

# Recent Development of Internet Courts in China

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## Abstract

*Online dispute resolution (ODR) is growing out of alternative dispute resolution (ADR) and pushing the envelope for resolving online disputes in the Internet courts in China. Recently, the Chinese Internet courts admitted blockchain-based evidence and applied artificial intelligence (AI), cloud computing, big data and virtual reality (VR) technology. The rapid development of Internet courts in China has implications for regulating AI-related technologies, which are playing the role of the 'fourth party,' and the interplay between the 'third party' and the 'fourth party.'*

**Keywords:** Internet court, ODR, AI, blockchain, regulation, fourth party.

The Internet courts in China have developed rapidly since the online dispute resolution (ODR) forum held in China, the International Business Festival, and the Reinventing Justice Conference held in Liverpool on 27-28 June 2018. Shannon Salter, the chair of British Columbia Civil Resolution Tribunal (CRT), acknowledged that the Chinese Internet courts have developed in only a couple of months to set up Internet courts.<sup>1</sup> Her response is thought-provoking. On 6 July 2018, the Chinese leaders at the third meeting of the Central Committee for Deepening Overall Reform approved a number of documents, including a plan to set up Internet courts in Beijing and Guangzhou.<sup>2</sup> Two months later, on 9 September 2018, the Beijing Internet Court was set up. Shortly afterwards, on September 28, the Guangzhou Internet Court was set up. China's first Internet court, the Hangzhou Internet Court, was approved by the 36th meeting of the Central Leading Group for Deepening Overall Reform on 26 June 2017. On 18 August 2017, less than 2 months from the day of its approval, the opening ceremony of the Hangzhou Internet Court was attended by the president of the Supreme People's Court

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1 Shannon Salter gave her comment on the Chinese internet courts when I asked her opinion about them during her online presentation at the 18th ODR forum held in New Zealand. Shannon Salter said she got the information about the Chinese internet courts when she attended the APEC Workshop on Developing a Collaborative Framework for ODR that was held on 8-9 November 2018 in Osaka, Japan.

2 Xinhua, *Xi Presides Over 3rd Meeting of Central Committee for Deepening Overall Reform*, 7 July 2018, available at: [www.ecns.cn/news/politics/2018-07-07/detail-ifyvvuhv1811164.shtml](http://www.ecns.cn/news/politics/2018-07-07/detail-ifyvvuhv1811164.shtml) (last accessed 19 December 2018).

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of China. The fast development of the three Internet courts mentioned above got the attention of His Honour Justice Geoffrey Venning, chief judge of the High Court of New Zealand, who praised them in his keynote speech for the Auckland ODR Forum. My presentation not only covers the admissibility of blockchain-based evidence and the application of artificial intelligence (AI), cloud computing, big data and virtual reality (VR) technology in the Chinese Internet courts but also covers the regulation of fast-advancing AI-related technologies in the Chinese Internet courts.

## 1 Blockchain Is Admissible as Evidence in the Chinese Internet Courts

On 7 September 2018, the Supreme People's Court of China promulgated 'Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases by the Internet Courts.' According to Article 11 of the 'Provisions,' the Internet courts shall recognize digital data submitted by the parties as evidence if the parties can prove their authenticity via electronic signature, reliable time-stamp, hash value check, blockchain and other tamper-proof technical means that can collect and fix evidence or through the authentication of electronic platforms for collecting and storing evidence.<sup>3</sup> Under Article 11, the parties can file an application in the Internet court and ask a person with expertise to provide an opinion regarding technical issues related to the electronic data. In accordance with the application of the parties or on the basis of the authority of the judge, the courts can authorize an expert to appraise the veracity of the electronic data or use other relevant evidence to check the electronic data.

Article 11 of the 'Provisions' was applied to the first case tried by the Beijing Internet Court on 30 October 2018. This case is a dispute over a copyright violation. In this case, the Beijing Weibo Shijie Technology Co., Ltd., sued Baidu Online Network Technology (Beijing) Co., Ltd., and Beijing Baidu Netcom Technology Co., Ltd. The plaintiff author initially uploaded the video in Douyin, a short-video-streaming platform, and later Baidu-backed Huopai uploaded the video on its own huopai app. to provide the users with download services. The plaintiff alleged that the defendant violated its right to distribute information through Internet networks, demanding that the defendant stop infringing and compensate for the plaintiff's economic losses – 1 million yuan for unauthorized downloads of the short video clip.<sup>4</sup> The plaintiff submitted the blockchain-based evidence to the Beijing Internet Court, and it was recognized by the court. The evi-

3 The Supreme People's Court of the People's Republic of China, *Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases by Internet Courts*, 6 September 2018, available at: [www.court.gov.cn/zixun-xiangqing-116981.html](http://www.court.gov.cn/zixun-xiangqing-116981.html) (last accessed 19 December 2018).

