Methodology of the Underlying Model of Internet Digital Economic Growth: Traffic, Customer Unit Price, Conversion Rate and Repurchase Rate

First author: Xiaohu Fu[a]*, Second author: Xu Wang[b]

Beijing City University and College of economics and management, Shunyi District, Beijing, China
Liaoning University and College of Physics, Shenyang District, Liaoning, China
[a]*Email: 2521714628@qq.com*
[b]*Email: 1444281136@qq.com*
*Corresponding author email: 2521714628@qq.com

Abstract:
In recent years, the operating costs of Chinese Internet enterprises have increased significantly, and the growth rate of operating profits has maintained double digits.
In 2021, China's Internet enterprises above Designated Size achieved a total operating profit of 132 billion yuan, an increase of 13.3 billion yuan over the previous year, a year-on-year increase of 11.2%, and the growth rate decreased by 4.71 percentage points over the previous year.
Disassemble the growth model of Internet companies through the four dimensions of traffic, conversion rate, customer unit price and repurchase rate, so as to provide new ideas for the growth of Internet companies in China, and then drive the development of the whole Internet industry.

Key words: Internet economy, traffic, digital economic growth model

1. Introduction

1.1. Research background

In recent years, the operating costs of Chinese Internet enterprises have increased significantly, and the growth rate of operating profits has maintained double digits.

In 2021, China's Internet enterprises above Designated Size achieved a total operating profit of 132 billion yuan, an increase of 13.3 billion yuan over the previous year, a year-on-year increase of 11.2%, and the growth rate decreased by 4.71 percentage points over the previous year.

Overall, the growth of the Internet industry is sluggish, and there is an urgent need for a set of landing methodology to guide practice.

1.2. Existing problems

To make the Internet economy grow, we must find the underlying logic that affects it.

Sales = flow * conversion rate * customer unit price * (1 + repurchase rate).

Suppose you open a store in Amazon, and the main category at present is women's clothing.

The traffic this month is 10000,

The conversion rate reached 5%,

The average unit price per customer is about 200 yuan,

The monthly repurchase rate is about 10%

At this time, you can calculate that your sales this month is about 110000 yuan (= 10000 * 5% * 200 * (1 + 10%))

However, many Internet companies do not know how to apply this model, so it is difficult to apply it to improve the growth of enterprise sales.

1.3. Research significance

If we can explore the specific methodology of this model, it will provide new ideas for Internet companies to break through the growth bottleneck and drive the development of the whole Internet economy.

2.   Materials and Methods

The problem to be solved: find the implementation scheme of the economic growth model of the Internet industry.

Research method: sort out various elements of the model through case analysis, and explore the scheme that can be implemented by layering users.

3.   Results & Discussion

3.1. Study on traffic

3.1.1. Replace shop with thriving business thinking with flow thinking

To get enough traffic, we should replace shop with thriving business thinking with flow thinking.

shop with thriving business thinking means sitting there waiting for consumers to come; Flow thinking means that users go wherever they are.

With flow thinking, it is helpful for us to find all user related contacts. These contacts may be the company's salesperson's initiative to promote products, advertise on some platforms, put services on some platforms, and cultivate private domain traffic.

3.1.2. Reduce the acquisition cost of traffic

Traffic is not always free. In most cases, traffic will become more and more expensive.

In order to make the ROI high enough, we need to find ways to reduce the acquisition cost of traffic.

There are three types of traffic: free traffic, winning traffic and buying traffic.[1]

Self owned traffic, commonly known as private domain traffic, is a user group that our products can directly reach.

These flows do not need to be paid and can be reused. They are generally precipitated in Wechat groups, personal Wechat and their own apps.

We need to build our own private domain traffic, build IP, establish relationships with users, enhance user recognition, and let users gradually form stickiness to products.

This kind of method not only does not cost money, but also has high traffic quality. It is our best choice.

Winning traffic refers to obtaining traffic through some strategies, such as fission, distribution, group competition, etc.

A good growth strategy will fission huge traffic in a short time and the cost will be very low.

We need to have a deep insight into users, find incentive bait that can let users spontaneously spread, and form a logical closed loop.

Buying traffic refers to a way to get traffic by paying for advertising on some channels.

