

Analysis of the Business Model of “Internet +” Intellectual Property Trading Platform

—Based on [Www.wtoip.com](http://www.wtoip.com)

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Abstract—In China, innovative development has become a national strategy. Both the government and enterprises attach more and more importance to intellectual property rights. How to effective use of intellectual property rights, make technology transfer more efficient and realize the industrialization of science and technology requires the help of intellectual property trading platform. At present, the development of China's intellectual property trading platform is not mature, there is great potential for development in the future. This paper takes intellectual property rights trading platform -- [Www.wtoip.com](http://www.wtoip.com) as the research object, firstly analyzes the different between the intellectual property rights trading platform and other e-commerce platform with respect to elements and business operation model, Secondly send the platform as an example, analyzing the features of “knowledge business” ecological, finally put forward some advices to our country’s intellectual property rights trading platform, in order to further improve the operation efficiency, improve the service function and further enhance the value of intellectual property in promoting the development of various industries in our country.

Keywords: *intellectual property trading platform, business model, [Www.wtoip.com](http://www.wtoip.com)*

I. INTRODUCTION

China's knowledge economy is developing rapidly. According to the "2019 Global Innovation Index Report" issued by the World Intellectual Property Organization, China ranks 14th in the world and becomes the only middle-income economy to enter the top 20. In the field of patent application, up to 2018, the number of invention patent applications in China was 1.432 million, ranking first in the world for eight consecutive years. In order to further promote the transformation of scientific and technological and increase the output of scientific and technological, enhance the core competitiveness of country and enterprises, the intellectual property trading platform emerged at the historic moment under the promotion of national policies and development strategies. American economist Joseph Schumpeter (1990) pointed out that as long as the invention has not been applied in practice, it is economically ineffective [1]. In other words, science and technology can only play a role in promoting economic growth if it is transformed into actual productivity. The role of the intellectual property trading platform is to promote the transformation of innovation results and maximize

the role of science and technology in promoting economic development. As the world's largest platform for intellectual property transactions and industrial upgrading under the leadership of China's non-government, [wtoip.com](http://www.wtoip.com) focuses on the intellectual property market, serving small and medium-sized enterprises as the core customer, by building an innovative “knowing business” ecosystem and promoting enterprise transformation and upgrading. The platform has formed a differentiated competitive advantage and strategic heights relative to other homogeneous platforms, and has become the representative of the China’s intellectual property trading platform. Strengthening the construction of the property rights and technology trading service system by expanding and improving the support and services of the intellectual property trading platform, and facilitating the strategic adjustment of the economic structure [2].

II. OPERATION OF INTELLECTUAL PROPERTY TRADING PLATFORM

A. Participating Subject

With the rapid development of e-commerce in China, e-commerce platforms are constantly emerging. Although the intellectual property trading platform has the support of the Internet, it is different from the traditional e-commerce platform. The main participants of the e-commerce platform include platform operators, buyers and sellers, and The third-party payment platform and Logistics Company. Compared with the participants of the general e-commerce platform, the participants of the intellectual property transaction platform have their own particularities, which are mainly divided into the following four categories: one is the operator of the intellectual property transaction platform, and the other is the supplier who transfers the technology on the platform. The third are consumers, who purchase patented technology on the platform, and the fourth is other assisting participants in the transaction chain, such as third-party payment platforms, government-related agencies, each type of participant in the entire transaction process is indispensable, the platform is the core of these four types of participants [3]. The main function is to bring together buyers and sellers of patented technology, making the time and space constraints of the transaction were

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broke. And provide a full range of intellectual property transaction services for users around the world by using Internet technology.