4 The Beijing Internet Court, *The Case of Protection of Right of 'Douyin Short Video' Was Formally Accepted As the First Case Out of a Total of 207 Case Applications Which Had Been Received Since the Opening of the Electronic Litigation Platform of the Beijing Internet Court*, 10 September 2018, available at: <https://www.bjinternetcourt.gov.cn/cac/zw/1536582453229.html> (last accessed 19 December 2018).

dence was stored on a blockchain service provided by Beijing Zhongjing Tianping (meaning 'balance'), a third-party platform.

According to Beijing Zhongjing Tianping, blockchain forensics is divided into two stages: taking/collecting and storing. The stage of taking/collecting evidence verifies the authenticity of the evidence through web forensics and network environment checks. The verification measures include viewing the IP address of the other party, checking the registration number of the other party and logging into the other party's home page. At this stage, blockchain is used to play the role of the notary office. The next stage is to store evidence: blockchain is the main solution to the problem of storage. The third-party platform extracts a hash value, which is the only ID of the evidence. The value is invariable. The blockchain technology is used to store the data in a distributed way. At this stage, blockchain ensures that it is not tampered with. If the lawyer of the opposing party questions the submitted evidence, the technicians of the third-party answer the questions on the spot, and additionally, the platform can provide online verification, online retrieval and other services.<sup>5</sup>

As noted above, the Beijing Internet Court admitted blockchain-based evidence in the first case by implementing Article 11 of the 'Provisions of the Supreme People's Court on Several Issues Concerning the Trial of Cases by the Internet Courts.' This fact itself does not mean the reform in legal technology is imposed solely from the top down. We should not ignore the bottom-up approach of the reforms tested by China's first Internet court in Hangzhou, the capital city of Zhejiang province, which has been ranked as the number one smart city in China. The Hangzhou Internet Court is the first Chinese Internet court that recognized blockchain as an admitted means of evidence in a copyright dispute judgment on 28 June 2018, more than 2 months earlier than the date when the Supreme People's Court ruled that Chinese Internet courts can admit evidence submitted by blockchain. In this case, Hangzhou Huatai Yimei Culture Media Co., Ltd., sued Shenzhen Daotong Technology Development Co., Ltd., alleging the defendant republished the author's original article without authorization. The plaintiff presented screenshots of the website's article, which they argued had infringed the author's right-of-information network dissemination. The plaintiff obtained the evidence from the defendant's infringing web page through Baoquan.com (*baoquan* literally means 'preservation') platform, a third-party platform for evidence preservation. The plaintiff proved the integrity of the data that had been stored on a blockchain and therefore had not been altered. According to the Hangzhou Internet Court, as a third-party electronic evidence preservation platform, the Baoquan.com platform is neutral, and the technology of forensics for infringing web page is credible. The electronic data generated from Baoquan.com platform is authentic, complete and cannot be altered. As a result, the court

5 Daily economic news, *The Beijing Internet Court Accepted the First Case and Block Chain Forensics Is Divided Into Two Stages*, available at: <https://baijiahao.baidu.com/s?id=1611405404740224238&wfr=spider&for=pc> (last accessed 19 December 2018).

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ruled that the defendant infringed plaintiff's right-of-information network dissemination.<sup>6</sup>

Other people's courts have learned from the Internet court. Jianggan District People's Court of Hangzhou offered a blockchain-based voting system for a bankruptcy case. The first creditors' meeting of a local hardware market was held from 21 to 27 September 2018, allowing personnel in Zhejiang province to participate in voting online and offline. The online voting data is recorded in the blockchain registry open platform (BROP). BROP is an open, trusted registry platform based on independent intellectual property rights (IIP) developed by Zhongchao (meaning 'China banknote') Blockchain Technology Research Institute, a research body under the People's Bank of China (PBOC).<sup>7</sup>

Whereas 21 creditors attended the meeting in person, about 240 creditors participated in the teleconference through the app. owned by ICBC (Industrial and Commercial Bank of China), which enabled them to register and vote online. The creditors used the blockchain-based voting system to cast their ballots more than 500 times, accounting for more than 80% of the total creditors. The system ensures that each vote is securely encrypted and transparently transmitted to the public.

