Judge's verdict or automated formats: Technological intervention in the decision-making of the Justice of the Peace

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Abstract- This paper delves into the intersection of equity, access to justice, and the right to immediacy within the evolving landscape of technological intervention in judicial decision-making, with a particular focus on the Justice of the Peace system. Postpandemic, there has been an increased reliance on information and communication technologies (ICT), emphasizing the importance of timing, consistency of criteria, and predictability in automated resolutions. However, the traditional role of the Justice of Peace involves judicial mediation to provide tailored solutions considering the perspectives of involved parties and the nuanced nature of justice and equity. This study contrasts the efficiency of automated formats with the inherent challenges they pose in capturing the complexities of human interactions and abstract concepts such as justice and equity. By analyzing the implications of artificial intelligence tools, the paper explores solutions and good practices to ensure that technological interventions uphold the principles of justice, fairness, and procedural integrity in the judicial process.

Keywords-- Automation of judicial decisions, access to digital justice, immediacy through new information technologies, mediation versus the automation of justice.

I. INTRODUCTION

This paper acknowledges ICT's growing impact on access to justice while emphasizing the need to understand its consequences, exploring the potential of autonomous mechanisms in dispute resolution. It highlights risks associated with unregulated technological deployment, especially amid increased digital reliance during the pandemic. An analysis evaluates justice operators' readiness for computerized tools and challenges faced by public institutions in their implementation. The central concern is whether automating judicial decisions compromises individuals' rights to mediation and legal protection. While not opposed to technological progress, the paper underscores the hazards of replacing judges with automated systems, risking core principles like efficiency and consistency, recognizing the value of human judgment in effective critique and discernment.

In Ecuador, a trend towards automating judicial processes has emerged, with initiatives like the Ecuadorian Automatic Judicial Processing System (SATJE) established in 2000 [1], [2], streamlining services such as judicial record review [3]. Resolution 318-2015 further endorsed the adoption of new information technologies to enhance transparency and

Digital Object Identifier: (only for full papers, inserted by LACCEI). **ISSN, ISBN:** (to be inserted by LACCEI). **DO NOT REMOVE** efficiency in the judicial system [4]. The COVID-19 pandemic in 2020 accelerated the use of telematic methods for efficient judicial protection, enabling remote work for judges.

the Judiciary Council of Ecuador's implementation of standardized formats for legal proceedings, particularly in small claims and alimony cases, is highlighted, eliminating the need for legal representation and offering downloadable forms on its website [5]. Additionally, the integration of predictive programs autonomously evaluates individuals' risk. The study scrutinizes the National Customs Service of Ecuador, where a technological tool determines importers' gauging procedures, underscoring challenges in reviewing such determinations in administrative and judicial contexts. Judicial oversight is constrained due to judges lacking access to the tool's underlying factors, rendering its outcomes the sole recourse. The paper assesses the efficacy of automated templates in judicial evaluations, exploring mediation and conciliation aspects, and examines automated resolution systems' potential for fairness and sound judgment, emphasizing the benefits of standardized templates and new technologies in bolstering judicial protection. It delves into ICT and artificial intelligence in Ecuadorian courts, distinguishing between automatic and autonomous actions, acknowledging potential uncertainties without significant concerns regarding criticism or access to justice [6].

The Judiciary Council mandated, through Resolution 045-2020 dated May 7, 2020, the establishment of a virtual window for justice services, facilitating the submission of electronically signed writs through dedicated online platforms [2]. Despite efforts to streamline processes with user manuals and virtual platforms, concerns persist regarding the validity of virtual documents, especially without electronic certification for notarized papers. The potential influence of autonomous actions on judicial sound judgment raises questions about unpredictability, as they eliminate direct human involvement [7]. However, human intervention remains crucial in system maintenance and database management, ensuring a balance between technological advancement and judicial integrity.