When selecting channels, we should promote Lean:

a) Can channels be tracked

Can you see through the data how many users this channel has brought to us today, this week and this month? If accurate statistics cannot be achieved, it is blind investment, and it is difficult to evaluate the quality of the channel.

b)   Is LTV (user lifetime value) greater than CAC (user acquisition cost)

If the commercial value brought by the traffic of this channel is lower than the cost of delivery in this channel, we may have to give up this channel, because it is destined to be a loss making business.

c) How accurate is the user

Are the users brought by this channel what we need? If your product is aimed at male users, advertising in XIAOHONGSHU channel is not a good choice, because XIAOHONGSHU user group is mainly women.

Generally, we will give priority to free traffic, then win traffic, and finally buy traffic.

3.2. Study on conversion

Users will lose every step from seeing advertisements to finally buying products, just like a funnel.

The conversion rate from the previous step to the next step cannot be 100%, and there will be loss in each step.

In most cases, the more steps in the whole process from advertising display to transaction, the greater the overall loss.

Then, how to improve the conversion rate?

In the book "super conversion rate: how to make users order quickly"[2] Mr. Yong Chen gave specific solutions, which are mainly divided into two steps.

Step 1: operate the whole process from seeing the advertisement to the final payment, and write down each operation to know how many layers of conversion rate will be involved. (sort out all links)

Step 2: find the main factors affecting the conversion rate of each step, optimize it and improve the conversion rate of each step. (find influencing factors)

Take an example to help you understand.

If your company is doing domestic service, the boss thinks the recent performance is not good enough and

sends you to do promotion.

Through analysis, you know that most people search housekeeping services through Baidu.

At this time, you choose Baidu paid promotion as your own promotion channel.
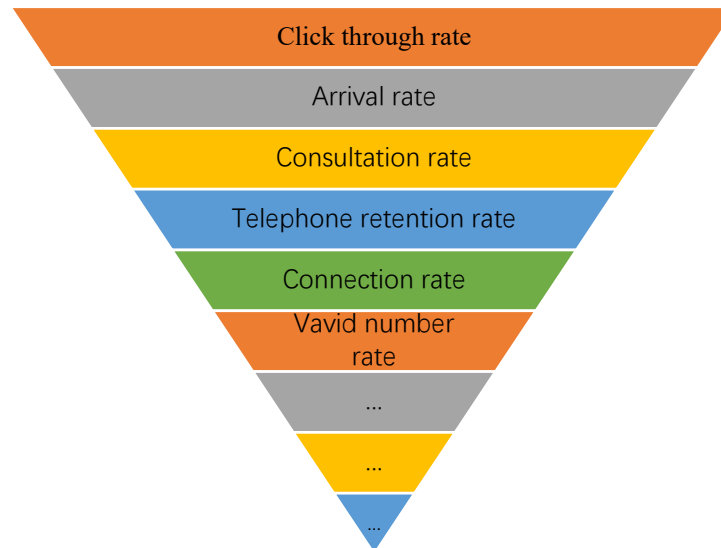
You recharge your money in Baidu and choose keywords related to housekeeping for delivery.

The daily exposure of advertisements is clearly 1000, but less than 5 people are really consulted, not to mention the payment. There is no one, but the money is not spent less.

At this time, you can sort out all the processes of users from seeing advertisements to clinching a deal.

Table 1 Transaction funnel

| Click through rate |
| Arrival rate |
| Consultation rate |
| Telephone retention rate |
| Connection rate |
| Vavid number rate |
| ... |
| ... |
| ... |

Now, you need to optimize the above 9 steps.

Through the data, you can know the conversion rate of each step, find the place with low conversion rate, find all the factors affecting it, and finally optimize it.

3.3. *Study on customer unit price*

Customer unit price is how much a user spends and buys at a time.

To borrow the words of Run Liu, the founder of RUNMI Consulting:

How much will a customer buy from you? I bought a suit. Does it come with a belt? I bought a belt. Do you have a pair of leather shoes? How much does it cost him to spend with you once? This is the customer unit price.

The higher the customer unit price, the more customers you meet.

In addition to the needs he offered, did you meet his potential needs by the way? This will help you greatly increase the customer unit price.

Then, how to tap the potential needs of users?

Increase the joint rate [2]

Joint rate refers to the rate of products jointly sold by deeply excavating relevant needs from the initial needs of users.

