Harnessing the Power of Information Technology for Efficiency in E-Court and E-Trial

Prof. Dr. Srisakdi Charmonman
Asian Computer Man, Father of Thai eLearning,
Father of Thai Internet, Father of Thai IoT,
Fellow of the Royal Institution of Great Britain
Founding President of Thailand Chapter of the Internet Society
Founding President of Thailand Chapter of the IEEE Computer Society
Founding President of Thailand Chapter of the ACM
Charmonman@gmail.com, www.Ccharm.SiamTechU.net

Pornphisud Mongkhonvanit
President of Siam Technology College
President of Thailand Chapter of the Internet Society
President of Thailand Chapter of the ACM
President of Thailand Chapter of the Computer Society of the IEEE
Pornphisud@gmail.com, www.siamtechu.net

Abstract - Searching Google for “E-court”, over 51 million entries were found. Similarly, searching Google for “E-Trial”, over 26 million entries were found. Therefore, it can be said that the terms “E-court” and “E-trial” are very popular. However, E-Court usually includes E-Trial. Therefore, in this paper, the term E-court will be used to stand for both E-court and E-trial. The senior author of this paper has been an Associate Judge at the Central Intellectual Property and International Trade Court of Thailand for 15 years and is familiar with E-Court used there. This paper will start with the Introduction which mentions E-Court at the International Criminal Court in The Hague which is one of the earliest E-Courts in the world, and presents E-court in India which is the country with more than 13,000 E-Courts. To be presented after the Introduction are E-court at ICC, US E-court, Thai E-court, Malaysian E-court, Korean E-court, China E-court, and Internet of Things or IoT in Court Cases.

Keywords - E-Court, E-Trial, E-Court at ICC, US E-Court, Malaysian E-Court, Thai E-Court, Korean E-Court, China E-Court, IoT in Court Cases

I. INTRODUCTION

Searching Google for “E-court”, over 51 million entries was found. Similarly, searching Google for “E-trial”, over 26 million entries was found. Therefore, it can be said that the terms “E-court” and “E-trial” are very popular. From Wikipedia [1], eCourt or Electronic Court, or ECourt, or e-Court or paperless court, is a place with qualified Judges using a well-developed Information Technology infrastructure for court’s functions such as presenting evidence, and filing judicial records or receiving testimony remotely. Therefore, in this paper, the term E-court will be used to include E-trial.

Wikipedia also cites “The International Criminal Court in The Hague” as a good example of an eCourt. From <https://en.wikipedia.org/wiki/International_Criminal_Court> [2], the International Criminal
Court (ICC) is an intergovernmental organization and international tribunal in the Hague in the Netherlands.

From the paper “The Use of eCourt Technology at the International Criminal Court (ICC)” [3], the ICC eCourt includes: 1) Tools for Judicial Research and Analysis; 2) Documents and Records Archive; 3) Library, Translation Tools, SAP HR, Budget, Finance, Travel, etc.; and 4) Computers, Printers, Storage Area Network, Telephony, and etc.

In the paper from India entitled “eCourts Project: Value and Benefits” [4], the Indian eCourts project provides Information Technology enhancement of courts via the universal computerization by: 1) Using cloud computing; 2) Digitizing case records; 3) Increasing availability of online e-services via e-filing, e-payment, and mobile apps; 4) Providing required hardware and software apps to enable courts to deliver e-services to citizens; and 5) Enabling the judiciary to manage and monitor functioning of courts in a very effective manner.

ICT implementation in the Indian eCourt was accomplished through the followings: 1) Court would be connected to jail by ISDN Lines at both ends with a camera and display unit provided with recording facility at the court’s and 2) The accused could be at the jail while judges, lawyers and witnesses would remain present in court and regular trial would be conducted.

The number of courts in India using eCourt is very, very large, i.e. more than 13,000 District courts and Subordinate courts in the first phrase of the E-court project.

The senior author of this paper has been an Associate Judge at the Central Intellectual Property and International Trade Court of Thailand for 15 years, including 5 years as the Chairman of the Associate Judge Club with about 140 members. One of the most important laws on Intellectual Property is the Copyrights Law. The first copyright law in Thailand was written by Phraya Nitisastrabaisal (Von Charmonman) when he was the Minister of Justice of Thailand. That law did not cover Computer Software. The Copyright Law of B.E. 2537 was amended from the earlier one by the Committee headed by the senior author of this paper who is a son of Phraya Nitisastrabaisal. In the next Section after the Introduction, this paper will present E-Court at the International Criminal Court, US E-court, Thai E-court, Malaysian E-court, Korean E-court, China E-court, and IoT in Court Cases.

