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Digital Platform and Company Performance: A Review of How Digital Platforms Can Improve Company Performance

Mingyang Hu[1,a,*]

[1]*Xi'an Jiaotong-Liverpoor University, Suzhou City, Jiangsu Province, China, 215028*
a. 1486595757@qq.com
**corresponding author*

Abstract: Digital platforms play an increasingly important role in the digital age, and their impact on enterprises participating in the economic market is noteworthy. Whether business leaders can fully utilize digital platforms to gain development advantages often affects the future direction of the company. Given that, this study explores the impact of digital platforms on company performance, focusing on the ways in which digital platforms affect corporate performance. Moreover, Google is used as an example to analyze how digital platform companies make profits. By reviewing the research of previous scholars, this study summarizes three specific ways in which digital platforms work: digital innovation, generating users' aggregation effect, and taking a mediating role in digital transformation capabilities. Besides, the improvement of enterprise performance is specifically reflected in the increase in company revenue, the attraction of more users, and the upgrading of business models and strategies. Google primarily earns profits by receiving advertising fees paid by advertisers.

Keywords: digital platform, company performance, digital economy, business model

1. Introduction

The evolution of the internet economy has spawned a new economy, the digital economy, which aggregates data, platforms, and users to create economic benefits based on digital technologies. It should be noted that digital platforms play an important role in the growth of the economy, especially for some economic entities. Considering the classification, Gawer classifies platforms by product platform, industry chain platform, and industrial platform, and Cusumano further divides platforms into two types: innovation platform and transaction platform [1][2]. The innovation platform provides new products and services to companies and users using platforms such as Google's Android system and Microsoft's Windows system, while the transaction platform aims to achieve information sharing and product trading as an intermediary, lowering the search and transaction costs of suppliers and consumers effectively. Cusumano argues that company leaders should be able to manage companies not only in the conventional economy but also in the platform economy, and the necessity comes with the huge economic value created by platforms [2]. In the digital era, platform competition has been more intense since many of the world's most profitable firms rely on digital platforms to some extent [3]. For instance, among the ten most profitable firms, most of them develop excellent platforms and

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gain profits [3]. It can also show that the development of digital platforms has the power to change business rules and business models, which may indirectly affect company performance [4]. Digital platforms can connect different firms, suppliers, and consumers, thereby establishing business connections between multiple economic participants [5]. In this process, a certain communication cost can be reduced, while the problem of information asymmetry can be alleviated. Business leaders generally adopt two approaches to making companies more responsive to the development of the digital economy: establishing digital platforms and shifting to new business models [6]. Based on that, some research questions are proposed:

Can companies improve their performance through digital platform? What are the related approaches? How can digital platform companies like Google for profitability?

This study has some inspiration for business leaders who are in the digital economy era. Although traditional business models still exist, the new models created by digital platforms cannot be ignored and will have an unpredictable impact on the participating economic entities. The structure of the thesis is as follows: Section 2 introduces the research method. To solve the questions above, this paper aims to systematically review the literature on digital platforms and company performance to determine whether digital platforms have a positive impact on company performance in general (Section 3). Section 4 explains how platform businesses make money by using a typical enterprise example. Section 5 is a discussion, and Section 6 is the conclusion of the literature and basic views.

2. Research Method

Due to the extensive research on digital platforms in recent years, this article has reviewed some literature to identify the questions raised in Section 1. By locating literature within 10 years and selecting authoritative journal articles, as well as excluding articles with broader content, some target literature was selected. Among them, most scholars' research mainly used the questionnaire survey method, supplemented by other methods such as consulting with interviewees and model hypothesis testing. Some scholars established empirical models or adopted single or multiple case studies for specific analysis. In addition, in order to provide a specific case analysis, this article also conducted a case study on Google and used it as an example to specifically analyze how digital platform enterprises can make profits without relying on products.

3. Digital Platform and Company Performance

3.1. Perspective of Digital Innovation

To adapt to the digital economy and the new data era, a lot of changes should be adopted by companies. Similarly, digital platforms force traditional firms to make a combination of convention business models and the modern digital economy, achieving business strategy upgrading as well as digital innovation [7]. The strategy adopted by a company for profit is called the business model [8]. Innovation and upgrading of the company's business model have become even more necessary under the catalysis of digital platforms. This requires companies to review and revise their business plans in a timely manner to gain an advantage in competition with competitors. Büyüközkan and Göçer refer to a business model as a statement, a description, a presentation, an architecture, a conceptual tool or model, a structural template, a method, a framework, a pattern, and a set [9]. Deng indicates that the new leaders of the digital platform are much more likely to be platform corporations that emphasize digital innovation, and these companies may help with resource and information sharing, social innovation, and full employment [10]. Service innovation is an important transformation. Barrett et al. explain service innovation in four dimensions, one of which is the supply-demand logic framework for service innovation [11]. This perspective suggests that regarding the algorithms as operant resources can not only generate innovation on services but also enrich the knowledge

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acquired from users' reviews, which indirectly increases the resource density of knowledge from platform companies [11]. Digital innovation can also create value by improving service levels, which generates a combinatorial effect such as the network effect on digital service systems [12]. This effect can also be seen in companies like Apple, which went from having fewer than a billion downloads at the beginning of 2009 to nearly 800,000 applications downloaded 25 billion times in March 2012 [13].

