

Micro-Institutional Performance Analysis: Thoughts on the use of technology. The Case of the Colombian (criminal) justice system

Análisis de desempeño microinstitucional: reflexiones sobre el uso de la tecnología. El caso del sistema de justicia (penal) colombiano

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ABSTRACT:

The need for the technological continuous improvement of the administration of justice was particularly evident for Colombia, a country used as an example due to its social dynamics and institutional adjustments. Hence, this article focuses on examining and arguing this scenario using a heterodox legal-economic approach.

Keywords: administration of justice, social benefits, public issues, communications technologies, effectiveness.

SUMMARY: 1. Introduction, 1.1 Reduction of administrative (tertiary) costs and thoughts on justice in Colombia, 1.2 “Optimization” of the right to equality; 2. Public issues, 2.1 Scarcity of resources, 2.2 Perverse effects, 2.3 Systemic Asymmetry; 3. Thoughts on the Law 2213 of 2022: The case of the Colombian Criminal Justice System; 4. Technology and administration of justice; 5. Conclusions.

RESUMEN:

La necesidad de una mejora tecnológica continua de la administración de justicia fue particularmente evidente en el caso de Colombia, país utilizado como ejemplo por su dinámica social y ajustes institucionales. Por ello, este artículo se centra en examinar y argumentar este escenario desde un enfoque jurídico-económico heterodoxo.

Palabras Clave: administración de justicia, beneficios sociales, problemas públicos, tecnologías de las comunicaciones, eficacia.

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SUMARIO: 1. Introducción, 1.1 Reducción de *costos administrativos (terciarios)* y reflexiones para el sistema de justicia en Colombia, 1.2 Optimización del “derecho a la igualdad”; 2. Desventajas, 2.1 Escasez de recursos, 2.2 Efectos perversos, 2.3 Asimetría Sistémica; 3. Reflexiones en torno a la Ley 2213 de 2022: El caso del sistema de Justicia Penal Colombiano; 4. Tecnología y administración de justicia; 5. Conclusiones.

1. Introduction

The main aim of this article is to give thought to the public benefits —as described by Méndez (2014) and public issues— as described by Noveck (2022) related to the Colombian Law 2213 of 2022.² That is to say, a brief rethinking of the subverted implications that a legal framework presented as advanced may have, since it recognizes aspects such as the importance of a continuous improvements view in interception with technological tools that, however, also pose a great challenge for an *unstructured society* (Méndez, 2014) and with an *emerging economy* (Boettke, 2012; Alonso and Garcimartin, 2008).³

Also, the challenge involved maintaining a *continuous improvement*⁴ (Holtskog, 2013) view means to use “new forms” of management while maintaining -without changes- the need to guarantee the right of access to justice for a natural or legal person who is still affected by the existence of a large material gap that affects its access and capacity for reasonable use of new developments in the digital technological field and others typical of a global context of the Fourth Industrial Revolution.

Furthermore, methodologically, the article will share a legal preliminary literature review to help identify “gaps” in existing knowledge where further research is and to build some general thoughts using doctrinal contributions relevant to the Colombian (Criminal) Justice System and a heterodox law and economics approach known as micro-institutional performance analysis.^{5 6}

This is relevant since referring to the use of “micro-institutional performance analysis introduces originality into legal thought to access doctrine and —current— juridical knowledge. According to Klammer and Scorsone (2022, p. 1), the “micro-institutional performance analysis introduces scholars to a different way of thinking about law (and economics) that will allow them to both understand and apply legal concepts to economic analysis”.

² As indicated in the text of Law 2213 of 2022, which “establishes the permanent validity of Legislative Decree 806 of 2020 and adopts measures to implement information and communication technologies in judicial proceedings, expedite judicial processes and make the attention to users of the justice service more flexible, and other provisions are enacted”.)

³ These societies are characterized by weak associative performance. Moreover, associative fragmentation prevails and constitutes a strong impediment to dynamic interaction between individuals. According to Alonso and Garcimartin (2008), there is a lack of functionality between socialization mechanisms (laws) and institutions (entities in charge of their materialization and compliance) as a problem-solving mechanism. Informal institutions (informal rules) are the prevailing mechanism that dictates in practice (<<*de facto*>>) how social control is established.

