

Critical Analysis of Baidu's Business Strategy

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Abstract. People's life is inseparable from the Internet. However, network information is a huge collection of various information resources. Its quantity is growing rapidly, disorderly, quality varies, and there is no certain organization and control. This brings great inconvenience to people's search and acquisition of information. It is very necessary and important for all network users to accurately and efficiently obtain relevant and applicable information to their needs from massive amounts of information. Search engines can help users find information about themselves in trivial information. Baidu.com has become the leader of China's Internet competition in the world with its relatively conservative specialization strategy. Baidu's brilliance is innovative profit models, tailor-made development strategies, and clear marketing models. At the same time, there are also disadvantages that restrict its development. Thus, this article analyzes the impact of Baidu's profit model, competitive advantage, shortcomings, shortcomings, and advertising models on business strategies by combing the previous literature.

Keywords: Profit model, competitive advantage, advertising models.

1. Introduction

Baidu was founded in 2000. It started with business on Internet and has China's leading search engine. Nowadays, Baidu defines itself as an AI company. While maintaining its leadership in search, Baidu vigorously develops AI-related businesses. The founder, Robin Li, obtained a patent for the hyperlink analysis system in the United States and founded Baidu after returning to China. It is a technological business based on autonomous control and provides the basic technology of the Internet, rather than concentrating on the provision of Internet content or the portal website [1]. Baidu blended the most cutting-edge network technology available with the quick growth of the Chinese internet economy. Characteristics of the Chinese language, as well as the state of the Chinese Internet economy, which created China's platform for Internet information transmission and retrieval and applied the most cutting-edge business model [2]. As a result, this becomes the finest provider of Internet technology in China and offers high-value technical services and products for the entire Chinese Internet. The core business of Baidu's online marketing services mainly includes search services, including Baidu Search, Baidu App, Haokan Video, etc. for ordinary users, and bidding P4P (pay for performance, pay for performance) services for merchants, etc. Baidu has been dedicated to offering customers "simple and dependent" Internet search services and has been relentlessly pursuing technological innovation while relying on the profound wisdom of China. Each day, Baidu answers to over 300 million queries from 138 different countries [2]. Users can find the relevant search results through Baidu homepage. These results come from Baidu's Chinese web pages database of more than 10 billion yuan. Baidu has been committed to listening, digging and meeting the needs of Chinese netizens, and adheres to the concept of user experience. In addition to web search, it also provides a variety of search services such as MP3, pictures, videos, and maps. It is the first to create a search community represented by posting bar, knowing, encyclopedia, and space, which integrates the wisdom in the minds of countless netizens into the search. At the same time, users do not have to access Baidu's homepage, and they can also search for information. Baidu search can be conducted online at any time by users, and over 200,000 search alliance websites integrate Baidu search into their own websites in a variety of methods [3]. In addition, Baidu provides a bidding ranking business and precise advertising services for various enterprises. Every month, tens of thousands of companies have obtained business opportunities through Baidu and hundreds of large enterprises use Baidu search promotion and advertising services. Searching for and promoting thriving businesses emerged

as a response to the ongoing enhancement of users' search results. By offering search engine business, it has helped hundreds of thousands of small and medium-sized businesses in China survive and grow over the years. Baidu which based on search promotion has also developed rapidly. Large enterprises focusing on the world's top 500 companies have carried out brand promotion based on search and promotion on the Baidu search platform to create for enterprise brands and product promotion [1]. In recent years, Baidu has adapted to the needs of its users. After entering the C2C e-commerce space, it started offering users practical services. Baidu provides users with more convenient services, especially on search engine. Although Baidu is already the leader of China's search engine and has also implemented a comprehensive business model, it also has the disadvantage of restricting its development. Through the combining and analysis of previous research, this article will analyze Baidu's profit model, competitive advantage, disadvantages, products, and advertising models in order to better understand the impact of business strategy of Baidu.

2. Profit Model

Search engines are always developing and improving their operations, as well as investigating viable business models [4]. As an organization, Baidu must deal with two key clientele: regular Baidu users, and users who use Baidu to find information. Commercial clients that transact business directly with Baidu make up the other group. Baidu offers information retrieval services to regular users; in exchange, they receive network click-through rates rather than money. Baidu offers technology or advertising to businesses in order to generate significant revenue. Baidu gets funding from this source in order to grow and run sustainably. Its main profit models include bidding ranking, fixed ranking, mobile search, technology licensing, and service charging etc.

2.1. Ranking of Bidding

Websites that have bought the same keyword are ranked according to the bidding ranking, which is based on the idea that the highest bidder gets listed first [5]. When a user submits the corresponding keyword for search, a promotion method in which websites with higher bids will appear at the front of the search results page. On the left side of the search page are the results of the bidding ranking and the search. The product details and associated URL links for retailers who have purchased matching keyword rankings will show up in the top few spots of the search results [1]. Moreover, the word "Promotion" is displayed on the lower right side of the relevant information. The mixed display of bidding ranking results and search results will have an impact on the user's search experience. Some companies that are not highly relevant to the search keywords submitted by users are ranked at the front.

