



The Association of
Accountants and
Financial Professionals
in Business

美国管理会计师协会

南京农业大学 “Tyr Back”队



2019 IMA Case Study

The Optimistic **Future** of Mobike

— Sharing Economy
or Access Economy?



TEAM: TYR BACK



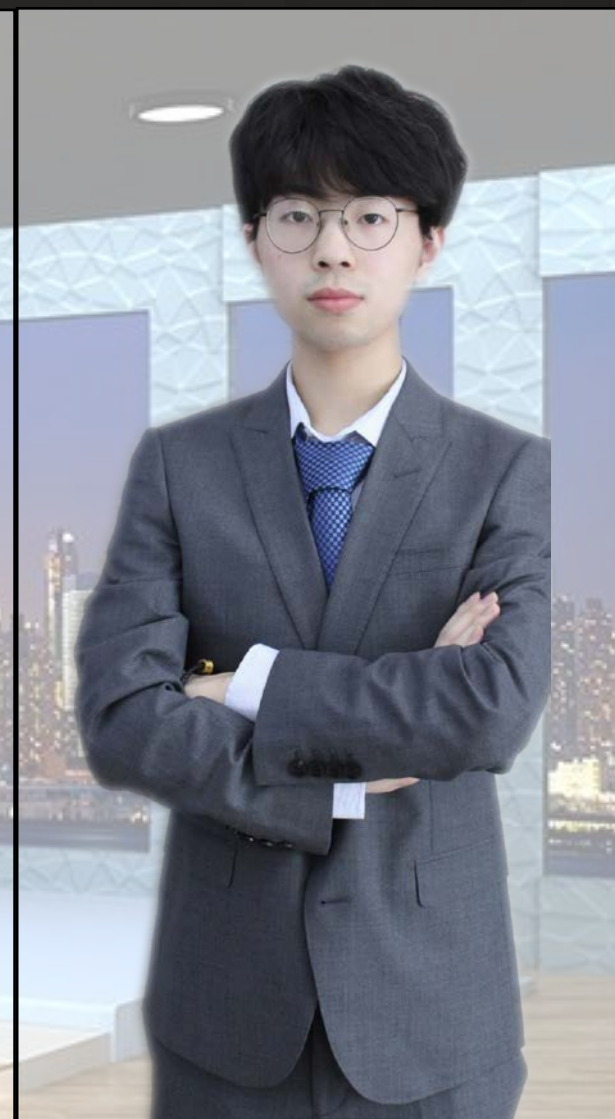
Mike



Emma



Jason



Edward

Sharing Economy Industry Life Cycle

Stage of **PEST** Development

- **Positive attitude towards bike-sharing**
- **Related supporting policies**
- **Encouragement of capital cooperation**

In 2017, Sharing Economy Industry reached 4.0205 trillion yuan, increased by 47.2% from last year.

- **Environment protection**
- **Green-travel awareness**
- **Transportation problems** (Traffic jams, etc.)
- **Extensive damage to shared bikes**

Living-Service Business
1.3214 trillion yuan

- **Economic growth**
- **Development of Eco-friendly economy**
- **E-commerce development**

Transportation
291 billion

Sharing-finance
2.8264 trillion yuan

- **Intelligent manufacturing**
- **Cloud Platform & Big data**
- **Internet of Things (IoT)**

Building
14.5 billion yuan

Health Care
7 billion

412 billion yuan

138.2 billion yuan

- **Smart & Mobile payments**

Many Sharing Industries Bankrupted

Source : China Sharing Industry Development While Pa...

Infancy

Exploration

Growth

Maturity

PEST



Case Overview

Situation Analysis

Strategy Model

Solutions & Budget

Future of Industry

Sharing-Bike Enterprise

Mobike

Similarity

Market Competitor Analysis



Customer

Focus on public relations

Improve customer loyalty

Active User Coverage of Sharing-bike APP



Product

Time for statistics: 2018/02
(Source : www.analysis.cn)

50.89%

49.14%

OFO

Mobike

Hello



OFO and Mobike occupies the vast majority of the market of the Sharing-bike industry.

