

Witness Testifying System in Court under the View of Online Litigation Mode

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Abstract: In litigation, whether the parties can obtain the expected result is often reflected in their use of evidence. As a single type of evidence, witness testimony can often play a better proof effect once it is recognized as true. At present, there exist phenomena such as the low rate of witness appearing in court and the difficulty of testifying in court, which can lead to unnecessary delay of the proceedings and make the truth difficult to be discovered. In the phase of COVID-19 prevention and control, regional courts have tried to shift from offline to online litigation, which also facilitates witnesses to testify in court. And the judge, with the aid of artificial intelligence, will also be helpful to judge the credibility of the witness testimony to a certain extent. Online litigation can solve some of the effects of witness testifying in court, or it will be a good opportunity to reverse our witnesses testifying in court.

Key words: online litigation; A witness testifies; Appear in court

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In recent years, the number of cases has increased dramatically, and such a large number of cases coupled with the impact of the new coronavirus epidemic, the cases of local courts can be said to be “a mountain of cases” and “protracted”. The arrival of the epidemic has further accelerated the process of China’s judicial digitization, which is undoubtedly an opportunity for judicial intelligence.

Witness testimony is an important embodiment of the essence of court hearings, but only less than 1% of witnesses testify in criminal cases in our country. According to empirical research, in ordinary first-instance cases in which the defendant pleaded not guilty, there are only 26 cases in every 10,000 cases with witnesses nationwide. [2] It can be seen from this that the rate of witness appearing in court in China is extremely low, which is not conducive to finding out the truth. In order to achieve the purpose of judicial discovery of truth and justice, witness testifying in court is an important part.

1. Problem Exploration

In the face of the extremely low rate of appearance mentioned above, the reasons can be summarized as follows: the witnesses themselves, the defects in legislation and the problems of the prosecution, the defense and the trial.

1.1. Witnesses Themselves

First of all, the witnesses themselves have prejudice to participate in the proceedings, and are imprisoned by the traditional concept of “more than one thing is better than less” and “nothing is hanging high”, which will make the

witnesses resist the psychology of testifying in court. For the investigators themselves, although they do not have the former's own ideological problems, they still have great concerns about the specific content of the review activities, and they are reluctant to mention it in public, so as to prevent the illegality and impropriety of their investigation behavior from being disclosed by the public. [3]

Secondly, although the law and some judicial interpretations have certain provisions for the reasonable cost subsidies for witnesses to testify in court, but our country is vast in territory, in addition to the pressure of money, sometimes testifying for about 3 days, the cost of time generated and how to pay? Does the organization really support the witness to testify? These are the objective resistance brought by witnesses to testify in court, and the risk that they may bring legal trouble to themselves or threaten to harm themselves and their relatives by testifying in court. This paper will focus on online litigation to discuss this.

1.2. Legislative deficiencies

Witness testimony is divided into pre-court testimony and in-court testimony. Our law stipulates three conditions for witnesses to appear in court. From its provisions, it can be clearly seen that witnesses do not appear in court, and their witness testimony can also be used as the basis for conviction and sentencing. In fact, this has a great hindrance to the witness to testify in court. As long as both parties have no objection to the written witness testimony (including the testimony of the pre-court witness), the witness can not testify in court. In this case, the two sides can not cross-examine the testimony of the witness in court, which is actually the result of our judicial system has not established the hearsay evidence rule, which has a great relationship with the requirement of witnesses to testify in court. In addition, there are no legal consequences for the violation of this procedure for the refusal of witnesses to testify in court, which is also a constraint on the reluctance of witnesses to testify in court. [4]

1.3. Tripartite issues of prosecution, defense and trial

In general, judges are in a negative state when witnesses appear in court to testify. It is because of the large surge of modern cases that judges have a large workload of cases. In the face of the testimony of witnesses with objections from both the prosecution and the defense, judges generally consider whether they can form their own self-evidence according to the pre-court case file materials in accordance with the principle of brief trial. In other words, whether the case can be self-"prejudice". The prosecution usually has the witness testimony in the written materials, and is afraid that the witness will reverse the evidence in court, so it is generally reluctant to witness. Some defenders may be afraid of the professional risk of causing "obstruction of testimony", so they are reluctant to apply for witnesses to testify in court. Some defenders do not expect the witness to testify, so they do not apply for the witness to testify.

