# Research on the Launch of Knowledge Payment App Based on SWOT Analysis

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### ABSTRACT

Modern society has already stepped into a new era, and advanced technologies have greatly influenced daily life. People can satisfy most of their needs using apps on their phones, so many new apps have emerged, followed by a series of problems for the promulgators. The app introduced is a new try of enriching people's life and at the same time offers a significant example of similar consulting app production. According to the realistic external and internal situations and the performance of current tools with a similar function, SWOT analysis plays an important part in the research process by clearly listing the app's strengths, weaknesses, opportunities, and threats. The results show that people are willing to use and pay for the payment app. More specifically, the general public likes to pay for the information and knowledge, which means app producers could also gain profits. Users prefer the video rather than other presentation forms. In conclusion, knowledge payment apps can be the major market force in the future, and for the whole fourth industry is predicted to increase dramatically.

Keywords: SWOT, knowledge payment, new app discussion

# **1. INTRODUCTION**

In the current situation, there is an obvious trend. An increasing number of people prefer to invest in the fourth industry since the main trend now is to invest in new industries, as media reports say such industries will see explosive growth in the future [1]. Also, the economic development of such industries has great potential to bring a more positive impact on the current economic situation. At the same time, today's society is more information, which means we can't leave information technology. Therefore, this industry can also help improve our industrial structure and enhance the country's economic strength. Moreover, when this technology is becoming popularized, society can be more stable and harmonious.

In this intensely competitive period, consumer demands are changing rapidly, so enterprises need to change their plans according to the variations.SWOT Analysis is widely used in business strategy planning and help companies solve many problems, for instance, the case of McDonald using the analysis method to make a better evolution in several aspects like services, expansion, products and food health etc. [2]. And also, it can devote to some regions' development and make some specific strategies to achieve a higher economic goal of the city, like Research on the Development Strategies of Rural Tourism in Suzhou Based on SWOT Analysis [3]. Another significant usage of SWOT is testing and evaluating the influence of advanced technologies, CCS technology development in China: Status, problems and countermeasures—Based on SWOT analysis [4].

As a result, we take this opportunity to find new business opportunities in the current situation. Our subject is the app that provides professional suggestions for the user and the research method that we use called SWOT. The main topic is how we can be outstanding during the fierce competition in the fourth industry [5].

# 2. DATA AND METHOD

## 2.1.DATA

83% of users choose Zhihu LIVE, 20% choose Ximalaya FM, and 21,05% choose other users, which may be related to the time when APP appeared. It can be seen from Figure 1 that users prefer to use the knowledge payment apps in a concentrated manner. In contrast "other" apps account for a high proportion, indicating that



users' preference for the knowledge payment apps in a minority category is scattered.

As shown from Figure 2, there are three main acquisition channels for users: the first is self-discovery, the second is a blogger or public account publicity, and the third is the recommendation by friends or teachers. According to the user acquisition channels reflected in Figure 2, operators can set promotion strategies for publicity.

Information overload is serious under the background of information explosion, and users need to spend more time and energy finding the required information from the massive information data. The survey results show (see Figure 3) that

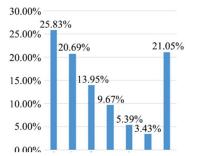
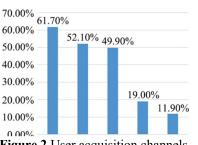
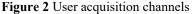


Figure. 1 APP used by the respondents[6]





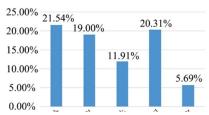


Figure 3. Purpose of using knowledge payment APP

Through the topic of "consumers' preferences of payment APP ", users' preference for resource types is investigated. According to the data analysis, 55% of users prefer paid course apps. Paid columns (17%) and paid reading (18%) followed. Finally, paid rewards (only 10%) (see Figure 4). It can be seen that course apps are more popular among users, which indicates that users prefer the carrier form of video and audio because the carrier form, of course, is closer to the traditional lecture mode, which is more likely to be accepted.

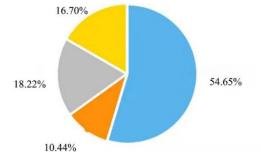
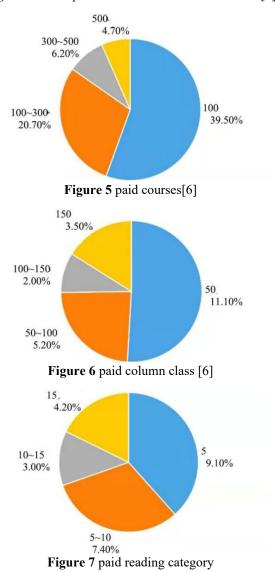


Figure.4 Users' preference for carrier form of APP [6]



Users' preference for product presentation form

Presentation have different characteristics, such as graphic products, with convenient access, easy to store the characteristics; audio products have the characteristics of strong accompaniment, making full use of fragmentation time and strong appealing. On the other hand, video products are intuitive and easy to mobilize the enthusiasm of users. Audio + video + graphic products combine the advantages of each type and make up for the deficiency of different presentation forms. After investigating users' preference for product presentation forms, the results are shown in Figure 7&8: the form of video + audio + text is the most popular, with an effective percentage of 54 57%, far exceeding other presentation forms, which indicates that the more comprehensive presentation forms are, the better they meet users' needs.