3.2. Perspective of User's Aggregation Effect

Another perspective on the idea that digital platforms can improve company performance is the user's aggregation effect, which gives companies more profit opportunities. It is clear that the digital innovation of platform entities is to generate new products, services, and commercial strategies by using digital techniques [14]. By empowering the digital platform, it is achievable that companies and relevant users are able to be aggregated and connected efficiently, realizing the value of sharing [15]. This process can be explained by the example of Jingdong (JD). JD is one of the biggest business-to-customer e-commerce platforms in China. Its net revenues for the first quarter of 2023 were RMB 243 billion [16]. According to Deng, a small number of nodes (selected by users) gather a large number of links in the network environment [10]. Obviously, users tend to choose more well-known nodes, and a large number of links can provide more opportunities for these nodes to be discovered than before. It is easy to understand that JD, as a key node, connects a large number of merchants and consumers [10]. The JD platform will allow more buyers to participate as more and more sellers join, thereby increasing the profit opportunities for platform enterprises [10]. At the same time, in the process of value and resource sharing, the personalized needs of consumers can be met through the screening of various merchants. This enables platform enterprises like JD to have a broader user base, which is beneficial for improving enterprise performance.

3.3. Perspective of Mediating Role in Digital Transformation Abilities

Besides, digital transformation abilities should be noted with the development of digital platforms. Digital platform capabilities help economic participants adapt more quickly to market changes in a more effective way [17]. A lot of researchers focus on the mediating role of companies' digital transformation abilities and explore the internal relation among digital platform service capacity, company digital transformation ability, and company performance. Taking cross-border e-commerce as an example, digital platform companies are unable to function alone, and other e-commerce companies are also important, especially in the perspective of coordinating with platform companies to create value [18]. This kind of internal connection can be created out of nothing. Therefore, establishing a specific mechanism can elaborate on the process of connecting other e-commerce companies with company performance empowerment through platform services as an intermediary point [19]. Some researchers examine this relationship by investigating the companies' key indicators, such as operating income, market share, and other indicators [20]. By establishing the empirical model and using the model hypothesis test, the final results prove that companies' digital transformation abilities can improve company performance, and both of them are affected positively by platform service capacities. Besides this article, similar research like ZHANG Yanfeng's had also been made and successfully elaborated that some of the skills required in the digital age act as mediators between digital platforms and increase company performance [21].

4. Case Analysis of Google

Compared with conventional companies, the profit model of digital platform companies undoubtedly has many innovations and changes. Google is a digital market giant with significant competitive

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advantages in innovation, business model, and profitability. To figure out how digital platform companies make profits, this part introduces the typical case of Google to explain the new revenue model specifically.

Google is initially well-known for its powerful search function, but it is even more notable for its rapid financial development. This platform company went from losing tens of millions of dollars to earning more than a billion dollars within five years, from 1998 to 2003 [22]. Google does not need to charge users any fees for searching for information, which makes many users choose this seemingly free search platform, thus establishing a strong customer base [23]. However, Google can make money by charging advertisers. Ads and pop-ups appear when users search for information. Once the user clicks on the advertisement that pops up, Google can receive the advertising fee paid by the advertiser [24]. Early investigations have found that Google gets its payment mostly from advertisements, with about 86%, meaning that advertising fees are the major source of Google's revenue [25]. In addition, firms that have a need for publicity for their products can bid on keywords that are intended to be placed on Google, and Google can also get publicity payments from these companies [24]. Besides, Google can use its own powerful algorithms to link the number of clicks on articles published on the platform to creator revenue, thus attracting publishers to compete for a larger number of hits [24].

5. Discussion

In a society with a lot of data, the digital platform shows great potential to increase company performance. However, not all enterprises can seize the opportunities brought by the digital age and digital platforms, which may be due to many reasons such as a lack of innovation, the failure of digital transformation, or other possibilities. Therefore, it is enlightening for entrepreneurs to fully take advantage of the convenience and innovation created by digital platforms. In addition, the behavior of entrepreneurs changing their business models in the face of the digital age can lead to fluctuations in operational models to some extent, and the potential impact of such fluctuations on corporate performance is not entirely certain even if digital platforms are thriving. Therefore, it is very important for business leaders to correctly anticipate the positive, negative, or composite impacts brought about by utilizing digital platforms.

6. Conclusion

After reviewing a lot of literature, it can be concluded that digital platforms can improve corporate performance in many cases, which is not only reflected in the improvement of revenue but also in the improvement of some key indicators such as strategy upgrading and an expanded user base. The approaches to achieving the above objects are various; this paper selects three perspectives. By promoting digital innovation, generating users' aggregation effects, and taking a mediating role in digital transformation abilities, digital platforms are able to improve company performance. Besides, Google is a typical digital platform company that generates a huge profit. This company's specific way of making money is to charge a third party, which is neither the platform itself nor their target users, but the advertisers. This study mainly focuses on the positive impact of digital platforms on corporate performance and related ways, but there are also many phenomena about digital platform revolution companies going bankrupt. Therefore, the direction of future research can consider the negative impact of digital platforms on enterprise development simultaneously and how to maximize the use of digital platforms to achieve improvement in company performance.

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