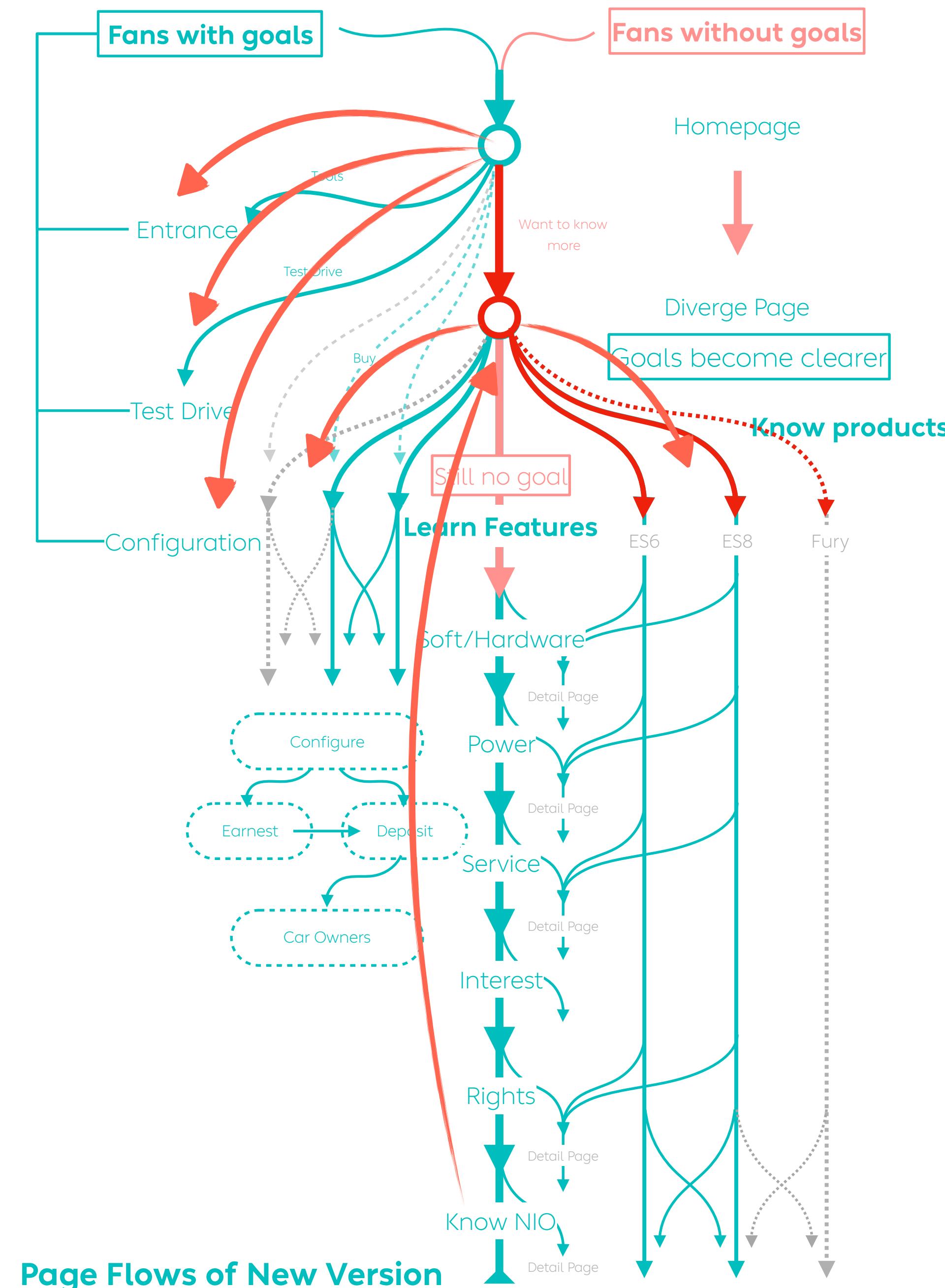
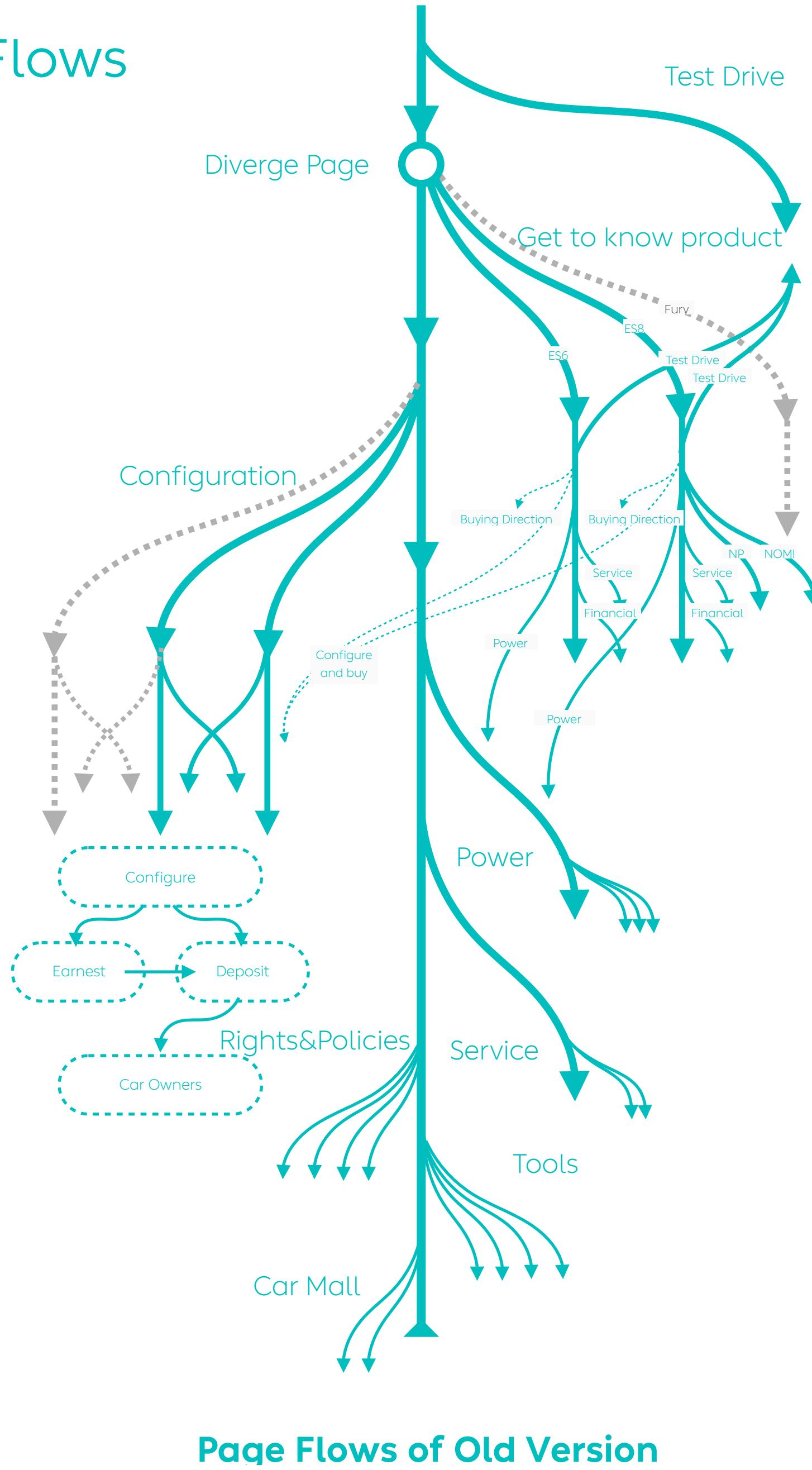
Wireframe

Buy and test drive

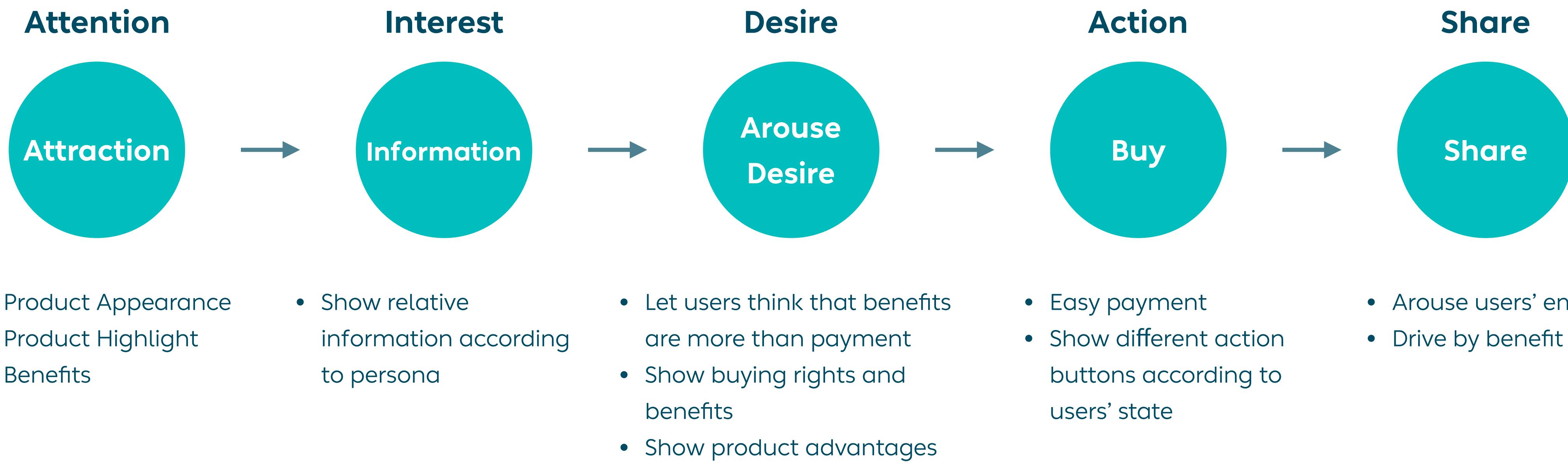
Information



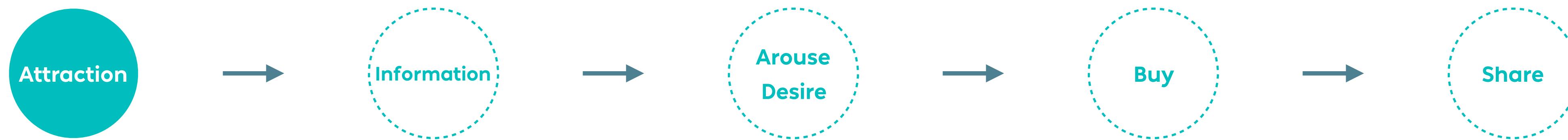
Page Flows



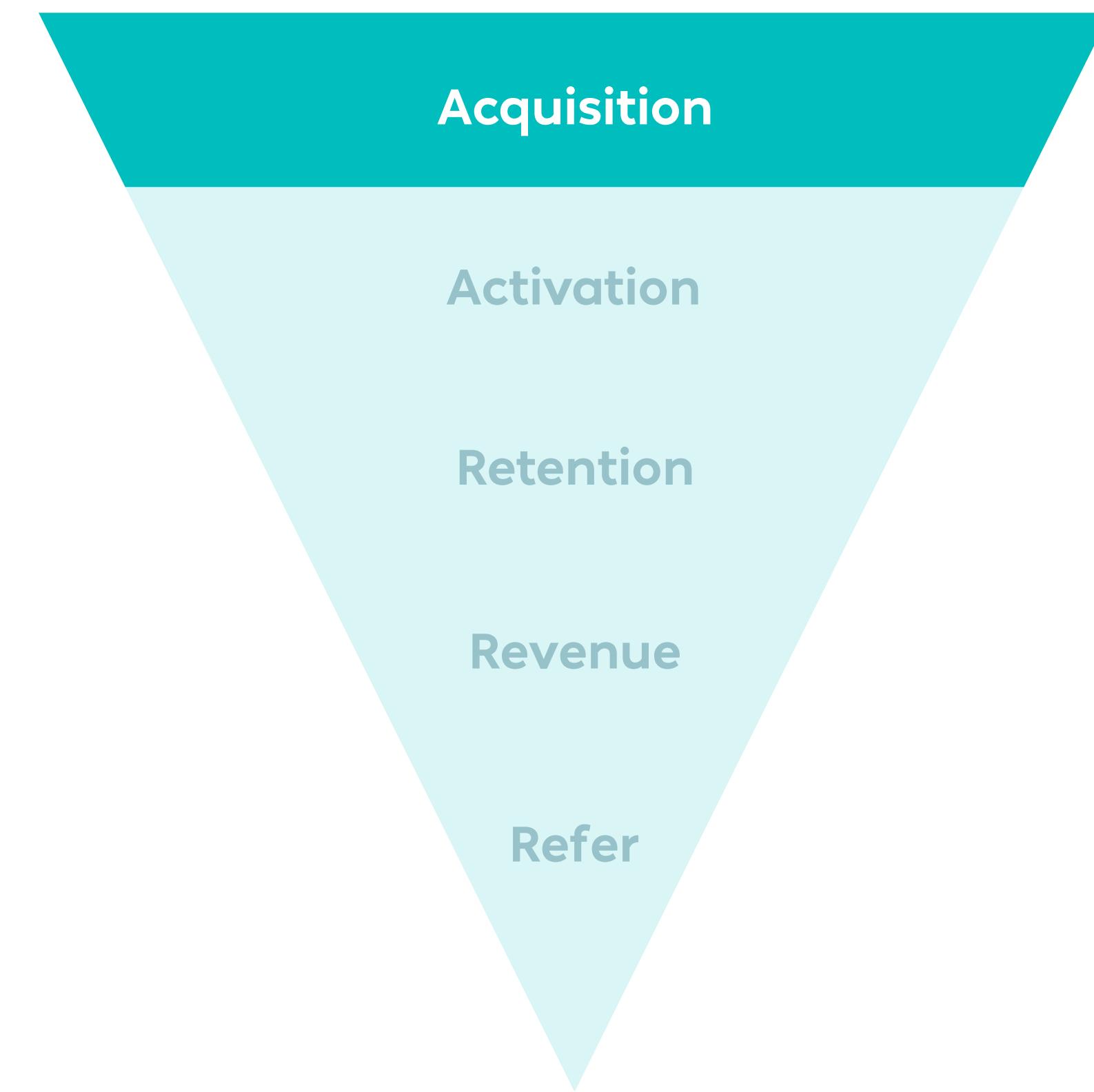
Buying Conversion - AIDA Model



Buying Conversion - AIDA Model



**Show something that catches the eyes
in home page or entrance.**



Buying Conversion - AIDA Model



1. Exterior

- Pictures
- Videos

2. Product Highlight

- 4.7s acceleration from 0-100km/h
- NOMI
- NIO Pilot

3. Interests

- Free battery swap for life time
- 0 interest rate in 3 years
- 0 down payment



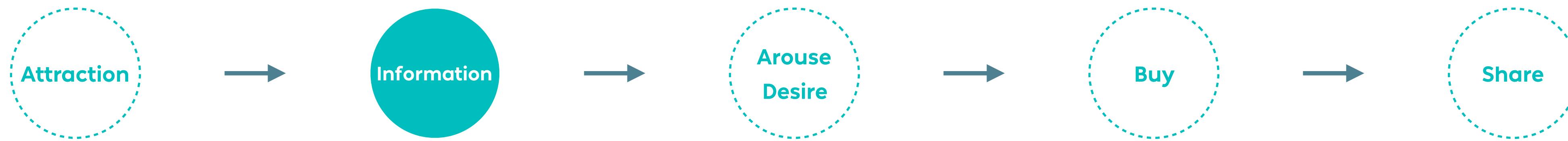
Interests and benefits

Exterior

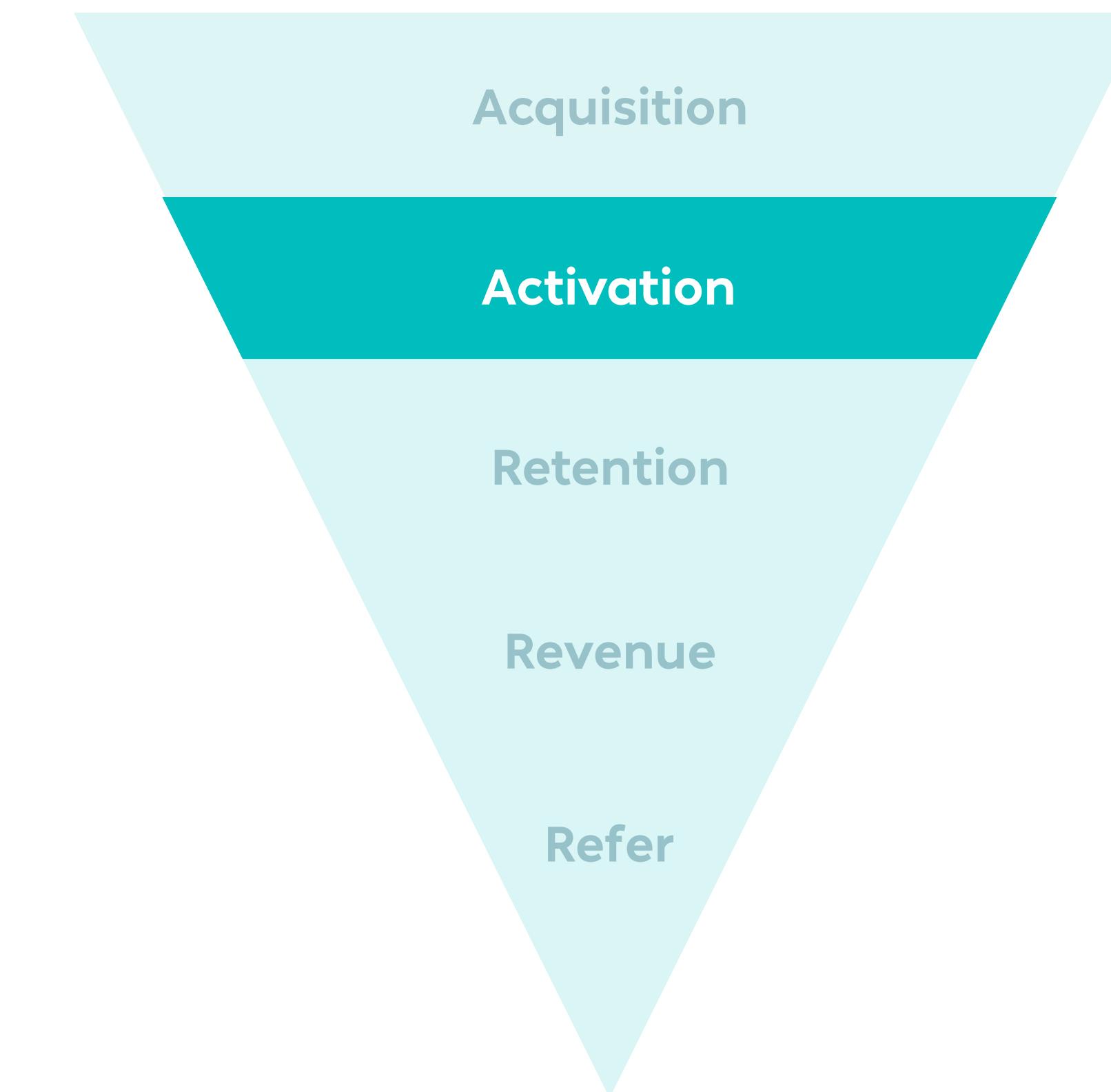
Product Highlight

Main button

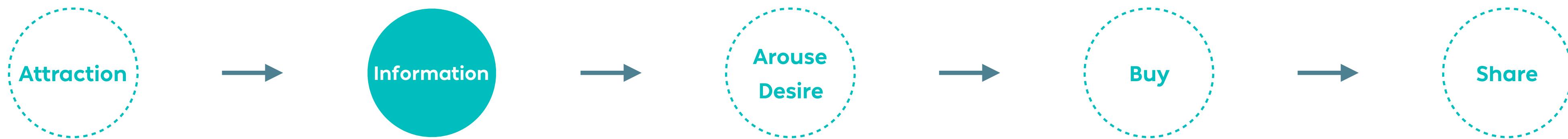
Buying Conversion - AIDA Model



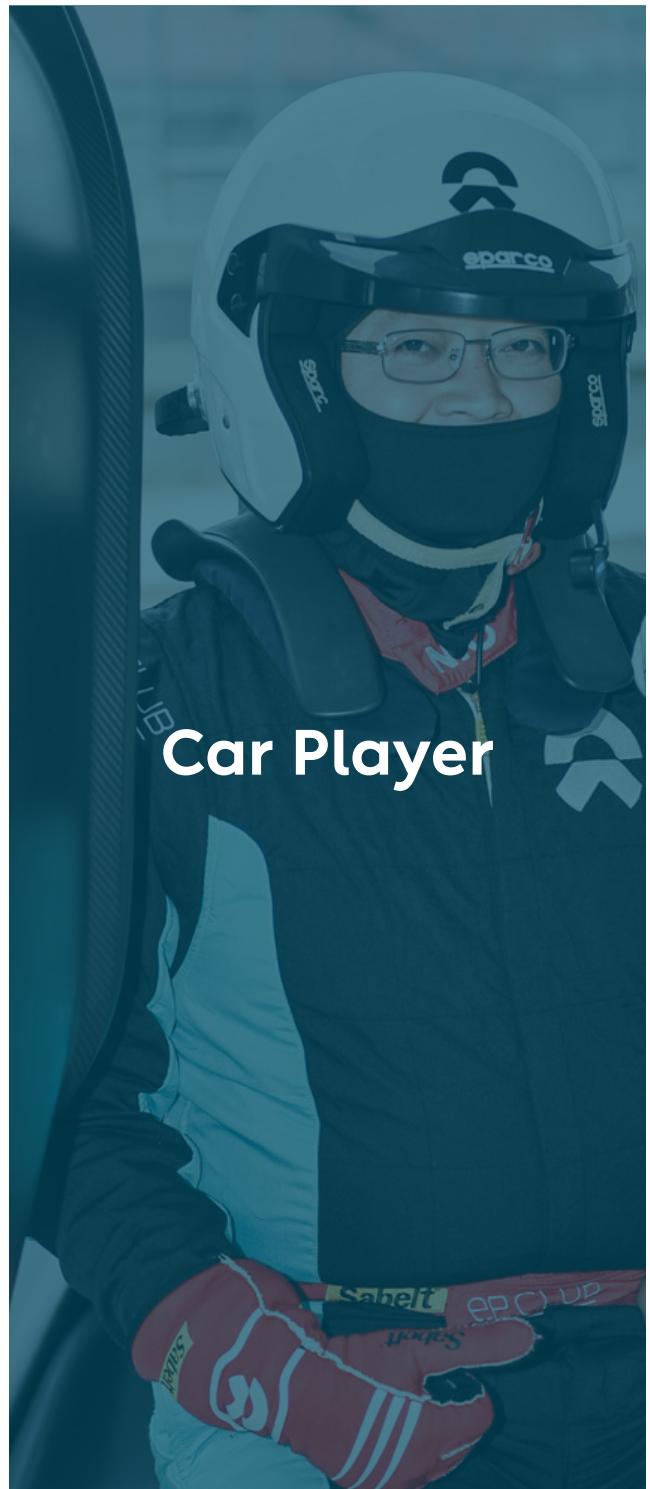
**Show different information
according to persona**