Efforts to expedite justice and ensure Access to Justice have led to the development of automatic and autonomous systems within jurisdictional affairs. Brazil's Federal Supreme Court employs the VICTOR system [9], which identifies impactful appeals based on pre-established thematic criteria, achieving a high accuracy rate (90.34%) in classification in 2018 [10]. Similarly, the Prometea system in Latin America, developed by the Public Prosecutor's Office of Buenos Aires, aids decision-making by generating draft decisions and offering recommendations for resolution, reducing analytical workload for judicial operators [11]. Operating in two stages, it initially serves as a virtual assistant with artificial intelligence, then as a predictive assistant analyzing case decisions. The Colombian Constitutional Court implements PretorIA [12], a similar system reducing case admission processing time. However, the integration of information technologies necessitates scrutiny, particularly concerning systems employing artificial intelligence or autonomous database management. This study addresses challenges in critiquing justice operators, examining both autonomous and automatic processes interchangeably, to ensure the integrity and fairness of judicial decision-making in an era of technological intervention.

II. SOUND CRITICISM AS AN ELEMENT PROPER TO THE SPIRIT OF THE JUDGE.

Sound criticism plays a pivotal role in legal adjudication, meticulously analyzing evidence and integrating it into the final resolution. Grounded in equity and morality, it employs various sciences and arts to ensure factual integrity. This method operates on the Judge's conviction, considering personal criteria, logical principles, and experiences [13]. In Ecuadorian jurisprudence, intimate or free conviction principles are prevalent, allowing for flexibility in decision-making, notably in cases involving constitutional precautionary measures. Similarly, Spanish juries apply these principles in serious crime cases [14]. Contrasting scenarios highlight sound criticism's application, from purely precedent-based judgments to those influenced by personal convictions and experiences. Despite concerns about incomplete guidelines and empirical studies predicting case adjudication based on judges' profiles, evident in the United States [15], efforts in Ecuador guide judges in sound criticism's appropriate implementation through established Codes of Ethics within the Judiciary.

On the international stage, documents like the Bangalore Principles of Judicial Conduct, along with their accompanying commentaries, underscore the influence of Judges' experiences and extrajudicial activities on their decisions and public perception [16]. Consequently, Judges are entrusted with social responsibility concerning citizens' trust in the application of the law.

In the domain of law and judicial proceedings, the inherent principles of logic and finality underscore the rational nature of humans and their anticipatory behaviors. Acknowledgment of rationale holds pivotal importance for adjudicators and society, although conflicts may arise due to diverging perceptions. Ethics intersects seamlessly with law and sound criticism, addressing human interests and moral considerations, making it integral to the judicial process. Consequently, sound criticism becomes a reflection of judges' personality, individuality, and ethos [18], [19], inseparable from ethics and morality, highlighting the multifaceted nature of justice. The integration of automated intelligence poses challenges despite its potential to dehumanize justice. Two scenarios emerge, emphasizing o operational criteria and subjectivity akin to human judges. Accountability in autonomous decisionmaking is crucial, especially concerning constitutional obligations outlined in articles 119, 120, 121, and 212 of the Ecuadorian Constitution [18]. Holding programmers or developers accountable in autonomous processes faces hurdles due to the absence of human intervention, raising concerns about fulfilling constitutional obligations.

The automation of justice raises critical questions about governance, given the subjective nature of data driving automated processes. Can subjectivity be eliminated from the criteria guiding autonomous intelligences, which rely on scientific, logical, and artistic knowledge? Challenges also arise in assigning constitutional accountability for public servants, particularly in decisions involving rights or obligations. Articulating a rationale is crucial to bolster democracy and societal trust, defining accountability for autonomous systems in case of errors.

III. IMMEDIACY AS A CHALLENGE FOR THE NEW INFORMATION TECHNOLOGIES

While recognizing that automating evidence assessment fails to address ethical and moral challenges in achieving democratic justice, attention shifts to immediacy and technological integration. Article 19 of the Organic Code of the Judicial Function [22] emphasizes immediacy within the oral procedural system, necessitating direct interaction between parties and judges during evidence presentation to ensure effective contribution to judicial decisions. However, telematic methods can compromise this interaction quality, undermining evidence evaluation and judicial decision rationale. The Principle of Immediacy underscores parties' Right to have their voices heard directly by the Judge, without delegation, as any such delegation could nullify the process. Judges must play an active role, leading proceedings, ensuring focus, and upholding ethical standards. These dynamics extend beyond screens; constructive interaction ensures equitable assessment of arguments and evidence. Despite technological advancements, empathy towards parties remains integral, a trait not yet integrated into automated systems.

