



INTERNATIONAL
GROUP OF
ARTIFICIAL
INTELLIGENCE



INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE IN COURT AND LAW AFFAIRS

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Dr. Lorenzo Cotino Hueso
Professor of Constitutional Law
at the University of Valencia

AI Uses in Justice and how to do it legally





VNIVERSITAT
DE VALÈNCIA

LORENZO COTINO

Catedrático de Derecho
Constitucional
de la Universitat de
València

SOBRE MÍ



Bienvenido a www.cotino.es

Política de Cookies

Lorenzo Cotino Hueso, U. Valencia

www.Odiseia.org www.derechotics.com

ISSUES

- More than 100 EU projects: sowing seeds for the future?
- China is already reaping profits from AI
- Uses for ODR
- Bases of EU legal regime

EU experiences



Study on the use of innovative technologies in the justice field

Final Report



EU experiences

- First Multi-annual e-Justice Action Plan 2009-2013
- e-Justice Strategy and Action Plan 2014-2018
- e-Justice Strategy and Action Plan 2019-2023. 25 States. 93 projects and use cases from authorities 8 projects from professional organisations.
- 29 projects from 15 companies

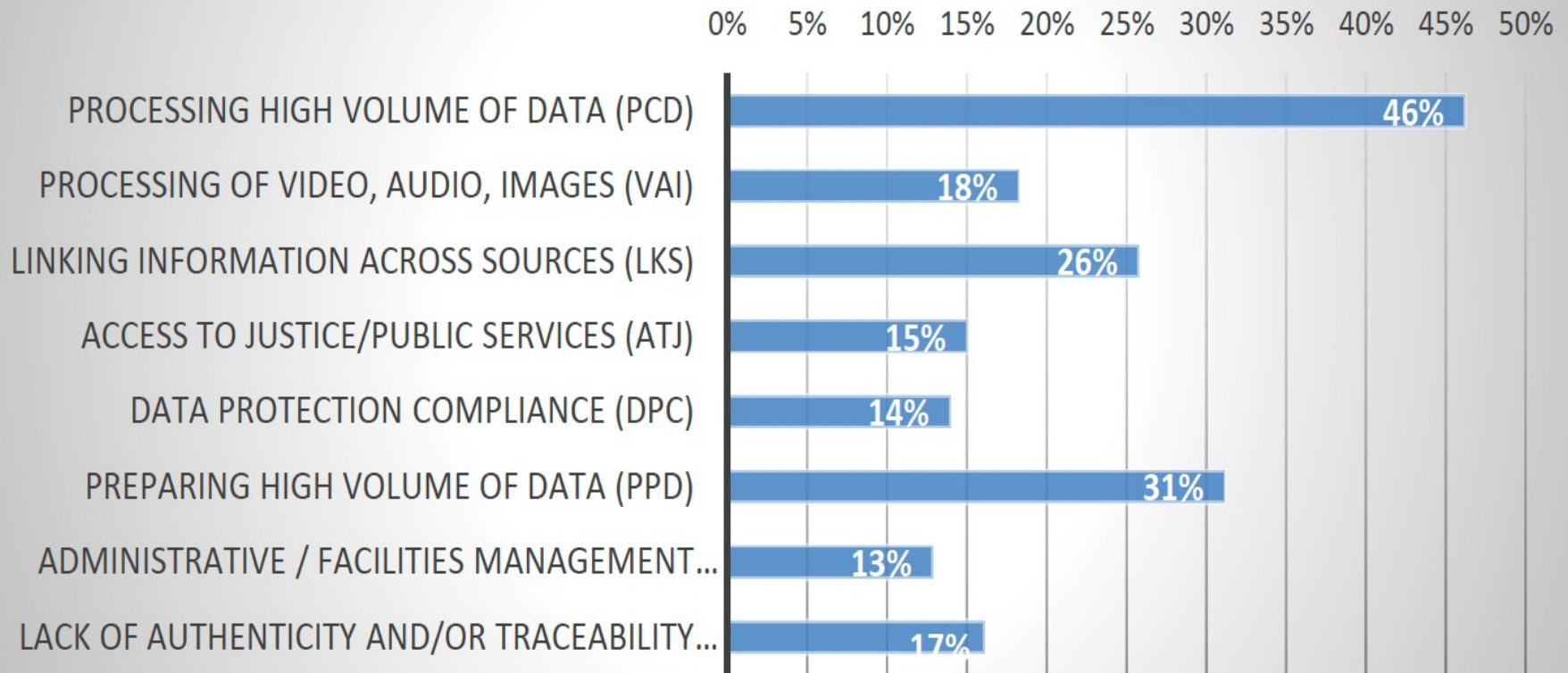
| Project status | Total number |
|----------------|--------------|
| Completed | 25 |
| Ongoing | 55 |
| Planned | 12 |
| Suspended | 1 |
| Total: | 93 |