Although blockchain can be used to authenticate evidence in courts, there is a concern that blockchain is expensive.<sup>8</sup> It is true that blockchain intensively consumes energy, particularly when mining coins. It is estimated that authenticating transactions on a blockchain costs \$600 million a year. AI can automatically calculate data and provide timely help to cryptocurrency miners to 'know when they are performing a less important transaction' and thus execute transactions faster. An AI-embedded blockchain with self-learning capability can dramatically reduce energy consumption and thus lower investments in mining hardware<sup>9</sup> as well as maintenance costs.

The improvement of efficiency is just one example of the convergence of AI and blockchain.<sup>10</sup>

6 Baijiahao, *The First Case of Blockchain Based Evidence Was Admitted in the Hangzhou Internet Court*, 29 June 2018, available at: <https://baijiahao.baidu.com/s?id=1604597392391455671&wfr=spider&for=pc> (last accessed 19 December 2018).

7 ZhongChao, *Blockchain-Registry-Open-Platform*, available at: [https://www.brop.cn/index\\_en.html](https://www.brop.cn/index_en.html) (last accessed 19 December 2018).

8 For example, an audience raised this concern when I gave my presentation at the 18th ODR forum.

9 O. Brytskyi, *Previous Decentralized AI: How AI and Blockchain Can Work Together*, 26 September 2018, available at: <https://espeoblockchain.com/blog/decentralized-ai-benefits/> (last accessed 19 December 2018).

10 F. Corea, *The Convergence of AI and Blockchain: What's the Deal?*, 1 December 2017, available at: [https://medium.com/@Francesco\\_AI/the-convergence-of-ai-and-blockchain-whats-the-deal-60c618e3acc](https://medium.com/@Francesco_AI/the-convergence-of-ai-and-blockchain-whats-the-deal-60c618e3acc) (last accessed 19 December 2018).

## 2 The Chinese Internet Courts Can Apply AI, Cloud Computing, Big Data and VR Technology

Cloud computing, big data and VR technology are all AI-related technologies. Big data is the fuel for AI. Cloud computing can be used to store, retrieve and transfer users' data. AI also has a big impact on the VR field.<sup>11</sup> How can the Chinese Internet courts apply AI, cloud computing, big data and VR technology? Seeing is believing. The Beijing Internet Court is an example. I visited the Beijing Internet Court before leaving China for Auckland to attend the 18th ODR forum. A robot, an intelligent litigation guide with blue eyes, named Hubao (meaning 'mutual treasure'), welcomed me immediately after I entered into the court. The robot stands 1.5 m tall and wears a white robe. Her childlike voice made me feel relaxed. I can imagine her voice could have a soothing effect on anxious litigants who are eager for assistance. When I asked her, 'May I contact the court staff?', she guided me to the service windows for personal services. She can not only guide the litigants but also answer legal questions. For example: After my article was reproduced by other websites without my authority, how can I protect my rights?; When my copyright is infringed, what liability does the infringing party have?; and If the borrower does not repay my loan, does the guarantor need to pay all the compensation? China's first litigation-guiding robot was introduced in Hangzhou in October 2016. It can help the parties find out the best way to resolve their disputes and assist them in selecting suitable attorneys for their cases. Janet Martinez, F. Peter Phillips and Colin Rule witnessed an intelligent litigation guide in Hangzhou Westlake Court in September 2017. It took only 2 years for Chinese courts to spread litigation-guiding robots all over China. Beijing introduced the first guiding robot in Beijing First Intermediate People's Court in October 2017, which can answer about 40,000 litigation questions and 30,000 legal issues. It knows more than 7,000 laws and regulations and can assist the parties in searching laws and procedures as well as the trial situation of similar cases according to the requirements of the parties.<sup>12</sup>

I also experienced other intelligent technologies in the Beijing Internet Court. One of them is 'facial recognition' technology, called shualian (meaning 'swiping face'). The parties, lawyers and judge can take advantage of face recognition and real-name authentication. In contrast, in the traditional courts people go through the tedious process of manual registration and security inspection before they can enter the court. Their identity information related to the facial features is linked to the identity information database of the public security system and the identity information stored in the lawyer information inventory of the Beijing Judicial Bureau.