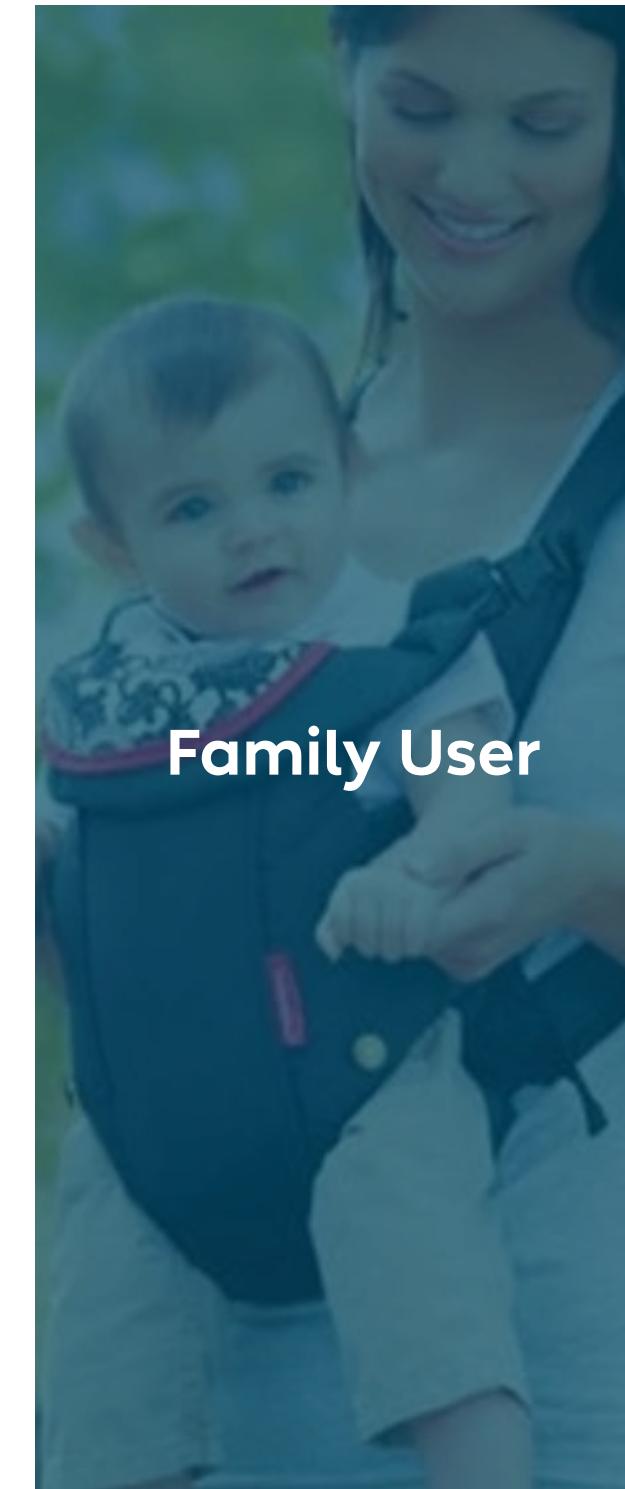
Buying Conversion - AIDA Model



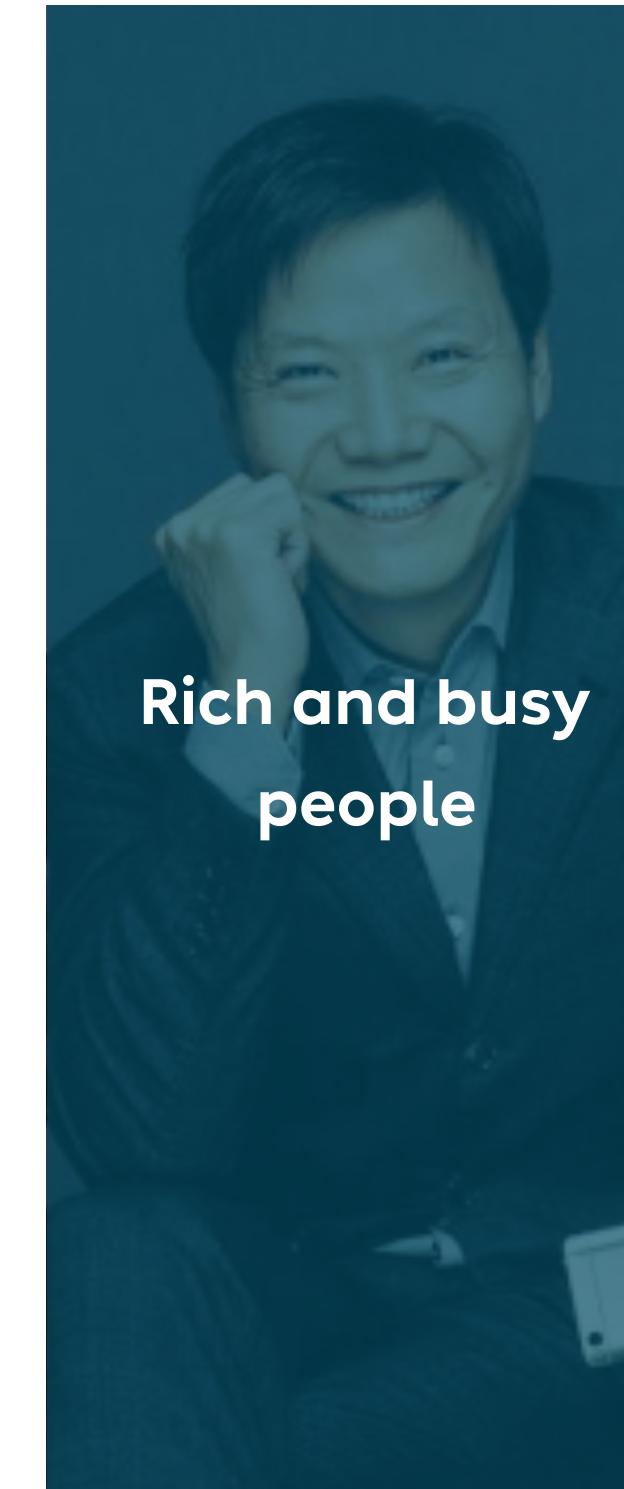
Provide different information for different persona



- Show the cool exterior
- Show the newest technology
- Show specs
- Use terminology



- Show the big space
- Show passive and active safety
- Show eco-friendly
- High price-performance ratio
- Low usage cost

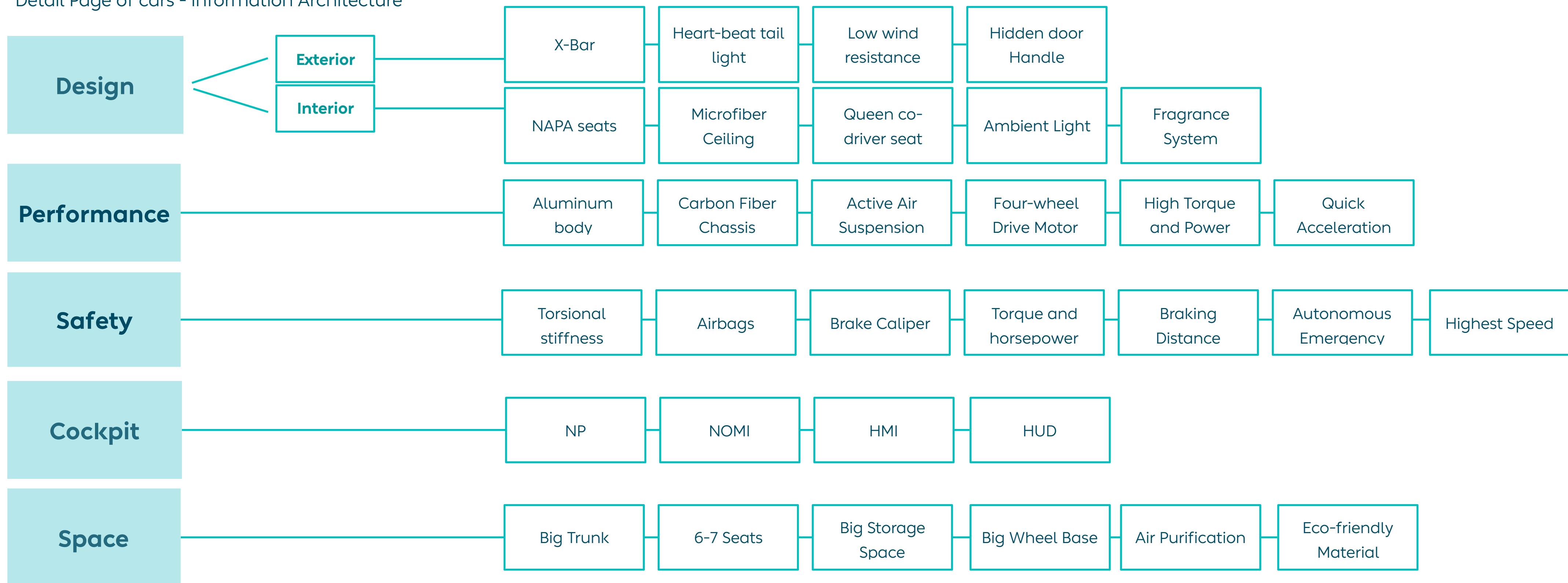


- Show the service with one click
- Show the charging service with one click
- Show the 24-hour customer service

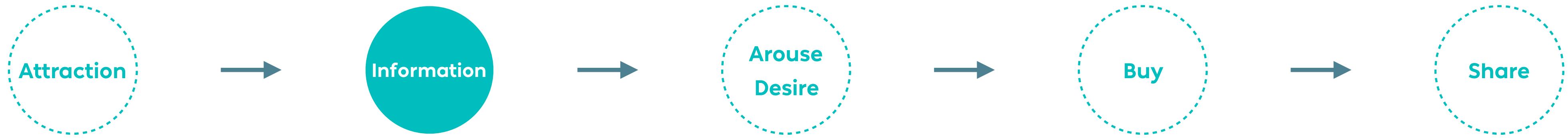
Buying Conversion - AIDA Model



Detail Page of cars - Information Architecture



Buying Conversion - AIDA Model



Detail page introducing ES8 / ES6

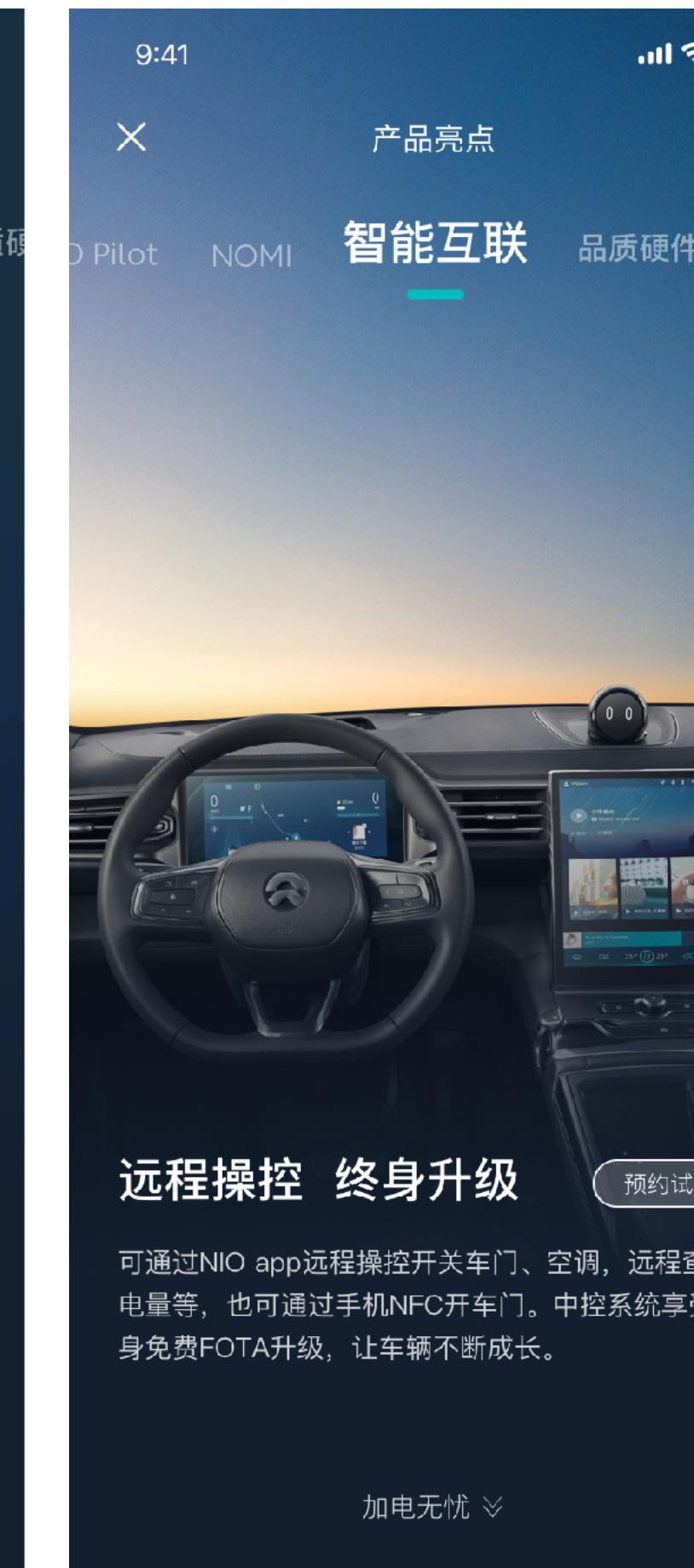
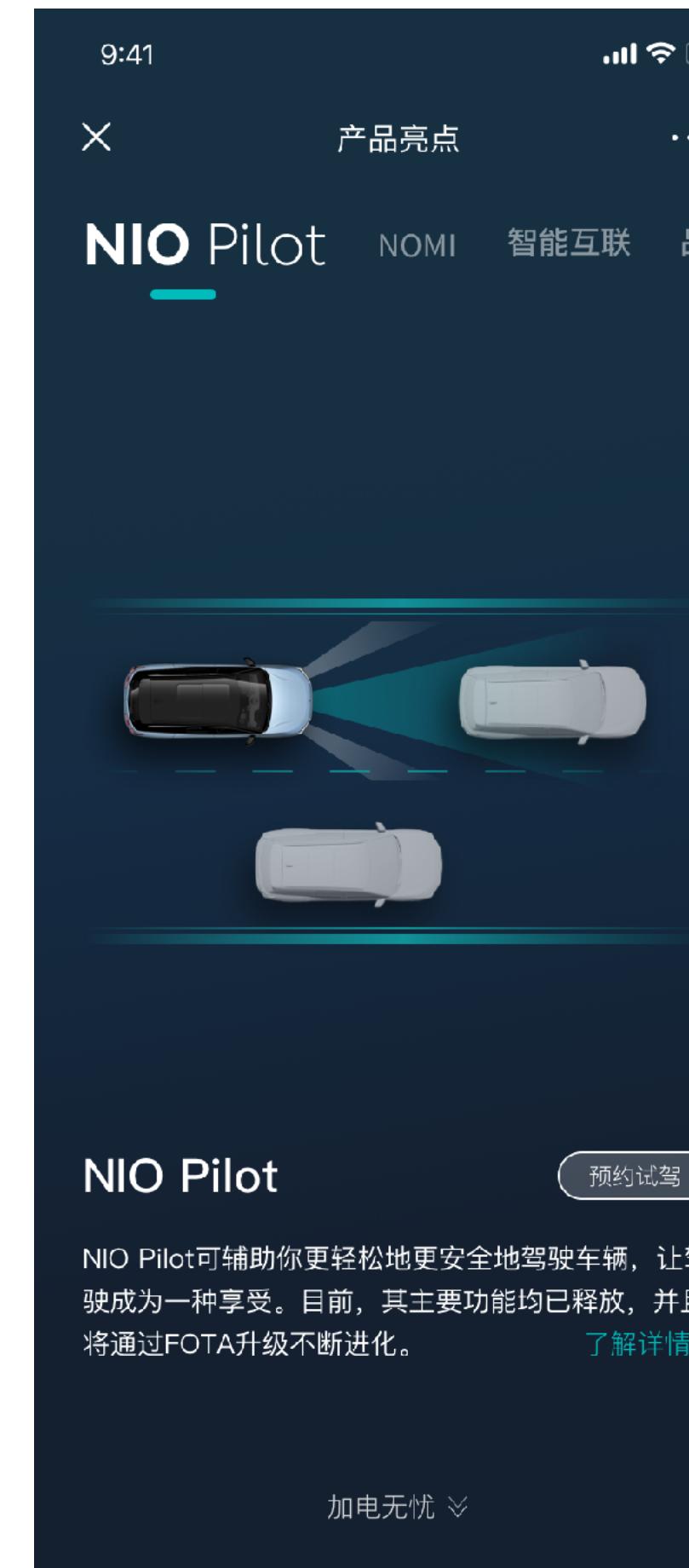
The grid displays a series of screenshots from NIO's website, organized into sections corresponding to the AIDA model stages:

- Attraction (Top Row):**
 - Information**: A solid teal circle.
 - Share**: A dashed teal circle.
- Information (Second Row):**
 - Benefits**: A screenshot of the ES8/ES6 detail page.
 - Can switch to 3D**: A screenshot showing a 3D view of the car interior.
 - Performance**: A screenshot showing the car's performance metrics (4.4s, 650ps, 840NM).
 - Safety**: A screenshot showing the car's safety features (AEB, Nomi AI).
 - Intelligence**: A screenshot showing the car's intelligent systems (Nomi AI, NOMI).
 - Charging/Battery Swap**: A screenshot showing the car's charging infrastructure.
 - Benefits and Interests**: A screenshot showing the car's long-term value and ownership benefits.
 - Big Space**: A screenshot showing the car's cargo capacity.
- Arouse Desire (Third Row):**
 - Introduction**: A screenshot showing the car's introduction and key features.
 - Quick Navigation**: A screenshot showing the car's quick navigation system.
 - Exterior**: A screenshot showing the car's exterior design.
 - Interior**: A screenshot showing the car's interior design.
 - Performance**: A screenshot showing the car's performance metrics.
 - Safety**: A screenshot showing the car's safety features.
 - Intelligence**: A screenshot showing the car's intelligent systems.
 - Charging/Battery Swap**: A screenshot showing the car's charging infrastructure.
 - Benefits and Interests**: A screenshot showing the car's long-term value and ownership benefits.
 - Big Space**: A screenshot showing the car's cargo capacity.
- Buy (Fourth Row):**
 - Share**: A dashed teal circle.
- Share (Bottom Row):**
 - Review from other media increases the liability of information**: A screenshot of a media review.
 - Rent the car for 30 days can relieve some anxiety about electric cars**: A screenshot of a 30-day rental offer.
 - Used car purchase can relieve users' anxiety about value preservation**: A screenshot of a used car purchase section.
 - Car owners' review increases the reliability**: A screenshot of car owner reviews.