2. Witness court testimony system under online litigation mode

On August 1, 2021, the "Online Litigation Rules of the People's Courts" was issued, and the Judicial Committee of the Supreme People's Court has provided substantive and specific procedural norms for online litigation in China, based on the principles of fairness and efficiency, legal and voluntary, rights protection, convenience for the people and safety and reliability. Article 26 of the Rules for Online Proceedings stipulates: "If a witness appears in court online, the people's court shall ensure that he or she does not attend the trial and is not interfered with by others by designating an online appearance venue and setting up an online testimony room." If a party objects to the online appearance of a witness and has reasonable reasons, or if the people's court deems it necessary, the witness shall be required to appear in court offline to testify."

2.1. Online litigation reduces the economic cost of witnesses appearing in court

As mentioned above, the testimony of witnesses in offline litigation is influenced by the time and energy of witnesses and the support of their units. Online litigation, by contrast, is a perfect way to avoid this.

If we set the distance from the hearing place to the witness's location as the horizontal coordinate, and the time cost paid by the witness as the vertical coordinate, then it is easier to get a one-time function, and the time cost paid by the witness increases with the distance from the hearing place. Through the cost analysis of the witness appearing

in court testifying distance, and then according to the principle of our country litigation economy, the online litigation trial mechanism should also be a better way for the witness to appear in court to testify compared to the traditional trial mode. In 2017, the Supreme People's Court adopted the "Administrative Measures for the Formulation of Informatization Standards for People's Courts" and a number of documents on informatization of people's courts. In recent years, all walks of life have been developing towards the "Internet +", and the policy propositions of "one thing at a time" and "let the data run more errands and let the people run less errands" have been derived. China's judiciary then put forward the construction of smart courts, with artificial intelligence technology as the main technical support, to meet the requirements of our people for judicial convenience. In this environment, it is particularly a good development trend for the online litigation witness to testify system, and it can also alleviate the low rate of witness to testify in court.

2.2. Online witness testimony under artificial intelligence technology

(1) Extended Reality

With the arrival of the 5G era, the era of information is changing all aspects of our lives, of which XR technology is particularly bright. XR, which stands for "Extended Reality," is an extended reality technology that integrates virtual, augmented and mixed reality technologies. In other words, XR is a combination of VR, AR and MR. XR technology is actually a fusion of these three technologies, VR (Virtual Reality) is also "virtual reality", so that users wear a specific device, so that they feel the virtual reality experience, through the user's visual, auditory and tactile virtual feelings, so that users have a sense of the "reality experience". Augment Reality (AR), also known as augmented reality, is a new technology developed on the basis of VR, which is "stitched" through virtual models and various sensors to make it difficult for users to distinguish. Mixed Reality (MR) is a technology that allows the virtual world, the real world and the audience to interact in real time.

More and more industries are promoting immersive experiences, which used to require very complex enclosed Spaces and a variety of technical devices, but now only digital technology can allow users to participate in a highly effective immersive experience. The same is true of China's judicial reform, through XR technology, the entire online litigation process can be heard in the virtual reality is quite high state, virtual and reality can be perfectly integrated together, in such a case, witnesses will no longer need to travel, can take a breath to participate in the litigation, help the court to find out the facts. By using this technology, it is not a problem for witnesses to testify in online proceedings to reflect the solemnity of the court. Through XR technology, the court can fully immerse the witnesses in the proceedings and testify for the case. XR technology can not only bring the solemnity of the court to the witness testimony, but also bring immersive experience to both parties and other participants in the litigation, which can completely copy the offline litigation court to the online, implementing the virtual-reality litigation mode.

On February 15, 2022, Tencent officially announced that Tencent launched XR business and laid out the true Internet. This is technically helpful for the construction of China's smart court, and it is believed that this technology will definitely penetrate into all walks of life in the future to jointly build a meta-universe digital living space. However, at present, there are still many objective factors in the use of this technology, and the litigation subject is a great challenge to the cognition, technology and application of the software system of this online litigation mode. [5] In the process of law popularization, it is necessary to actively use resources from all aspects to enable the litigants to voluntarily apply online litigation to solve disputes, and to actively publicize the witnesses in cases requiring witnesses to testify in court, so as to enable the witnesses to testify in court through online litigation despite the inconvenience caused by their inability to participate in litigation due to time and other aspects.

