

# Thinking about the current situation of "smart court" construction in the 5G era

-- Analysis from the perspective of grass-roots people's courts

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**Abstract:** Today, with the accelerated process of economic globalization and the rule of law in the country, especially since the 18th National Congress, the rule of law has become a hot topic. The era of "smart courts" has come. Under the leadership of the Supreme People's Court, the construction of smart courts has accumulated a lot of experience, but at the same time, some problems have also been exposed, such as the prominent phenomenon of emphasizing construction over application, the threat to the security of court network information, and so on. There are two ways to solve the problem. One is to optimize the new legal service system based on the existing technology. However, this method may face technical difficulties that cannot be overcome. Therefore, it is a bold attempt to adopt the new generation of communication technology. Based on this, this paper aims to combine the unique advantages of 5G independent networking with the current smart legal service system, and consider how to build a smart court in the new era from the perspective of the grass-roots people's court, so as to promote the improvement of our grass-roots legal construction system.

**Keywords:** Smart court; Information technology; Judicial reform.

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## 1. Background and logic of smart court construction

### 1.1. Background of smart court construction

"Smart Court" is a form of people's court organization, construction, operation and management that relies on modern artificial intelligence, focuses on justice for the people and fair justice, adheres to the integration of judicial laws, institutional reform and technological reform, supports judicial adjudication, litigation services and judicial management in a highly information-based manner, and realizes full-business online processing, full-process legal disclosure, and all-around intelligent services.

From the perspective of historical process, China's research on the combination of modern science and technology and legal practice lagged behind that of western developed countries, and it was not initially reflected until the late 20th century. Among them, the representative view is that "system science (such as electronic computer) is not only used as a tool in the construction of the rule of law, but also used to promote the modernization of legal research". For example, in 1983, the article "Calculation of Legal Work" creatively proposed the establishment of a judicial database to facilitate the judges to collect similar cases to help the judges decide the case. Since then, it has been in a slow or even stagnant stage of development. It was not until the 21st century that many academic explorations emerged in the theoretical circle. At the same time, there was a trend of the integration of science and technology and the rule of law in judicial practice. In July 2015, the Supreme People's Court first proposed the concept of "smart court", which aims to speed up the construction of information technology and promote the modernization of judicial capacity and judicial system. On April 20, 2017, the Supreme People's Court issued the Opinions of the Supreme People's Court on Accelerating the Construction of the Smart Court (Fa Fa [2017] No. 12), which

pointed out that the smart court is an organization, construction and operation form in which the people's court makes full use of the advanced information system to support the full business online processing, the full process of legal openness, and the full range of intelligent services, and realize the fair justice and justice for the people. The 20th National Congress of the CPC has made it a top priority for China's future construction and development to adhere to the rule of law in an all-round way.

### 1.2. The construction logic of smart courts

The construction of smart courts is composed of three elements, namely government, courts and technology market. The support of national policies and the regional promotion of the government are the premise and foundation of the construction of smart courts; The court is the main body and core of smart court construction; The technology market effectively alleviates the explosion of court proceedings by combining AI with justice, thus improving judicial efficiency, which is the innovation and key to the construction of smart courts. By analyzing the internal relevance of the three, explore the internal logic of the smart court from theory to practice, and provide reference and reference for the realization path of "5G+legal services".

#### 1.2.1. Prerequisite basis: national policy and government practice promotion

The continuous innovation of the rule of law can promote the realization of the modernization of the national governance system and governance capacity. Therefore, scholars in the academic circles have innovatively integrated the artificial intelligence technology with the judicial trial system, giving it new characteristics of the times. The "smart court" is a model for the judicial authorities to actively respond to the national policy. Since the concept of "smart court" was put forward in 2015, the country has successively issued a series of policies to help the orderly construction of smart courts. At the 7th National Court Network Security and

Informatization Work Conference in 2020, it was emphasized to ensure the basic completion of the knowledge-based informatization version 4.0 by the end of 2022 and the full completion of the knowledge-based informatization version by the end of 2025.

### **1.2.2. Subject core: the practical needs of the court system**

"Too many cases and too few people" is a realistic dilemma facing China's judicial practice at present. With the implementation of our country's registration system, the threshold for filing a lawsuit has been lowered, which has led to a sharp increase in the number of litigation cases. However, the judicial resources have not increased with it, and the number of people engaged in judicial work is limited. Although the methods such as complex and simple diversion and improved trial management are adopted, the huge contradiction between the imbalance between judicial resources and the number of lawsuits cannot be resolved. Therefore, the court system needs to use artificial intelligence to achieve pressure diversion.

### **1.2.3. key to innovation: vigorous development of technology market**

With the rapid development of high and new technologies such as big data and artificial intelligence, in recent years, contemporary technology governance has taken on the face of "intelligent governance", which is highly consistent with the internal logic of emphasizing the use of technology in governance during the construction of smart courts in China. Smart courts combine artificial intelligence technology with judicial trial business, and its fundamental purpose is to improve the court's litigation efficiency, and achieve justice for the people, facilitate the people, and benefit the people Benefiting the people; At the same time, it is conducive to the innovation and improvement of technology in the practice of judicial integration.