In Ecuador, the Judiciary Council mandates electronic signatures, replacing handwritten ones in physical files, yet this transition raises concerns about procedural violations and nullifications. Despite QR code validation, disparities between physical and electronic files persist due to resource constraints, potentially hindering the Right to Access to Justice. Limited resources also affect telematic hearing utilization, as applications entail additional expenses for both the judiciary and parties. Despite efforts to improve internet accessibility [24], [25], legal professionals encounter challenges in securing stable connections for telematic hearings, highlighting the need for further improvements in internet infrastructure.

IV. MEDIATION AS A CONFLICT RESOLUTION FORMULA AND ITS CHALLENGE IN THE FACE OF JUSTICE AUTOMATION

In Ecuador, mediation, mandated in all jurisdictional proceedings per Article 294 of the General Organic Code of Processes [26], involves parties striving for a voluntary agreement with a neutral third party's assistance, highlighting its significance in an autonomous system. Though doctrinal differences exist between mediation and conciliation, they are treated interchangeably here for their shared goal of fostering empathy. Both processes require more than database analysis; judges must establish connections, aiding parties in self-discovery of resolution, beyond mere dispute settlement, emphasizing repair of human relationships. A crucial advantage of mediation or conciliation lies in eliciting "common sense" solutions, aligning divergent perceptions more pragmatically for effective conflict resolution [27], [28].

Incorporating mediation into autonomous justice systems adds complexity as they ensure party decisions align with legal, moral, and relevant criteria. Adherence to principles like party voluntariness, confidentiality, and equity, outlined in the code, poses challenges not fully addressable by database management alone. While artificial intelligences might possess cognitive empathy enabling them to predict parties' responses, they still struggle to grasp nuanced emotions, especially in family disputes [27]. Consequently, while autonomous systems may meet legal criteria and demonstrate equity, they may lack a sense of justice and be unable to facilitate mediation, jeopardizing human rights safeguarding [28].

International agreements like the Toronto Declaration of May 2018 aim to prevent discrimination in machine learning systems, particularly in public domains, outlining state obligations and delineating responsibilities for private entities in AI development [29]. Emphasizing integration of diversity and equity into machine learning systems, concerns persist regarding maintaining discriminatory biases, especially concerning race, gender, and sexual orientation. Apprehensions arise over autonomous systems' struggle with positive discrimination implementation, particularly in cases requiring empathetic connections to address power imbalances. Crucially, ensuring parties' access to judicial authority, both immediately and in relation to the Judge, is vital, employing sound criticism principles devoid of bias towards any involved party.

V. DIGITAL JUSTICE DURING COLLECTIVE COMMOTION AND ITS EFFECTS ON COURT DECISIONS

Amid the COVID-19 pandemic, Ecuador adapted its judicial services to minimize onsite personnel while maintaining essential operations, necessitating innovative hybrid remote work models. This period spurred the acceleration of computerizing judicial management processes initiated around 2000, prioritizing digital platforms for legal document submission and electronic notifications for judicial decisions. The pandemic underscored the importance of leveraging information technologies to enhance accessibility to justice, leading to expedited adoption of digital solutions in Ecuador's justice system. Legislation concerning electronic subpoenas has been introduced.

Telematic summonses offer modern solutions for legal proceedings, simplifying complexities, especially beneficial for international cases or those beyond a judge's jurisdiction. Challenges arise with email transmissions, particularly concerning voluminous evidence, highlighting the need for extended deadlines due to geographical constraints [26].