2.2. Technology Transfer

While some people find it important to use search technology, search engine technology development is quite expensive. Companies who do not primarily deal in search services are hesitant to commit significant financial and human resources to the advancement of search engine technology [4]. Customers who run huge search engines want to buy pertinent search technology from these organizations. Given its position as the leading Chinese search engine globally, Baidu stands to gain financially from the sale of its Chinese information processing technology and other search engine-related assets. General portal websites, online sales websites, job search websites, etc. will all apply relevant search technologies and are feasible market objects for technology authorization. For example, Baidu once transferred search engine technology to Sina.

2.3. Wireless Search

Based on mobile network search technologies, the phrase wireless search is used generally. Information service material, including mobile value-added services, interactive voice answers, and brief messages, can be found by users searching through a variety of access ways [6]. Users can also

select search results and customize related mobile value-added services. With the advent of wireless search, users' search demands are now met anytime, and without regard to geography, networks, or hardware constraints. At the same time, the rapid growth of mobile value-added services provides opportunities for the development of the wireless search industry. Mobile phone-based wireless search services use natural sentences to search for information and services that users care about, which to a certain extent expands the number of search users [7]. Wireless search has the potential to benefit from a high number of mobile phone users. The characteristics of these users that are different from Internet users have put forward higher requirements for the functional realization of search technology [4]. As stated by the head of Baidu's section responsible for strategic development and partnerships, Baidu and Nokia will also embed Baidu's search services into Nokia's mobile phone products in the market of China.

3. Competitive Advantage

3.1. Localization

Websites that require "search without limit" should prioritize resolving technical issues. Due to the fact that search engines are typical products dominated by technology, they can help users find the information they need by classifying all of the content on the Internet using certain programs and offering information "retrieval" services. That is, anything that is available on the Internet can be searched for, provided that the technical capability is sufficient. Therefore, Google needs to spend a lot of money to calculate [5]. There will be no obstacles at Baidu, because Baidu's biggest advantage is the same company in the same company, without foreign industrial policies, China rules and other issues. Baidu's business is popular at the Chinese market and the successful operation of localization. Localization adheres to Chinese regulations, which include localizing philosophy, localizing technology, and localizing (even if people employ habits, the main goal is still to earn money in the Chinese market, of course) [8]. Baidu introduced a number of Chinese-specific goods and services, like bidding rankings [6]. At the same time, they can chase the popular fashion of the public, satisfying the needs of netizens and the community. Baidu allows Chinese users to have a strong sense of psychological identity. Thus far, Baidu has been the preferred option for users conducting searches on the network or businesses promoting their products, as Baidu helps Chinese users become more accustomed to using it.

3.2. Product Diversification

Diversified products can attract more consumers, and improve market competitiveness, which is conducive to enterprises invincible in the market. Baidu is based on search engines, it is also actively developing other products, such as Baidu Cloud, Baidu Short Video, Baijia Number and so on. Such a diversified coordination makes Baidu's uniqueness, thereby achieving diversified growth, not only maintaining the original search engine advantage, but also pioneering other business areas and enhancing the company's comprehensive strength [5]. Baidu has abundant content resources as well. Baidu can offer users greater content on a variety of websites, including news, video, social media, and e-commerce sites. This enables users to access more services on Baidu. Thus, Baidu continues to innovate and optimize products and services to meet the diversified needs of users.

3.3. Intelligent Service

In order to create artificial intelligence technology, Baidu has committed a significant amount of money and labor in recent years, laying the groundwork for the industry on a broad scale. Baidu has introduced deep learning-based products and services in various domains, including voice and facial recognition, intelligent customer support, and autonomous driving. The use of these technologies has greatly enhanced Baidu's technical barriers, bringing better intelligent services to users, and significantly enhanced Baidu's core competitiveness. Furthermore, Baidu depends on robust data analysis skills to convert user input into insightful analysis and decision assistance [8]. By conducting

a thorough analysis of market trends and user behavior data, Baidu is better able to anticipate user demands and changes in behavior, which helps to inform its operational plans, marketing campaigns, and product development. Data-driven decisions and refined operations enable Baidu to more effectively meet user needs and improve operating efficiency and effect.

4. Weakness

4.1. Content Quality

Baidu has always taken information search and advertising marketing as its main business model. However, in recent years, Baidu has been questioned frequently on content quality and commercialization. A large number of advertisements appeared in Baidu's search results. The search results were not accurate and reliable for users, and even some false information. Such search results not only affect the user experience, but also damage Baidu's brand image. At the same time, Baidu's commercialization model also has problems. Baidu has caused public doubts for promoting medical advertisements, and has been exposed because some merchants have been exposed in front of the search results through bidding rankings [7].