Buying Conversion - AIDA Model



3rd page - Introduction of products' highlight



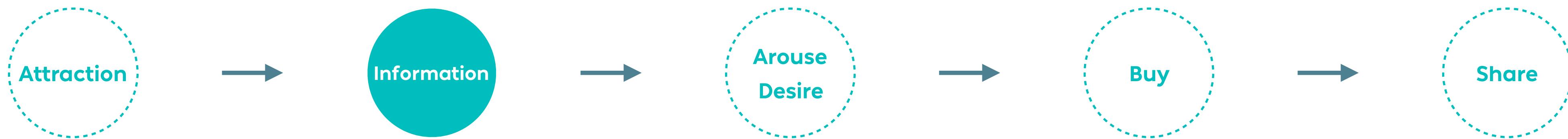
Test drive entrance

Product highlights

Hint on the content of next page



Buying Conversion - AIDA Model



4th page - charging and battery swap

The figure consists of four screenshots of the NIO app interface, each corresponding to a stage in the AIDA model:

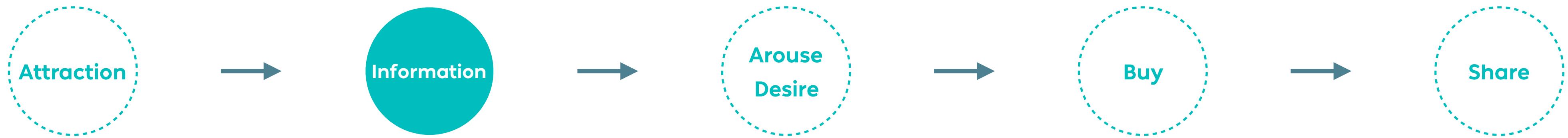
- Attraction:** Shows a large image of a blue NIO car inside a battery swapping station. Text: "终身免费换电" (Lifetime free battery swap). Description: "蔚来全国首创换电站，最快3分钟换上满电电池。购买蔚来车辆可享受终身免费换电池，既是0元补能，也是性能保障。" (NIO's first battery swapping station nationwide, with the fastest swap time being 3 minutes. Purchasing an NIO vehicle allows you to enjoy lifetime free battery swaps, which is both a 0-yuan refueling method and a performance guarantee.)
- Information:** Shows a map of China with charging stations highlighted. Text: "充电网络" (Charging network). Description: "已接入全国300多个城市22万根充电桩，你可通过充电地图查找你附近的充电桩和换电站，以及做路线的充电规划。" (Currently connected to over 300 cities across the country with 220,000 charging piles. You can use the charging map to find nearby charging stations and battery swapping stations, and plan your route's charging strategy.)
- Arouse Desire:** Shows a blue NIO car with a charging cable. Text: "随车赠送 免费安装" (Free installation included with the car). Description: "随车赠送专属桩，提供上门安装，30米内电缆免费。专属桩可远程控制，预约充电享受波谷优惠电价。即使无网络，也可通过Wi-Fi来控制。" (Free delivery of a dedicated桩, providing on-site installation, with free cables for distances up to 30 meters. The dedicated桩 can be controlled remotely, and you can enjoy off-peak electricity rates when booking charging. Even if there is no network, it can be controlled via Wi-Fi.)
- Buy:** Shows a group of NIO service staff. Text: "解放你的时间" (Release your time). Description: "蔚来提供代客加电服务，家里无桩不用愁，你只需呼叫代客加电服务，蔚来专员即上门取送车，帮你到附近加电或换电。" (NIO provides代客加电 service, so you don't have to worry about the lack of a桩 at home. You just need to call the代客加电 service, and an NIO specialist will come to pick up and deliver the car for you to charge or swap batteries nearby.)

Car owners' review introduces the convenience of charging from an objective perspective.

Introduction of charging and battery swap.

Hint what's on next page

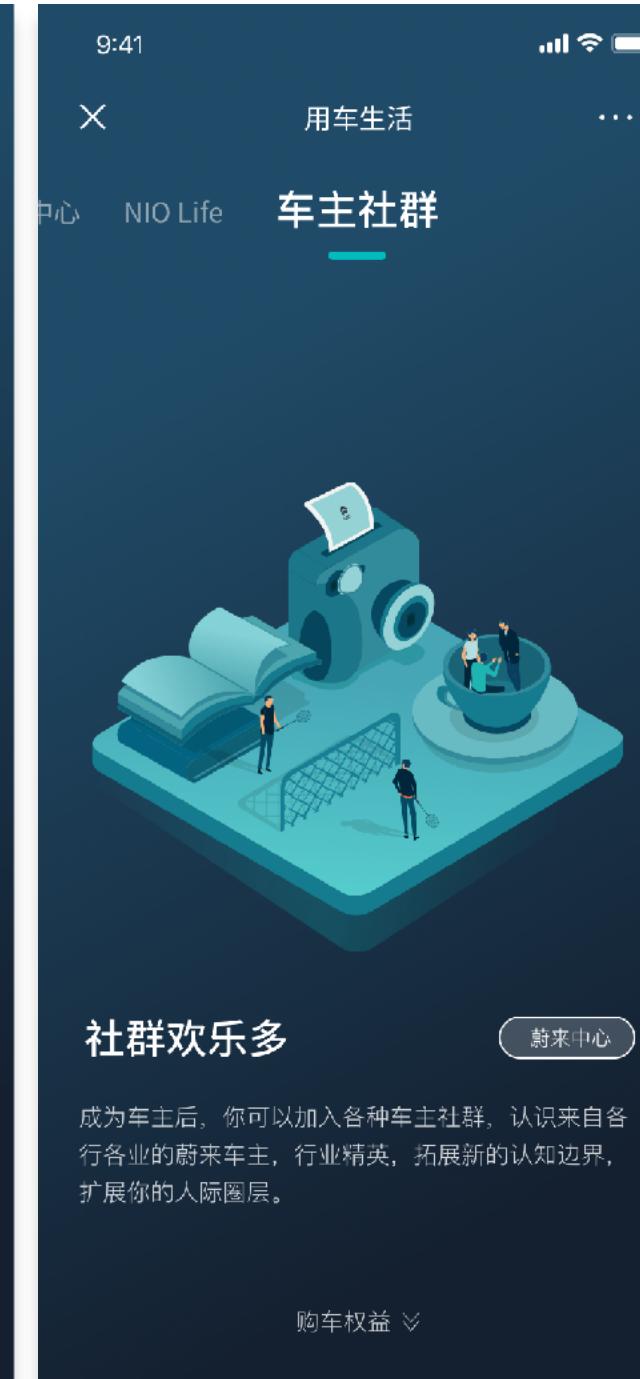
Buying Conversion - AIDA Model



5th page - Introduction of service



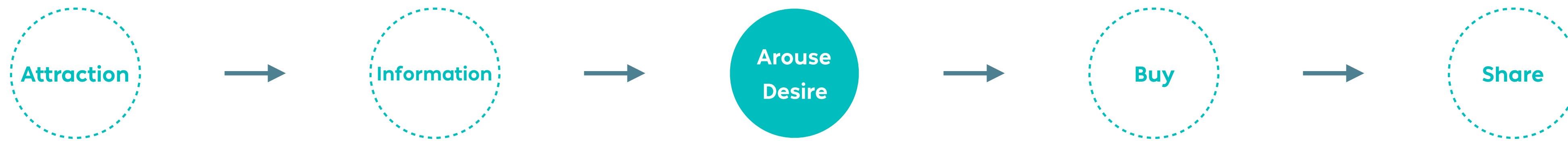
6th page - Introduction of life style after having the car



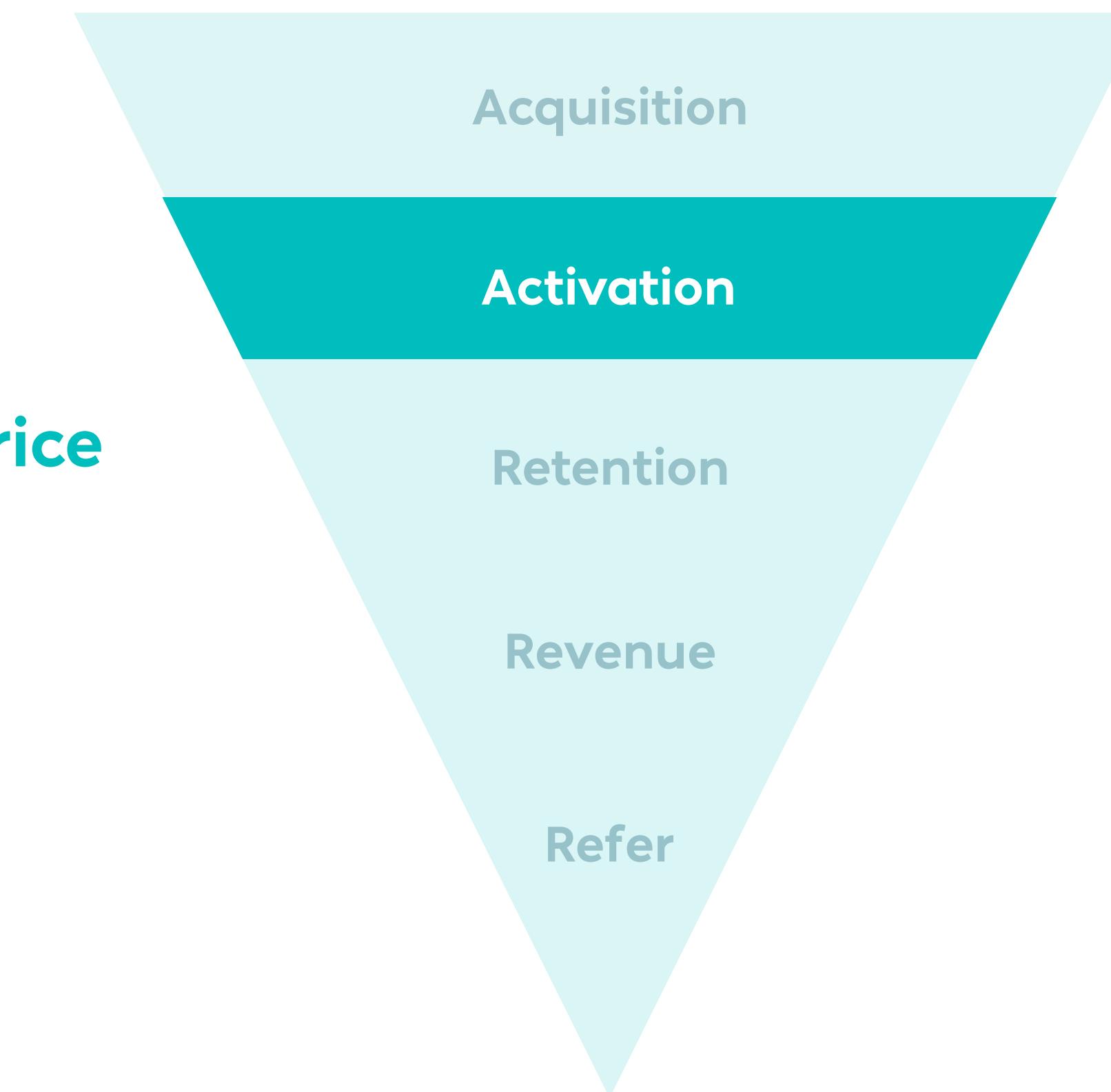
Car owner's review
increases the
reliability

"NIO House"
guides users to
go to stores
offline.

Buying Conversion - AIDA Model



**When users think that
the benefits they get is bigger than the price**



Buying Conversion - AIDA Model



2nd page (ES6)



Show the benefits

Highlight the advantages

Configuration button guides users to configure cars.

Click into detail page

Arouse Desire

Benefits of buying and using the car



Buy

用车优待



蔚来首任车主基本权益
1、终身免费质保；
2、免费专属充电桩；
3、终身免费道路救援；
4、终身免费车联网服务；
5、终身免费异地加电。

全程无忧的售后服务

1、修车养车代客取送，工作生活两不耽误；
2、爆胎呼叫移动服务车，不到一小时现场解救你，事故发生不再孤军奋战，代客值守为你处理；
3、从交付、上牌、取送车、维修保养、事故救援、代客值守、代步车、远程升级，到洗车、代驾、机场泊车、配附件，日均一杯星巴克的价格，就能享有服务无忧为你提供的一站式无忧服务。

我和我的服务无忧

Show all the benefits and interests users can get on one page, to let users know all at once.

Buying Conversion - AIDA Model



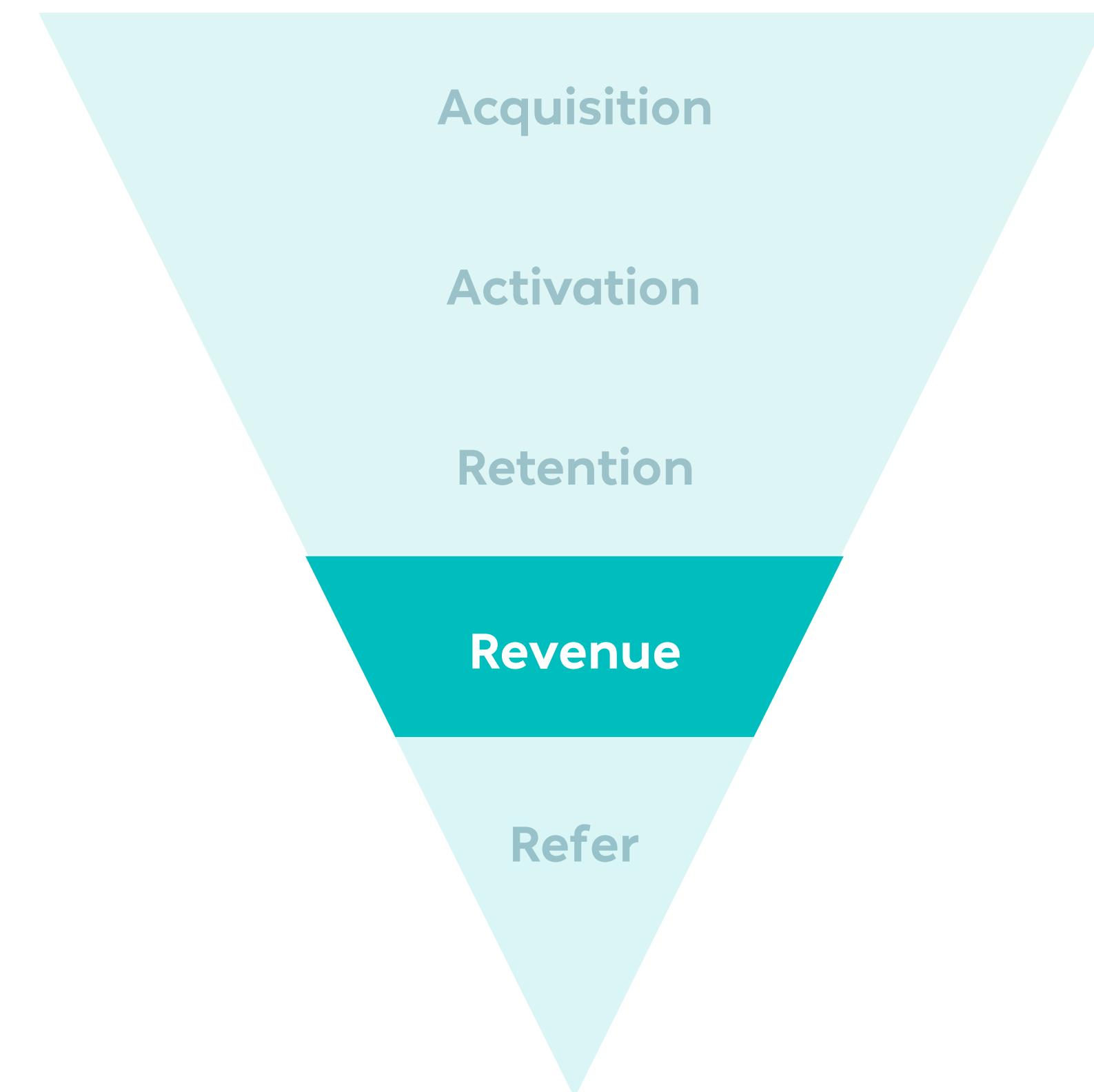
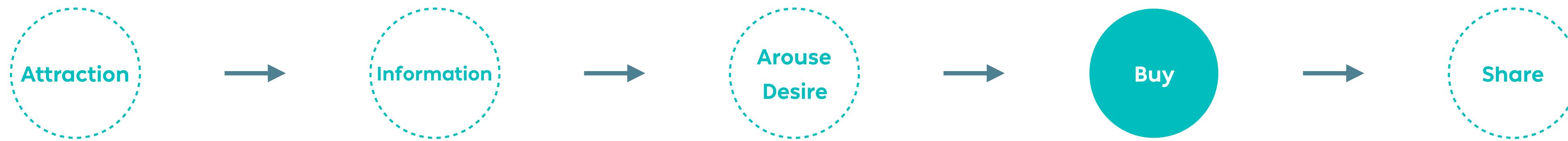
7th page - Interests of buying cars



Show all the interests
and rights of buying
a car.

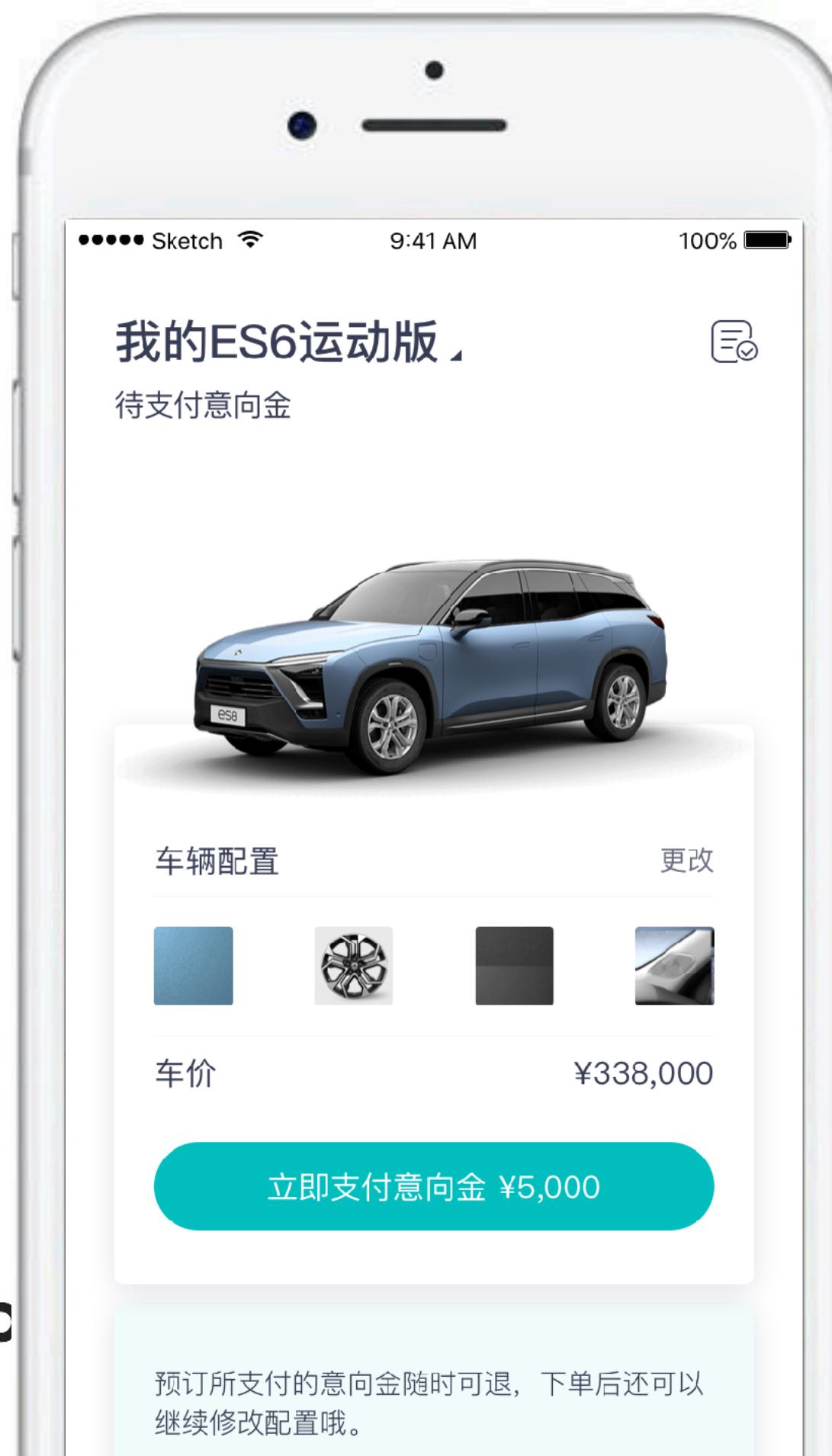
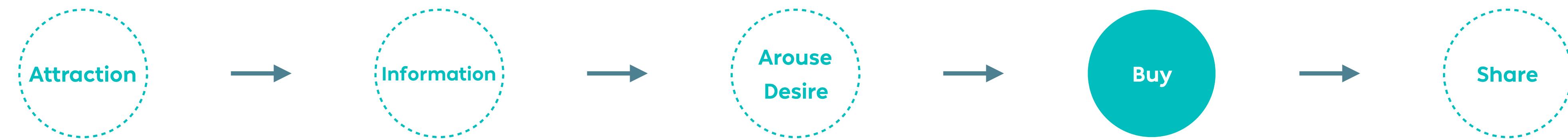
Recommend power package
and service package so that
users can buy directly.