II. E-COURT AT THE INTERNATIONAL CRIMINAL COURT

Searching Google for “E-Court at the International Criminal Court”, 1.36 million entries were found. From the document “Electronic Courts and the Challenges in Managing Evidence: A View From Inside the International Criminal Court” [5], there are 3 court rooms at the International Criminal Court (ICC). Two of the three are fully configured e-courts, with: 1) Broadcast quality technology in place, hearings can be broadcast globally via the Internet; 2) A thirty-minute delay was built into the system as a safeguard; 3) All documentary evidence is presented as electronic images; 4) All parties have access to all evidence collected for their case using the Ringtail e-Court system; 5) All parties have e-mail access allowing them to communicate discretely with their opposing party and with relevant support staffs; and 6) Secure systems are in place to manage the evidence. A view of an ICC E-court room is shown in Fig. 1.

![A View of an ICC E-Court Room](Source: www.haguejusticeportal.net)
III. E-COURT IN THE USA

Searching Google for “E-court in USA”, about 9.15 million entries were found. As an example, the document “E-COURT TRANSITION IN NEW HAMPSHIRE: An Analysis of Short and Long-Term Implications” [6] stated that New Hampshire’s e-Court Project was the result of a recommendation from the New Hampshire Judicial Branch Innovation Commission. The New Hampshire Judicial Branch grouped 122 of the 158 trial court case types into 12 separate workflows, which would be automated in 12 phases. The New Hampshire Supreme Court would be the 13th and final phase. As of early 2014, the project’s completed deliverables included the project mission, business requirements, rules and statute review, budget, and feasibility studies. Finally, Maryland, New Jersey, and Oregon were selected for case analysis.

For E-court in Maryland: 1) In April 2009, the Maryland Administrative Office of the Courts announced “The Maryland Electronic Courts (MDEC) project” for all the courts in the state court system; 2) Courts would collect, store and process records electronically, and would be able to instantly access complete records as cases travel from District Court to Circuit Court and on to the Appellate courts; 3) The new system would ultimately become ‘paper-on-demand; and 4) Maryland’s current automated system consists of five primary case management systems (CMSs) and 22 subsidiary court applications that support the courts and associated organizations.

For E-court in New Jersey: 1) the E-Court Project development began in 2008, when a Special Committee on Electronic Filing was formed; 2) In June 2009, the Committee delivered a 110-page report; 3) In May 2014, the state officially launched its program in only ten counties; and 4) A statewide rollout was by the end of July 2014.

For E-court in Oregon: 1) The Oregon e-Court transition began in 2012 and was set to be completed by 2016; 2) The primary goal of Oregon’s e-Court transition was to store all court documents digitally; and 3) Oregon’s Chief Justice summarized the program’s success positively.

IV. E-COURT IN THAILAND

Searching Google for “E-Court in Thailand”, 1.36 million entries were found. As an example, from <www.it24hrs.com>, on 29 August 2013, the Thai Government agencies, the Thai courts, and concerned organizations, signed an MOU to implement E-Court based on the E-court in Maryland, USA [7] as shown in Fig. 2. and 3.

![Fig. 2 Vision for E-Court in Maryland, USA](http://www.courts.state.md.us/mdec/img/vision-screen.jpg)
For the E-court in Maryland, there were 4 assumptions, 5 benefits, and 5 future policy considerations.

The 4 assumptions are: 1) There will be no paper files and new court case records; 2) All new and re-opened cases will be in computerized form; 3) Computerized Work Flow Management will be used; and 4) Fees will be collected electronically.

The 5 benefits are: 1) Eliminating paper files for all new cases; 2) Greatly enhancing interoperability; 3) Eliminating process delay; 4) Supporting court operations; and 5) Increasing services to all parties concerned.

The 5 future policy considerations are: 1) Mandatory E-filing; 2) Electronic case records as official records; 3) Electronic and digital signature; 4) E-filing model, fee structure, etc; and 5) Policy development to coincide with technology development.

For the E-court in Thailand, there are 3 systems, namely: 1) Electronic Filing System; 2) Case Management System; and 3) Court Room System. The 3 systems are connected to the Front Office System and the Back Office System of the Court and other related organizations.

V. E-COURT IN MALAYSIA

Searching Google for “E-court in Malaysia”, about 1.68 million entries were found. As an example, the document “E-Court: Information and Communication Technologies for Civil Court Management” [8], stated that the E-court in Malaysia focuses on the four main types of applications: the Electronic Filing System (EFS), the Case Management System (CMS), Court Recording and Transcribing (CRT) and Queue Management System (QMS).

Malaysian Legal System includes two legal systems standing side by side, namely, the Civil legal system based on English Common Law and statutes, and the Shariah legal system based on the Islamic Law. The overall E-court project was divided into four phases as outlined in Court’s ICT Strategic Plan (ISP) dated July 4, 2003, with respect to all courts throughout Malaysia. E-Court began to be developed on September 27, 2004 by a third party supplier, Solsis (Malaysia) Pte. Ltd., while KPMG was appointed as the consultant. E-Court has been implemented on a pilot basis in 11 courts and was transferred to the Judiciary for full implementation on Jan 11, 2009.