The judicial system has changed from completely offline litigation to the current offline and online litigation simultaneously. In line with the principle of cheap economy, it provides practical development for online litigation objectively. Especially during the epidemic period, for cases that have never been tried to solve online litigation before, the use of online litigation has been well resolved, which greatly saves judicial costs and reduces the burden on parties and witnesses.

(2) Affective Computing

Affective Computing (Affective Computing) is a concept proposed in 1997 by Professor Rosalind Picard of the Massachusetts Institute of Technology (MIT) Media Lab. The purpose of affective computing is to develop systems that can recognize, interpret, process, and simulate human emotions. [6] Emotions are complex and are reflected in both physical and psychological aspects of human experience. Experts in different fields of knowledge divide emotions into two general types: discrete emotion theory and dimensional emotion theory. [7] Discrete emotion theory wants to

use many emotion descriptors or adjectives to represent people's emotions. But this has some disadvantages, discrete emotion theory limits the efficiency and adaptability of application. In addition, it is not easy to describe some emotions clearly by using only symbols and adjectives, and the difference between emotions and emotions may be too small to be expressed in such a discrete way. Therefore, most researchers use the theory of dimensional emotion to overcome these problems. According to the theory of dimensional emotion, emotion should be displayed in the psychological dimension space. Since emotions are complex, they need to be measured. The measurement of emotion includes the measurement of emotion dimension, expression and physiological index. The determination of affective dimension is of great significance to the measurement of affective experience, because only with the determination of affective dimension can we make a more accurate assessment of affective experience. [8]

The researchers concluded that a smile, a frown or just a nod of the head on a person's face may reveal certain emotional feedback, voice stutter and frequently used habitual sentences or words, and also reflect the feedback elements of emotional upsurge and depression. If these physiological factors can be captured very truly and quickly, You can give feedback on the person's true emotional state. The computer system can form a certain affective dimension by measuring these affective elements.

At present, affective computing is used to analyze customer emotions, select good employees and so on. Similarly, affective computing can also be applied to the judicial field, such as the criminal department, to assist investigation organs in investigation activities; In terms of mediation, help people's mediators to mediate disputes as soon as possible and in a timely manner. [9] Similarly, emotional computing is applied to the trial of cases under the online litigation mode, and the court assists the parties and other participants through emotional computing, so that the auxiliary judge can form the correct psychological evidence as soon as possible. Through the emotional calculation of the subject and witness of the lawsuit, the need to improve the substantive effect of the court trial is of great significance to the enhancement of the intelligent court. Of course, we should note that emotional computing is only a function of auxiliary artificial intelligence technology to help judges, and cannot be relied on as a critical existence of self-evidence. Only the evidence presented in court and the debate between the prosecution and the defense in court can become the formation of the judge's self-evidence.

3. New prospect of online litigation mode

The information age has arrived, the rapid coverage of 5G provides practical support for online litigation mode, and online judicial work is the trend of The Times. Since the new coronavirus epidemic, online office software has exploded geometrically, and more and more companies are using online office. According to statistics, even if the epidemic situation has eased, there are still a considerable proportion of companies are still using online office mode. This shows that the whole environment ADAPTS to or prefers the convenience brought by online working. On the occasion of this reform, China's judiciary has also continuously introduced relevant network laws and policies, such as the judicial interpretation of face recognition on August 1, 2021 - The Provisions of the Supreme People's Court on Several Issues concerning the Application of Law in civil Cases related to the processing of personal Information using face recognition Technology; A month later, the Data Security Law of the People's Republic of China was implemented. On November 1, 21, the Personal Information Protection Law of the People's Republic of China was officially implemented. All these are revealing for the arrival of the information age. According to the Shanghai Work Report for 2021, the city received 2.625 million applications for online litigation services, with the online filing rate rising from less than 20 percent to 73.3 percent. The number of courts supporting online trials has increased from 26 to 274, with more than 40,000 online trials. [10]

3.1. Artificial intelligence should be actively used as an auxiliary means to create a more suitable online litigation model with Chinese characteristics.