Buying Conversion - AIDA Model



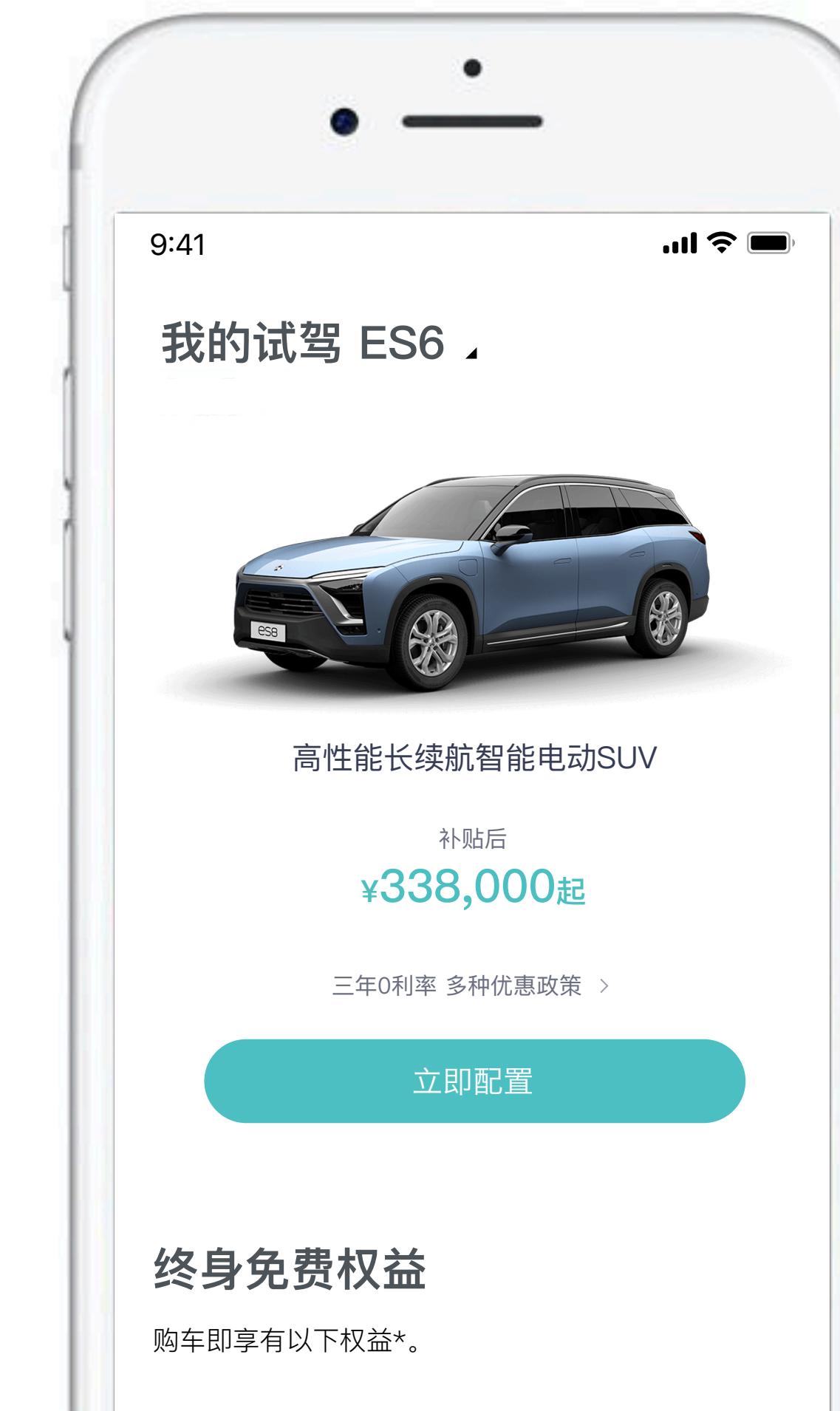
Convenient Payment

Buying Conversion - AIDA Model



Convenient paying button.

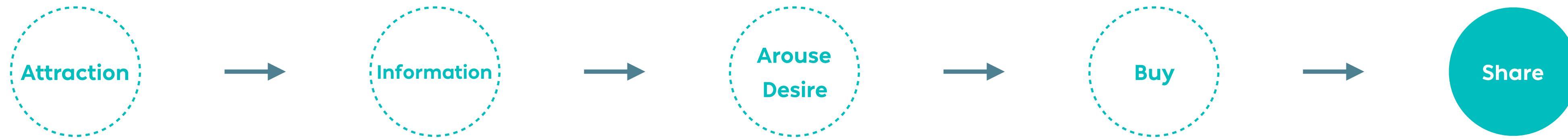
Show the paying button on homepage when users configure their car, even just as a wishlist.



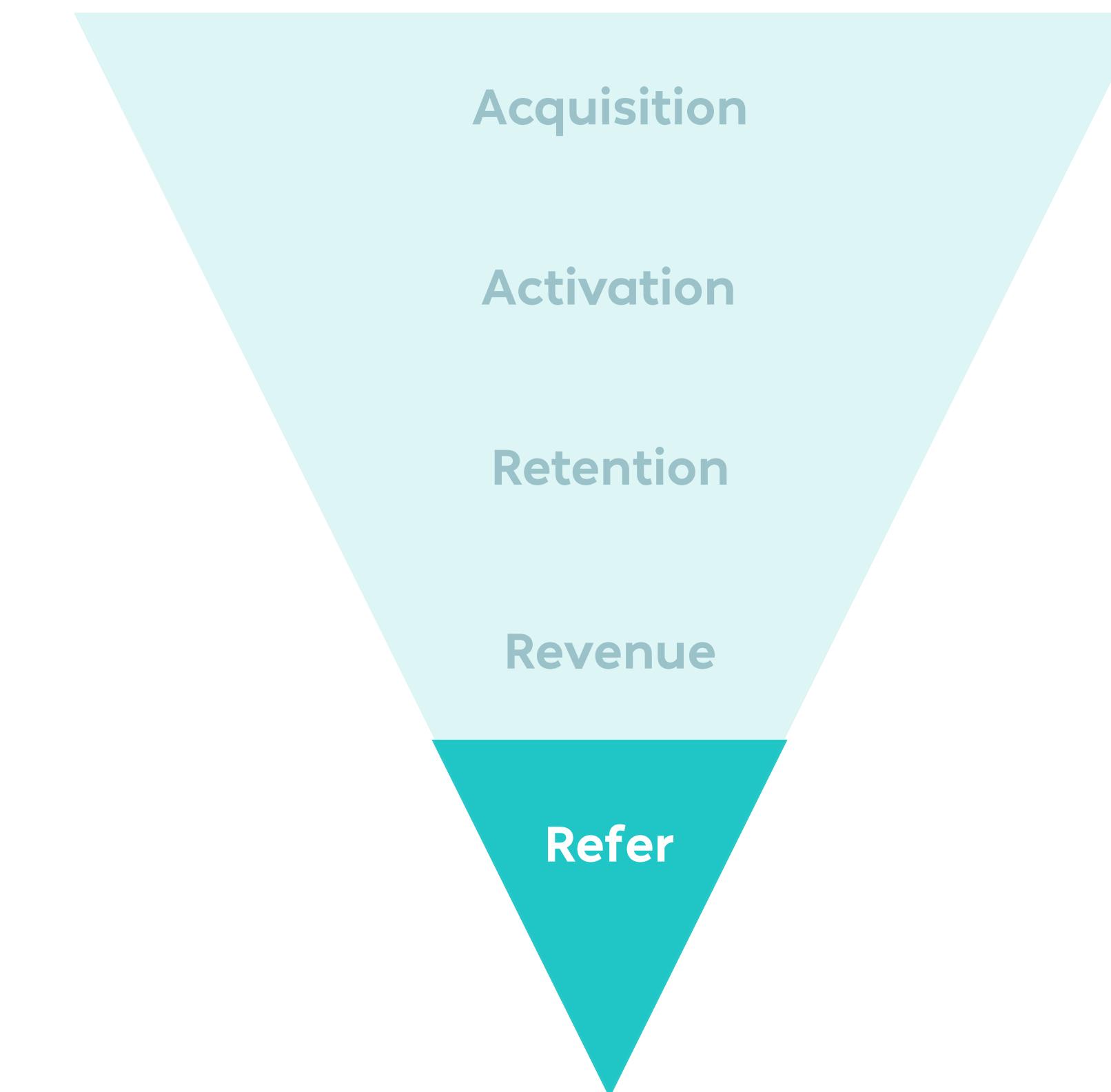
Convenient paying button.

Show the config button on home page after users finish their test drive, so that they can order the test-drive car directly.

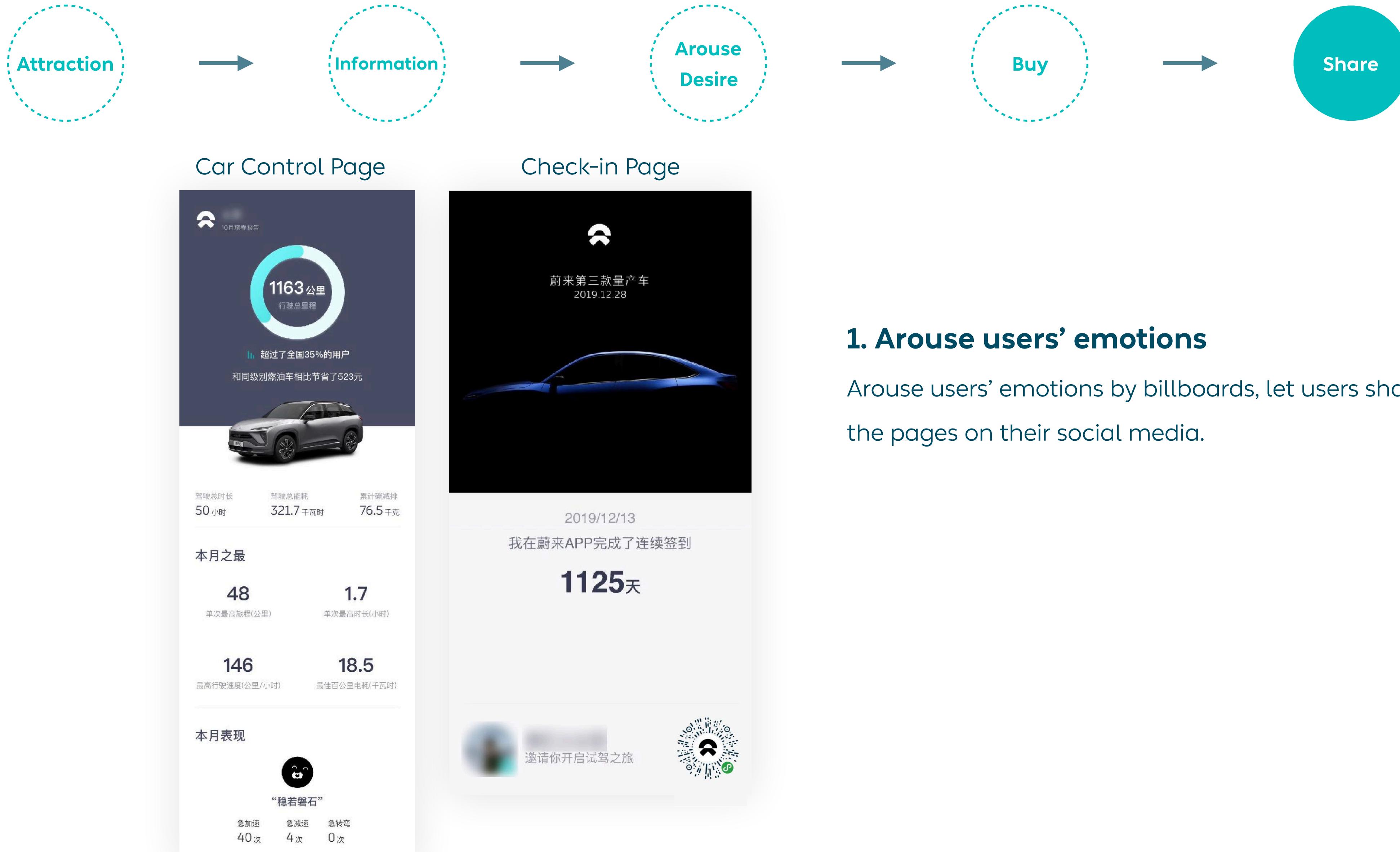
Buying Conversion - AIDA Model



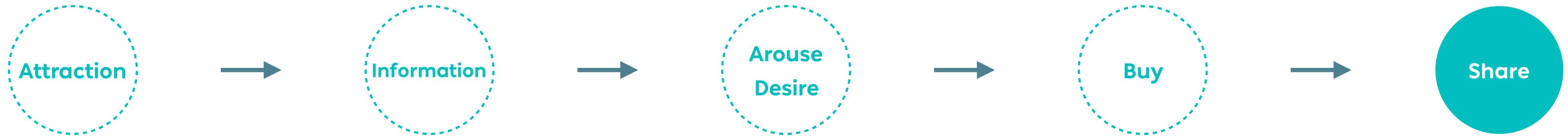
- **Arouse users' emotion**
- **Drive users by interests**



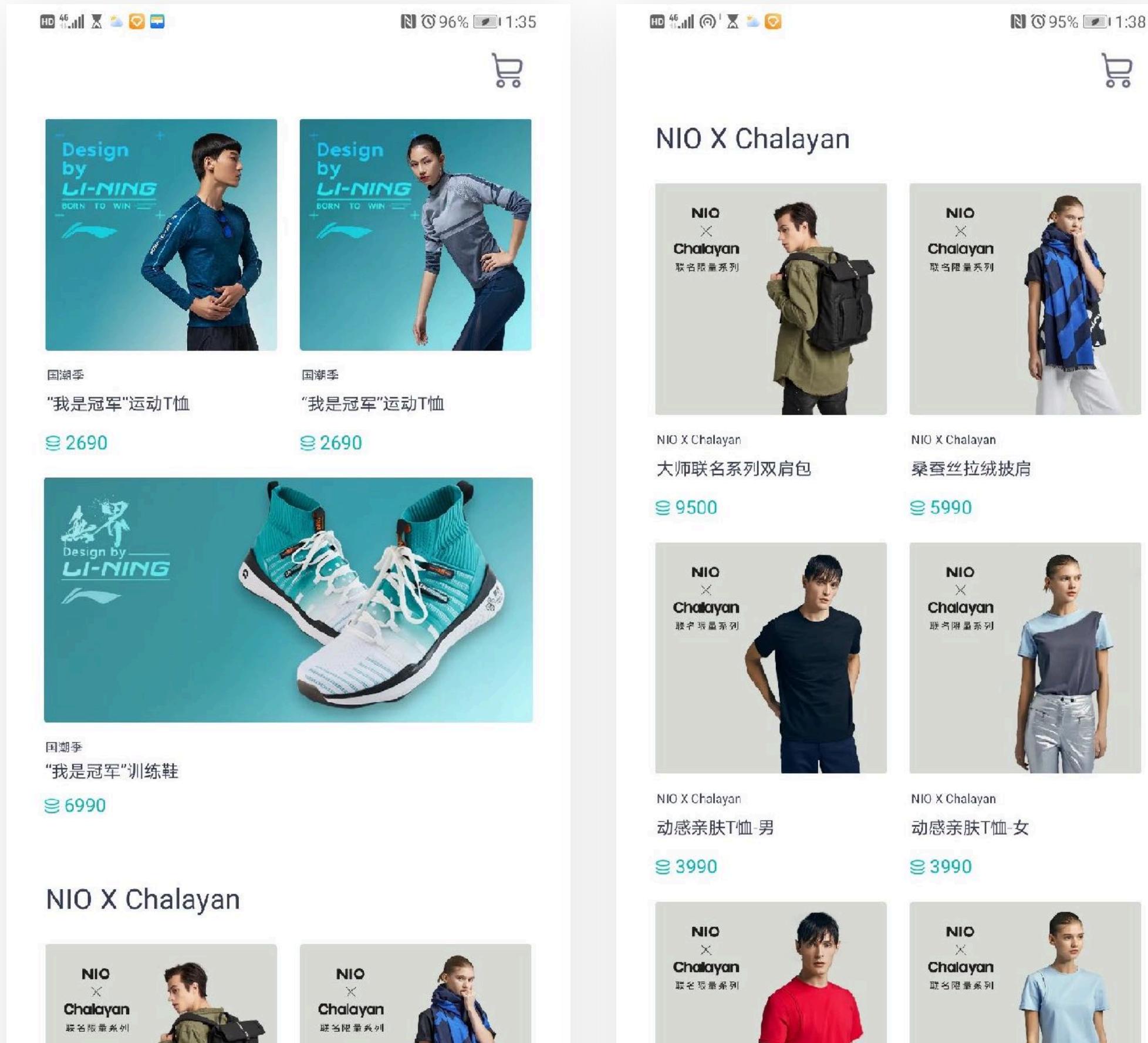
Buying Conversion - AIDA Model



Buying Conversion - AIDA Model



NIO Mall



2. Drive users by Interests

Get points after inviting friends, and can exchange the points for real products in Delight Mall.

- The invitee and inviter will get **1000 points** if the invitee pay the earnest money.
- The invitee and inviter will get **12000 points** if the invitee get the car finally.

Part 4

Test

User Testing

We did 2 user testing in the middle and at the end of the design process.

12 NIO employers were invited to do the first testing for first draft.

9 NIO car owners & fans were invited to do the second testing for high-fidelity prototype.



Project Result

Result One

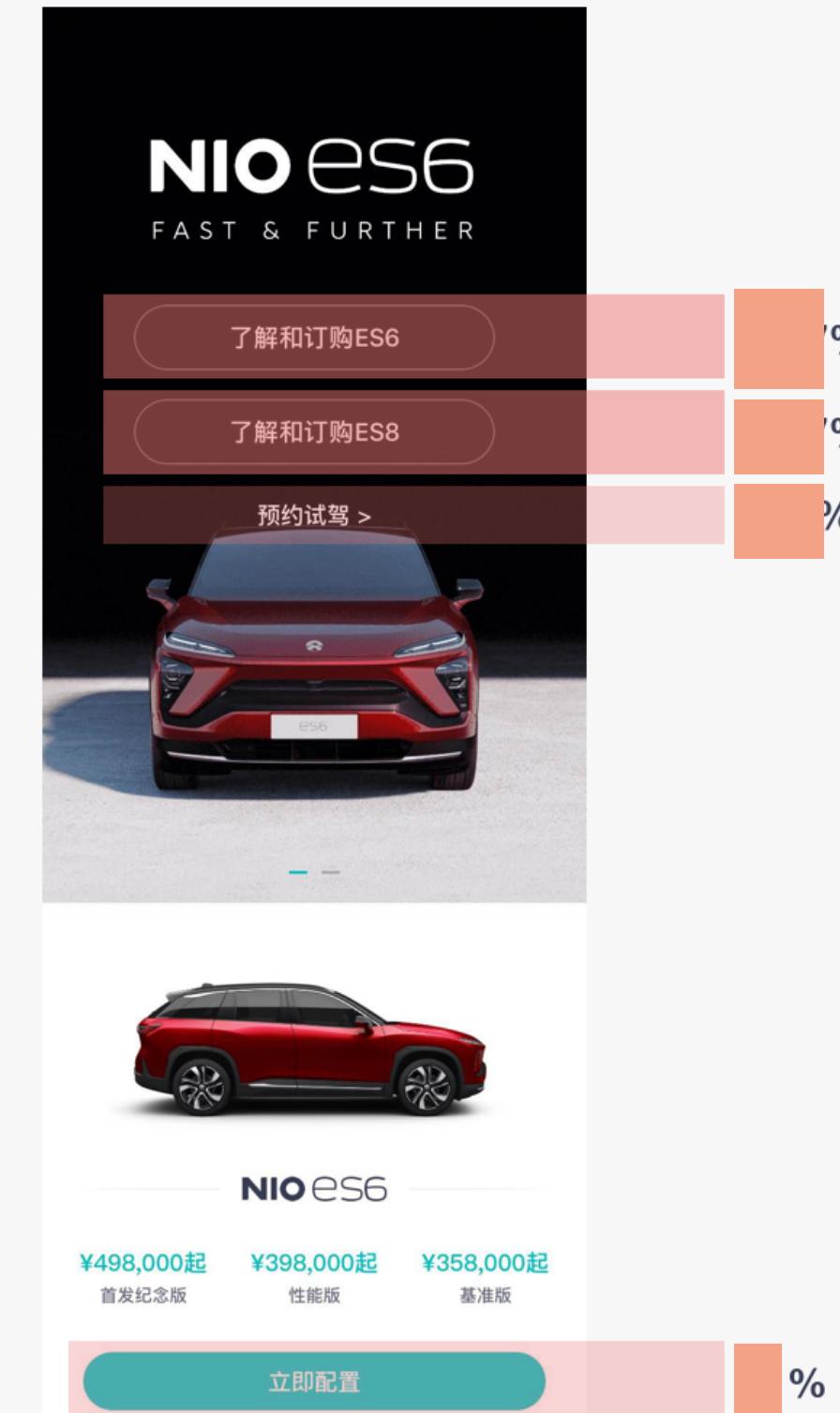
Got the highest remarks from NIO's co-founder Lihong Qin after the presentation.