Telematic proceedings require physical document review, risking chain of custody issues during transport. Rapid political decisions during the pandemic have adapted legal processes, underscoring the need for ongoing analysis and resolution within the judicial system. The European Ethical Charter offers principles for AI utilization in due process [30], including upholding fundamental rights, ensuring non-discrimination, and maintaining transparency and fairness. Expounding upon the latter, the following precepts are outlined:

"User autonomy should be enhanced and not restricted through the use of artificial intelligence tools and services. Justice system professionals should, at any time, be able to review judicial decisions and the data used to produce an outcome and continue without being bound in light of the specific characteristics of that particular case. The user should be informed in clear and understandable language about whether the solutions offered by artificial intelligence tools are binding, about the different options available and whether he or she has the right to legal advice and the right to access a court. You should also be clearly informed of any prior processing of a case by artificial intelligence before or during a court proceeding and have the right to object, so that your case can be heard directly by a court."

The integration of information technologies into the Justice of the Peace system raises concerns about balancing human judgment with automated decision-making, challenging principles of transparency and impartiality. Good practices for technology integration prioritize transparency, human oversight, and ethical considerations, emphasizing justice and fairness through user-centric design. Transparency, fairness, and user autonomy are crucial in navigating technological complexities while upholding rights. Ethical standards necessitate prioritizing data privacy and human oversight, with practical solutions.

Transparency and accountability: Accountability frameworks are essential for holding automated systems and human operators responsible, ensuring oversight and correction for errors or biases. Transparency shortcomings raise fairness, bias, and discrimination concerns, necessitating Explainable AI (XAI) techniques for insights into decision-making. Innovations like AI systems with transparency features enhance understanding and accountability.

Human oversight and intervention: Judges require training to understand and intervene in cases where automated systems' decisions raise concerns, ensuring ethical standards and human rights are upheld. While automation enhances efficiency, ethical considerations regarding reduced human oversight must be carefully addressed. Balancing automation benefits with human judgment and oversight is crucial for ethical standards and individual rights protection. Ethical Considerations: Develop ethical guidelines and standards for the use of artificial intelligence in judicial decision-making, emphasizing the importance of upholding fundamental rights, non-discrimination, and user autonomy. Conduct regular ethical audits and assessments of automated systems to identify and address potential biases, ensuring that the technology aligns with legal and ethical standards.

Data privacy and security: Automation and digitization demand responsible management of vast data to safeguard individuals' privacy rights, stressing ethical safeguards and adherence to data protection laws. Neglecting data privacy risks undermining trust in the judicial system and compromising confidentiality. Implementing robust measures like encryption, access controls, and blockchain technology can bolster data privacy and security.

Fairness and Non-Discrimination: Automation and digitization in the judicial system raise concerns about fairness and non-discrimination, requiring ethical considerations to mitigate biases and ensure equitable treatment. Challenges such as the digital divide and algorithmic bias hinder access to justice, particularly for marginalized groups. Strategies involve enhancing accessibility and community engagement through virtual hearings, with ethical guidelines emphasizing equity and fairness vital. Regular audits and machine learning techniques are necessary to prevent discriminatory outcomes. Thoughtful technology implementation can improve access to justice, ensuring fairness and equity in the judicial process.

User Autonomy and Due Process: Ensuring users understand automated systems and their rights is crucial for upholding due process and human rights in the judicial system. Empowering users with information and avenues for review preserves the integrity of the legal process.

VI. CONCLUSION

This study emphasizes the critical need for ongoing monitoring to ensure due process and effective judicial safeguards amidst the inevitable integration of autonomous justice systems. It recognizes the role of automated systems in simplifying bureaucratic processes and reducing time pressures on public officials, advocating for a balanced perspective that upholds fundamental principles of justice and procedural fairness. Virtual assistance must adhere to core rights such as public trial and presumption of innocence while overcoming technical challenges to enhance the justice system's integrity. AI integration spans various sectors, yet remains debated in judicial decision-making. Initiatives like the Bangalore Rules aim to reduce discretionality, but concerns arise over necessary discretion relinquishment. Cases like Loomis's and Ecuador's risk profiling tool usage illustrate potential infringements on rights without human oversight, necessitating thorough AI implications assessment. This study perceives the phenomenon as a depersonalization of the judiciary, posing risks such as standardized judgments and infringement upon the right to a fair trial, highlighting the importance of empathy in judicial decision-making.

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