5.64%

Profit-Mode



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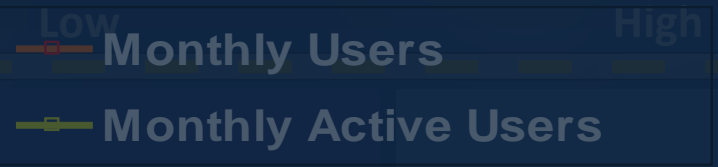
Solutions & Budget

Future of Industry

Business Growth Rate (Market Growth)

Fixed Base Growth Rate of Monthly Users (from Jan. to Nov. in 2017)

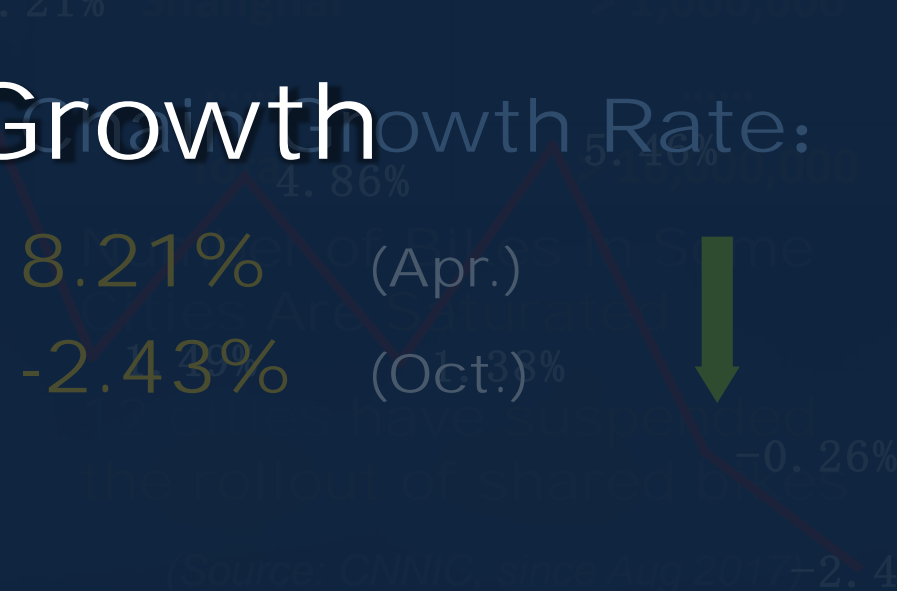
Relative Position (Market Share)



Low Market Growth



Chain Growth Rate of Monthly Users (from Apr. to Oct. in 2017)



Production (BCG Matrix)

Market Share

Relative Position (Market Share)

Low

High

Dogs

Cows

Question marks

Stars

High Market Share

Penetration Rate in Vehicle Service Industry

Sharing-bike Industry Scale:

	Mobike	ofo
2017.2	12.13%	5.08%
2017.1	9.85%	2.70%
2016.12	8.65%	2.50%
2016.11	1.40%	

Chain Growth Rate

	Mobike	ofo
2018.2	9.14%	50.89%
2017.10	49.4%	
2017.4	54.4%	

Proportion of Active Users

	OFO	Mobike	ofo
2018.2	36%	9.14%	50.89%
2017.10		49.4%	
2017.4		54.4%	

High Proportion

(Source: Iresearch 2019.2)



Production (BCG Matrix)

Mobike

Similarity

Production Orientation



Customer Relative Position (Market Share)

Low

High

Improve customer loyalty

Control the cost

✓ Stabilize the heavy asset investment in by Meituan bicycles.

✓ Reduce cost of capital on bicycles. investment and have strong capital dependence

Expand the market

✓ Transfer heavy asset investment in bicycle ecosystem field.

Business Growth Rate (Market Growth)

Low

High

Dogs

Cows

Question marks

Stars

Profit-Mode



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Investment Contrast-Venn diagram

Meituan provides financial support for Mobike to implement its future development. OFO has pledged core capital and the future financing is not optimistic.