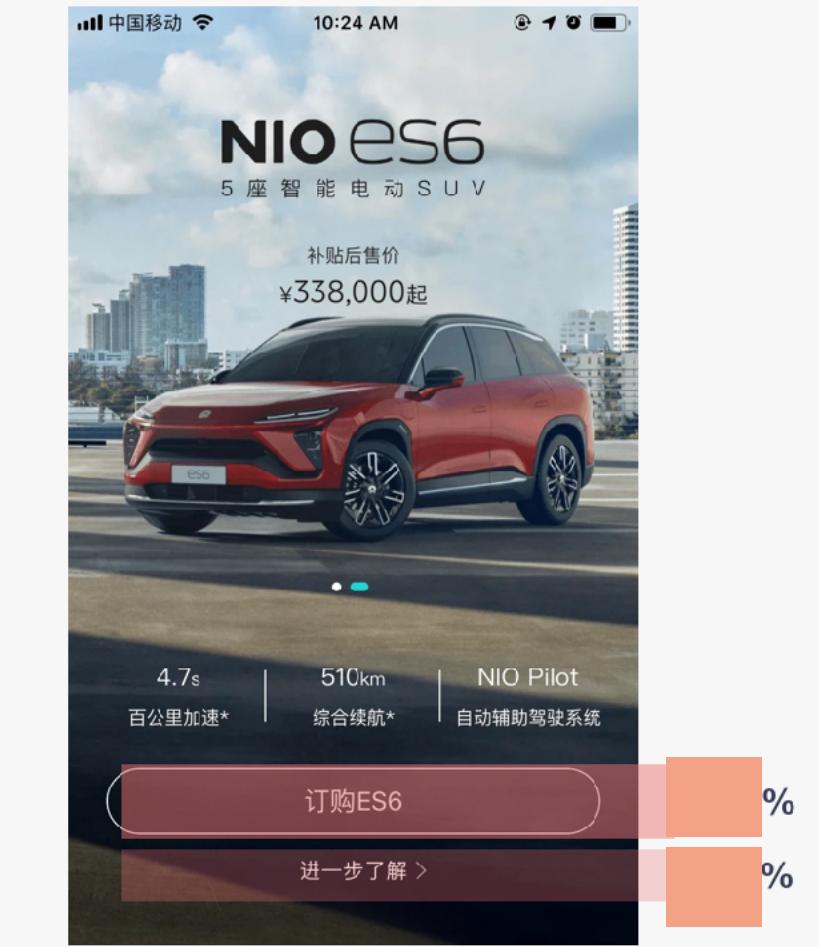
Result Two

After the launch, the click rate of “order es6/es8” button improves by **78.0%**

2019-08 old version UV-CTR



2019-09 new version UV-CTR



Project 2

Redesign SCMS app for NIO technicians

NIO

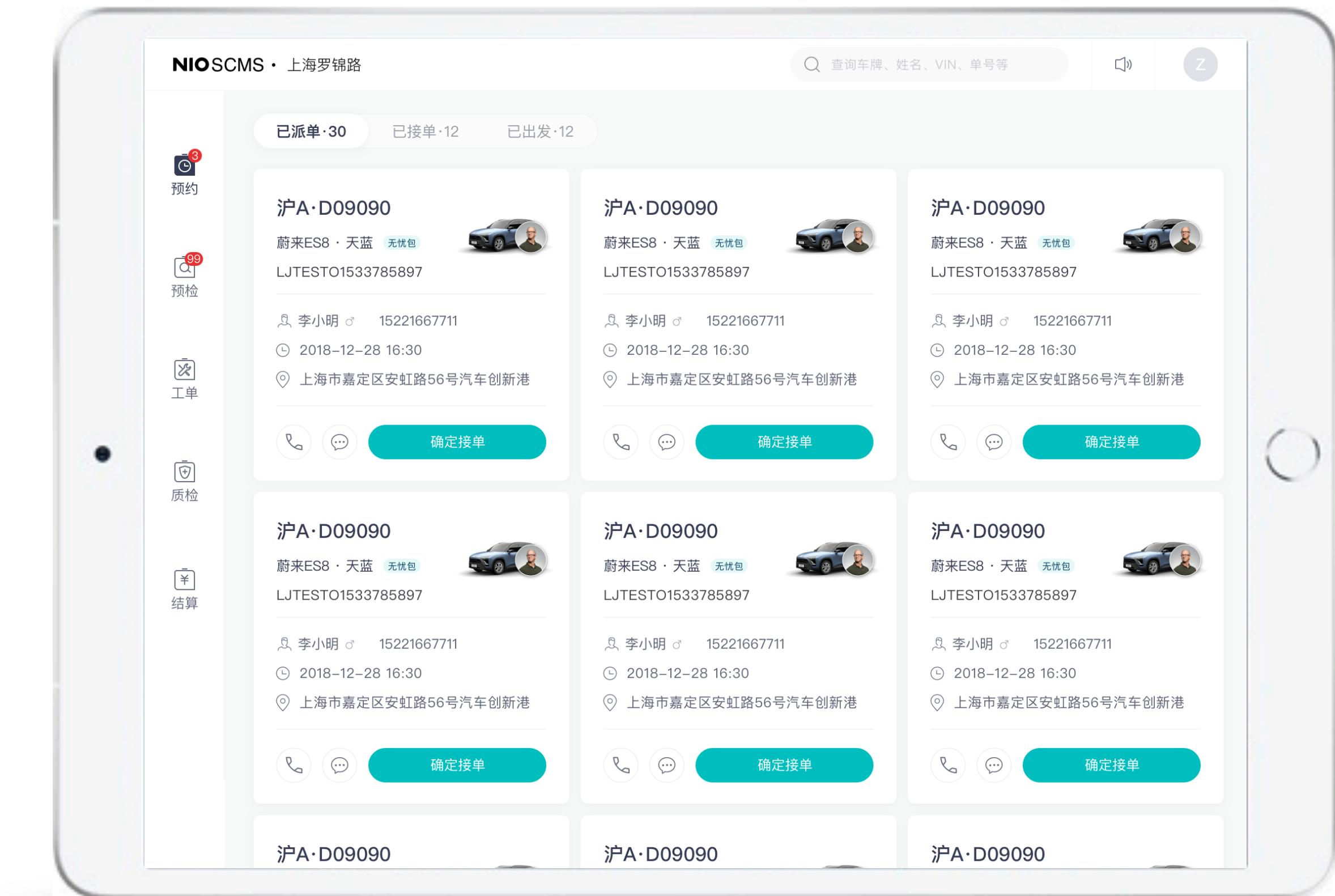
Background

NIO SCMS is a tablet app used by NIO service staff to receive orders and repair cars on-site.

The previous app is used in stores by 6 different roles, this app will be used on mobile cars by only one staff to repair cars on-site.

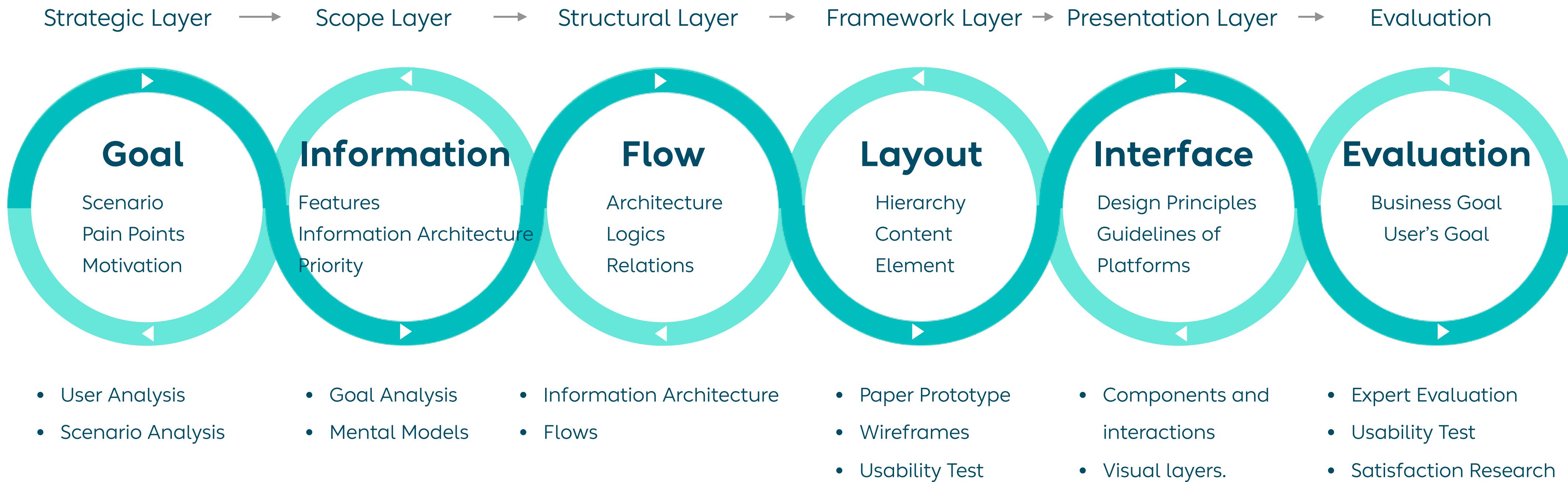
Challenges

- 1. Simplify the complex flow and interaction.
- 2. Optimize the complex interaction components;



Design Process

Five Elements of User Experience



Target Users

NIO technicians.

Daily work: Provide users with repairing and maintenance service on-site.

Users' feature: Low education level, noisy working environment, many interference factors.

Users' goal: Receive orders and repair cars efficiently and of high quality.

Design for new scenarios

Scenarios: Used in stores → Used in service cars.

Target Users: Many roles responsible for different process → One role responsible for whole process.

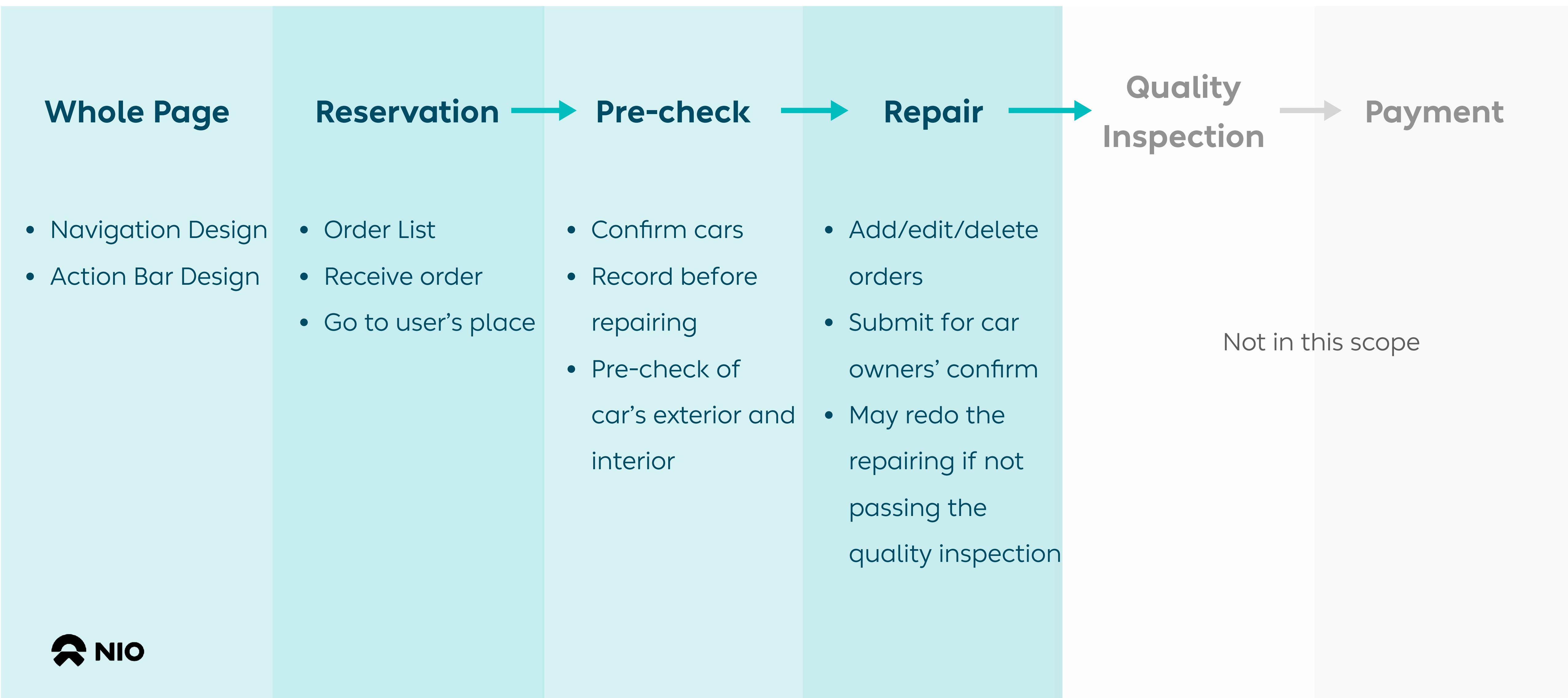
Repairing Scope: Many complex repairing projects → A few easy repairing projects.

Design Goal

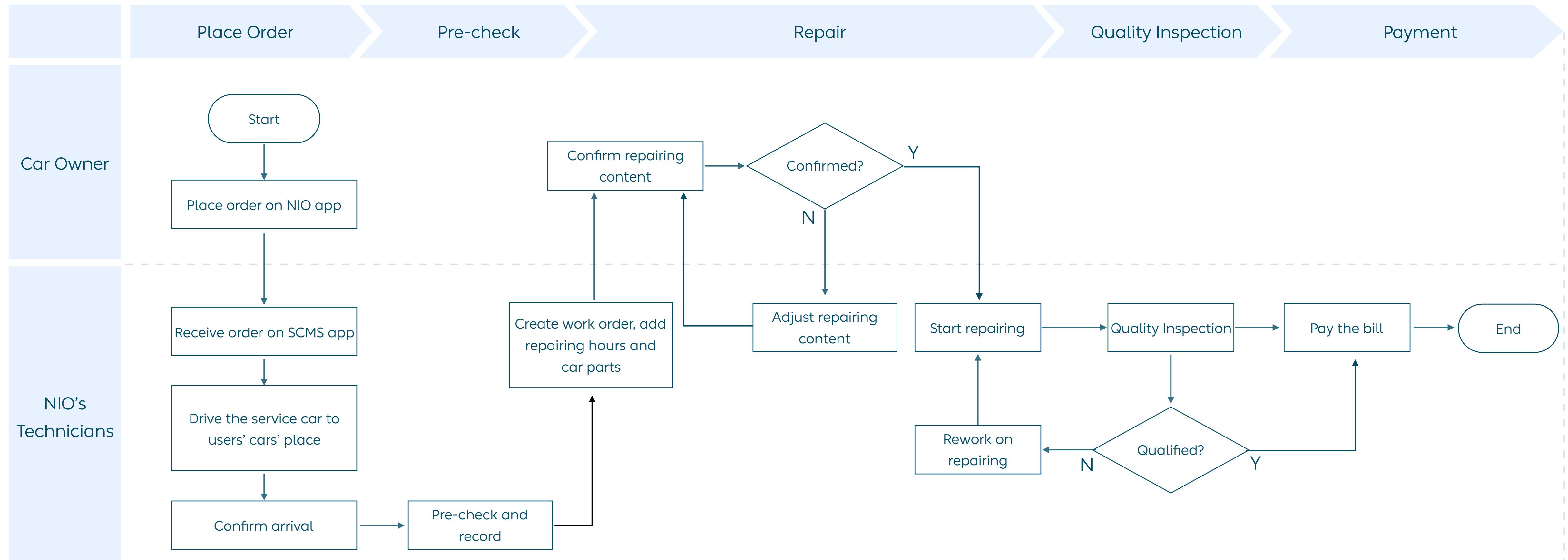
Easy to use | Efficiency | Smooth | Beauty



According to the priority, I redesigned the first 3 steps, the other 2 are left to next stage.



Business Flow Chart



User's Pain Points

1. Don't know how to receive an order at first.
2. The order list is too messy to find specific information.
1. Constantly press the submit button before filling in all blanks, need to go back and fill in everything.
2. The pictures taken in pre-check can't relate to the marked place.

1. The process of creating working order is too complicated and inefficient.
2. Easily forget what have been added when items are too many, have to find them one by one again in the 3-level navigation.

Problems of previous app

1. Messy information architecture

All information are displayed at the same level, no emphasis on important information, no proper groups of information.

2. Wrong use of components

Wrong use of components such as checkbox, tabs, input field, etc. in wrong way.

3. Interact like a PC app rather than a tablet app

Massive use of small clicking areas and pop-up dialogues, hard to use on a mobile device.

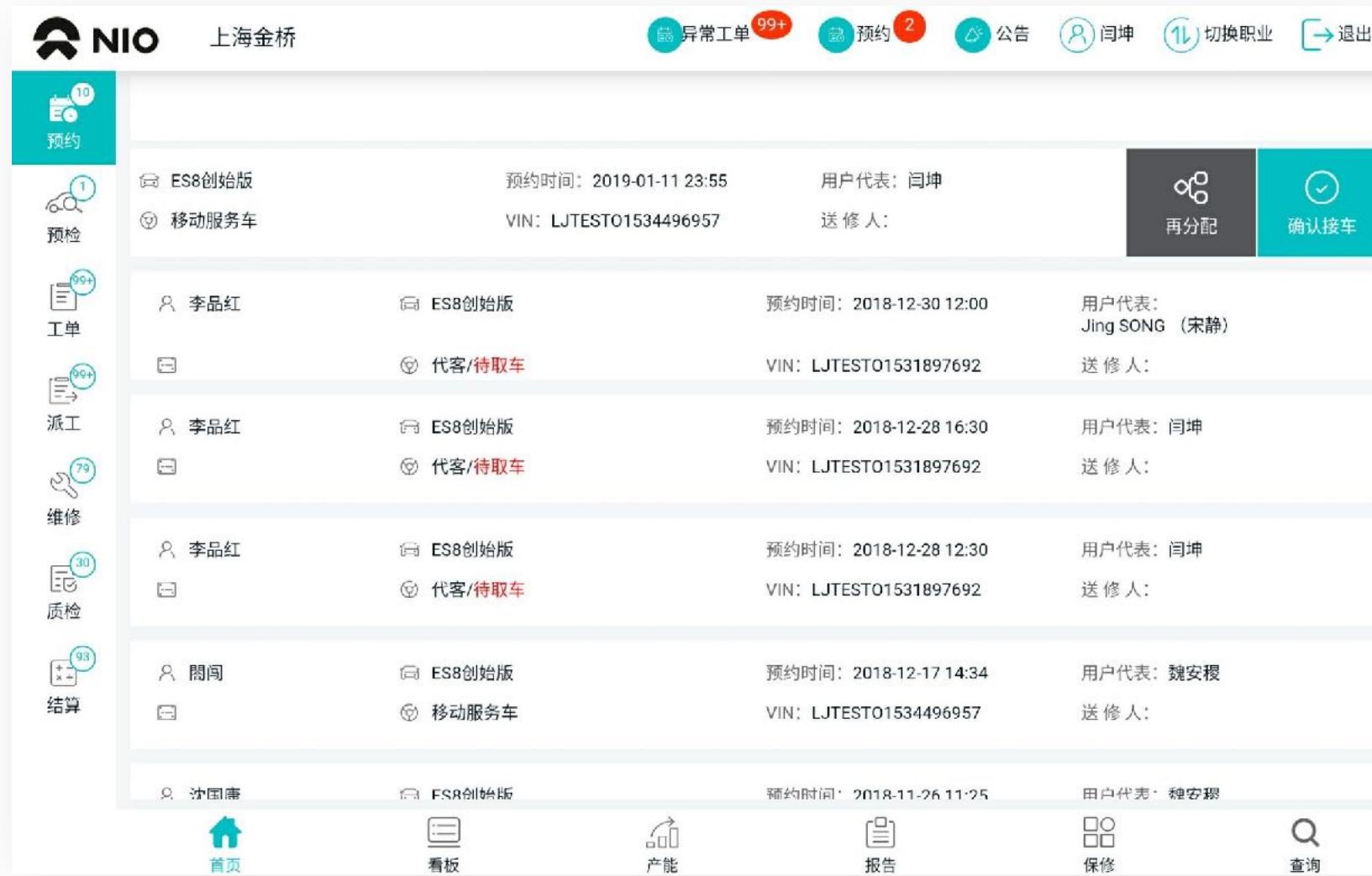
Screenshots of previous app

The image displays three screenshots of a mobile application interface, illustrating various design flaws:

- Left Screenshot:** Shows a list of parts in a table format. The table includes columns for 序号 (Index), 代码 (Code), 名称 (Name), 仓库名称 (Warehouse Name), 库存 (Stock), 销售单价 (Sales Unit Price), 数量 (Quantity), 销售金额 (Sales Amount), and 操作 (Operation). A search bar and a confirmation button are visible at the top.
- Middle Screenshot:** A form for vehicle inspection. It includes sections for 车辆预检 (Vehicle Pre-inspection), 用户诉求 (User Complaints), 外部检查 (External Inspection), and 内部检查 (Internal Inspection). It features a large table with rows for vehicle details like 车牌号 (License Plate) and technical parameters like 配置 (Configuration).
- Right Screenshot:** A detailed service order form. It shows工单编号 (Work Order Number: RSHHB00120190115012), 工单类型 (Work Order Type: General Maintenance), and various service details like 预约单号 (Appointment Number: BSHHB00120190115012), 上次维修 (Last Repair: 2019-01-14 15:46), and 车主姓名 (Owner Name: 任梦瑶). It also includes sections for 维修内容 (Repair Content), 其他费用 (Other Costs), 故障信息 (Fault Information), 增减项变更历史 (Change History), and 保养检查表 (Maintenance Inspection Form).