- 11 "Some of the biggest reasons for the sudden [VR]evolution are the recent milestones in the combination of virtual reality and machine learning ... machine learning and artificial intelligence are already impacting the field in spectacular ways." See Ryan Kh, *Virtual Reality and Machine Learning Go Hand In Hand*, 16 July 2018, available at: <https://www.smartdatacollective.com/virtual-reality-machine-learning-go-hand-in-hand/> (last accessed 19 December 2018).
- 12 X. Wen, *Robot Gives Guidance in Beijing Court*, 13 October 2017, available at: [www.chinadaily.com.cn/china/2017-10/13/content\\_33188642.htm](http://www.chinadaily.com.cn/china/2017-10/13/content_33188642.htm) (last accessed 19 December 2018).

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The Beijing Internet Court has an online litigation orientation room, which is divided into eight parts: e-click-through for case filing, diversified-mediation, online mediation room, panoramic VR<sup>13</sup> demonstration of online trial, online moot court, the window of science and technology, intelligent enforcement and e-message area. When mediation begins, the original transparent colour of the glass wall can be changed to an opaque colour. When the glass is transparent, it is convenient for visiting people to watch the scene. When mediation is in progress, its opaque colour can avoid external disturbance. The glass wall has some degree of soundproofing, affording confidentiality and privacy during the mediation progress.

The pre-litigation mediation platform is linked to more than 70 mediation organizations. The parties who agree to have a pre-litigation mediation can use remote online mediation as long as they enter into the platform. After the mediation is completed, the mediation agreement and the confirmation of the mediation application can be sent back to the platform.

The court's AI system can assess possible litigation outcomes for a party before a case filing starts. The online litigation platform provides the party with a litigation risk intelligent evaluation system, which can deliver a report by synthesizing the litigant's case and corresponding risk based on the analysis of judicial data and similar cases. The litigation risk assessment can help the party with a lack of legal knowledge to identify and avoid common litigation risks, thereby reducing unnecessary losses. Meanwhile, the assessment can make the party aware that litigation is risky and costly and guide the parties to choose alternative dispute resolution or 'diversified dispute resolution.'

If the litigant has not written a complaint letter, she or he can use the Intelligent Complaint Machine to solve the problem. In the Intelligent Complaint Machine, a complaint letter can be automatically generated by selecting answer choices such as cause of action according to the specific question directions. The list of answer choices with a series of questions has been automatically generated by the system based on big data and AI analysis. The litigant can use the complaint letter to file a case after previewing and confirming the information.<sup>14</sup>

Finally, I saw a demonstration of 'automatic generation of a simple case judgment document.' The generated judgment document has green and black characters. The black characters are used as the fixed content. Green characters are the personalized information, such as the basic information of the parties, case number, the facts of the case and applicable legal provisions, which are received from the platform. It takes only about 10 seconds to form the draft document after the

13 Virtual Reality is not 'virtual' but becomes a 'reality' in the Chinese courts, including Internet courts, for example, in March 2018, VR for crime scene visualization was tried in a court in Beijing. See Xinhua, *Beijing Court Turns to Virtual Reality* – China.org.cn, 2 March 2018, available at: [www.china.org.cn/china/2018-03/02/content\\_50634714.htm](http://www.china.org.cn/china/2018-03/02/content_50634714.htm) (last accessed 19 December 2018).

14 The introduction of Intelligent Complaint Machine can be used to respond to the question raised by Professor Noam Ebner of Creighton University: 'Is the interface (the website, the forms to fill out, the menus, the language, etc.) designed to be understood by the layman, or do they seem to be oriented to people with legal expertise?'

trial, and the judge only needs to check it and make simple amendment before completing a judgment document.

It is worth noting that the Beijing Internet Court effectively uses ‘pop-up screens’ shown on the party’s mobile phone as service of a legal document. It is difficult to serve a document to the party whose whereabouts is unknown, but pursuant to Article 84 of the Civil Procedure Law of the People’s Republic of China, “[a] receipt shall be required for every litigation document that is served and it shall bear the signature or seal of the recipient of the service and the date of receipt.” Accordingly, the e-litigation platform sends the party a text message for the purpose of service. When a party receives the text message, the mobile phone shows the pop-up screen and the screen is locked.<sup>15</sup> The mobile phone cannot be used unless the content of the notice is read and the ‘close’ button is clicked. The short message cannot be intercepted by common security anti-virus software. After reading the message, the party can click on the link of the e-litigation platform shown in the message and use the *guanlian ma* (meaning ‘correlation code’) of the case to respond to the court. The cooperation between the three major communication operators of China – Unicom, Telecommunications and Mobile – ensures the effective delivery of the message by using the technology of the pop-up screen. The three major communication operators almost cover all mobile phone service all over China.