Investors: Strategic
Cooperation with Tencent

Investors: Strategic
Cooperation with Alibaba

Mobike vs OFO

OFO

Mobike

Similarity

Cost Analysis



Customer

Focus on public relations

Improve customer loyalty



Product

Cow Production



Finance

Acquisition by Meituan

Depend on capital investment and have strong capital dependence



Bike-Cost

High-cost bicycle parts

Self-developed bicycles

Self-established factories



Profit-Mode



Case Overview

Situation Analysis

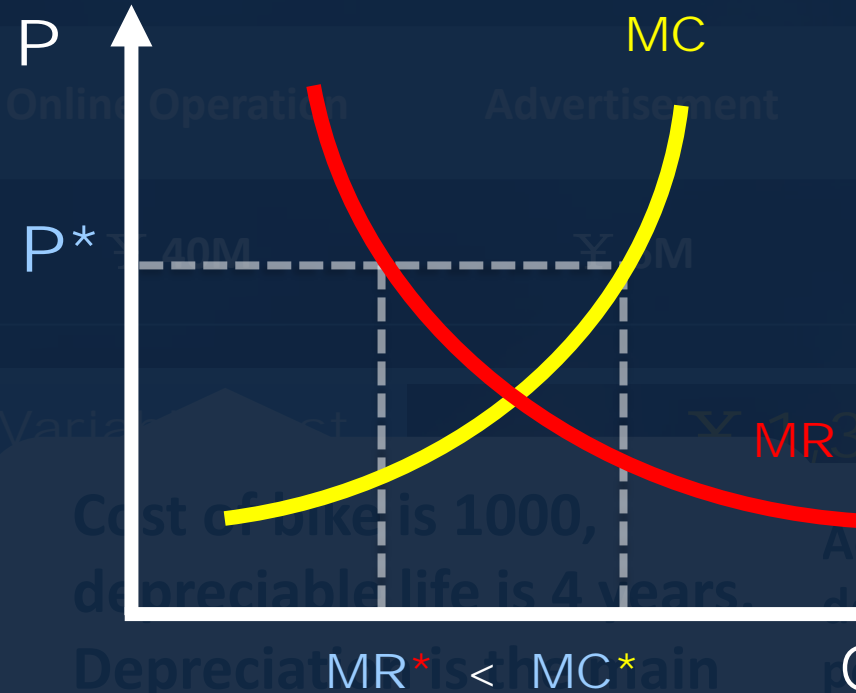
Strategy Model

Solutions & Budget

Future of Industry

Fixed Cost

¥2,233,500,000 Per Year



Margin Analysis

In terms of margin, the **marginal cost** of each by is **1382** each year and the **marginal revenue** is **1259**.

So we **can't deliver more bikes** under current condition.

Depreciat^{MR*} < ^{MC*}ain
part of total cost.

Q bike, the bike depreciation is 4 years and
the damage rate is 10%.



Cost (Sensitivity Analysis)

Cost Behavior

(Yuan)

35.1% decrease

Bike cost	1000	1500	649	500	300
Depreciation	250	375	162	125	75
Damage Rate	10%	10%	10%	10%	10%
Cost of bike	500	750	324	250	150
Operating cost	500	750	324	250	150
Other Cost	332	332	332	332	332
Maintenance Cost	100	100	100	100	100
Total Cost	1382	1557	1259	1207	1137
Income	1259	1259	1259	1259	1259
Net Profit	(123)	(298)	0	52	122

When the cost decreases to ¥ 649, each bike breaks even. At this moment, the changing

Cost of bike has a great effect on his final net profit and loss. Controlling the cost is vital!

Sensitivity Coefficient
=100%/35.1% = 2.84.
Profits are very sensitive to changes in cost of bike.

100% increase



Cost (Components of Bikes)

- Front Fork ¥ 200
- Basket ¥ 90

- Aluminium Alloy Frame ¥ 250

- Saddles and Seat Post ¥ 225

- Crank Set ¥ 100

TOTAL : about ¥ 1000

Although Controlling The Cost Is Vital ,
Cost Control Strategy Is **Not Feasible.**

The **price** of the same quality parts assembled together is similar to that of Mobike. So there is **little** scope for costs to fall.

(Source: Wholesale prices on 1688)

(a website owned by Alibaba)

Cost has a great effect on the final net profit and loss.
Depreciation is the main part of total cost.



Mobike vs OFO

OFO

Mobike

Similarity

Profit Mode



Customer

Focus on public relations

Improve customer loyalty



Product

Cow Production



Finance

Acquisition by Meituan

Depend on capital investment and have strong capital dependence



Bike-Cost

High-cost bicycle parts

Self-developed bicycles

Self-established factories



Profit-Mode

Profit from E-shop

Complete deposit free

Main profit from deposit and rental



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Rental (Break-Even Analysis)

Profit Features

(Yuan)

Depreciation per Year

250

Bike cost is ¥1000, depreciable life is 4 years

Damage Cost

100

Operation Cost

Maintenance Cost

(Sensitivity Analysis)

Other Cost

Cost

Bike Cost

CVP Analysis

Another Solutions...?