In practice, the smart court is based on the basic business of intelligent, information and digital tandem courts. Taking the intelligent system construction project of an intermediate people's court as an example, its intelligent system project includes more than 20 subsystems, starting from the smart court, court trial guarantee, Internet court trial system, litigation service center, witness protection, security and other aspects, these systems will be improved in the combination of national policy guidance and big data and other new technologies.

## **2. Problems in the construction of smart courts**

### **2.1. The technical quality of grass-roots judges is generally low**

At present, there are many high-quality judges in the courts at all levels in China. The country has trained a number of excellent graduates of law majors, including undergraduate, master and doctoral students. They have passed the judicial examination and civil service examination, and have a solid theoretical foundation in law. In judicial practice, they have also accumulated work experience, and can skillfully use professional knowledge to solve various legal problems encountered in judicial practice, It has become the backbone of courts at all levels. However, generally speaking, more judges in economically developed areas and higher courts meet such standards, while in economically underdeveloped

areas and lower courts, there is a lack of high-quality judges. In economically underdeveloped areas and lower courts, there is a lack of attraction for high-quality judges.

However, the judges of the grass-roots courts are generally older. Although they have a lot of trial experience, they lack the ability to adapt to new things. For example, the grass-roots people's court where the author practiced, by the second half of 2022, followed the pace of national construction and introduced the smart justice system, but the judges had no idea how to apply the system. The judges were older and knew little about emerging technologies such as the Internet. It would take a lot of time and experience to overturn the previous work experience, and start to adapt to the new system again to hear cases, this has hindered the construction of smart courts.

### **2.2. The platform construction has not reached the "easy to use" standard**

For the new system, the author learned how to operate it with the judges during the internship, but found that there were flaws in the design of the system during the learning process. The design of the system in some aspects is too complex to operate. For example, there may be two ways to access the same function in the system, which increases the complexity of the system. Secondly, the classification of some functions is unreasonable. For example, the release of criminals after serving their sentences and community correction are among others. Whether this placement is reasonable remains to be confirmed by the judges in their work. The system seems to have complete business, but in fact there is confusion, which increases the difficulty of finding functions for the trial of cases. In addition, the production of files is not standardized, and the intelligent application of the contents related to the generation of judicial documents and electronic files in the actual operation also needs to be further improved. The non-standard files make the case-handling personnel dare not use them. There is still a big gap between these application systems and the standard of "easy to use" on the basis of "available".

### **2.3. The platform has information leakage and security risks**

Before the construction of the cross-department collaborative case handling platform of politics and law, the systems used by the grass-roots courts were all based on the internal network of the court. The internal transmission of case information could better prevent the leakage of information. However, after the construction of the platform, the system used will expand from only one department to more than one department. The coverage will be expanded, and the scope of information circulation will be greatly increased. At the same time, the number of people suffering from cases will increase, which virtually increases the risk of information leakage. At the same time, the construction of the platform requires extremely high requirements for the operation system. However, the safety supervision system of the smart court has not yet formed, and the procedures lack institutional guarantee. Once the system has problems, the technology of the grass-roots court cannot support, and the work of the entire grass-roots court will be paralyzed.

### **3. Analysis of the causes of the smart court problem**

#### **3.1. High-quality grassroots judges are difficult to make up**

Grass-root courts are unable to make up for the younger generation of judges. The economically underdeveloped grass-root courts are not attractive to high-quality talents and cannot introduce high-quality talents. Therefore, the grass-root courts are facing greater pressure to select judges. On the one hand, they cannot introduce talents and on the other hand, they cannot retain talents. Although the grass-root courts have recruited talents, it is difficult to improve the wage level. The work environment is improving slowly and the space for improvement is small. Most of the high-quality talents only use this as a springboard, which makes the grass-roots courts unable to retain talents and makes them drain. For example, the composition of the civil court is complete, while the composition of the criminal court and the administrative court are only a few. The follow-up police are also facing the risk of retirement and resignation.

In addition, although the double examination ensures the quality of legal workers, the starting point is too high. From the previous examination data, it can be seen that the passing rate of grass-roots courts is not satisfactory, and the economically underdeveloped areas cannot catch up with the economically developed areas. The gap between the two sides is very obvious. Some high-quality talents who have passed the examination are also willing to devote themselves to the national judicial construction. They have a construction ambition, but because of their own information blockage, the access to the court is blocked, and they cannot be added to the judge team in time.

To sum up, the judges of the grass-roots courts are too old to adapt to the development of the 5G era. The application of the new court trial system is limited by age and technology, and the younger generation that adapts to the development of the 5G era cannot complement the grass-roots courts, which hinders the construction of smart courts.