B. Trading Mode

Like traditional e-commerce platform, the essence of intellectual property trading platform is the e-commerce trading platform supported by the Internet. At the same time, it is also a service platform for communication between the supply and demand sides of patents, copyrights, trademarks and other technologies. After the two parties reach a trading intention, the transfer of ownership of the traded goods can be realized through payment by a third-party payment platform. Different from the traditional e-commerce platform, due to the particularity of the commodities traded on the platform, which are trademark, copyright and patent technology, there is no logistics distribution process for the transaction on the platform. Instead, the transfer needs to be examined and approved by relevant government departments, such as the National Patent Office and the National Trademark Office. The overall trading mode of the intellectual property trading platform is shown in the figure below:

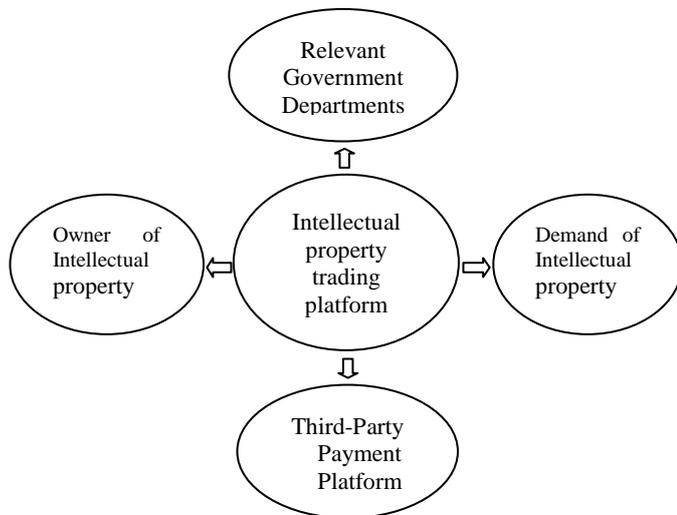


Fig. 1. Transaction mode of intellectual property trading platform

C. Profit Model

The intellectual property trading platform is a public welfare project closely related to the development of the national economy and involving technological innovation and development. So far, due to the immaturity and non-standardization of the intellectual property market, it still needs a certain period of cultivation. Therefore, the construction and preliminary work of the platform requires government policy support and financial support. After the market is matured, the platform is gradually standardized, and has a certain user base, it will consider absorbing social funds to participate in it, and gradually carry out market-oriented operation. And in order to achieve platform profitability to consider different charging strategies. For example, the registration fee (the transaction parties need to pay a certain fee when registering), the

transaction fee (a certain percentage of the handling fee is charged for each transaction), and the value-added function fee (providing value-added services such as brokers and intellectual property consultants to both parties and charge service fee). The intellectual property trading platform should design a profit model suitable for itself by taking into consideration such factors as its own development, the attributes of users and the charging strategies of other competitive platforms in the industry.

III. OPERATION MODE OF WWW.WTOIP.COM

A. Development of Wwww.wtoip.com

In 2017, it received a B round of strategic investment of 1 billion RMB, which became a milestone event in the field of intellectual property. Wwww.wtoip.com explores a new model of the intellectual property service market and system actively. Moreover, through the online and offline interactive model of intellectual property transactions, the knowledge ecosystem has been constructed for the first time. Focusing on the industrial chain of intellectual property transaction and transfer of science and technology, it gathers global intellectual property resources and provides users with innovative services such as intellectual property transaction, evaluation and intellectual property finance. Through the way of "Knowledge Networking", it fully integrates resources and committed to promoting the transformation of innovation results and industrial upgrading in China. It is honored as the "leading enterprise in innovation and entrepreneurship in Guangzhou Tianhe district". As a young innovation and entrepreneurship demonstration representative, it was also rated as "top 40 Chinese Enterprises in Service Innovation and Growth in 2017". On October 21, 2019, Hurun Research Institute released "2019 Hurun Global Unicorn List", ranking 264th in Wwww.wtoip.com.. The following is the transaction amount of wtoip.com.'s intellectual property in recent years. It can also be seen that the platform is developing rapidly and the transaction volume is growing steadily. From the beginning of 2015, the transaction amount of intellectual property and science and technology services reached 1.06 billion yuan, to 5.2 billion yuan in 2016, to 11.3 billion yuan in 2017, and 22.3 billion yuan in 2018. In the first half of this year, 2019, the transaction volume has reached 22 billion yuan.