Homepage Redesign

Before Redesign



Problems of previous app:

1. Messy information.
2. Have to swipe to left to see main operation buttons.

After Redesign

Put away some unimportant features.

Add search on top.

Highlight the license number so that technicians can easily find a car.

Add gender information so that technicians can call them right.

Add location, technicians can click and navigate.

Show main buttons directly, add contact buttons.

Remove the tabs at the bottom, put the search function on top.

Design of pre-check

Pre-check page 1 before redesign

车辆预检

用户诉求 外部检查 内部检查

车牌号: 请点击选择... 是否服务无忧包车主:

配置: 行驶里程:

VIN: 电 量: 0%

无忧包失效日期: 预计出厂时间:

保修期限: 工单类型:

车内物品登记: 钥匙 行驶证 警示牌 补胎液 充气泵 随车工具
其他

是否授权

用户需求: [Text Area]

用户故障描述代码分类: [Icon]

维修项目: 三包预警 维修历史

工时费合计: 0.00 配件费合计: 0.00 费用合计: 0.00

Problems:

- Complex process. 3 tabs can't guide users through the process.
- Messy information. Users can't distinguish what should be filled and what is read only.

Pre-check page 1 after redesign

预检

1 基本信息 2 故障确认 3 车辆检查

车辆信息

- 车牌号: 沪A·D09090
- VIN: LJTEST01531897692
- 车主: 李小明
- 车辆配置: ES8 创始版
- 是否授权: 是
- 保修期至: 2020-10-02
- 是否无忧包车主: 是
- 无忧包有效期至: 2020-10-02

信息记录

- 行驶里程: 18108 km
- 当前电量: 50% (滑块)
- 车内物品: 钥匙, 行驶证, 警示牌, 补胎液, 充气泵, 随车工具, 备胎
- 其他物品: [Text Input]

下一步

预检

1 基本信息 2 故障确认 3 车辆检查

故障描述 三包预警 维修历史

我的方向盘转向失灵了, 怎么处理。现在可以转动方向盘, 但是车子不能进行转向。只能一直往前开啊, 求助求助求助求。

技师故障描述分类

- 保养: 更换雨刮器 空调异常 车机异常

预检结果

- 工单类型: 售后维修 PDI/美容装潢设备
- 预计完工: 2019-04-01 上午09:00
- 备注: [Text Input]

用户故障描述分类

保养: 更换雨刮器 空调异常

Use steps to guide users through the whole process.

Put the read only information on the left and put the editable information on the right.

Separate the read only information from users and editable information for technicians by a vertical line.

Design of pre-check

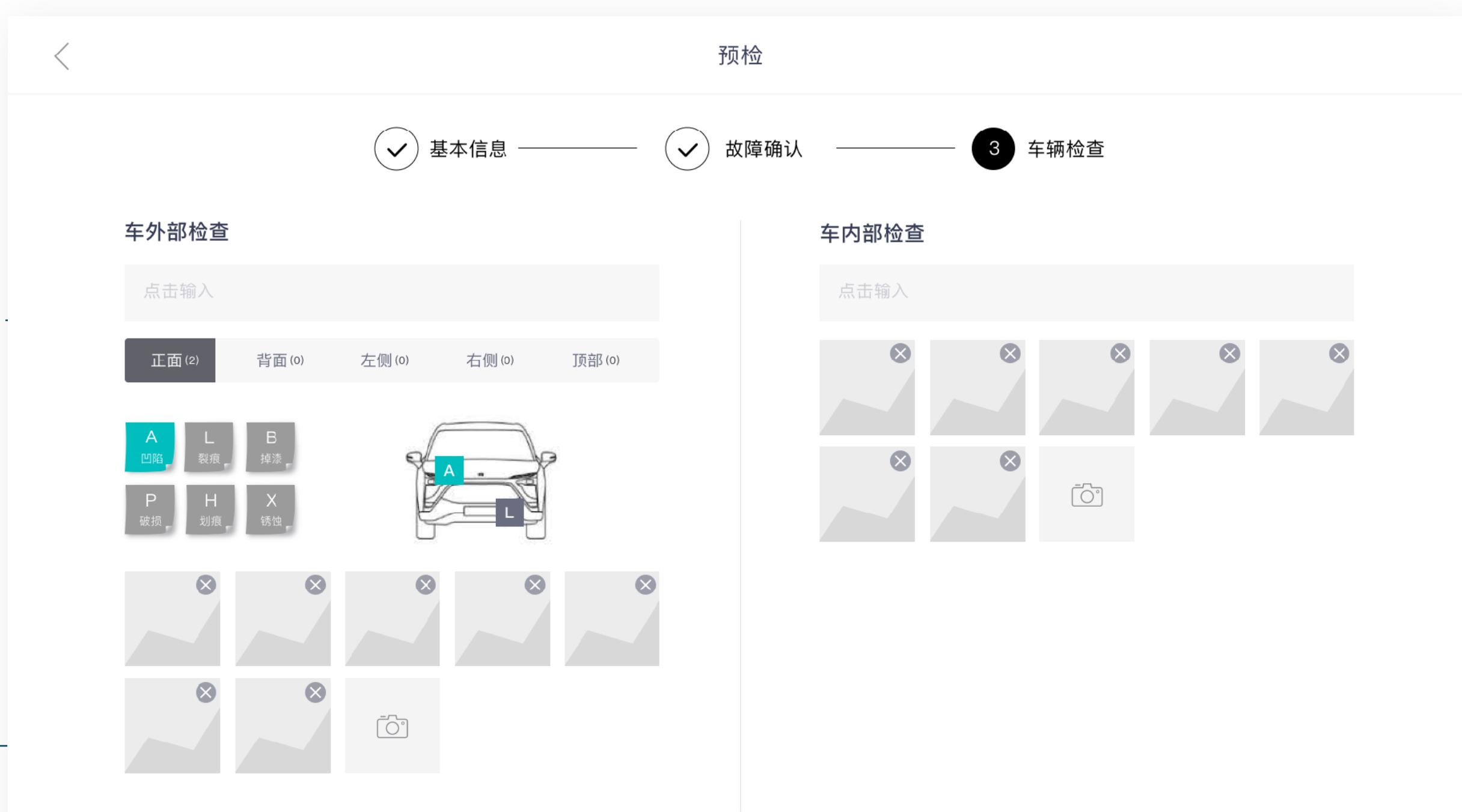
Pre-check page 2 before redesign



Problems:

1. Hard to understand what to do and how to do it because the interaction is not intuitive enough.
2. The pictures taken on the right can hardly be related to the spots marked on the left.
3. Interior check's content is too little, so it can be combined with exterior check.

Pre-check page 2 before redesign



Combine exterior check and interior check, improve operation efficiency.

Design of working order

Before Redesign

工单变更													
工单编号: RSHH00120190115012	工单类型: 一般维修												
预约单号: BSHB00120190115012	上次维修: 2019-01-14 15:46												
用户代表: 闫坤	车主姓名: 任梦瑶												
电机号: AE123493	里程: 12												
所属角色: 主用车人	销售日期: 2018-07-18 00:00												
保修期限: 2021-07-18 00:00	预计出厂时间: 2019-01-16 12:12												
用户需求: 123													
用户故障描述代码分类:													
工时费合计: 0.00 配件费合计: 0.00 其他费用合计: 0.00 费用合计: 0.00													
维修内容 其他费用 故障信息 增减项变更历史 保养检查表													
<table border="1"> <tr> <td>1. GZB1001 进场检修</td> <td>工时费: 0.00 配件费: 0.00</td> <td>用户故障描述: 坛坛罐罐</td> <td><input type="button" value="添加备注"/></td> <td><input type="button" value="添加工时"/></td> <td><input type="button" value="删除"/></td> </tr> <tr> <td>④ GS1001 进场检修</td> <td>单价: 450.00 内部-NIO结算 钣金喷漆</td> <td>0.00 X 1.00</td> <td><input type="button" value="添加配附件"/></td> <td><input type="button" value="删除"/></td> <td></td> </tr> </table>		1. GZB1001 进场检修	工时费: 0.00 配件费: 0.00	用户故障描述: 坛坛罐罐	<input type="button" value="添加备注"/>	<input type="button" value="添加工时"/>	<input type="button" value="删除"/>	④ GS1001 进场检修	单价: 450.00 内部-NIO结算 钣金喷漆	0.00 X 1.00	<input type="button" value="添加配附件"/>	<input type="button" value="删除"/>	
1. GZB1001 进场检修	工时费: 0.00 配件费: 0.00	用户故障描述: 坛坛罐罐	<input type="button" value="添加备注"/>	<input type="button" value="添加工时"/>	<input type="button" value="删除"/>								
④ GS1001 进场检修	单价: 450.00 内部-NIO结算 钣金喷漆	0.00 X 1.00	<input type="button" value="添加配附件"/>	<input type="button" value="删除"/>									

Problems:

1. The basic information on top takes too much space, but is of little use.
2. The 3-level table is very complicated, and the interaction of it is confusing.

Refine the basic information into a license number.
Can see more basic information in this entrance.

After Redesign

沪A·D09090																																																									
		<input type="button" value="预检详情"/>	<input type="button" value="增减项变更"/>	<input type="button" value="维修建议"/>																																																					
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<input type="button" value="提交"/>																																																									

Press the red area to edit. The right panel makes it convenient to edit.

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		<input type="button" value="编辑工时"/>																														
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Add this table header, so that it doesn't have to show the title in every row below.

Optimize this 3-level table, align relevant prices for easier calculation.

Put the submit button below, add the total price.

Design of working order - add repairing packages

Before redesign

所属类别	代码/名称	库存	数量	金额	操作
车架与前轴	INT1002002R 歇脚板下盖板总成的更换	-	1	+ 90.00	<input type="checkbox"/>
车身门盖系统	INT1002003R 仪表板中嵌板总成的更换	-	1	+ 180.00	<input type="checkbox"/>
CHS	INT1002004R 歇脚板离合器总成的更换	-	1	+ 90.00	<input type="checkbox"/>
电池蓄能系统	INT1002008R 乘客侧下护板总成的更换	-	1	+ 180.00	<input type="checkbox"/>
内饰	INT1002010R 转向管柱上护罩的更换	-	1	+ 45.00	<input type="checkbox"/>
照明系统	INT1002011R 转向管柱下护罩的更换	-	1	+ 90.00	<input type="checkbox"/>
内部照明	INT1002012R 乘客侧上护板总成的更换	-	1	+ 90.00	<input type="checkbox"/>
仪表板饰板	INT1002013R 仪表板上盖板总成的更换	-	1	+ 90.00	<input type="checkbox"/>
座椅	INT1002014R 除霜板总成的更换	-	1	+ 810.00	<input type="checkbox"/>
内饰板	INT1002027R 中下灯带总成的更换	-	1	+ 45.00	<input type="checkbox"/>
翼子板	INT1002033R 脚踏盖板的更换	-	1	+ 45.00	<input type="checkbox"/>

Problems:

1. Wrong use of components. Users have to check the checkbox first and adjust the number.
2. The inventory column is only for car parts which rarely appears in the list, but it still occupies one column.
3. No indication of how many items users have checked.

After Redesign

代码/名称	单价(元)	数量
BIW1002001R 右侧后流水槽总成的更换	¥150	- 1 +
EDS-0006 输入轴油封安装工具 库存 2	¥100	- 2 +
BST01012423R 左车门的替换	¥150	- 2 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +
BIW1002001R 右侧后流水槽总成的更换	¥150	- 0 +

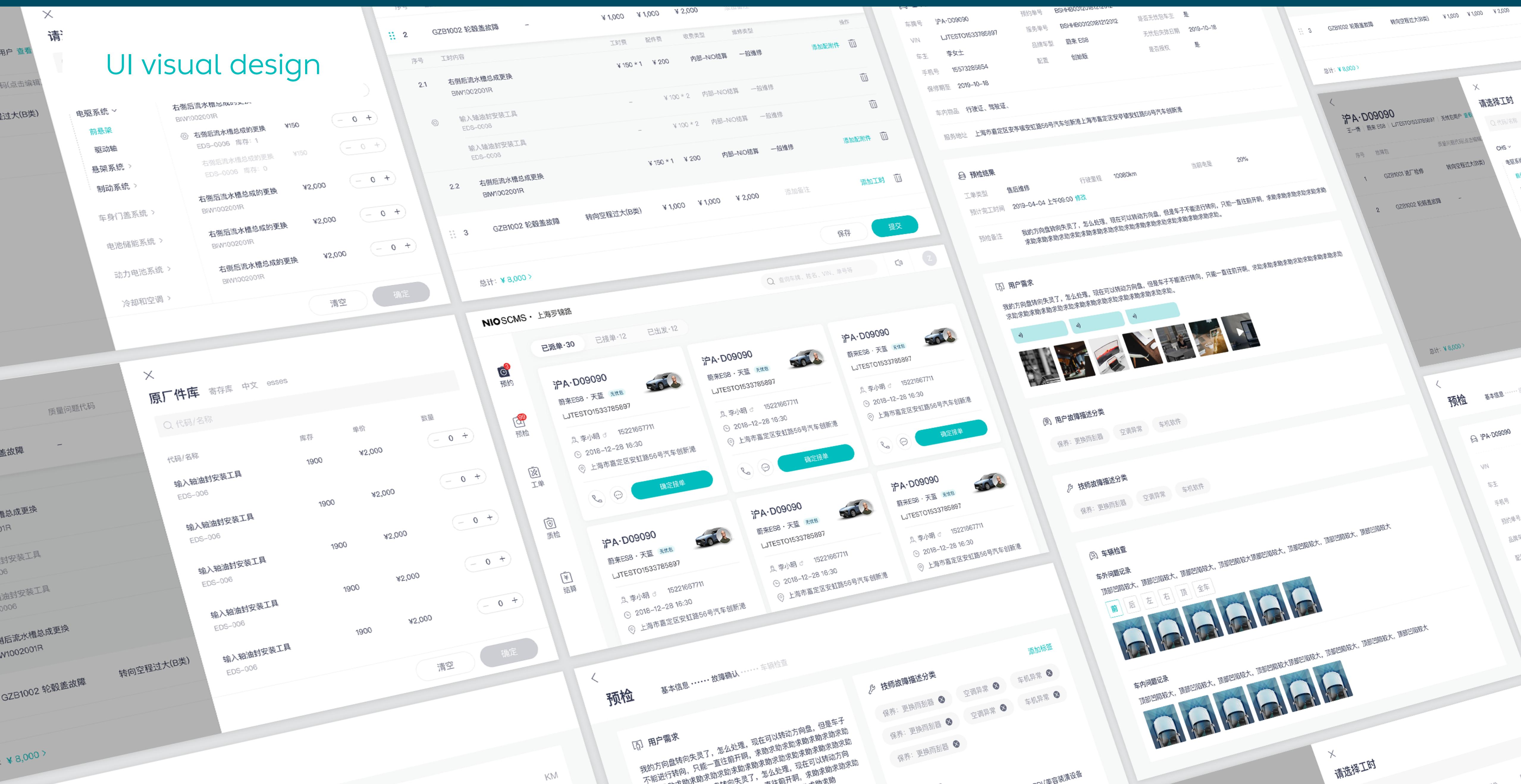
Show the number of items checked.

1. Optimize the table, remove the checkbox, user + and - to add working hours.

2. Remove the inventory column, show the number of inventory only under the car parts row.

Put main buttons at the bottom.

UI visual design



TECH Model from Ant Financial + GSM

Model Target	Goal	Signal	Metrics	Methods	Remarks
Task Success	Improve task success rate	The number of users finishing tasks increases	Task success rate of a task.	User testing + data analysis	Tasks : 1. Pre-check cars. 2. Add work order, malfunction packages, working hours and car parts. 3. Edit work order.
	Improve task efficiency	The time spent on one task shortened.	The time one user finishes a task.	User testing + data analysis	
		The steps of tasks decreased.	The number of clicks one user finishes a task.	User testing + data analysis	
Engagement	Improve frequency of usage	The number of times opening the app increases.	The times one user open the app.	Data analysis	The app after redesign is used in different scenarios from previous app, so it's of no meaning to compare this data.
Clarity	Improve clarity of information	The time technicians recognize some information shortened.	Usability test report.	User testing, Expert evaluation	-
Happiness	Improve Satisfaction of technicians	Technicians are happier using this app.	Satisfaction report, NPS report	Qustionnaires	-

Evaluation Result

↓ **14.7%**

Average Task Completion Time

↑ **59.3%**

Clarity

↑ **31.1%**

Satisfaction Rate

Project 3

Redesign customer service for merchants

Meituan-Dianping

Background

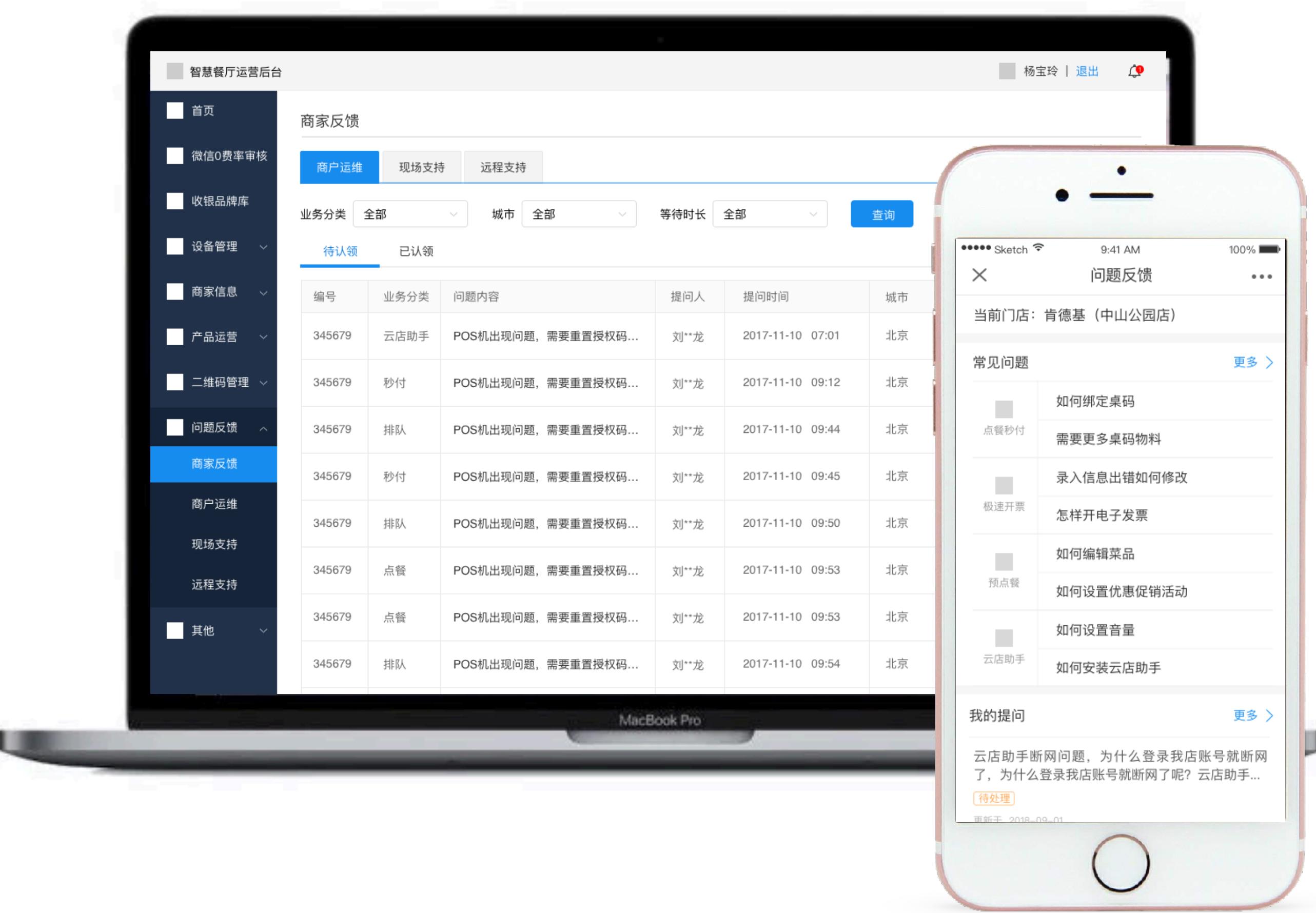
Meituan-Dianping provides merchants with some CRM system to manage their orders.