Volume



Cycling Times



Net Rental Profit



(Final Propose)

(Break-even Analysis (Rental))

Number of Annual Cycling Times

1842.67

If we want each bike can cover its cost, each bike must be cycled 5.05 times per day.

Number of Daily Cycling Times

5.05



Deposit analysis

Profit Features

(Source : Iresearch, 2019.1)

Deposit Flow
Total Deposit
Stable Deposit



Deposit: 299 yuan



5 million Users

As The Deposit Decreases,

It Is No Longer The Main Profit Point.



1.5 billion

Jan Feb Mar Apr May Jun Jul Aug Sep Oct

The Deposit Is Not Sustainable

Huge Capital Pool

With the gradual establishment of credit mechanism, deposit is becoming unreasonable.



Choice 1

Bank 0.35%
Demand deposit interest rate

5.23 million yuan



Choice 2

Yu'e Bao 3%
Rate of return

44.85 million yuan

We can choose...

- Earning interest by depositing money in a bank.
- Making profits by purchasing financial products.

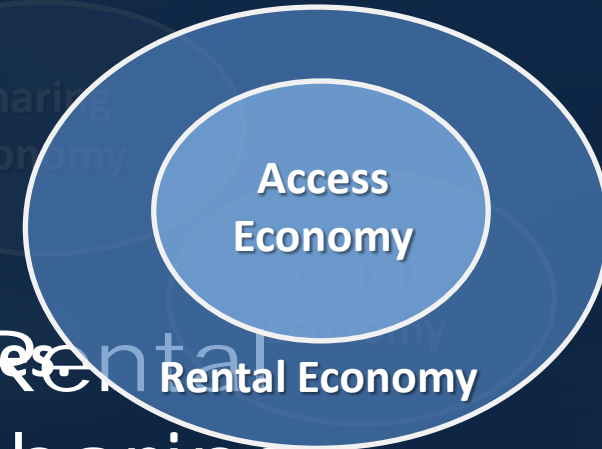


Rental Economy vs Access Economy?

Model Contrast

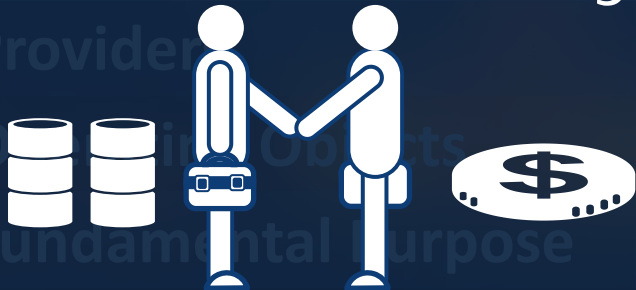
Rental Economy: Transfer the usage rights of items intended for **renting for a profit**, providing exclusive services.

Access Economy: Transfer the usage rights of items intended for **renting with internet**, providing exclusive services.



Economy, Access Economy and Sharing

Rental Economy?



+

Internet & IOT



=

Access Economy



Features of Service

Exclusive

Non-exclusive

Sharing Economy vs Access Economy?

Model Contrast



Factory



Service



Platform



Service



User

Fund Utilization

Access Economy

Funds mainly for purchasing assets



Sharing Economy

Funds mainly for platform operation



Cost/Profit mode

Buying and providing assets for leasing



Charging rental for assets



Providing platform to lease the idle resources



Charging platform service fee



E-commerce Mode

Business-Customer



Customer-Business-Customer



Sharing Economy vs Access Economy?