Problems to which IA provides answers

- Processing of large volumes of structured and unstructured data for the purpose of analysis (information, patterns, words, categories, etc.)
- High-volume processing of video, audio and images for analysis and documentation.
- search, extract and analyse information from multiple, non-centralised sources.
- Access to justice/public services (jurisprudence, cases, laws...)
- Administrative/facilities management, personnel, etc.
- Data protection compliance
- Preparation of large volumes of data, preparation of court hearings
- judicial administration, translation, preparation of contracts,
- judicial decisions and anonymised versions
- Lack of authenticity and/or traceability so that information can be stored and/or transferred securely.

Problems to which IA provides answers

Business Problem Categories



Solutions and answers

- process automation - 32 projects (34%) - organisation, planning and management of facilities, prioritisation, categorisation and allocation of documents and tasks, related to management and efficiency.
- data security and traceability - 16 projects (or 17%) - blockchain
- anonymisation and pseudonymisation -12 projects -(13% of 93 projects) data protection
- search optimisation -10 projects (11%)- jurisprudence, land registers, libraries
- voice/text to text/speech solutions -9 projects (10%)- modernising courtrooms
- facial and/or object recognition - 5 projects (5%).
- identification of victims - prisoner behaviour
- "predictive justice" -5 projects (5 %)
- chatbots -digital assistance -- 4 projects (4%)

Less "fun" projects

- Many countries anonymisation-pseudonymisation projects
- Austria: Automated allocation and processing of incoming documents
- Croatia: speech to text
- Hungary: speech recognition and transcription
- Ireland: Licence plate recognition
- Italy: case law
- Lithuania: networks, texts and loudspeakers
- Netherlands: case law robot
- Portugal: classification, indexing and advanced search of AI, national land registry, indexing of documents and information
- Slovenia: Handwriting recognition
- Spain: Textualisation, Classification of documents, sentences and transition to structured data
- Sweden: Translation



More attractive projects



- Austria: Chatbot
- Denmark: Digital court planner for prosecutors ; facial recognition
- to generate pictorial material on sexual abuse; classification of more serious cases of child abuse to be dealt with first
- Estonia: Automatic transcription of the audiences
- Finland: chatbot in divorce/separation (Aurora)
- Germany: processing of child pornography images; search for child pornography images; search for hate crimes on social media
- Italy: predicting guidelines and deadlines in family law; quantifying compensation for personal injury and maintenance. Management in the criminal field.
- Latvia: Voice Recognition; Court Administration
- Lithuania: ROXANNE, uncovering organised criminal networks
- Portugal: IReNe - Personal Web Assistant, BALCAT - ballistic analysis database
- Slovenia: Handwriting recognition
- Sweden: Legal guidance with support from the Inland Revenue's AI; one bot (FairAdBot) for mapping hidden ads