For online litigation, we should actively cooperate with artificial intelligence technologies, and take digital twins, expand reality and emotional computing, privacy computing and other technologies as an opportunity to bring more suitable and more satisfying litigation platforms for online litigation platforms. "People's Court Online Litigation Rules" has been implemented on August 1, 21, the rules for online litigation applicable principles, conditions and so on have made provisions. The introduction of "Rules" provides substantive guidance and content for the better development of

online litigation in China. In this environment, we should accelerate the organic combination of the latest technology of artificial intelligence and judicial proceedings in our country, and become a real new mode of litigation that takes into account both online and offline.

The online litigation trial mode can meet the different requirements of various litigation subjects for online and offline by expanding the realistic artificial intelligence technology, and each subject can conduct online or offline litigation procedures for the same case at the same time according to their actual situation and needs, creating a new mode of virtual-reality litigation that is more in line with the needs of China's judicial system. With the continuous advancement of the online litigation mode through the "Internet + judicial" mode, the continuous improvement of the online litigation rules of the people's court can reach the ranks of the world's advanced trends. Under the new online litigation mode of "artificial intelligence + justice", we should actively promote witnesses to testify in court through the convenient characteristics of online litigation, overcome the regional and time difficulties, and actively publicize the obligation of witnesses to testify. Judicial workers should also hold a positive attitude towards witnesses to testify in court.

3.2. Rational view of the role of online litigation.

The basic principles stipulated in the Online Litigation Rules of the People's Court clearly stipulate the voluntary principle, and we should also look at the online principle rationally, and the excessive use of online litigation trial mode without dialectic will also have a big problem. Through empirical research, Professor Zuo Weimin found that there are many problems in the current practice of online litigation. Although online litigation has significant advantages in terms of cheap litigation and judicial benefits, the technology of online litigation is not perfect in a considerable number of courts. It is also a challenge for judges and litigious parties to use online litigation platforms. [11] In particular, it is difficult to conduct online litigation in a wide and convenient way due to the uneven basic equipment faced by the litigants. For online witnesses to testify in court, it is also necessary to use a separate online litigation room for online witnesses to prevent the witnesses from knowing the trial content in advance and violating the legal provisions of witnesses to testify in court, thus causing wrong cases. It causes damage to the legitimate rights and interests of the parties and reduces the authority of the judiciary, especially the distrust of the new online litigation trial mode, resulting in the death of online litigation from now on.

China's online litigation should carry out a progressive reform model, under the current scale of online court litigation, the first point to line and then to the surface way to carry out more advanced programs with artificial intelligence technology and online litigation, pilot courts should especially seek the latest artificial intelligence technology to help the further development of the court's online litigation model. The online litigation mode is a very important part of the smart court, which needs to rely on the continuous reinforcement and update of artificial intelligence technology. But also have the courage to admit the shortcomings of the current online litigation, for the cases that are not suitable for online litigation to resolutely and actively adopt the mode of offline litigation to prevent unnecessary losses to the parties. People's courts classify civil cases to a certain extent, which can effectively deal with the trial mode required by different types of cases. The Supreme People's Court should refine and improve the online litigation rules, guide the effective implementation of online litigation through rules, conduct necessary technical guidance training for local courts, and combine the guidance and practice of "online litigation + artificial intelligence" with legal rules and pilot courts.

3.3. Online litigation should increase the publicity work and legal aid of new media.

People's courts should not only pay attention to offline law popularization activities, but also pay attention to the new media. If a new litigation model really wants to take root, it is inevitable that a large amount of publicity work will be carried out in the early stage, which requires Chinese courts to increase the publicity of online litigation.