Strategy Model



Fund Utilization

Cost/Profit mode

E-commerce Mode

Access Economy

Funds mainly for purchasing assets

Funds mainly for bike production

Buying and providing assets for leasing

Charging rental for assets

Getting rental from renting the bikes
Mobike bought

Business-Customer

Providing bikes it has bought for customers

Business Model Canvas (Mobike)

Strategy Model

Strength

- ◆ Good quality bicycles
- ◆ Supply chain enterprise
- ◆ Tencent's finance & Merituan's acquisition
- ◆ High user activity level
- ◆ Government
- ◆ High market share
- ◆ Internet company
- ◆ partners & Competitors
- ◆ Multi-investment

Opportunity

- ◆ Support from Government & Investors

Core Business

- Bike rental
- LBS advertising
- C2B2C
- Ecosystem (Life circle)

Key Resources

- Mobike Lock
- Big Data + AI
- Customer Base
- Cloud Computing

Value Proposition

- Personalized travel
- High-quality bikes
- Focusing on customer loyalty rather than survival
- Brand premium

Customer Relations

- Public relations
- Delivery of brand value to the public
- ◆ High manufacturing credit mechanism
- ◆ High maintenance cost

Single profit model

- ◆ Customer sales
- ◆ Cooperative sales
- ◆ Dependence on Meituan
- ◆ Fierce competition (OFO, Hello Bike)

Customer Segmentation

- Young people aged 15-45
- App active users
- Habit of using Internet product
- funds

- ◆ Development of EC-Related Industries
- ◆ Huge potential in campus & other places
- ◆ Heavy asset operation & high maintenance cost
- Mainly fixed costs with almost no variable costs
- ◆ An era of blooming self-media

Cost Structure

- ◆ Income analysis
- ◆ Customers losing faith in this industry
- Current income:
- ◆ Recent trend of deposit refunds
- Bike rental
- ◆ Many alternatives of transportation
- Advertisement income



Strategy Map (Profit Competency In The Future)

Strategy Goal

Provide basis for IOT technology, GPS information

Upstream(Supplier)

Midstream(Platform) st Downstream(Consumer)

Advertising Strategy

Sharing Economy

Ecosystem Strategy

Scenic Area
Cooperation

Navigation Function

Fitness

Customer Feedback

Cycling Sport

High-end market
Exploration

Mobike-Coin Mall

Sharing Economy



Key resources Application: Advertisement



Customer base



Provide a huge customer flow, attracting merchants to cooperate in online & offline advertising



Big Data + AI



Cloud Computing



Merchants

Advertising

Information



Mobike Platform

Accurate
delivery of LBS

Cloud Computing+AI



User

30 min 1.0 yuan
Price

I WANT IT!

Plan B

 If you ride to this position, you will get a **coupons!**

Offline **cooperation with various brands** to achieve common publicity.



Monthly Average Number of Users: 49,924 thousand

Total number of cycling times per day: 91,775 thousand

70% of daily use happens in towns and cities and CBD

3% of LBS ads expected to be clicked

10 LSB cooperative merchants

(According to Statistics in 2017)

We referred to the Tencent and made a forecast

According to our hypothesis

Advertising will be our **core profit point** due to the rapid turnover of funds. It can **offset our loss**.

AD Type	Charging Mode	Charge Standard	CPM/EC	Cooperatives	Expected Daily Income(10 Thousand)
LBS	CPC	0.3/click	149.774	10	449.321
Open-Screen AD	CPM	100 Per thousand	4992.455	No Limit	499.245
Voice Broadcast AD	CPM	100 Per thousand	6424.234	No Limit	642.423
Total Income					1590.989
Income per Month					47729.692



Key resources Application: C2B2C Sharing Platform



Mobike Lock



Provide **location information and bike status** for the shares to facilitate platform management.



Customer base



Create demand for the new platform and conduct publicity to create conditions for campus promotion



Big Data + AI



Analysis on **users' preferences for bicycles**

Cloud Computing



Information of supplied bikes



Cloud Computing



Analysis on **location information of sharers and users**

Cloud Computing



Matching location information of sharers and users

We assume that depreciation period is 2 years,(Non-shared bikes' depreciation period is 3 years.) X as rental/hour and Y as bike's price.

$$X \cdot 0.423 \cdot 365 = Y/6$$

$$X = Y / (6 \cdot 0.423 \cdot 365)$$

Conclusion:

When the platform Extract 50% as a commission, suppliers(bike-sharers) will make a profit rather than have a loss.

Y	X	X/2	Price Range(per 0.5 hour)
500	0.5397	0.2699	0.5-1.5
1000	1.0795	0.5397	1-2
1500	1.6192	0.8096	1.5-2.5
2000	2.1589	1.0795	2-3
2500	2.6987	1.3494	2.5-3.5
3000	3.2384	1.6192	3-4
Above 3000			Above 3

When 100 bikes can be provided, why bike sharing?