Fig. 2. Transaction volume in the past five years (Unit: million yuan)

B. The Service Item of Wwww.wtoip.com

IP Cloud is a service system for the diagnosis and evaluation of intellectual property rights of Wtoip.com. The types of services that can be provided include intellectual property, brand and technology projects. Featured services are as follows:

TABLE I. FEATURED SERVICES

Name	Featured Services
Intelligent inspection	Monitor the development of business operations Comprehensively
Risk Warning	Provide risk warning for enterprise, help enterprises quickly understand the risk and provide solutions.
Corporate radar	Master the core technology dynamics of competitors, know faster and lay out earlier.
Big data analysis	Real-time view of national patent information, grasp the market dynamics of core technologies.
Knowledge Cloud Hosting	Effectively identifies various risks of intellectual property, notifies the user of the change of intellectual property status in the first time.
Knowledge production trade selection	With massive patent resources, users can apply for products they like (including patents, high-quality trademarks, etc.).

C. Analysis of the Profit Model of Wwww.wtoip.com

It is basically consistent with the profit model of general Internet platform enterprises. The profit model of intellectual property trading platform is also often adopted subsidy strategy in the early stage of establishment in order to accumulate initial users. When the platform becomes mature, users will be charged registration fees, transaction fees or other value-added services. As a platform for the growth, the current platform adopts a price strategy of “free registration fee and transaction fee” for bilateral users. In addition to basic services such as technology transfer, patent trading and trademark trading, the platform also takes advantage of professional talents to actively expand value-added services such as broker and expert services for entrusted transactions and consulting. According to official data, the company has established subsidiaries in 38 cities

across the country since its establishment six years ago, with a total membership of 5.5 million. At present, has served more than 1.2 million enterprises, and the transaction volume in the first half of 2019 has reached 22 billion.

D. Analysis of the Operation Mode of Wwww.wtoip.com

Wwww.wtoip.com has two unique operating modes. The first one is the technology transfer mode. First, it establishes the protection of intellectual property rights of scientific and technological achievements. Secondly, it transfers and transforms the scientific and technological achievements, and then scientifically produces the products from sample to commercialization. The whole process of property finance and technology finance is accelerating; the second is the model of industrial acceleration. By exerting its own advantages in intellectual property rights, it has penetrated into many second- and third-tier cities, cooperated with local governments, introduced technology-based enterprises, and actively organized international technology competitions. To attract international high-tech enterprises to settle in China and help the domestic science and technology economy to upgrade.

1) Analysis of Technology Transfer Mode

As an intellectual property trading platform dominated by non-government, in order to provide high-quality related services and enhance market competitiveness Wwww.wtoip.com constantly pursues innovation in response to the competition from home and abroad. The innovation fields cover model innovation, technology innovation and service innovation.

The following describes the specific content of this mode: Before the transaction between the buyer and the seller, the seller displays its patented technology or trademarks on the website and pays the transaction margin. The platform provides verification services for the relevant transaction products. First, it ensures that the transaction is applied in accordance with the national legal procedures and has been legally authorized. Secondly, it proves that the human rights related to the transaction are clear and within the validity period. This verification process can guarantee the legality of the transaction, and the second is to ensure the security and efficiency of the transactions between the two parties and enhance the transaction credibility of the platform. After the buyer and the seller have determined the trading intention, taking the patent transaction as an example, the trading service process is as follows:

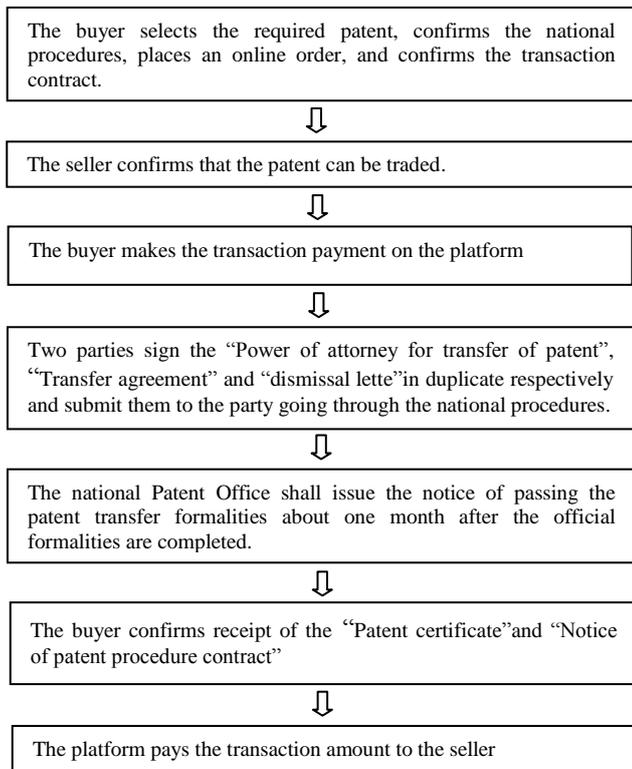


Fig. 3. Transaction service process of Wwww.wtoip.com

In this process, the functions of wtoip.com are as follows: First, as a third party to provide fund escrow service, ensure that the buyer obtains the patent certificate and other documents and then pay the transaction amount. Like other e-commerce platforms that choose third-party payment platforms (such as Alipay) to host user funds, provides a guarantee mechanism for the two parties. The second is to handle the relevant national procedures for buyers and sellers, and take advantage of the partnership with government to simplify the transaction procedures for users and achieve one-step service.

2) *Analysis of the Industrial Acceleration Mode*

Enterprises or individuals that create, protect, and operate intellectual property rights can be called "knowledge business". "Knowledge business" is the business ecology driven by intellectual property [5]. By constructing the "Knowledge business" ecosystem, the resources and services will be fully integrated to form a full industrial chain, not only promote the commercialization and industrialization of intellectual property within the ecosystem actively, but also accelerating the promotion of industrial upgrading which is the characteristic business of Wwww.wtoip.com. As an intellectual property trading service platform, in addition to the field of basic transactions, the platform expands the others service objects by innovating its service model, actively promote the integration of innovation factors of the whole society, and link intellectual property rights with enterprise development, social progress and national rejuvenation. So far, it has hundreds of domestic and foreign partners with intellectual property resources. This was not only an important factor for the platform to achieve

strategic goals, but also was the core competitiveness of the platform. And necessary measures to improve service quality.

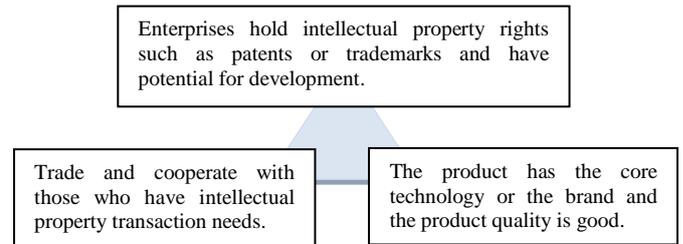


Fig. 4. What is meant of "knowledge business"?

Take Kunming Zhishang Valley International Intellectual Property Space as an example. This is the key project of Kunming Science and Technology Innovation created by wtoip.com and Kunming Chenggong Information Industry Park Management Committee. With government policy support and substantial financial support, it is the only international intellectual property creation space in Kunming that is based on the entire intellectual property chain, and located in Kunming Chenggong Cloud Data Base. Relying on multi-national technology and afford entrepreneurial support for young start-up technology companies, they can not only provide them with intellectual property transactions, but also solve problems arising from the application of intellectual property rights. Different levels of help can be provided for different needs dimensions.