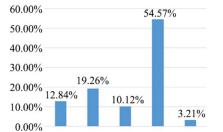


Figure. 8 Users' preference for carrier type and form [6]

# 2.2. METHOD

SWOT is a strategic analysis method, a situational analysis based on the competitive environment and conditions from the inside and the outside [7]. Heinz Weihrich, a professor of management at the University of San Francisco, proposed this study method in the 1920s. It evaluates comprehensively and draws its final conclusion by analyzing the main strength. This weakness is closely related to the analysis object and searching and listing the factors like the outer opportunities and threatens. To understand the opportunities and challenges the object face, it combines the inner resources and outer environments organically to clearly determine the weaknesses and the strengths so that it becomes more accurate to adjust method and allocate resources at the strategic and tactical level to guarantee the implementation of the object and to reach the investigation objectives to be achieved. By applying SWOT, comprehensive, systematic and accurate research to the circumstances of the analysis object is available. Thus the user can make a directly appropriate plan and develop a risk-specific countermeasure. SWOT Analysis is now being applied by multiple enterprises in different aspects like business management, manpower resource and product development [8].

SWOT is separately short for strengths, weaknesses, opportunities and threats.

SW is an analysis of the internal conditions that are profoundly identifying self resources and capacity to take appropriate measurements while maintaining competitive advantages.

OT is mainly used to analyze external conditions. However, with the rapid growth of the economy and scientific technology, especially the trend of economic globalization, the establishment of global information networks, and the diversification of consumer demands, the external environment has become more and more open and volatile. The change has deeply impacted almost every enterprise. Therefore, the outer environment analysis has gradually become an essential business function.

Taking full advantage of SWOT can effectively uncover the favorable factors, clear the developing direction and focus on problems urgently waiting for solutions. As a result, it can save much time and money to keep away from danger and discover existing problems.

# **3. RESULTS AND DISCUSSION**

# 3.1. Strength

## 3.1.1. Product Advantage

Nowadays, people are often occupied with their work and their spare time is very limited, so most people are chasing a fast lifestyle, like getting a take-out during noon beak, buying most of their clothes on online shopping centers like Taobao, and even reading books reviews or the other readers summary instead of reading the whole book. So a hobby becomes more expensive to time. However, planting flowers is obviously a better choice for modern people. It does not need too much attention or company like raising a pet, and it does not need too much money like collecting some artifacts. Also, green plants can bring fresh air and relaxation to the planter, create a better environment for their home and improve their living quality. The original goal of this app is that it can offer efficient service for the customer. Compared with traditional consultation on flower problems that customers need to go to the flower shops or online artificial consultant, the data analysis based on an abundant database can send the answers to the customer at a rapid rate.

# 3.1.2. Professional Advantage

There already have some search engines which has the consultant function. Baidu Knows, which locates on the Baidu website, offers a platform for askers and answerers [9]. However, the answers are not quite accurate and timely. For example, when asking about "the reason for this flower's illness (posted together with several pictures)", the questions below provide limited choices, and it does not have much information basis according to the environment of the flower. When typing on the search engine, the answers do provide many choices, but it is very hard for non-professionals to recognize the accuracy and choose which one to operate [10]. So a program that can select the best answers based on the professional database and the suggestions from the experts becomes needed.

To get a more accurate result, the app uses an advanced detective technique, which is used by shooting a photo of the plant's leaf, stem or root (on special circumstances), and the program will process the data it gets from the picture. After the app gets every data it needs, it will transfer the figures into the indicators of important



factors (soil moisture content, air humidity, the content of essential elements for growth, etc.). Customers can get a report of the comparison of these tests and normal figures. After all these tests, the suggestions are more reliable and can be matched perfectly with scientific results.

#### 3.1.3. Service Advantage

Meanwhile, as the app can provide useful nutrient solution links, it must cooperate with garden supply companies with excellent reputations. As we all know, there are many online shops nowadays, and shopping online has become a typical characteristic of modern people's life. Many problems are following, too, like fake products, a trick price, or some unreasonable delay. So selecting and providing a better product is also a main function and strength of this app. The app does not need to sell any products. The only thing to do is adding the link of certain products to the end of every suggestion of the flowers' condition. Accompanied with the product, customers can clearly see the feedback of former buyers and decide freely on whether to buy it or not.