We Made Assumptions for One School.

Situation 3

Number of students: 32,000

Number of bikes available: 8,396

Bike's Price	500	1000	1500	2000	2500	3000	
Proportion of Each kind of Bike	20%	20%	40%	10%	5%	5%	
The Number of Each Kind of Bike	20	10	20	10	5	5	
Rental per Hour	1	1.5	2	2.5	3	3.5	
Bike's income per Hour	0.5	0.75	1	1.25	1.5	1.75	
Total Income per Hour	20	2005	20	12.5	7.5	8.75	88.75
Average income per school per day	5,599.62						
Yearly income of one school				2,043,863			
Situation 1							
Situation 2				2,303,401			
Situation 3				2,368,285			

Daily actual income for these 100 bikes:

88.75 yuan



E2B2C Sharing Platform

Uncertainty

(Yuan) Cost & Expense
(Program in 2017)

Worries:

Operating cost

Maintenance cost

...

Total cost

Platform operation expense

Marketing

...

Bike Sharers and Users

Total expenses

I'm worried about the high rental brought by fake information.



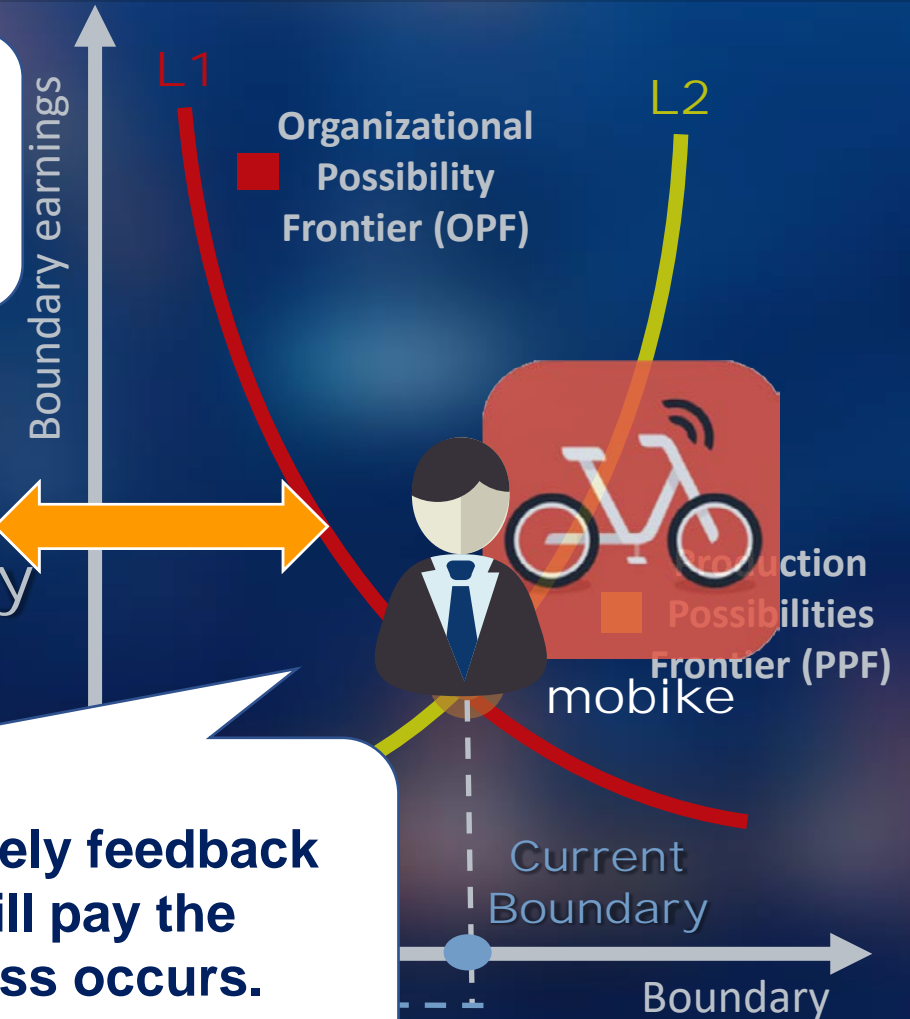
2,525.00

130.00



Our Answers:

Bike-users will provide timely feedback and insurance company will pay the compensation if serious loss occurs.