With the support of government policies, they had carefully created five functional modules of the space, and also give entrepreneurs with comprehensive services through a complete community function configuration, covering International Incubation Center, Property Comprehensive Service Center, International Technology Transfer Center, Intellectual Property Incubation Base and International Entrepreneurial Community. Forming a sustainable entrepreneurship system with a wide range of innovative and entrepreneurial resources. In short, supported by its own intellectual resources, the online transaction is continuously improved, and the service dimension is continuously extended offline. The all-round sustainable development service model of online and offline has been realized. By creating "Knowledge Business" ecosystem, enterprises in the ecosystem can form a strong cluster effect through intellectual property transaction cooperation, which will help cultivate their own core competitiveness and promote a virtuous circle of resources within the ecosystem. In addition to letting intellectual property create commercial value in industrial application, it also promotes the development of enterprises and makes intellectual property become a booster for the transformation and upgrading of Chinese enterprises.

IV. OPERATION STRATEGY OF INTELLECTUAL PROPERTY TRADING PLATFORM

A. *Identifying Differentiated Platform Positioning*

A clear positioning can help the platform to grow better in the early stage, and any platform should solve the positioning

problem in the early stage of development. In the early stage of development, the platform should first seek its own focus areas, find the right position, and strive to improve the core competitiveness of the platform focus area. After adapting to the current operation mode, the company will appropriately expand the business model, increase the service content and achieve differentiation, so as to achieve long-term development.

So far, wtoip.com has realized the differentiated operation of eight categories such as intellectual property, industrial and commercial finance, creative design, internet development, legal consultation, brand marketing, administrative personnel, and training consultation, greatly improving the user's stickiness and promoting the long-term development of the platform. In the view of the platform, the value of intellectual property can only be maximized after it is combined with industry and enterprises. Therefore, wtoip.com strives to find a breakthrough, and strives to not only assist enterprises apply for intellectual property rights, but also provide entrepreneurs with a full range of services through the industry chain and ecosystem of "Knowledge Business", maximize the commercial value of intellectual property in the process of industrialization. In this way, the service content of the platform has been broadened, at the same time, the connotation of the platform has been enriched. What's more, it is the positioning innovation of the intellectual property trading platform.

B. Building a Professional Talent Team

The subject matter of the intellectual property trading platform transaction is different from the ordinary trading items. This requires the platform personnel to be composed of experienced and professional. This also determines the essential difference between intellectual property transactions and service platforms and general e-commerce platforms. These professionals should include economics and financials, laws and regulations, sciences and technologies and other fields, and they should be very familiar with today's Internet Economy. Only in this way can the construction and development of the platform can be supported by strong talents. It is necessary to control the quality of the trading products strictly, interpret any documents that are related to laws and regulations accurately, identify the risks in the transaction and service process in a timely. Ensure that the transaction is efficient and the development of platform is sustainability [7].

At present, wtoip.com has reached strategic cooperation with more than 4,000 domestic and foreign professional institutions, including intellectual property exchanges in the UK, Japan and South Korea, law firms in the US and Europe, as well as technology transfer agencies in the US and ASEAN, forming a global service chain. The expert talent covers biopharmaceuticals, intelligent hardware, VR/AR, artificial intelligence, IT Internet, new materials, communications and many other fields. It is benefit for the high quality of the trades, improves the efficiency of transactions. In other words, the human talent resource guarantees the credibility and reliability of the platform.

C. Figures Building a Perfect Operational Service System

The intellectual property trading platform is more professional than the ordinary e-commerce platform, but for the construction of the platform, it can also draw on the design of other mature platforms. Including beautiful interface, simple and clear operation, convenient and perfect after-sales service, etc. Only a mature service system can attract more professionals and non-professionals, expand the customer group and cultivate the dependence of users. At the same time, with the growing popularity of mobile devices, any software that is convenient for users, such as mobile APP, can be considered for development and utilization when the cost permits.