For example, the Supreme People's Procuratorate made Wang Junkai the image ambassador of public interest litigation supervision and publicity, and released a publicity video titled "The rule of law force guarding a better life" through the official public platform of the Supreme People's Procuratorate. This approach has a great impact on today's society. Compared with the simple propaganda in the past, it attracts the attention of the majority of youth groups. The way to drive the people to understand the judiciary through the flow of artists is a way to constantly explore the rule of law in the road of abiding by the law of the whole people. Similarly, online litigation, a new convenient litigation

method, in addition to the continuous changes and iterations of China's judicial system to strengthen its own hardware and software, still needs the general public to understand and understand, so that online litigation can be understood and used by the general public to the greatest extent. Legal aid cases not only provide legal aid for legal aid groups stipulated by the law, but also expand the interpretation, and carry out legal aid work for people or legal persons who are isolated at home due to the epidemic. The application for legal aid should be expanded, legal aid applications should be allowed online, and there should be no geographical restrictions on legal aid agencies. Through big data analysis, the online litigation system can automatically allocate the cases that the applicant needs legal aid, limited to the number of people in line and the degree of familiarity, or select legal aid service personnel for the selection of the applicant. Online litigation should not only reflect its convenience, but also reflect the advantages of big data through artificial intelligence to provide the most effective legal aid for vulnerable groups in need of legal aid.

4. Witnesses testifying under online proceedings

The impact of the COVID-19 pandemic has made online litigation particularly prominent. The Supreme People's Court pointed out that in more than two years, China Mobile micro court filed a total of 13.3056 million online cases, initiated 138,800 cross-domain cases, served 23.3939 million documents, and accumulated more than 7.8 million registered users. [12] The online litigation model, catalyzed by the epidemic, has developed rapidly in the past two years and has become a judicial model in the current Internet era. Against this background, the ability of witnesses to testify online would be an excellent change. The author believes that the witnesses in online litigation can meet the adverse cost caused by the witnesses' reluctance to cross-regional testimony and time consumption to the greatest extent.

The reason for the low rate of witnesses to testify in court in China is the common result of many aspects, in the author's opinion, the most important may be due to the Chinese society, fear of retaliation, fear of offending others, Chinese society itself (this is a paragraph and later) is the human society, and most of the witnesses are associated with the parties to the case, so the witnesses generally will not testify in court. However, as mentioned before, there are many witnesses who do not testify in court. Some of the witnesses really do not want to testify in court because the distance and time consumption are too long, which will affect their work and life. Online litigation can help witnesses to testify in court with minimum time to the maximum extent, and avoid the consumption of witnesses' travel. Witness testimony in court is often very important for the discovery of the truth of the whole case. Witnesses set up online testimony simulation rooms at home to prevent witnesses from knowing the trial situation in advance. Through the 3D technology of artificial intelligence and the extended reality technology, the room of the witness to testify is holographic projected on the court scene, so as to achieve the procedural provisions of the witness to testify in court.

The state should strengthen the popularization of science and technology in the rule of law, fully implement the policy of law-based governance, raise citizens' awareness of the use of justice to resolve disputes, and enhance citizens' confidence in safeguarding the legitimate rights and interests of others and the interests of society as a whole, and their courage to testify. Witnesses to testify in court still need the whole society to carry out the thought of the rule of law, and it will become a normal state to resolve disputes through justice. Increasing the organic combination of witness testimony and artificial intelligence technology has become a weapon that can discover the truth, which can help the real needs of some witnesses, so as to promote the willingness of witnesses to testify online to achieve the ultimate fairness and justice.

5. Summary

In the face of the era of big data, our entire society is gradually transforming to digital, affecting the precise changes of all walks of life and industries, and realizing the real data era. The construction of the smart court will become the pillar of our judicial system, which is the concrete embodiment of our judicial modernization. The smart court is the integrated platform of the database system of various platforms, which has a far-reaching impact on our judicial work. Online litigation can help the litigants and other litigants to provide convenience, and they have a positive role in settling disputes through litigation. Online litigation is the most important part of China's judicial modernization. Through the perfect integration of artificial intelligence technology and judicial hearing, online litigation forms a new litigation hearing model suitable for China's case hearing, which helps to overcome the practical problems of China's

vast territory. Through the formulation of legal rules to guide the in-depth development of online litigation, help witnesses to testify in court conveniently, so as to better protect the legitimate rights and interests of the parties and the legitimate interests of society.

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