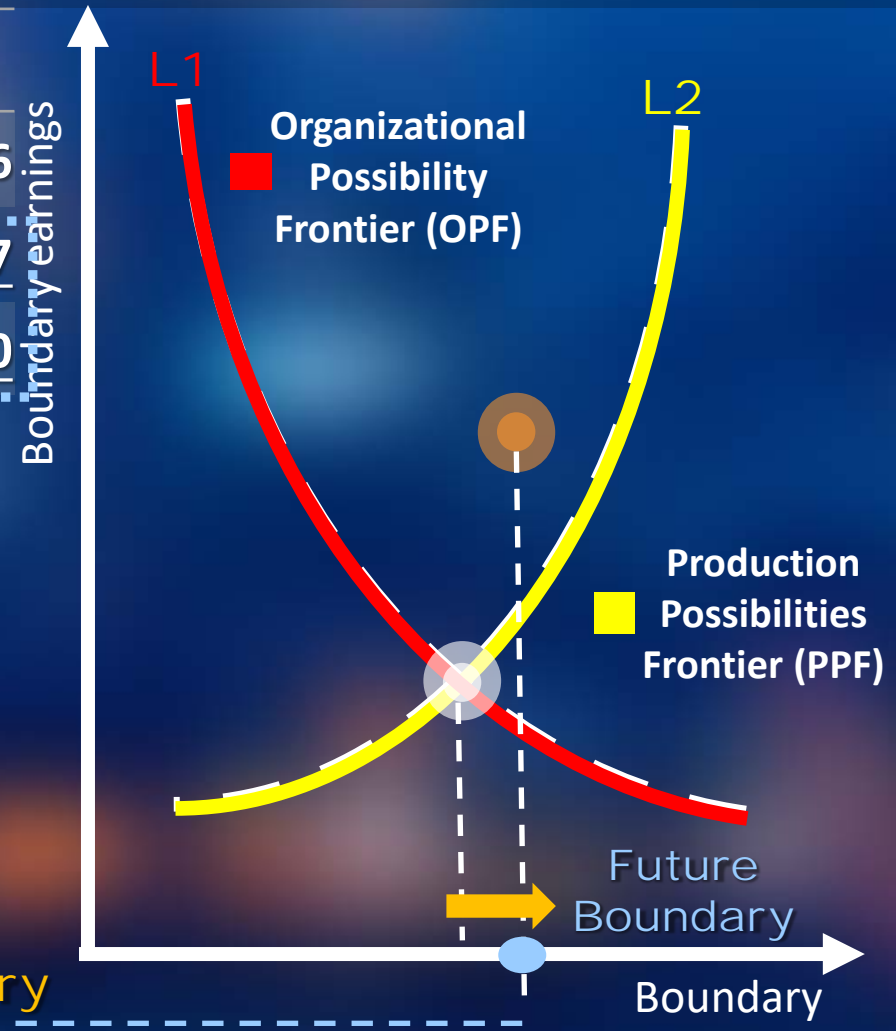


Ecosystem Strategy

Business Boundary

(Yuan)	Cost & Expense (Program in 2021)	Revenue (Program in 2021)
Operating cost	3,074.61	Riding revenue 6,451.56
Matainace cost	512.44	Advertising revenue 6,630.27
...	...	Other revenue-C2B2C 2,484.00
Total cost	5,893.00	
Platform operating expense	371.29	
Maketing expense	467.03	
...	...	
R&D expense	1,556.58	
total expenses	4,608.62	

+ ¥ 4708
Life Cycle
Life Cycle with Multiplicity
Operation
Multiplicity Operation
Larger Boundary



Breaking the Boundaries

Breaking Resource Boundary

Upstream

Accelerating Industrial
Integration

Midstream

Upstream

Resource Integration

- Developing new business models
- Focusing customer value

Platform Operation

"Internet +"

Making full use of
Internet in optimizing
the allocation of social
resources.

Conclusion:

Mobike not only creates a **travel APP**, but
also a comprehensive **living community**.