It is mainly divided into four ways: collocation joint, price joint, family joint, and large pieces with small pieces.

3.3.1. *Collocation joint*

The most typical example is the recommendation of e-commerce products.

When you add a mobile phone to the shopping cart in jd.com for payment, there will be a "you may still like" column under the shopping cart to display products related to this mobile phone, such as rechargeable treasure and Bluetooth headset suitable for this mobile phone.

At this time, will you consider buying them again?

3.3.2. *Price joint*

Price is linked, that is, high price with low price.

When you order at McDonald's, the waiter asks you if you want to add 2 yuan to upgrade to a richer set meal. Will you be excited at this time?

3.3.3. *Family joint*

When you meet a suit of clothes in the clothing store, the waiter may say to you: you look beautiful in this dress. We also have lovers' styles here. Do you want to bring one for your boyfriend?

3.3.4. Large pieces with small pieces

Next to the cash register in the supermarket, there are often some commodities with the price of 1 yuan, 3 yuan and 5 yuan. When you check out, you find that the total is 197. At this time, will you choose to take some small pieces of 3 yuan to make a whole?

3.5. Study on repurchase rate

The repurchase rate is how likely it is that the user will come again after leaving.

If the user buys it for the first time, will he buy it for the second or third time?

How can we make users continue to come back and buy our products?

3.5.1. Member + user growth

Members: by deeply binding users with members, users of preferential members can enjoy more value-added services, so as to improve users' purchase frequency. JD plus members are a good example.

User growth: you can design a growth mechanism for users, just like the hierarchy of QQ, so that they can continue to grow with the deepening of the use of the product, and then it will be difficult for them to leave your product.

3.5.2. Lean Operations

Some means can be used to layer the users of the product and lean the operation of each layered user.

We can classify users according to RFM model.

a)   R: Recency, the latest trading time

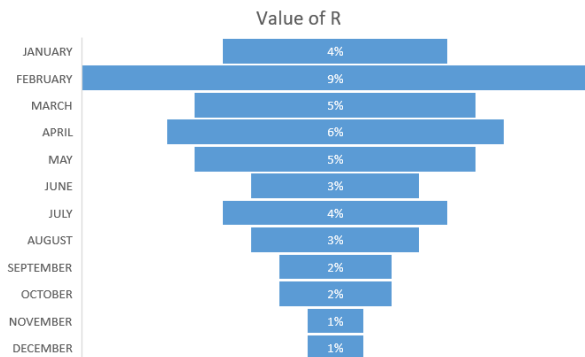The following figure shows the R-value distribution of the latest consumption of an Internet retail company.

Figure 1 R value of an Internet company

The R value of customers presents a regular "wavy" distribution. The longer the time, the smaller the wave.

b)   F: Frequency, transaction frequency

The following figure shows the distribution of F value of the latest consumption of an Internet retail company.
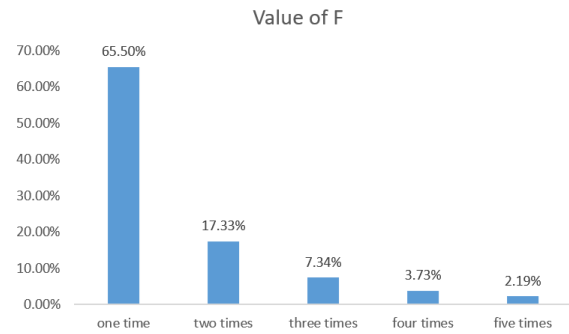

Figure 2 F value of an Internet company

Purchase once (new customers) accounted for 65.5%, and repeat purchase (old customers) accounted for 34.4%;

The proportion of customers who buy three times or more (mature customers) is 17%, and the proportion of customers who buy five times or more (loyal customers) is 6%.

c) M: Monetary, transaction amount

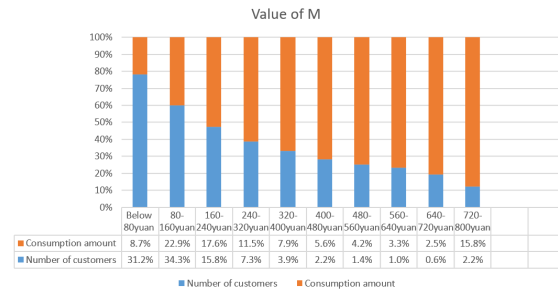The following figure shows the M value distribution of the latest consumption of an Internet retail company.