Estonia? Everybody talks, but not

Estonia story

e-state building blocks

Facts & figures

News & events

Briefing



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Private collaboration

Austria: m2n

Bélgica: Consono, Dynizer, Deloitte, RegExplorer, IBM Watson

Croacia: Newton Technologies Adria

Dinamarca: Pentia

Estonia: Assured-AI

Finlandia: KnowIT

Francia: Predictice

Alemania: Parodatec, PROSAR-AIDA, LexIQ, Lexalyse

Países Bajos: Microsoft, Azure AI

Reino Unido; VoiceScript Technologies Ltd, **PredPol**



Document AI

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- ✓ Make better decisions using document data and make it available to your applications and users
- ✓ Automate and validate your data to make your workflows more efficient and free from guesswork
- ✓ Rely on Google's security model and world-scale infrastructure to keep your organization secure
- ✓ Use your document data to gain new insights about your products and meet customer expectations

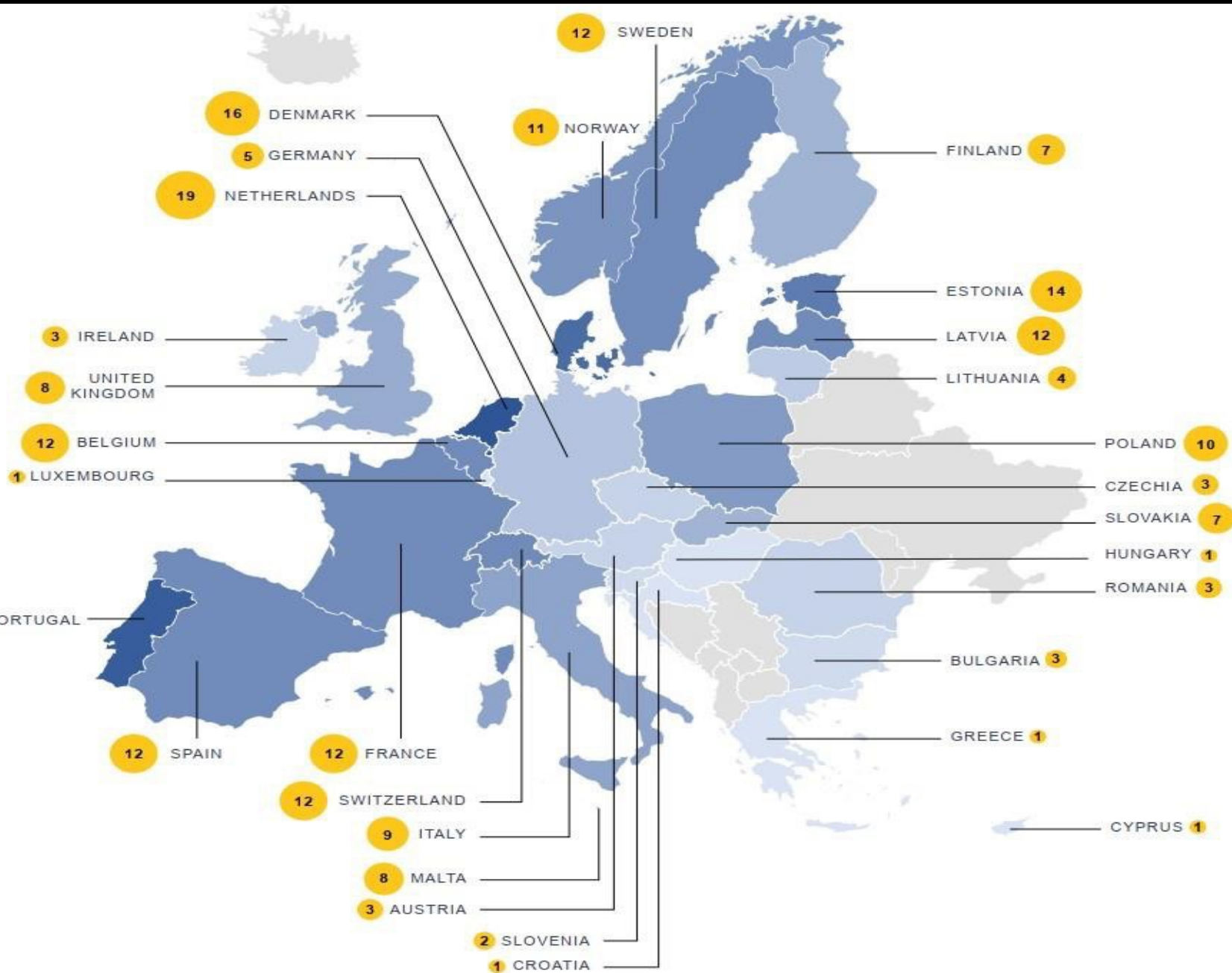


Science for Policy Report

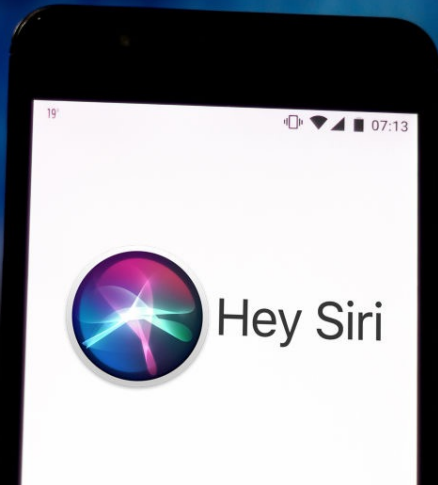
AI Watch

Artificial Intelligence in public services

*Overview of the use and impact
of AI in public services in the EU*

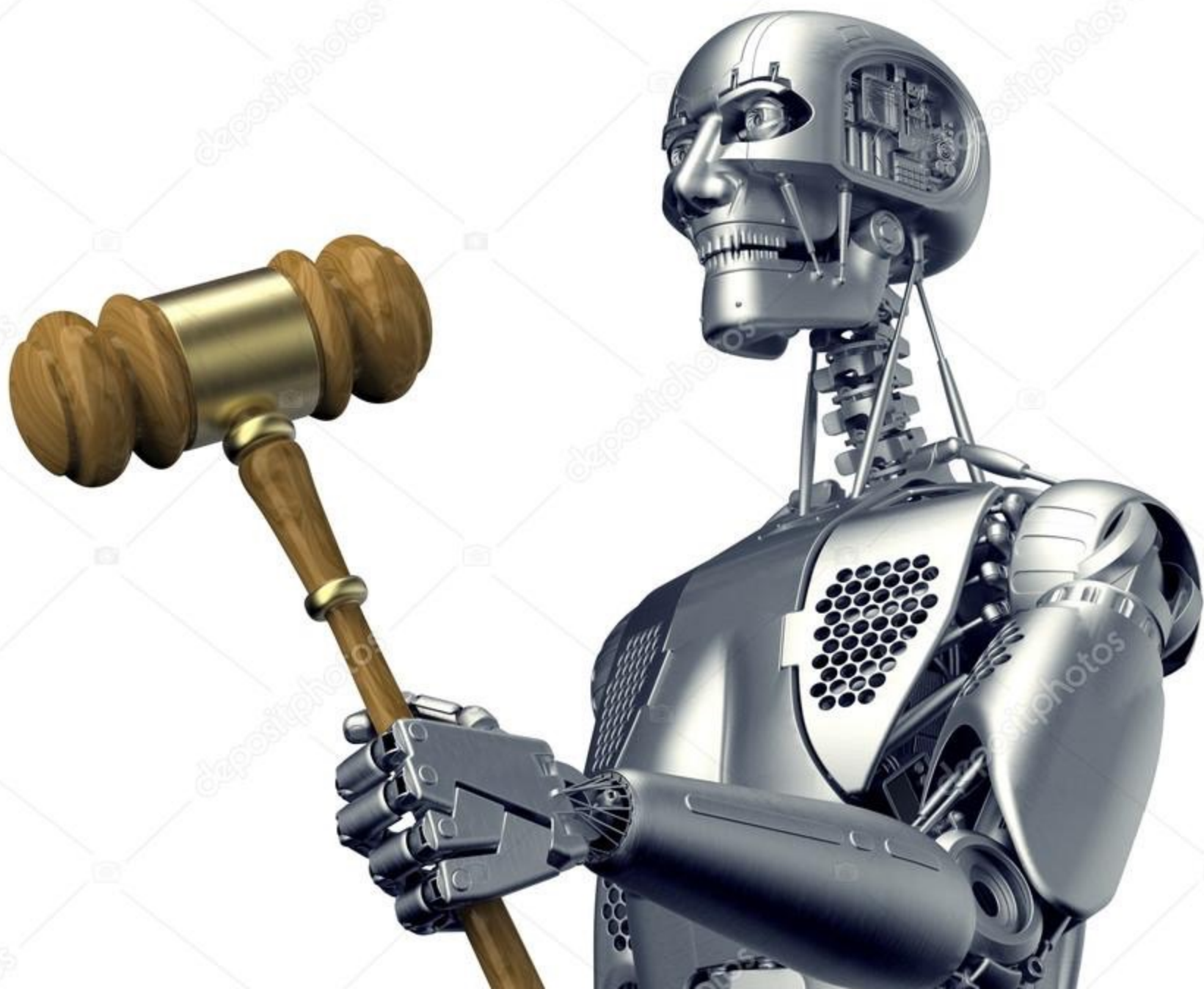


SYRI in Holland; SATÁN (Falcciani , , Valencian Law in Spain against fraud) , Viogén, Veripol...



CHINA . It is already reaping the fruits of the IA.





CHINA Hangzhou Internet Court



杭州互联网法院（杭州铁路运输法院）

杭州互联网法院诉讼平台