Merchants sometimes run into malfunctions on the software or hardware, which needs the support of Meituan-Dianping.

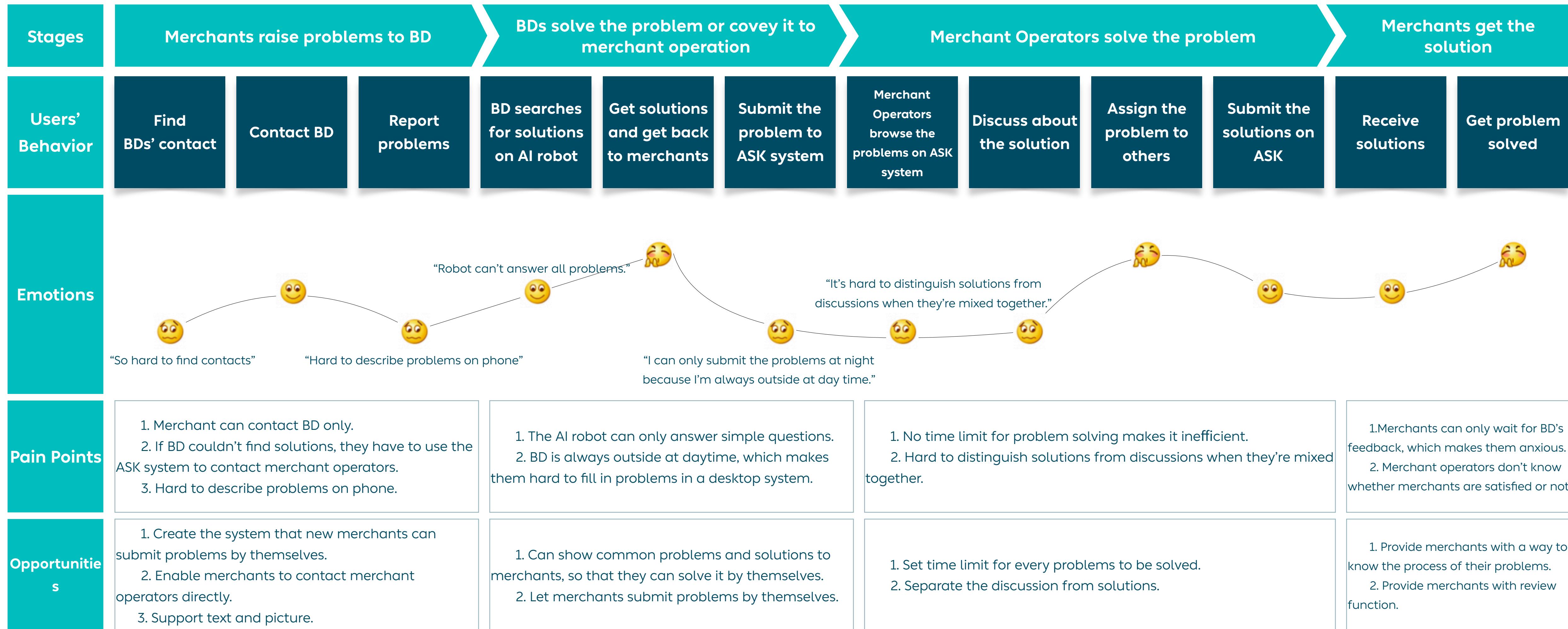
Current process is too complicated and takes a long time to get a problem solved. We decided to redesign it to improve the efficiency.

Challenges

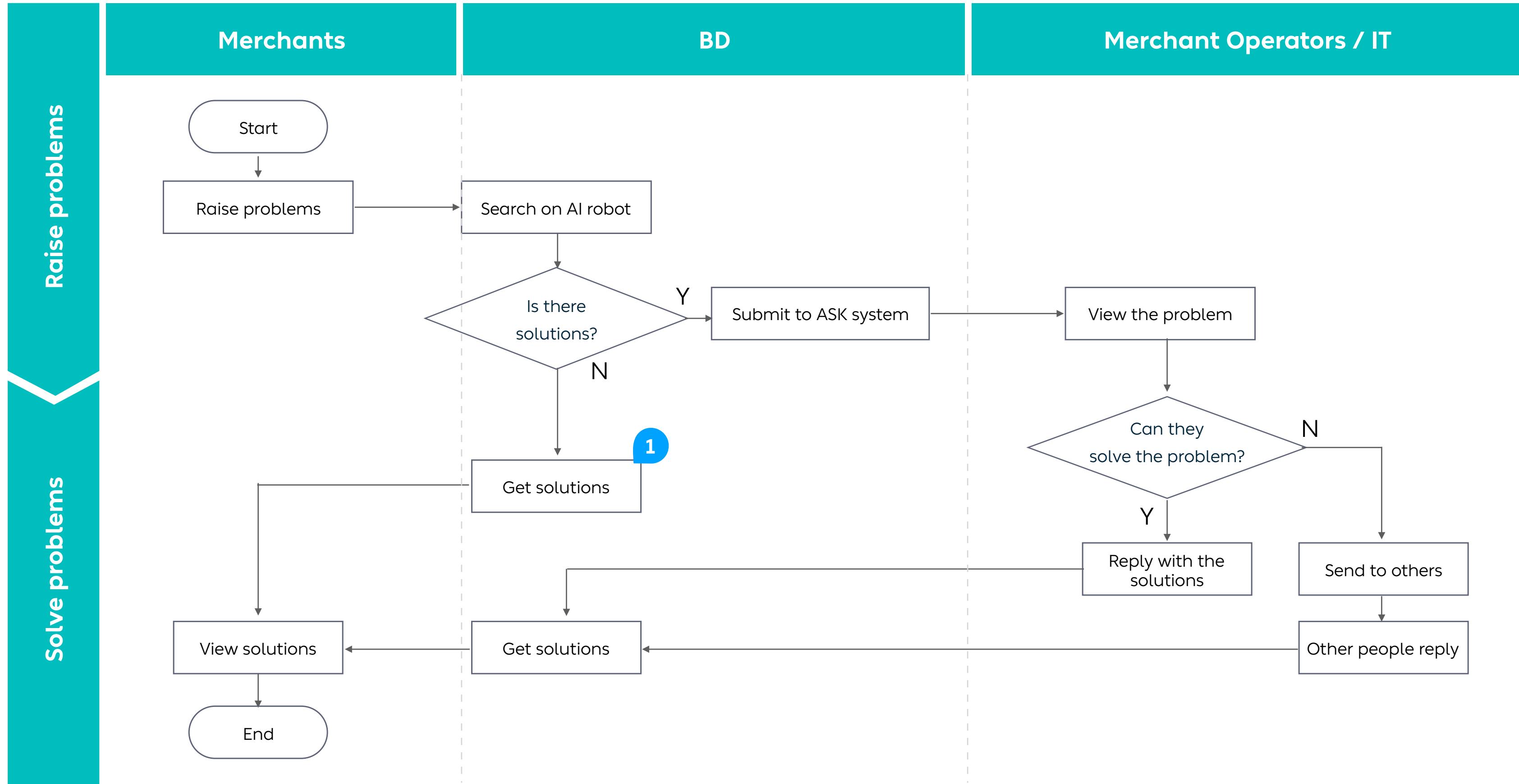
- Optimize the complex process.
- Experience map of many roles.



Experience Map of Customer Service



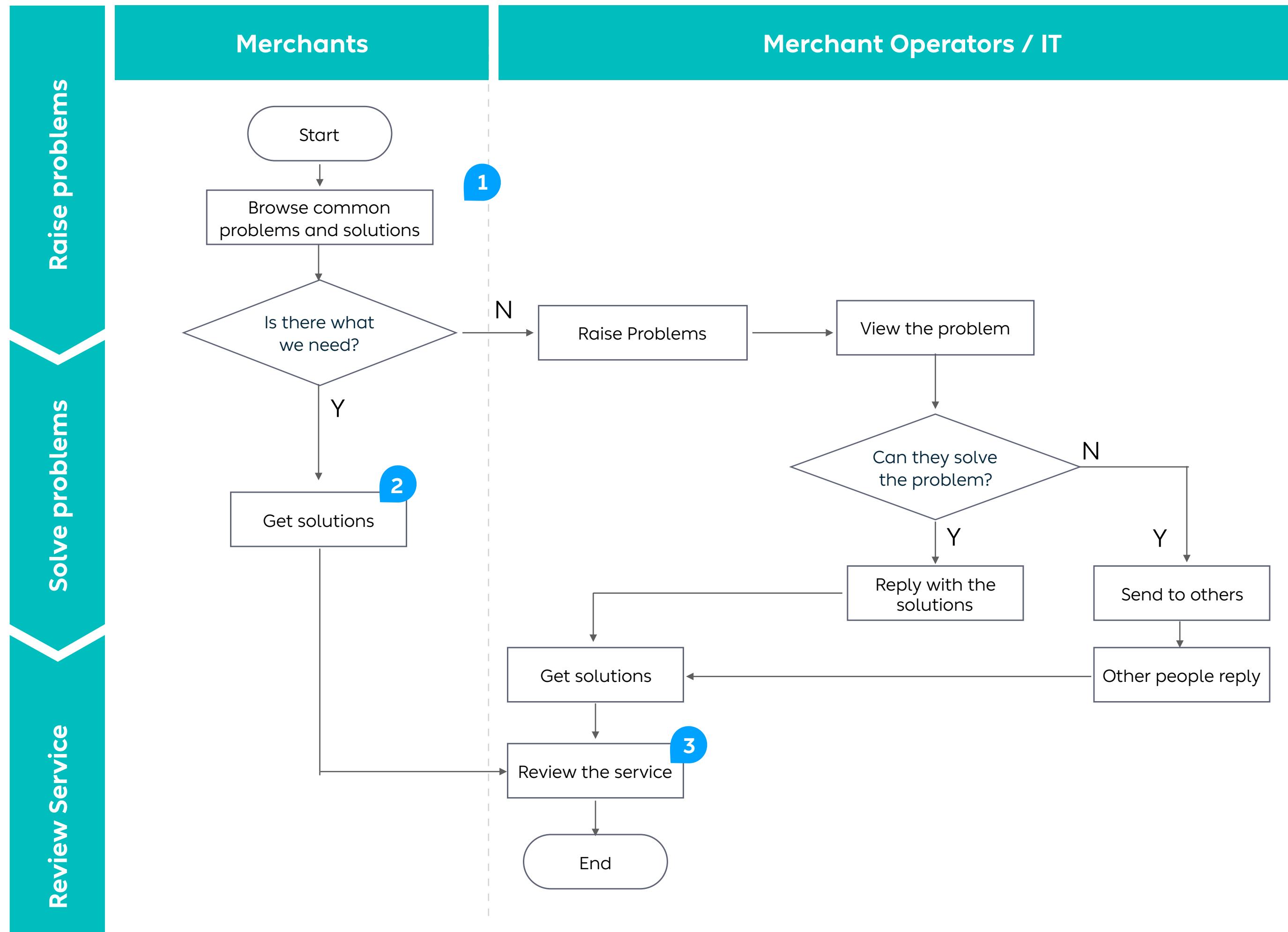
Business flow before redesign



Previous process requires merchants to contact BD before get solutions from merchant operators, which takes about 3 days to get one problem solved.

- 1 Get solutions without merchant operators' help.

Business flow after redesign



The complex flow is simplified by eliminating the role of BD, merchants can contact directly with merchant operators.

In the meantime, the H5 page containing common problems and solutions enables merchants to solve problems by themselves.

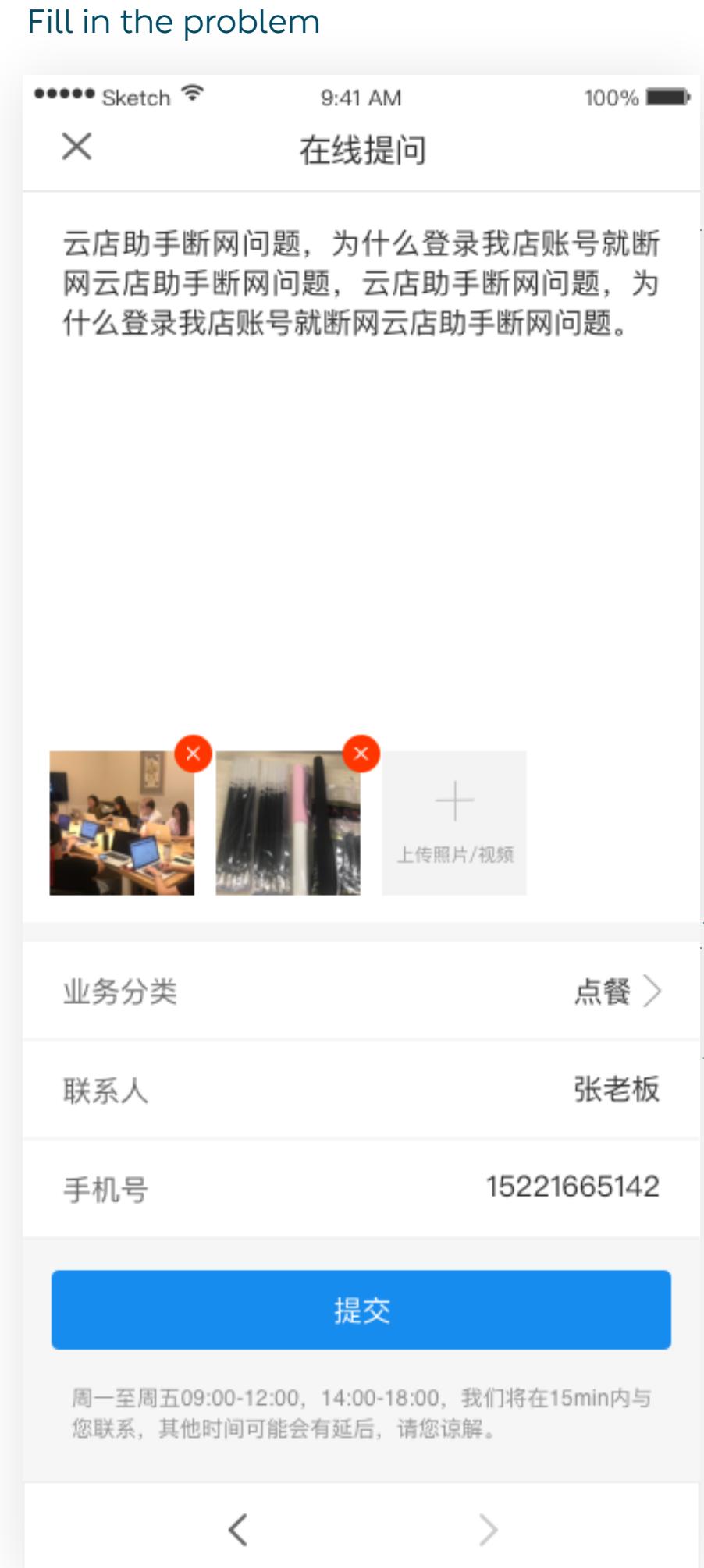
- 1 Design the H5 page to display common problems and solutions.

- 2 Get solutions directly from H5, without anyone's help.

- 3 Add the review process so that merchant operators can improve their service.

Problem detail page design for merchants

H5 entrance:
1. Entrance in Yundianzhushou.
2. Entrance in Kaidianbao.
3. QR code for merchants.



Problem detail page design for merchants

Detail page for problems



Merchants can review
the solutions, so that
merchant operators can
improve their service.

Review the solutions and services



After the review is submitted



The backstage of problem solving

Problem list

智慧餐厅运营后台

杨宝玲 | 退出

商家反馈

商户运维 现场支持 远程支持

业务分类 全部 城市 全部 等待时长 全部

查询

待认领 已认领

编号	业务分类	问题内容	提问人	提问时间	城市	等待时长 (min)	操作
345679	云店助手	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 07:01	北京	129	认领
345679	秒付	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:12	北京	45	认领
345679	排队	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:44	北京	13	认领
345679	秒付	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:45	北京	12	认领
345679	排队	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:50	北京	7	认领
345679	点餐	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:53	北京	4	认领
345679	点餐	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:53	北京	4	认领
345679	排队	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:54	北京	3	认领
345679	秒付	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:55	北京	2	认领
345679	云店助手	POS机出现问题，需要重置授权码...	刘**龙	2017-11-10 09:55	北京	2	认领

< 上一页 1 2 3 4 5 ... 下一页 >

美团 美团

Categorize the problems into 3 groups, each group is supported by one team, so that every team can focus on their problems.

- 1 The time span that problems waiting to be solved is marked in 4 colors, each color represent a level of urgency.

Waiting time & color:

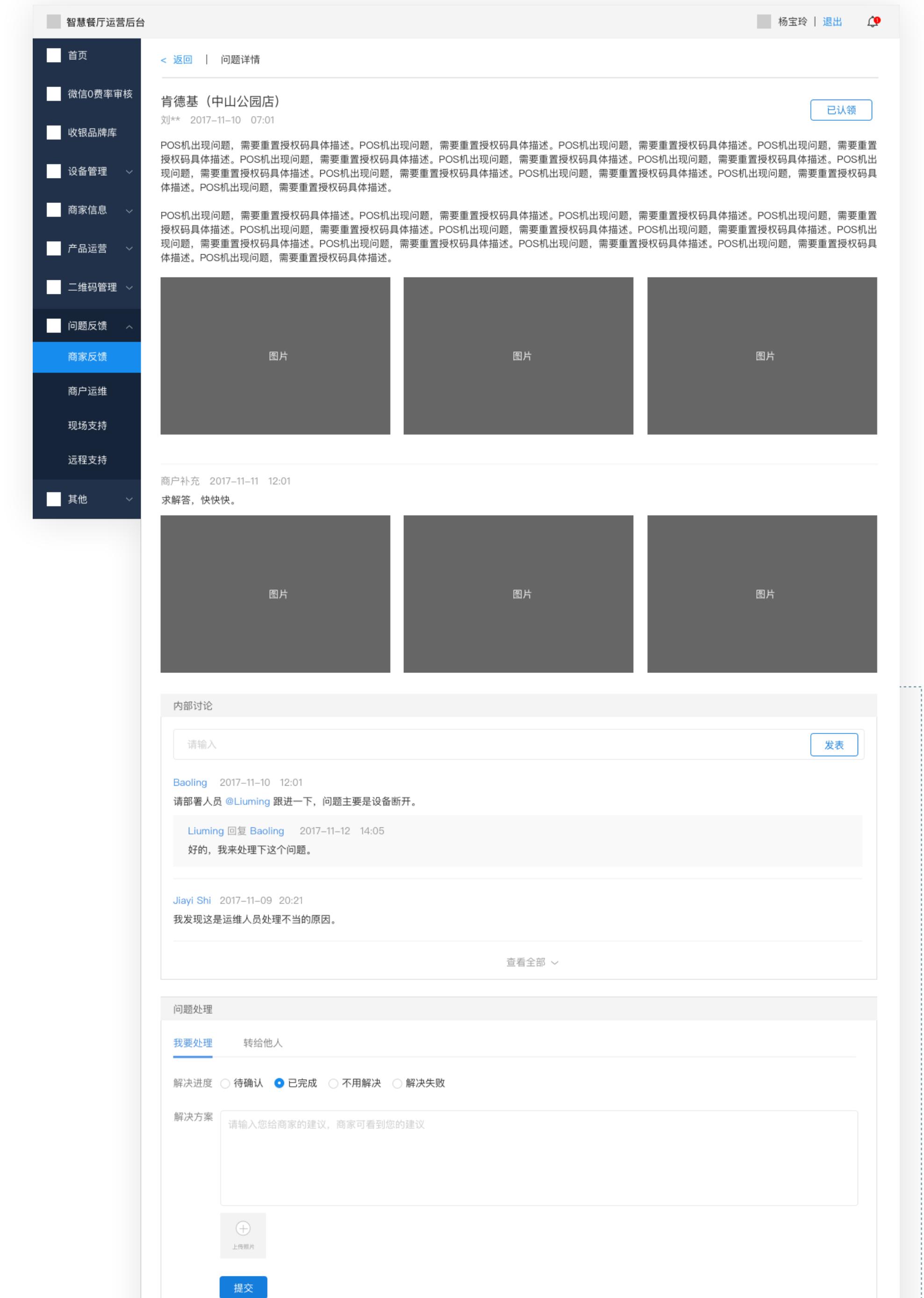
0-5min: Grey

5-10min: Yellow

10-15min: Red

15+min: Purple

The backstage of problem solving



Separate the internal discussion from solutions, so that other people can find solutions easily.