The technologies in place in courts under the E-Court project consist of four modules as follows:

1) E-Filing system (EFS) Electronic Filing System (EFS) generally allows for case filing via the internet, where legal firms file their case online through submission of applications or summons;
2) Queue Management System (QMS) which allow the queuing process of daily court transaction, to be automated;

3) Case Management System (CMS) allows cases to be managed electronically, without physical files; and

4) Court Recording and Transcribing (CRT) to record the whole process of hearing before judges in the open court, so that the whole court proceeding can be stored in audio video format for reference and long term preservation.

VI. E-COURT IN KOREA

Searching Google for “E-court in Korea”, about 3.3 million entries were found. As an example, the document “Improving court efficiency: the Republic of Korea’s e-court experience” [9] stated that Korea efforts to implement E-court started by a group of judges by recording some cases on floppy disks, in 1979 and asked the Korea Institute of Science and Technology to make a feasibility of E-court.

In 1986 the case management system was launched and allowed search of all civil cases in the database. The electronic filing of civil, commercial, administrative and family-affairs cases began operating in 2010, and by June 2013 almost half of civil cases were e-filed.

Korea did not go paperless immediately but started with paper-on-demand to allow users to adapt and then moved to a paperless system. The population of Korea is 50 million inhabitants including about 12,500 lawyers. About 40% of lawyers registered with the system but only 20%, or approximately 2,500 lawyers use it regularly.

In 2012, Korean lawyers filed just over a third of the nearly 1 million cases electronically. Every month, more lawyers become users of E-court because of the following advantages: 1) Convenience; 2) 24/7 access to registries and court documents; 3) Easier, faster access to information that no longer requires a trip to court; 4) Increased transparency because litigants can also access the system; and 5) Document security guaranteed by a high-tech information technology system.

About the costs of Korean E-court: 1) about US$20 million for initial development of the system; 2) about US$20 to integrate new features by 2015; and 3) Maintenance fees and data preservation cost about US$30 million a year.

VII. E-COURT IN CHINA

Searching Google for “E-court in China”, about 6.63 million entries were found. As an example, the document “Alibaba Partners With China’s Courts To Offer E-Courts for Chinese E-Shoppers” [10] stated that China’s e-commerce market has increased in recent years and Chinese courts have implemented pilot e-court programs to handle e-commerce disputes. Chinese e-courts are available in Xihu, Binjiang and Yuhang district courts covering issues from online trade disputes, copyright lawsuits, and online financial services and the appeals are handled by Hangzhou intermediate court.

Alibaba has partnered with Zhejiang Provincial High Court to launch an e-court to handle disputes in e-commerce, copyright, and online financial services. From initiation through disposition, a case can be handled at www.yuncourt.com. The Chinese E-court uses Alibaba’s big data to improve the efficiency of e-commerce-related cases and to help with trial transparency and avoid the wrong or contradictory sentence. China has over 350 million e-shoppers and e-courts allow shoppers to have easy access to justice and services.

The are many good points of Chinese E-courts such as: 1) All documentation filed online; 2) Three-way video conference; 3) Fees are the same as traditional cases; 4) No travel and the process is quicker; 5) Mediators help settle cases; 6) Lawsuits can be dropped at any time; and 7) Easy to get evidence from Alibaba system. The only main bad point of the
Chinese E-court is that it is too convenient and so the E-courts are inundated with frivolous lawsuits.

VIII. INTERNET OF THINGS IN COURT CASES

Searching Google for “Internet of Things in Court Cases”, about 52.7 million entries were found. As an example, the document "Internet of Things: A Privacy Law Case Study” [11] stated that one of the most talked about topics of IoT is concerning Privacy Law, especially with regards to the two pieces of major legislation, namely, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), and The Fair Credit Reporting Act of 1970 (FCRA). Both laws were written long before the IoT era and therefore the use of IoT could easily violate the two laws.

As the second example, the document “Will your Internet of Things Device Testify against You?” [12], raised a situation that your wearable device is subpoenaed to testify against you. You were driving when you were over the legal alcohol limit and data from a smart Breathalyzer device is used against you.

IX. CONCLUDING REMARKS

E-court and E-trial may be considered two separate topics but a good and complete E-court should include E-trial. Therefore, in this paper the term “E-court” has been used to stand for both E-court and E-trial. One of the very first E-court is at the International Criminal Court (ICC). The country which has very, very large number of E-courts is India with more than 13,000 E-courts. This paper presented E-Court at the International Criminal Court, US E-court, Thai E-court, Malaysian E-court, Korean E-court, China E-court, and IoT in Court Cases. However, since Information Technology are developing very, very fast, all parties concerned should search Google regularly to find up-to-date information on the applications of IT in E-courts for the benefits of himself, his organization, and his country.

REFERENCES

(Arranged in the order of citation in the same fashion as the case of Footnotes.)