[首页](#) | [法院简介](#) | [法院要闻](#) | [便民诉讼](#) | [执行信息](#) | [审务公开](#) | [调查研究](#) | [普法课堂](#) | [司法改革信息](#)

[首页](#) > [法院简介](#) > [法院概况](#)

法院简介

法院概况

来院地图

领导介绍

管辖范围

机构设置

法院概况

法院简介

2017年8月18日，根据中央全面深化改革领导小组审议通过的方案，杭州互联网法院挂牌成立，集中审理浙江省杭州市辖区内基层人民法院有管辖权的六类涉互联网一审民事、行政案件，开启了中国互联网案件集中管辖、专业审判的新篇章。

我院通过制度创新和信息化应用，打破时空限制，实现全流程在线办案，方便群众诉讼，提高审判效能。登陆杭州互联网法院诉讼平台，当事人通过勾选和填充表单式的结构化选项，5分钟内即可完成起诉立案申请。立案后，系统自动生成相关法律文书并加盖法院公章，以短信、语音、电子邮件等电子方式进行送达。在举证及质证环节，系统会自动提示证据交换动态，便于当事人利用空余时间完成诉讼。庭审以视频方式进行，当事人只需一台电脑或者手机，足不出户便可参与庭审。庭审时，电子证据通过诉讼平台在线展示，双方围绕争议焦点进行调查和辩论，语音识别系统实时生成电子笔录，大大缩短了庭审时间。

我院根据涉网案件特点及审理要求探索出台的《诉讼平台审理规程》理规程，破解了诉讼主体身份确认难、当事人在线质证难、在线行为基本框架。我院将继续在司法实践中总结探索涉网案件审判规律，全规则，探索人工智能司法应用及信息技术深度应用，构建高效、便捷安全、化解涉网纠纷、促进互联网和经济社会深度融合作出积极的贡

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CHINA Hangzhou Internet Court