Mobile phone app of wtoip.com was launched in June 2016. Full-featured and easy-to-use apps are more likely to appeal to non-professional users, and promote the integration of information. In the case of information symmetry, the scope of effective dissemination of information was expanded. And with the help of the WeChat Official Account, the users can be cultivated the awareness of using intellectual property rights. More importantly, the use of mobile terminals and various Apps to assist in solving problems has also increased the stickiness of customers and platform to a certain extent, and promoted the deep integration of platforms and users. In addition, in order to further enhance the dependencies of uses, other supporting services such as language translation and international patent application are also available. On the one hand, operating through the Internet which greatly reduces the cumbersome procedures and save time for both parties in the procession of transactions, greatly improving efficiency. In the field of intellectual property, trademarks, patents, Transactions are often more valuable than anything else. Leading technology transfer, as well as leading trademark registrations, can often take the initiative to achieve the goal of trade money for time. On the other hand, wtoip.com is also through a full range of offline services to meet more knowledge production demand, constantly promote the patent technology into innovation productivity.

D. Exploring Stable Market Demand

Continuous supply and demand is one of the core conditions for the development of intellectual property trading platforms, without stable supply, the platform will lose vitality, and there will be no motivation for the development. A mature property rights trading platform requires a large number of buyers and sellers. Furthermore, rich property rights are also an indispensable condition. An important reason for the failure of IPXI is the limited resources of intellectual property and insufficient supply, which has made it impossible to satisfy the buyer's market, which has made the development of the platform unsustainable. Failure is inevitable without the motivation to develop. We do not deny that the platform has some other aspects worth to be learned by us. For example, in order to bring trust to customers, the platform has always regarded transparency and efficiency as the key concept of development. To some extent, this will bring some inspiration to our business.

From the perspective of supply, the main sources of intellectual property in China are mainly scientific and

technological enterprises, R&D institutions and universities. Under the overall planning and guidance of the development of the platform, wtoip.com has continuously strengthened cooperation with intellectual property owners to profoundly grasp the technological development trend and international competition pattern under the new situation. Through a forward-looking vision and continuously cultivating scientific and technical personnel to tap frontier science and technology, providing a continuous stream of vitality for the sustainable development of the platform, and taking these factors as an important basis for realizing the development strategy of the enterprise.

V. CONCLUSION

With the implementation of China's "Made in China 2025" strategy, Intellectual property has gradually become the foundation of core competitiveness. As an element of technological innovation, intellectual property rights are not only the fundamental foundation for revitalizing the real economy, but also the necessary measures for China to achieve industrial transformation and upgrading. To revitalize the real economy, we must first strengthen the protection of intellectual property rights. Without intellectual property rights and innovation as a support, the real economy is difficult to upgrade and develop in the modern industry [8]. At present, the development of China's intellectual property trading platform is still in infancy, most of which are led by the government. There are few private intellectual property trading platforms, and the intellectual property trading market has great potential for the future. This paper takes www.wtoip.com as the research object, analyzes the intellectual property transaction of the platform, and builds an innovative "knowledge business" ecosystem based on this. -- Through the "Internet +" approach, the full integration of resources and services has been realized, and the commercialization, industrialization, and financialization of intellectual property rights have been actively promoted, Moreover, the purpose of creating commercial value in industrial application of intellectual property has been realized. By building the creation of the "Knowledge Business" ecosystem, the innovative ecological model of trinity of intellectual property services, professional technical services and investment incubation services has been formed. On the basis of the market-oriented operation

mechanism, information sharing, resource sharing and service linkage has been realized, and continues to develop in the direction of "institutional specialization, organization network, market internationalization"[9]. It is a platform with management science, service standards, smooth information, high quality personnel, with distinctive characteristics and in line with international intellectual property trade practices .To some extent, it has provided experience in the construction and operation of other intellectual property trading platforms. Undoubtedly, the implementation of the intellectual property strategy will condense the wisdom and strength of the whole society on the development of innovation, which is in line with the development trend of the global knowledge economy. Comply with the strategic planning of China's transformation and upgrading in the new age, it is also a necessary measure for China to build an innovative country.

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