Customer Center

- Cooperating with scenic spots
- Exploring high-end market
- Integrating superior resources

Breaking Growth Mode Boundary

Technology Driven Mode

Value-added Services

- Building a fitness platform
- Forming a cycling sports circle
- Providing Incidentally-taking services

Break Market Boundary

Expanding Business Scope

Midstream

Downstream

Value-added Services

Creating Customer Value

Downstream

To build a customer-
centered life circle



Forecast

Forecast Map

	Short Term	Mid Term	Long Term
Advertising Strategy	Cooperation with 10 large enterprises in advertising	Cooperation with 100 large enterprises in advertising	Cooperation with other enterprises in advertising
	Voice ads implementation in important cities	Voice ads implementation in more cities	Increasing number of cities cooperated in advertising
C2B2C Sharing Platform	Promotion in colleges in first-tier cities	Promotion in more colleges	Promotion in communities other than colleges
Ecosystem Strategy	Primary establishment	Gradual consummation	Total establishment of Mobike living community



Income Statement Forecast

(million ¥)

	2017	2018	2019	2020	2021
Riding revenue	4,406.5	4,847.2	5,331.9	5,865.1	6,451.6
Advertising revenue	0.0	5,727.5	6,013.9	6,314.5	6,630.3
Other revenue-C2B2C	<u>0.0</u>	<u>92.0</u>	<u>276.0</u>	<u>828.0</u>	<u>2,484.0</u>
Total revenue	4,406.5	10,666.6	11,621.7	13,007.6	15,565.8
Depreciation	(1,312.5)	(1,443.8)	(1,588.1)	(1,746.9)	(1,921.6)
Operating cost	(2,100.0)	(2,310.0)	(2,541.0)	(2,795.1)	(3,074.6)
Maintenance cost	(350.0)	(385.0)	(423.5)	(465.9)	(512.4)
Cost of loss	<u>(262.5)</u>	<u>(288.8)</u>	<u>(317.6)</u>	<u>(349.4)</u>	<u>(384.3)</u>
Gross profit	381.5	6,239.1	6,751.5	7,650.3	9,672.8
Platform operating expense	<u>(130.0)</u>	<u>(169.0)</u>	<u>(219.7)</u>	<u>(285.6)</u>	<u>(371.3)</u>
Marketing expense	(421.2)	(589.7)	(648.6)	(583.8)	(467.0)
R&D expense	(440.7)	(1,066.7)	(1,162.2)	(1,300.8)	(1,556.6)
Other expense	<u>(1,512.0)</u>	<u>(1,663.2)</u>	<u>(1,829.5)</u>	<u>(2,012.5)</u>	<u>(2,213.7)</u>
PBIT	(2,122.4)	2,750.6	2,891.4	3,467.7	5,064.2
NET Profit	(2,122.4)	2,750.6	2,891.4	3,467.7	5,064.2

The Future of Industry

Theoretical Logic

Reasons for Failure

Procedure

Suggestions for Industry

Lack of customer feedback
Profit Mode



Establishing feedback mechanism

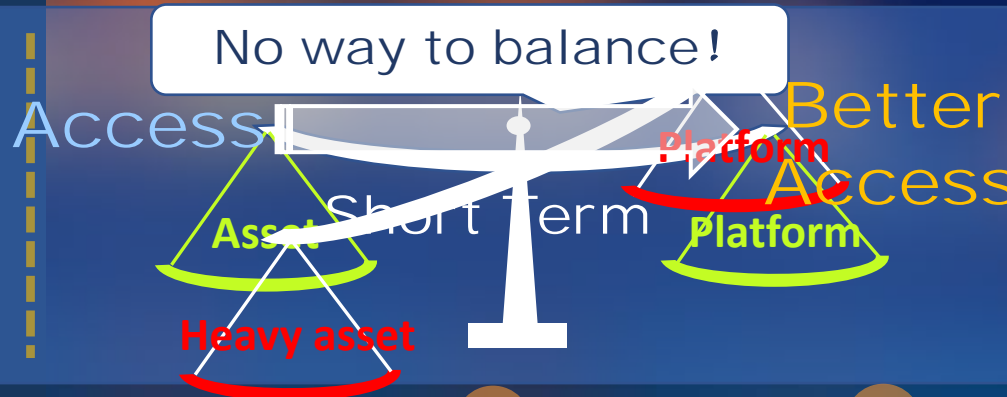
Consummating the platform
Rental + Advertising + Platform

Weak market power



Enhancing industry competitiveness

Business Model
Heavy asset operation



Building sharing economy platform
Long Term
Gradual transition to sharing economy
Access and Sharing



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Student Case Competition

**THANKS FOR
YOUR TIME!**

2019