Figure 3 M value of an Internet company

With the data of the above three dimensions, each user can be measured according to each dimension. Generally speaking, we will select a reasonable score to divide R, F and M. The three dimensions are divided into high and low categories respectively. The combination is 8 categories, which forms 8 user groups.[4]

Table 2 RFM model

R score	F score	M score	RFM score	Customer type
high	high	high	222	High value customers
high	high	low	221	General value customers
high	low	high	212	Key development customers

high	low	low	211	General development customers
low	high	high	122	Key maintaining customers
low	high	low	121	General maintaining customers
low	low	high	112	Key retaining customers
low	low	low	111	Potential customers

You see, by classifying users, we can take specific actions according to the classified user characteristics.

For example, for "key development customers", that is, users who have a short purchase time and a high purchase amount but have a low purchase frequency, they have a high purchase intention and purchasing ability. They can recommend relevant products for them and improve their purchase frequency.

Then, for " Key retaining customers ", that is, users with large historical transaction amount but haven't bought for a long time, coupons can be issued to them to stimulate their consumption.

3.5.3. Peak end law[5]

Whether people feel good or bad about an experience is determined by the peak and end of the experience.

When users go to Starbucks for consumption, the decoration style, background music, coffee taste and packaging, and the professional skills of the clerk make users feel the unique charm of this cup of coffee all the time, which is the peak of experience.

When you leave, the clerk still smiles sincerely, which is the final value.

Users will selectively forget the poor experience of long queues, high prices, long production time and difficult to find seats when buying coffee. Naturally, they will have a good impression of Starbucks and will still consume coffee here next time.

In your product, can you integrate the peak end law into the whole link from user browsing to purchase?

3.5.4. Value reservation

Have you ever encountered such a situation? When you recharge on a platform, you have only a few fixed amounts to choose from: 6 yuan, 68 yuan, 88 yuan, 208 yuan, 388 yuan and 998 yuan. When I actually buy products, the price is often 199 yuan. After I buy products, I always have some change left in my account.

At this time, I always want to buy something to consume it, but there is no product with just the right amount, so I unconsciously replenish money (loss aversion).

So it's important for users to leave something in your product.

Can you let users leave more things in your product as much as possible? This may attract them back to continue spending.

## 4.	Conclusions

### 4.1.	Draw conclusion

To improve the growth of Internet companies, we can start from four aspects: traffic, conversion rate, customer unit price and repurchase rate.

Sales = traffic * conversion rate * customer unit price * (1 + repurchase rate)

In terms of traffic, we should look for all contacts with users, and think about reducing the cost of obtaining traffic.

In terms of conversion rate, we should sort out all processes from users' seeing advertising to final payment, find the links with low conversion rate, think about the factors affecting it, and then optimize it.

In terms of customer unit price, we should find ways to improve the connection rate and tap the potential needs of users.

In terms of repurchase rate, we can use member + user growth, lean operation, peak end law, value reservation and other means to let users return to the product for consumption again.

In the business world, we should strive to find the underlying laws and have a definite aim.

### 4.2.	Research meaning

Provide growth ideas for people engaged in the Internet industry. Internet practitioners have a clear aim when doing company operation and growth.

Promote the development of the entire Internet industry and provide a set of solutions that can be implemented to solve the growth bottleneck.

References

[1]	Li, Yunlong (2019) growth thinking.China Citic Press, Beijing

[2]	Yong Chen (2019) super conversion rate: how to get customers to place orders quickly.China Citic Press, Beijing

[3]	Run Liu (DEDAO), 2017 Joint and several rate:

customers have been shopping for a long time and haven't bought much. What should they do.https://www.dedao.cn/course/article?id=aYB83z 6N9dqxVy1bEV7ZMvy0GQDO5g&source=search

[4] Miko (RENRENDOUSHICHANPINJINGLI), 2017 old customer recall strategy - RFM model and Application.http://www.woshipm.com/operate/666 103.html

[5] Neil Kahnman (XUEQIU), 2002, law of the end of the peak.https://xueqiu.com/9745632746/175228554