Project Result

The time from merchants raise
the problem till it's solved

From **3** days to **24** hours

The number of problems raised in the
first month after launch

Decrease by **11.3%**

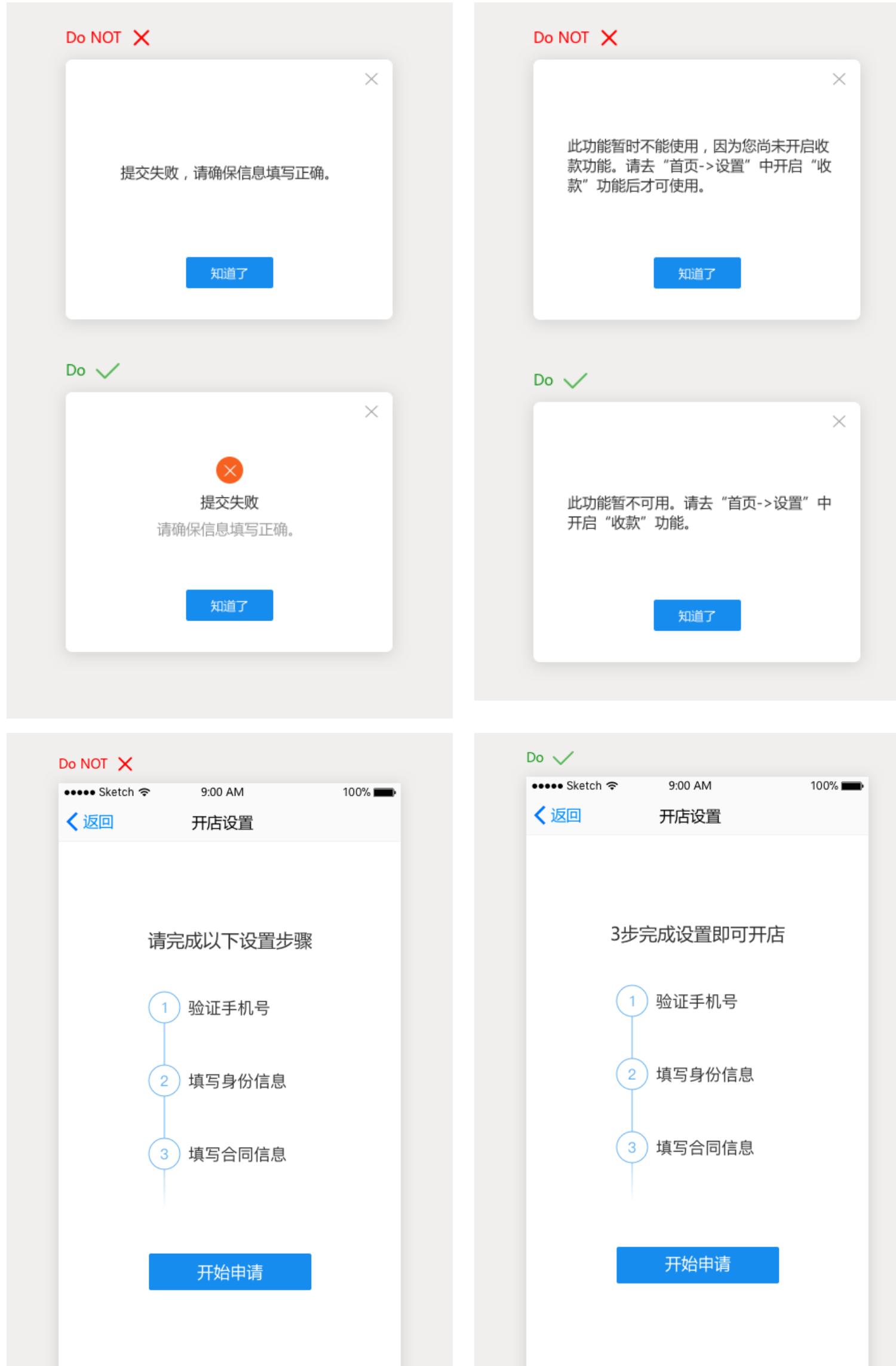
Others

Writings / Sharing / Visual Design

Daily Work

Write some articles about user experience

Write some articles on my wechat official account BaolingUX.



Daily share on my wechat official account BaolingUX.

The first four posts are from 2018:

- 2018-07-02: 【心智模型】之 AIDA 模型. Discusses the AIDA model in sales, explaining Attention (注意), Interest (兴趣), Desire (欲望), and Action (行动). It includes a diagram of the model and steps: 1. 让潜在客户听你说, 吸引注意力. 2. 引起潜在客户的兴趣; 想客户介绍产品特色, 引起兴趣; 3. 激发对方的购买欲望; 找到产品特点和客户购买欲的切合点; 4. 完成销售; 客户购买了你的产品.
- 2018-06-08: 【设计法则】之西蒙效应 (Simon effect). Explains the Simon effect in design, noting it occurs when feedback is at the same relative position. It includes a screenshot of a payment interface showing a '支付成功' button and a '支付' button at different positions.
- 2018-08-03: 【产品】字节跳动的崛起. Analyzes ByteDance's growth, showing a chart of Chinese mobile internet total time spent in apps for June 2017 and 2018. The chart shows a significant increase for ByteDance (Tencent) over the year.
- 2018-08-18: 【读书笔记】《必然》. Notes from the book 'The Law of Attraction' by Kevin Kwei, discussing the trend of copying in the tech industry and the low cost of replication.

The fifth post is a summary of the 8 characteristics of valuable products:

- 1. 即时性(Immediacy):** Every movie has a free version online, but people still pay to watch it in theaters.
- 2. 个性化(Personalization):** Online courses are free, but personalized learning experiences are charged.
- 3. 解释性(Interpretation):** Software like Red Hat and Apache is free, but they provide paid support.
- 4. 可靠性(Authenticity):** Consumers buy from reliable brands like JD.com.
- 5. 获取权(Accessibility):** Cloud services are accessible anywhere.
- 6. 实体化(Embodiment):** Physical products like Xiaomi are more expensive than their online counterparts.

Share with others

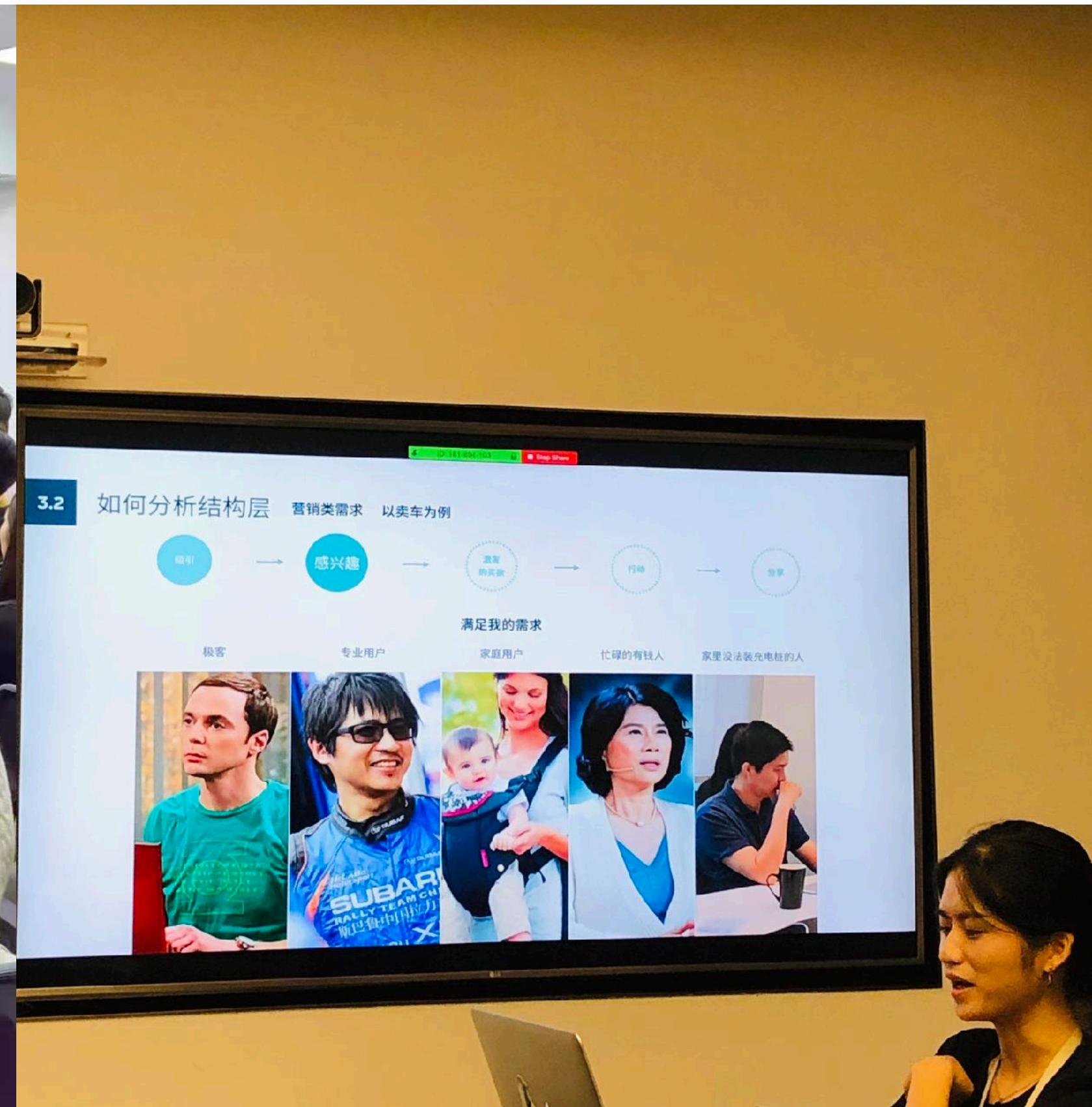
Share the self-driving system NIO Pilot and voice robot NOMI in the NIO X Mixlab meetup.

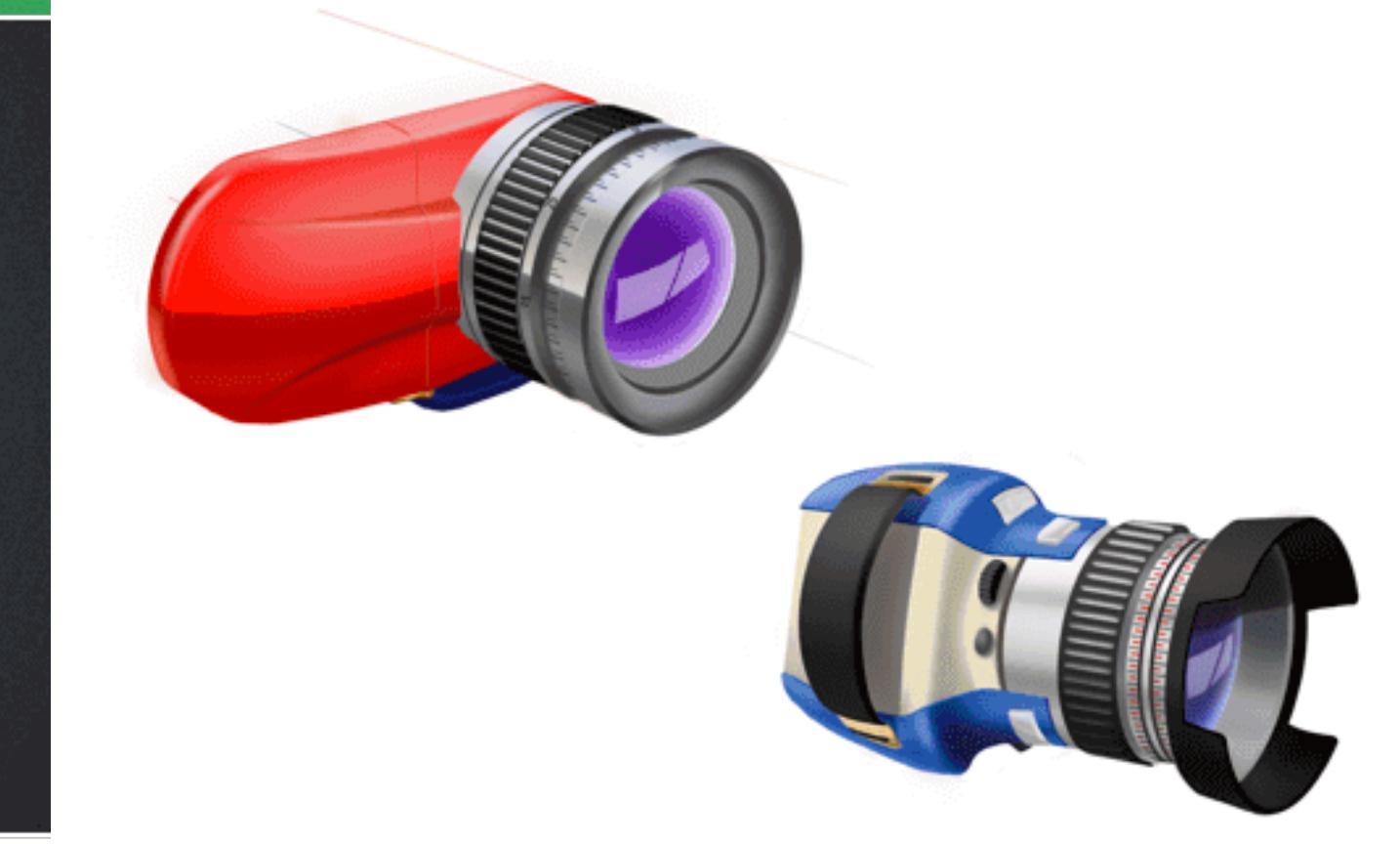
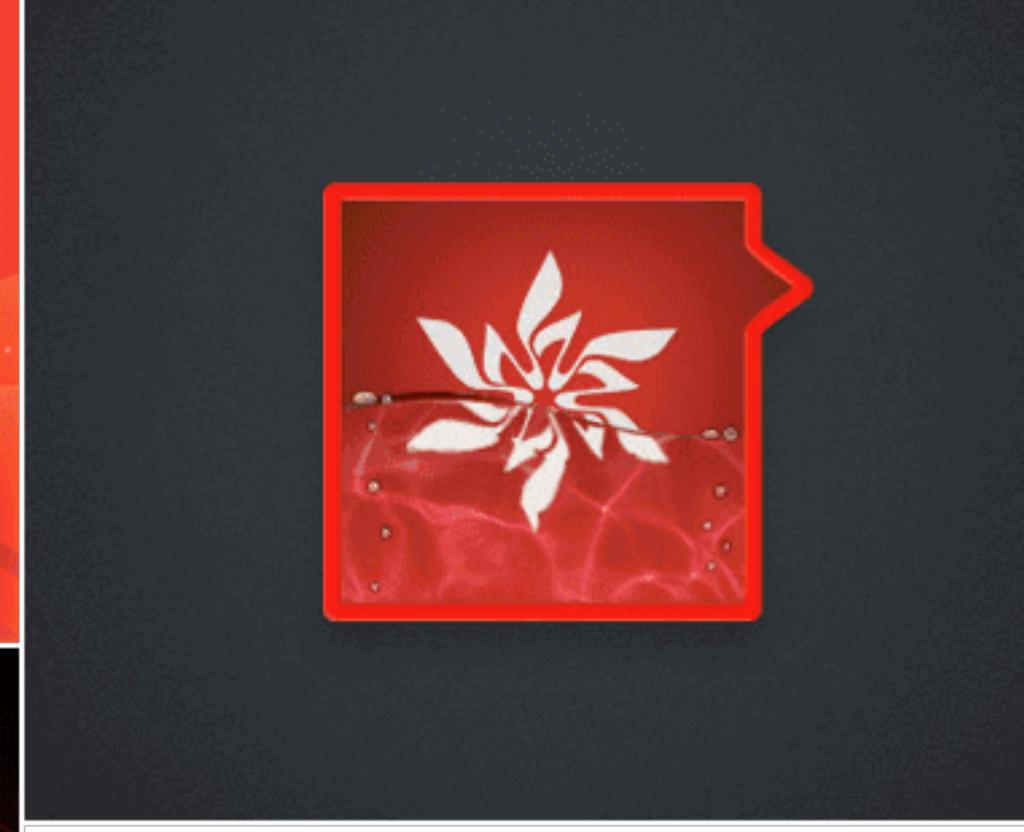
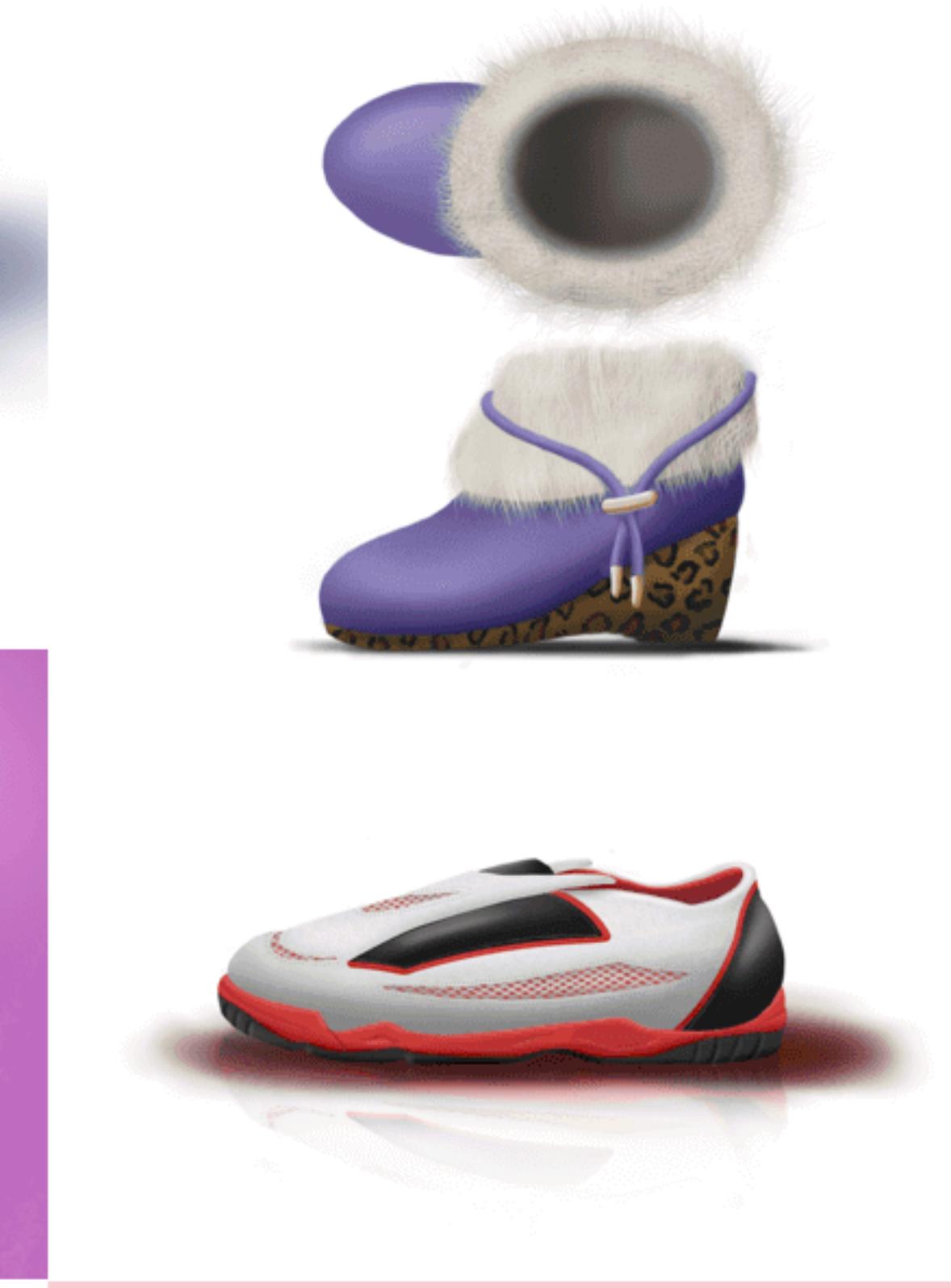


Share “Full process design” in PM Talk.



Share design methods of Meituan-Dianping in NIO UDP team





Thank you for your time

更多内容，请访问我的个人网站：

<http://baoling.me>