4.2. Lack of Technical Innovation

Baidu has always been the leader of Chinese search engine technology, but compared to other Internet enterprises, its technical upgrade and innovation is relatively slow [9]. In the field of artificial intelligence technology, Baidu is increasing investment and research development efforts, but compared with international technology leaders, Baidu's technical level still has a gap. Baidu's technical defect has also led to lack of competitiveness in the era of mobile Internet.

5. Product

5.1. Web Search

Users can search for Chinese information and content through Baidu search engines, which have a large Chinese web page library. Also, the servers distributed by Baidu can return the search information to local users directly from the nearest server, and enjoy the fast search and transmission speed. Regardless of how many search engines had appeared in China, Baidu search engine is the leader in China from the perspective of user and brand influence. From this perspective, Baidu still exists in searching questions and providing answers. It is also the engine that everyone feels that they can retrieve content with the same hand. Advertisement has supported Baidu, and it also brings a lot of negatives to Baidu [10]. As a content display service, Baidu provides a platform for advertising display for a large number of domestic companies, but on the other hand, a large number of advertisements had negatively influenced users experience [11]. However, in recent years, it has gradually converged in this regard, and under the rapid development of AI, it has optimized the performance of search and can better absorb the needs of users. It will actively recommend the content, and also stabilizes the user's emotions through technical and core products.

5.2. Baidu Pedia

Baidu Pedia is an information integration platform for users which is operated by Baidu. It is very similar to the Wikipedia. With over 16 million items spanning nearly all known branches of knowledge and over 6.8 million individuals editing articles, Baidu Encyclopedia is the largest online reference source. The goal of Baidu Pedia is to develop a Chinese platform for gathering knowledge across a range of topics [8]. It emphasizes user participation and dedication, fully mobilizes the power of Internet users, brings together the brain wisdom of hundreds of millions of users, and actively communicates and shared [10]. Also, Baidu Pedia achieves the combination of search with Baidu to meet the user's needs for information from different levels.

6. Advertising

Baidu advertisements can support a variety of directional methods, helping advertisers accurately find the target group. The main precise orientation methods include: interest, keywords, regions, time periods, network environment, equipment, and basic attributes [7]. By displaying advertisements on Baidu search results page, Baidu Zhidao, Baidu Tieba and other websites, attract potential customers to click to enter the corporate website or landing page, thereby achieving the purpose of brand promotion and product sales.

6.1. Baidu Information Flow Advertisement

During the holidays, some people may want to travel abroad. So, users will search for travel strategies and local information. Users will see hotels on the homepage of Baidu, from the information of the itinerary. In the form of graphic and text, the information of the news is a piece of information flow. It will make the consumers to think that they are browsing information instead of advertisements, which can greatly increase the acceptance of this advertising [11].

6.2. Baidu Search Promotion

Baidu search promotion is an advertisement for customers' initiative to search for display. The bidding is to push the keywords of their products to Baidu's homepage in the form of a website [6]. Once the user searches the keywords, user can accurately locate the website. The advantage is that if the keyword planning is well organized that can accurately position customers with demand. The display position of the search advertisement mainly contains the result page of the search, which is generally a search page for major search engines. The biggest advantage of Baidu's information advertising is that it can analyze the user's hobbies based on the historical trajectory of users, so that targeted advertising can be performed, so that the accurate user group can be achieved and obtaining accurate user groups. Each product has suitable target group, so advertisers can put them targeted according to the characteristics of the product and the user's audience.

7. Conclusion

At present, the profit methods of the search engine market are basically mature in China, and its operating model and revenue sources are relatively fixed. Currently, Baidu is gradually forming its more mature profit model. Baidu adopted users as the starting point to improve its technology and services, increase user traffic, and attract profitable marketing customers. Marketing customers bring advertising revenue to Baidu, which is its source of profit. Secondly, Baidu uses profits for technology improvement and service development to strengthen its profit barrier and gradually improve profit measures. In this case, Baidu formed a complete cycle of profit model. This model cultivates its core competitiveness and guides the company to continuously obtain excess profits and update the mechanism in a timely manner. Since users' habits of using search engines have been basically formed, how to further enhance customer marketing attraction is the primary issue. Baidu is specialized for imitation and innovation, but in a rapidly developing industry, following imitation is dangerous for any company, especially an industry leader like Baidu. Baidu is the top website, but it is limited to China, which is not consistent with its status and technical strength. As China's Internet leader, Baidu continues to improve its corporate strategy and business model, focusing on innovation and diversified development. While constantly improving itself, Baidu also actively participates in international cooperation and strives to develop the global market. In future, it can develop the search field of global languages such as English. Baidu must actively conduct research and development and launch new products to discover new users and retain loyal users, so as to attract customers and increase marketing investment. Only by continuously improving and innovating its own business model can Baidu continue to achieve higher development. In the future competition, Baidu will continue to adhere to the corporate philosophy of innovation and service first, and is committed to

becoming a world-class high-tech enterprise in order to achieving more extensive development and contribution.

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