The screenshot displays the official website of the Hangzhou Internet Court. At the top, a banner features the court's name in Chinese, '杭州互联网法院 (杭州铁路运输法院)', and '杭州互联网法院诉讼平台', set against a background of a modern city skyline. Below the banner is a navigation bar with links such as 'Home', 'About the Court', 'Court News', 'convenience lawsuit', 'execution information', 'Audit Service open', 'research', 'Franco-Prussian classroom', 'Judicial Reform Information', and 'Introduction to the Court'. The main content area is titled 'Introduction to the Court' and contains two paragraphs of text. The left sidebar lists various sections: 'Court Overview', 'Come to the hospital map', 'Leader introduction', 'Jurisdiction', and 'Institutional setting'.

杭州互联网法院 (杭州铁路运输法院)
杭州互联网法院诉讼平台

Home | About the Court | Court News | convenience lawsuit | execution information | Audit Service open | research | Franco-Prussian classroom | Judicial Reform Information

front page > Introduction to the Court > Court Overview

Introduction to the Court

On August 18, 2017, in accordance with the plan deliberated and approved by the Central Leading Group for Comprehensive Deepening of Reform, the Hangzhou Internet Court was established to focus on six types of first-instance Internet-related civil and administrative cases that have jurisdiction over the grassroots people's courts within the jurisdiction of Hangzhou City, Zhejiang Province. It opened a new chapter of centralized jurisdiction and professional trials of Internet cases in China.

Through system innovation and the application of information technology, our court breaks time and space constraints, realizes the entire process of online case handling, facilitates litigation by the masses, and improves trial efficiency. Log on to the Hangzhou Internet Court litigation platform, and the parties can complete the application for filing a lawsuit within 5 minutes by checking and filling in the form-like structured options. After the case is filed, the system automatically generates relevant legal documents and affixes the official seal of the court, and delivers them by electronic means such as SMS, voice, and e-mail. In the link of proof production and cross-examination, the system will automatically prompt the evidence exchange dynamics, so that the parties can use their spare time to complete the lawsuit. The trial is conducted by video, and the parties only need a computer or mobile phone to participate in the trial without leaving home. During the trial, the electronic evidence is displayed online through the litigation platform, and both parties conduct investigations and debates around the focus of the dispute. The voice recognition system generates electronic transcripts in real time, which greatly shortens the trial time.

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CHINA Hangzhou Internet Court



Can perceive and understand, think and reason, make decisions and take action, collaborate and interact

CHINA Hangzhou Internet Court

- 1 Automatic case file review. automatic generation of procedural documents and delivery to the parties before the court.
- 2 a pre-report is sent to the judge in real time and points out the focus of the dispute
- 3 During the trial, assisting the judge . organising both parties to present evidence and cross-examination, classify evidence, record trial content in real time and perform intelligent semantic analysis, dynamically generate the focus of disputes and order according to the trial content and evidence identified by the judge, complete quantity calculation and result prediction in real time, alert the judge of risk points, generate the judgment document in real time and dynamically optimise it according to the trial situation.

CHINA 2020 annual “Report on Informatization of Chinese Courts [中国法院信息化发展报告]”

TOP-BOTTOM The supervisory platform of the Yibin People's Court, Sichuan Province

- Control-supervision between higher and lower courts.
- creates problems of independence and illegitimate interference.
- can detect and send a warning to the higher courts. The senior judge then supervises the case of a junior judge.
- real-time monitoring of the progress of a case.
- may freeze the proceedings in the case until the monitoring requirements are met.
- determines clear time limits for each stage of the judicial process,
- The system can send warnings to the judge in charge.

BOTTOM-UP. Jiangxi High Court's "Electronic Judge Assistant" platform.

Faxin 2.0 Smart Push System (Smart Court Times , 28 October 2020).