The Beijing Internet Court is just an example of Chinese online courts. According to *China Daily*, the nation’s leading English-language newspaper, “[t]he Supreme People’s Court has ordered Chinese courts at all levels to build technology-friendly systems for lawsuits and explore the use of big data and AI to help judges and litigants search documents and resolve cases.”<sup>16</sup> There is an ecosystem for the Chinese courts to build AI systems. For instance, Gridsum Holding, Inc., as a leading provider of cloud-based big data and AI technologies in China, has ‘incorporated AI technologies such as natural language processing and machine learning to match identical and similar cases’ in order for the courts to make consistent judgments.<sup>17</sup>

### 3 Regulating Fast-Advancing AI-Related Technologies in the Chinese Internet Courts

From the International ODR Forum in Liverpool to the 18th ODR Forum in Auckland, it took only 4½ months for the topic of ODR conferences to change

15 T. Li, *The Pop-up Screen Technology Used to Serve the Document Is on Trial in the Beijing Internet Court: The Party Is Unable to Use Mobile Phone Unless Reading the Message*, 28 October 2018, available at: [http://news.sina.com.cn/o/2018-10-28/doc-ifxeuwws8792125.shtml?cre=tianyi&mod=pcpager\\_china&loc=3&r=9&doct=0&rfunc=68&tj=none&tr=9](http://news.sina.com.cn/o/2018-10-28/doc-ifxeuwws8792125.shtml?cre=tianyi&mod=pcpager_china&loc=3&r=9&doct=0&rfunc=68&tj=none&tr=9) (last accessed 19 December 2018).

16 Wen, 13 October 2017; for more information about AI in the Chinese courts, see, e.g., Z. Lin, Y. Wang & T. J. Teng, *Could AI Transform China’s Legal System?* 11 December 2017, available at: <https://www.caixinglobal.com/2017-12-11/could-ai-transform-chinas-legal-system-101183154.html> (last accessed 19 December 2018).

17 Gridsum, *Court Solutions*, available at: [www.gridsum.com/en/solution/judiciary/judicialCourt.html](http://www.gridsum.com/en/solution/judiciary/judicialCourt.html) (last accessed 19 December 2018).

from ‘Justice Re-Imagined’ to ‘Innovation and Impact: Online Courts and the Changing Landscapes of Digital Justice.’ I have introduced the innovation of online courts and the changing landscapes of digital justice in China, but we should ‘re-imagine’ the ‘impact’ of online courts on landscapes of justice. The impact of the Chinese Internet courts upon international landscapes of justice is incredible. Even American non-experts talk about the Chinese Internet courts: “[f]or the rest of the world, the Chinese Internet courts open up a new door in the world of blockchain.”<sup>18</sup> The Chinese Internet courts have impressed Western lawyers so much that they exclaim: “China has taken the lead in the digitization of the legal system.”<sup>19</sup> Also, when I was asked to answer the question, ‘What’s the best thing happening in ODR in your jurisdiction?’ at ODR Symposium in Melbourne on 22 November 2018, I praised the fast advance of the Chinese Internet courts, giving the ‘hottest tip to Aussies.’<sup>20</sup> However, I and other panel members did not have the chance to discuss questions such as ‘Could we become victims of our own success?’ (e.g. how do we deal with the ‘floodgates’ problem when access becomes too easy or accessible?). At the conference, I did not mention the regulation of AI systems in the Chinese courts. I will use some thought-provoking questions raised by Leah Wing as my disclaimer statement:

Under what conditions should algorithms decide outcomes? Should big data specialists control access to justice? How do we regulate the interface between AI, big data and the impact of platform designs on the delivery of justice? ...Who should be responsible for the creation and maintenance of regulation, monitoring and accountability?<sup>21</sup>