# 3.2. Weakness

The app we designed is based on the artificial perception system, so it is really important to finance the servicer and internet. For example, there will be a large number of users which means our servicer needs to be able to all them to use the app simultaneously, so we should develop the system and provide a stable platform. Also, maintenance cost is considered a key part too because in this industry, our app can be attached by the heck and virus, resulting in the app breakdown. To avoid that happen, we should use main our internet and service regularly, and that fee is such a high cost.

In terms of the risks, I'd like to mention that there are countless threats, and they are in many aspects. For instance, people nowadays are used to searching information on the search engine which means we have difficulties letting them use our app. To deal with that, we have to make a difference between the app and website, like providing higher quality information(providing expert advice instead of general information) and trying to make the app into a specific field rather than offering information from all fields. As a result, we are likely to own the stable user number, which could increase in the future. However, although we could make this app without any problems, we cannot ensure our app can be the consumer's first choice. This uncertainty can not control by us.

# 3.3. Opportunities

#### 3.3.1. Covid-19

Under the current situation of Covid-19, it is dangerous to go to crowded markets. As in many cities,

the flower shops often gather in a large market. Although wandering on the flower shops' street is quite enjoyable, the limited relaxing time and current condition of people trying hard to protect themselves from being infected have made it hard to come true. Many companies have created new business models to deal with this difficult condition. For example, some offline supermarkets started delivery services to send daily necessities to the customers' homes. A number of attractions use virtual programs to put the famous scenes of the attractions on the Internet. All these measurements attract many customers and come to a new working stage. This app is also a pleasing result of the new time. It is operated as if we move both flower shop and experts' office to the Internet. This is an excellent institution for flower lovers, which can satisfy customers concerns for their flowers and wish to know more about plants while getting information from botanists.

#### 3.3.2. Policy Implication

As the government has put out regulations to reduce working pressure and limit people's work hours, office workers' right to rest is under the protection of the laws. As a result, they will have more opportunities to develop their hobbies, and planting can be a perfect choice for them.

#### 3.3.3. People's Changed perception

With the development of technologies, people have been accustomed to finding what they need online. For example, instead of going to restaurants for dinner, many people prefer calling for delivery on an app. So an app that offers rich information can be accepted quickly and attack many stable users. Another chance for the app is that people begin to enjoy life and find methods to improve their life quality. As the plant is a very popular decoration, more people will choose to plant flowers in their homes. Thus, professional suggestions and accurate data analysis will be very popular.

#### 3.3.4. Effective Promotion Channel

As there are many active influencers on social media, a good product can be quickly known by a wide range of people. Therefore, we do not need to worry about how to put on ads because we need to recommend the app to someone who has a certain amount of followers. Therefore, with the precondition of a nice system and considerate service, the app can get some users fast at the early stage of its promotion.

## 3.4. Threaten

## 3.4.1. Intratype Competition

There are a lot of X factors that affect us when we make software. Just like the market will have peers and

competition, which means that we need to complete the production of this product at the same time the industry needs to make their own characteristics and need to make characteristics to stand out in the competition.

# 3.4.2. Malignant Competition

Moreover, when we are doing business, strong competition is the thing we have to consider. Like other apps, producers may imitate what we did and attract consumers' attention with any method. For example, they will design an APP that is very similar to our software, commonly known as piracy, and to attract more users, they will choose to provide the service to the public for free. This means that our potential customers are attracted by their free usage, which affects our normal revenue. So we need to protect our source code and related materials, and when necessary, also use the law to protect their rights and interests. In addition, in the fierce competition, we should focus on the development of software and pay attention to the relationship with employees. If there is a contradiction in this, peers will be malicious to employ people. That means the whole project will come to a standstill, so we need to focus on communication with employees.

# 3.4.3. High Operating Costs

Meanwhile, as an app producer, there are various expenditures, not just for creating the app(hire the staffs and the fixed cost like the renting and so on), but the cost on the maintenance, because now viruses and malicious attacks on the network have become a normal. Therefore, we need to allocate some budget for software protection. Otherwise, our software will not be able to run when attacked, which will affect the normal use of users and thus reduce their satisfaction with us.

# **4. CONCLUSION**

Based on the researches and reports from the internet, we found that nearly 80% of people are willing to search for information through the app. For example, the platform is quite well-known and authoritatively called CNKI. At the same time, compared to Baidu, the accuracy of the information on these platforms cannot be guaranteed because Baidu allows all people to upload things, so it is difficult to ensure the accuracy of the data, so most people are willing to go to more authoritative or specialized platform. At the same time, we also found some surveys on users' willingness to pay and found that most of them spend a small amount of money on these platforms, less than 100 yuan, and most of them are willing to spend money on paid courses. Therefore, we can use these data to analyze our products. In addition, in different carrier types, video and audio are accepted by most users, so it can also help me optimize the product and improve its quality. In the current situation (COVID-

19), news reports that this kind of information service industry will see a spurt of growth. Therefore, we can use these advantages and information for our own software development.

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