推荐 | “法信2.0智推系统”上线！全面对接全国法院电子卷宗办案系统

研发背景

系统建设的痛点

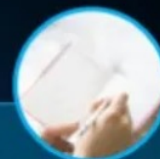
电子卷宗辅助法官办案成效不显著
办案系统与知识数据库融合程度低



裁判数据



法律法规



文献观点

随案生成电子卷宗



法官检索的痛点

案例裁判数据量太大，自主检索费时费力
结合案情查找法条引用说理查询操作复杂

BOTTOM-UP. Jiangxi High Court's "Electronic Judge Assistant" platform.

- to assist judges in preparing and deciding cases.
- text recognition, image recognition, indexing and automatic organisation of scanned case materials.
- compares and analyses key plaintiff and defendant information with other databases to check for overlapping or serial litigation.
- It can generate legal documents, transcripts of trial hearings, first instance trials, etc.,
- enables judges to generate procedural documents with a single click
- analyses the information in the case in depth and suggests legislation,
- leading cases, similar, publications.
- records all decisions taken for management and monitoring purposes.

ODR-negotiation and conflict resolution

Zelevnikow

- negotiation support
- shows the level of disagreement
- "better alternative".
- argumentation or dialogue techniques
- compensation strategies
- Particularly common in family law, Australia, also in Holland.
- ANDRC, ARyME, BBB, Peruvian, Cybertribunal, CPR, CyberLaws.net, Electronic, Courthouse, Eucon, ICC, JAMS, Mediation Now, Mediation Room, Forrest Mosten, DRWo, Private Judge, Resolution F., martSettl, TRUSTe, WIPO, Camera Milano, OAN, V. Courthouse, Arbitrare
- Family_Winner (Australian family law domain (Bellucci & Zelevnikow, 2001). Family Wizard
- Automated Legal Intelligent System (ALIS) intellectual property rights, in Europe PERSUADER (Sycara, 1993) is a framework for intelligent computer-supported
- IMMEDIATION, MODRON , Dutch platform Rechtwijzer - Roadmap to Justice

ODR-negotiation and conflict resolution

Zelevnikow

Table 2 Categorization of ODR Systems

| I. Category | Methods | Main Players |
|---|--|---|
| Information systems | Provision of information that parties can use to resolve their dispute | Scenario Builder Notgoodenough.org |
| Univariate blind bidding | Automation for single monetary issues | CyberSettle |
| Document management for negotiation | Facilitators working online and/or offline with parties making use of formal structured document management tools to help them create their contract | Negoisst |
| eNegotiation (or automated mediation) systems | Sophisticated optimization algorithms to generate optimal solutions for complex problems | Family_Winner Inspire SmartSettle |
| Customized for negotiation or mediation of a particular type of dispute | Automated negotiation with structured forms | eBay UPI SquareTrade |
| General virtual mediation rooms | Human mediators working online with parties making use of mediums such as email, instant messengers, telephone and discussion forums | ECODIR Mediation Room SquareTrade |
| Arbitration systems | Human arbitrators working online with parties making use of mediums such as email, instant messengers, telephone and discussion forums | Word & Bond |