- 18 N. Reiff, *Chinese Supreme Court Will Allow for Blockchain-Authenticated Evidence*, 12 September 2018, available at: <https://www.investopedia.com/news/chinese-supreme-court-will-allow-blockchainauthenticated-evidence/> (last accessed 19 December 2018). Actually, US state of Vermont is the world-first to recognize blockchain data in courts. Under certain circumstance, however, what matters is not the fact itself but the influence of the opinions.
- 19 “A conclusion that can be drawn from the existence of specialized courts that work entirely online, but even more so from the fact that the Hangzhou Internet Court was the first to approve blockchain technology as appropriate means of evidence in an online infringement case, is that China has taken the lead in the digitization of the legal system.” See R. Brunner, *Chinese Court Is First to Accept Blockchain As Means of Evidence*, 27 July 2018, available at: [blog.dennemeyer.com/chinese-court-is-first-to-accept-blockchain-as-means-of-evidence](http://blog.dennemeyer.com/chinese-court-is-first-to-accept-blockchain-as-means-of-evidence) (last accessed 19 December 2018).
- 20 Shannon Salter, Colin Rule, Pablo Cortés, Michael Heron, Katarina Palmgren and David Weisbrot (the panel Chair) were in the plenary session of ‘Around the World in 80 Minutes: Expert Panel From 5 Continents’, ODR Symposium, Melbourne, Sir Zelman Cowen Centre. We discussed the questions such as ‘What lessons can Australia draw from the international experience?’ Available at: <https://www.odrmelbourne.com.au/> (last accessed 19 December 2018).
- 21 L. Wing, ‘Artificial Intelligence and Online Dispute Resolution Systems Design: Lack of/Access to Justice Magnified’, *International Journal of Online Dispute Resolution*, Vol. 4, No. 2, 2017, p. 19.



In addition, Daniel Rainey agrees that the designers and the programmers directly impact the “fourth party”<sup>22</sup>, which can bring “biases to the table just like any other party.”<sup>23</sup> The rapid development of AI technology in the Chinese court should call for government regulation. Chinese scholars pointed out that AI brings unprecedented challenges to existing laws, such as civil law, copyright law, tort law, personal right law, traffic law and labour law, and that preventive actions such as establishment of a ‘Robot Ethics Charter’ should be taken to balance the negative effects caused by AI.<sup>24</sup> In addition, they raise a few issues. For instance, the situation that AI automatically generates judgments and judges correct the deviation of legal decisions based on big data can result in a potential problem with accountability. Who should be held responsible for a judgment mistake? Programmers, software engineers, data processors, information technology companies or judges have a chance to avoid accountability.<sup>25</sup> The concern raised by the Chinese scholars is not unreasonable. AI systems in courts may act unforeseeably. The unexpectedness of AI behaviour could shield judges from liability for mistake under certain circumstances. Furthermore, the issue of a superseding cause or an intervening force and proximate cause are complicated in AI tort. Not only do the Chinese scholars call for the regulation of AI system in courts but so do the Chinese judges. On a Chinese website, a couple of Chinese judges have published a Chinese translation of Colin Rule’s speech on ODR standards given at the 2017 International Mediation Summit held in Hangzhou.<sup>26</sup> The standard is evolving and including the ethical role of algorithms/AI and “third-party ethics in the age of the fourth party.”<sup>27</sup>

Is it necessary to regulate blockchain technology? If so, is it too premature to regulate it in China? Regulating blockchain is not to kill the ‘golden goose’ but navigate the uncharted waters of blockchain technology. Blockchain is a double-edged sword, which not only can be used for public good, such as securing evidence, but also has the potential for public harm. The immutability and irreversibility nature of blockchain could be at odds with the ‘right to be forgotten.’ Blockchain’s immutability means that the data is not forgotten, threatening the right

22 The term of the ‘fourth party’ was coined by Ethan Katsh and Janet Rifkin; simply put, ODR is the use of Information and Communication Technologies (ICT) as the fourth party to assist the impartial third party to resolve the dispute between two parties; see E. Katsh & J. Rifkin, *Online Dispute Resolution: Resolving Conflicts in Cyberspace*, San Francisco, Jossey-Bass, 2001.

23 D. Rainey, ‘Third-Party Ethics in the Age of the Fourth Party’, *International Journal of Online Dispute Resolution*, Vol. 1, No. 1, 2014, p. 55.

24 H Wu, ‘Institutional Arrangement and Legal Regulation in the Age of Artificial Intelligence’, *Science of Law – Journal of Northwest University of Political Science and Law*, No. 5, 2017, pp. 128-136.

25 W Ji, ‘The Change of Judicial Power in the Age of Artificial Intelligence’, *Oriental Law*, No. 1, 2018, pp. 125-133.

26 H. Jiang & W. Wang, *Development of ODR Standards in the United States*, 29 October 2017, available at: <http://news.sina.com.cn/sf/news/fzrd/2017-10-09/doc-ifymrcmm9476807.shtml> (last accessed 29 November 2018).