#### **3.2. The platform construction is divorced from the judge**

The trial and execution are dominated by judges. However, although the current platform adapts to the development of technology, it ignores the judges' use experience and the actual work needs of the real case-handling personnel, which is the main reason why the platform is not "easy to use". The repeated input of information, the repeated upload of documents, the multiple steps of operation and the multiple methods of entry, all of which increase the workload and difficulty of judges, and do not facilitate judges after development. For judges with generally low technical quality, they can't keep up with the progress of the system. Grass-root judges use their continuous trial business to improve their quality in one case, but the construction of the new platform is because they can't keep up with the development of information, which reduces their quality, which makes the new platform not achieve the expected effect among grass-roots judges.

#### **3.3. Enhanced information circulation and lack of technology**

The leakage of platform information is due to the

increasing number of people handling information, the gradual expansion of the circulation scope, and the uneven quality of people contacting information, thus the risk of information leakage is greatly increased; With the gradual expansion of information from the internal network to the external network, the required technical security is higher, and sometimes external technical personnel are often required to maintain it, which increases the risk invisibly. At the same time, the potential safety hazard is attributed to the lack of technology in the grass-roots courts. First of all, in terms of technical talents, grass-roots courts lack both technical and legal talents, and comprehensive talents are insufficient. Before the construction of a new platform, grass-roots courts mainly focus on trial work, and lack of attention to technology, resulting in a large number of vacancies after the application of the platform. Secondly, the financial strength of the grass-roots courts is limited, the investment in technology is small, the hardware facilities are aging, and the software facilities are scarcer.

### **4. Countermeasures for the construction of smart courts**

#### **4.1. Guarantee talents and promote team optimization and upgrading**

##### **4.1.1. Improve treatment, introduce and retain talents**

The wage standard of grass-roots judges is consistently at a relatively low level, but still lower than that of other countries in the world. The judicial examination and civil service examination are undoubtedly extremely difficult. Under the elimination of the double examination, they are not guaranteed wages and treatment, which is not attractive to absorb high-quality talents. Therefore, the salary of grass-roots judges and welfare benefits such as housing and medical treatment will be increased. Only by narrowing the gap between economically developed regions and underdeveloped regions can talents be introduced and retained.

##### **4.1.2. Strengthen the construction of comprehensive talent team**

With the development of information technology, the grass-roots courts can not only focus on the legal quality of talents, but also must have certain technical quality. Our talents should change the simplification. We should set up big data, artificial intelligence, internet and other related disciplines, promote the interdisciplinary and integrated development of various disciplines and disciplines, create a talent training model of law and technology, and gradually change from talent training. In addition, the grass-roots courts should also expand the scope of professional recruitment, and the recruitment of technical talents is also indispensable, so as to make up for the shortage of the political and legal construction team, and cultivate a working team that understands both technology and judicial business.

#### **4.2. Let judges steadily advance in practice**

According to the current situation of grass-roots court judges, the promotion of the new platform needs to be gradual. The author believes that the speed of promotion can be slowed down to avoid directly entering the application of the new platform and make the transition period longer. In the use of the five departments of external public security, procuratorial, judicial, judicial, and detention centers, the high-quality staff

of the court should be connected, and the new platform should be used to cooperate with the work, which can be gradually adapted in the grass-roots courts. For the older or unskilled court staff, the combination of paper and electronic methods should be adopted, so that the staff of the grass-roots courts have a process of adaptation and acceptance. In the government's efforts to solve the problem of cross-department cooperation in handling cases, it is mentioned that the problem of "not being used" should be solved, and a series of measures such as the establishment of the "five" platform for handling cases of the public, procuratorial, judicial, judicial, and detention centers, and the convening of meetings to analyze the difficulties in the construction of the research and judgment platform are also mentioned, but the author believes that the work of the grass-roots court staff has been a lot at ordinary times, The solutions proposed at present have not gone deep into the staff of the grass-roots courts. Only by gradually promoting and gradually applying them in the work, can we better make the new platform play its greatest role, and do not forget the original intention of the construction of "smart justice".

### 4.3. Perfect and build technical support system

With regard to the use of the new platform, the grass-roots courts have revealed that there are technical weaknesses, and under the influence of the previous epidemic, the grass-roots courts can not open all cases online and offline. This also depends on the connection of online technology. The aging of equipment, lack of technology, and inability to operate are all the difficulties of the current new platform construction of the grass-roots courts. The author believes that first of all, we should improve the hardware, equip complete office hardware, and solve the unstable operation of the platform caused by the aging of the equipment. This depends on the funding guarantee of the construction, actively strive for the financial support of the local government in the construction of the smart court, strive to broaden the funding channels, strive for special funding input, and solve the bottleneck problems that affect and restrict the current development and construction. Secondly, from the perspective of personnel, we should strengthen the technical training of on-the-job staff at this stage, explain the platform operation and its case handling personnel, interpret the specific implementation rules, and ensure that the operation of each link is accurate, legal and standardized. Conduct practical exercises on the operation of the case circulation, data exchange and other platforms of the cross-department big data collaborative case handling platform of politics and law. Finally, starting from the network environment, return to the application of 5G technology, and gradually apply 5G network to the platform construction to

ensure the platform operation needs and information security. The construction of "smart justice" must go hand in hand with 5G network.

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