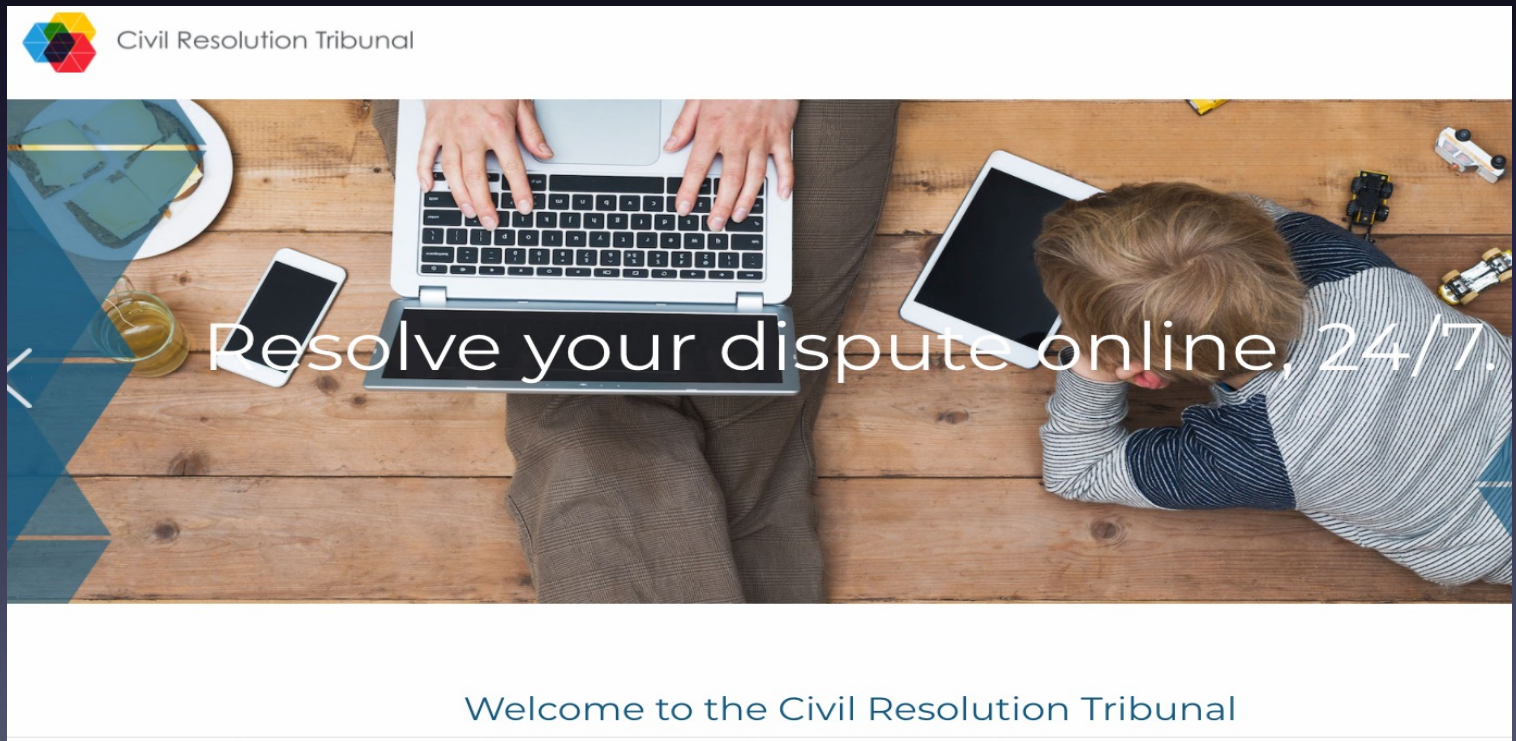
British Columbia Civil Resolution Tribunal \$ 5,000 (Salter and Thompson)

also, Ontario Superior Court of Justice Digital Hearing Workspace

system has handled nearly 14,000 small-claims cases.

Roughly 85 percent of the 700 cases resolved to date were settled.

Only 12 went to decision at the tribunal.

A top-down photograph of a person's hands typing on a laptop keyboard, with a young child sitting next to them looking at a tablet. The scene is set on a wooden table with various items like a glass of juice and toy cars. The banner includes the Civil Resolution Tribunal logo and text.

Civil Resolution Tribunal

Resolve your dispute online, 24/7.

Welcome to the Civil Resolution Tribunal

Law enforcement and police and judicial use: PREDPOL, COMPAS,



GDPR- IA “Made in Europe” ethics by design



New compliance model "Prevention is better than cure".



Prior approval systems



High risk

- Real-time" remote biometric identification
- Individual risk assessments for offending or re-offending
- Police polygraphs, emotional state, reliability of evidence
- Predict personality or past criminal behaviour
- Crime analysis large complex data sets
- Migration, asylum and border control management
- Assisting a judicial authority in the investigation and interpretation of the facts and law and in the application