27 Rainey, 2014.

of privacy.<sup>28</sup> In 2014, the European Court of Justice established a legal precedent in the EU, ruling that operators of search engines must remove certain unwanted links if requested because they were the ‘controller’ of information. The ruling results from a Spanish man’s efforts to remove historic links to his debt problems. The decision focused on the tension between privacy and freedom of information.<sup>29</sup> The court observed that as a rule the data subject’s rights override the interest of Internet users.<sup>30</sup> Since then, Europeans have requested that Google remove over 2 million URLs. Of those requests, 15% were related to ‘crime’ and ‘professional wrongdoing.’<sup>31</sup> In April 2018, another landmark ‘right to be forgotten’ case was decided in a UK court that ruled in favour an anonymous businessman who requested that Google delete search results about his conviction. The judge sought a fair balance between ‘right to be forgotten’ and the ‘public interest.’<sup>32</sup> Additionally, there exists a conflict between blockchain’s immutability and ‘right to erasure’ specified by EU General Data Protection Regulation (GDPR).<sup>33</sup> Since May 2018, GDPR has been applicable in all EU member states to harmonize their data privacy laws. According to Article 17 of GDPR, the data subjects have the right, for some reasons, to ask the data controller to erase their personal data without undue delay, for instance, if personal data are no longer necessary to achieve the original purposes for which they were collected.<sup>34</sup>

The Chinese Internet courts handle Internet-related disputes, including disputes arising from infringing personal (*e.g.* rights of privacy, name, portrait, reputation or personality). In theory, the right to be forgotten is related to right of privacy. In July 2018, a few Chinese websites have suggested that blockchain should be used to store the evidence of sexual harassment. According to these websites, since blockchain has the feature that ‘data cannot be changed,’ the evidence and articles should be timely published in the blockchain in order to avoid

- 28 Alphawallet, *Blockchain Violates the Right to Be Forgotten*, 13 April 2018, available at: <https://alphawallet.com/blockchain-violates-the-right-to-be-forgotten/> (last accessed 16 December 2018).
- 29 I. Kottasova, *Europe’s Top Court Supports ‘Right To Be Forgotten’ in Google Privacy Case*, 13 May 2014, available at: <https://edition.cnn.com/2014/05/13/business/google-right-to-be-forgotten/index.html?iid=EL> (last accessed 16 December 2018).
- 30 G. Sterling, *The “Right To Be Forgotten” – EU Court Gives People Ability to Delete Their Google Search Results*, 13 May 2014, available at: <https://searchengineland.com/right-forgotten-eu-court-grants-people-control-control-search-191198> (last accessed December 16, 2018).
- 31 S. Fiegerman, *Google Loses ‘Right To Be Forgotten’ Legal Battle*, 13 April 2018, available at: <https://money.cnn.com/2018/04/13/technology/google-loses-right-to-be-forgotten/index.html> (last accessed 16 December 2018).
- 32 A decade ago, the businessman was sentenced to half a year’s imprisonment for conspiring to intercept communications. See CBS News, *Google Loses “Right To Be Forgotten” Legal Case in Britain*, 14 April 2018, available at: <https://www.cbsnews.com/news/google-loses-right-to-be-forgotten-legal-case-europe/> (last accessed 16 December 2018).
- 33 P. S. Vogel, *Blockchain’s Immutability Is in Conflict With GDPR’s “Right To Be Forgotten”*, 9 October 2018, available at: <https://www.lexblog.com/2018/10/09/blockchains-immutability-is-in-conflict-with-gdprs-right-to-be-forgotten/> (last accessed 29 November 2018).
- 34 Art. 17 GDPR, Right to erasure (‘right to be forgotten’), the Regulation (EU) 2016/679 (General Data Protection Regulation), available at: <https://gdpr-info.eu/art-17-gdpr/> (last accessed 29 November 2018).

the destruction of evidence. National Sexual Assault Information Network should be established to collect sexual assault information and record the information in blockchain permanently. Moreover, a Metoo Dapp platform should be established to report about victims around the world. In a Metoo Dapp, the developer can compare the feedback information of the victim with relevant information through data stored on blockchain. After the authenticity of the feedback information is confirmed, the information could be transmitted directly to the relevant departments to immediately protect the victims.<sup>35</sup>

In April 2018, an organization named after 'Chinese Student Activities' posted an open letter online, referring to the issue that sexual harassment reports stored in the blockchain cannot be deleted or changed. The letter was posted on the ethereum blockchain and attracted reviewers from Weixin, Weibo and other social media platforms.<sup>36</sup> The letter drew attention from China's Cyberspace Administration. In October 2018, it released strict draft regulations for blockchain companies and entities operating in China. According to the regulations, blockchain-based information service providers should fill in the registration form through the service management system of the National Internet Information Office. The registration should be completed within 10 working days from the date of service delivery. In addition, blockchain start-ups must check users' identities. Recently, the National Institute of Electronic Standardization (CESI) under the Ministry of Industry and Information Technology (MIIT) of China plans to issue three blockchain standards for smart contracts and privacy to improve the development of the country's blockchain industry.

China's e-commerce giant Alibaba invited an American law professor to give a speech on the issue of 'right to be forgotten' at its headquarters in Hangzhou. The professor pointed out that Chinese courts rejected a right to be forgotten claim against Baidu in a lawsuit over removing search results in May 2016.<sup>37</sup> It was the first of such cases to be tried in China. According to Xinhua news published in April 2018, Alibaba will use its AI technology and cloud services to upgrade legal technology in "thousands of Chinese courts."<sup>38</sup> Therefore, the American law professor's speech about 'right to be forgotten' will have implications in China.

In December 2018, the regulation of blockchain has been supported by one of the leading Chinese scholars: Zhang Wenxian, the vice president of China Law Society. He published an article, 'Rule of Law Should Be Considered As a Long-Term Development,' pointing out that the development of new technologies such

35 Tencent cloud, *If Girls Can use the Block Chain*, 31 July 2018, available at: <https://cloud.tencent.com/developer/news/288923>; see also, "METOO DAPP", The Girls Unite! 31 July 2018, available at: <http://wemedia.ifeng.com/71562528/wemedia.shtml> (last accessed 19 December 2018).

36 Blockchain Hard Science and Technology, *China's Internet Regulatory Authority Has Strict Requirements on Block Chain Start-ups*, 23 October 2018, available at: [www.inpai.com.cn/news/qukuailian/20181023/4837.html](http://www.inpai.com.cn/news/qukuailian/20181023/4837.html) (last accessed 19 December 2018).

37 H. J. Krent. Dean and Professor of Chicago-Kent College of Law, named 2018 Person of the Year by Chicago Lawyer magazine, gave a presentation about 'Right to be Forgotten' in Alibaba in Hanzhou on 11 December 2018.

38 Xinhua, *Alibaba to Help Chinese Courts Go on Cloud*, 27 April 2018, available at: [www.xinhuanet.com/english/2018-04/27/c\\_137141548.htm](http://www.xinhuanet.com/english/2018-04/27/c_137141548.htm) (last accessed 19 December 2018).

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as blockchain and cloud computing should be subjected to regulation under the rule of law. A few important websites have used the headline ‘New Technologies Such as Blockchain Need to Be Regulated by the Rule of Law’ to introduce his article. His argument is that modern information science and technologies, such as Internet, Internet of things, cloud computing, big data, artificial intelligence and block chains, have pushed human beings into an intelligent society. The use of big data and blockchain technology is invading citizens’ information rights. Personal privacy, dignity and tranquillity are facing a crisis so serious that they may no longer exist. Faced with the double-edged sword of science and technology and the societal risk posed by information technology, we must regulate the development of new technology under the rule of law, exerting its beneficial effects on human beings to the limit and meanwhile preventing its harmful effects on human beings.<sup>39</sup>

In sum, it is not premature to regulate blockchain technology in China. Also, it is necessary to regulate blockchain as applied in the Chinese Internet courts.

In conclusion, the Chinese Internet courts have developed rapidly. They have a big impact on other courts in China, and vice versa. We should view the Chinese Internet courts from the perspective of AI development in the Chinese court system. If we only focused on the Chinese Internet courts, we would not see the forest through the trees. Moreover we should view AI-related technologies in the Chinese court system from the perspective of the ‘fourth party’ of ODR that is the manifestation of technology, including AI, cloud computing, big data, blockchain, VR and other technology. We should not exaggerate the role of these technologies, and particularly the courts cannot solely rely on AI-related technologies for performing judicial functions. The term ‘fourth party’ was first coined in 2001, and it will be not become obsolete at least for the foreseeable future. Although AI as a fourth party is increasingly annexing the territory of the third party, it can only reduce the need for human intervention and cannot replace the third party. The ODR standards and AI ethics codes should be developed to keep pace with the advance of AI-related technologies in order to regulate the interplay of the ‘third party’ and the ‘fourth party’ of ODR.

39 C. Lian, *Vice President of China Law Society: New Technologies Such As Block Chain Need to Be Regulated by the Rule of Law*, 4 December 2018, available at: <http://liancaijing.com/alerts/251619.html> (last accessed 16 December 2018).