⁴ Defined in this article as the permanent search focused on identifying opportunities for correction, adjustment, and improvement in social processes and their different forms of manifestation, such as the legal.

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⁶ According to Klammer and Scorsone (2022), the “micro-institutional performance analysis” introduces the reader to a different way of thinking about law and economics that will allow them to both understand and apply legal concepts to economic analysis.

To this end, this article also “adopts and further develops Wesley Hohfeld’s framework of juridical (legal) relations as a tool of analysis” (Klammer and Scorsone, 2022). As Méndez, (2014; 2017), Ghersi (2020), and Klammer and Scorsone (2022) have coincidentally stated in previous contributions, this analytical tool, was built into the “legal-economic performance framework”, providing specific direction in identifying and describing interdependence among persons (agents) and it refers to rights, duties, liberties, and exposure to various acts.

Therefore, the “framework adopted and developed by micro-institutional performance analysis relies on the concept of interdependence” (Klammer and Scorsone, 2022). It means that in society all agents (citizenry) are tied together in a legal system given the inherent interdependent nature of transactions (explicit and implicit economic exchange) in a complex modern global world (Klammer and Scorsone, 2022).

Then, as will be shown through this article, developing this framework opens the door to further applying it to a variety of settings and —potential— empirical examples. Using this approach, law and economics scholars will be able to reshape their analysis to account for how legal systems and specific legal rules impact behavior (performance) and outcomes (Méndez and Sumar, 2020; Klammer and Scorsone, 2022).

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1.1 Reduction of *administrative costs (tertiary)* and “renewal” of the Colombian justice system

The main argument presented as a tangible advantage is the significant reduction of *administrative costs*⁸ and the achievement of a *renewal* of justice in Colombia. This is derived from Article 1 of Law 2213 of 2022 stating that hearings will continue to be held with the support of technological tools (*general rule*)⁹ or the fact that personal notifications can be made through digital channels without the need to send a summons or notice.¹⁰ This main argument represented by the reduction of administrative costs and, consequently, the elimination of barriers to access to justice is also, by extension, the main basis for justifying the entry into force of this legal rule from a multidisciplinary perspective.¹¹

⁷ This approach does not require a formal (technical and graphical) development to reframe social science (private and public) issues and the intersections of law (and economics) with the application of legal concepts to impact analysis, and practitioners in the fields of policy, law, and so on (Noveck, 2022; Klammer and Scorsone, 2022)

⁸ Inspired and based on the contribution of Calabresi (1970), they are defined as the costs of administering the justice system and other aspects related to it.

⁹ Likewise, according to Tejada (2022) and a certain part of the doctrine, the deficiencies of this general rule would also be corrected within this first article when it is established that “the hearings may be held in person if there are reasons to do so, such as, for example, technological barriers on the part of one of the intervening parties or the judicial authority”

¹⁰ Does the reduction of administrative costs justify increasing -potentially- the presence of cases involving legal and regulatory uncertainty, affecting the right to defense, effective protection, and due process? This and others are present and contradict the argument presented as an “advantage”.

¹¹ As Herrera (2020) explains, in the Chilean case, “(...) as the need to maintain social distancing as a consequence of COVID-19 was prolonged and the effects of the social outbreak remained, entities such as the Public Prosecutor’s Office sought new forms and mechanisms for the development of their activities. Likewise, the Chilean Judicial Branch saw the need to enhance the technological development of its platforms to allow better access to justice, both for the citizenry and for lawyers. Moreover, hearings and attention to citizens were carried out through the Zoom platform. In addition to the above, Chile adopted Law 21391 (a law regulating teleworking), which aims to protect those who have been forced by quarantine to work from home and seeks to provide more opportunities and freedom to workers. In this way, there has also been an exponential increase in the use of technology that today is already positioned as a key and indispensable element to maintain the work dynamics”. Also, the above is added to the inclusion of the “(...) Digital Processing of Judicial Proceedings, with the entry into force of Law No. 20,886 of 2015. Through this regulation, a greater digitalization of judicial proceedings, optimization in the infrastructure of the Judiciary, and considerable reduction in processing times are sought. Likewise, (...) it establishes the obligation for users to make use of the Virtual Judicial Office. To do so, they must have the Single State Key, which will function for purposes of filing pleadings, lawsuits, and appeals as a Simple Electronic Signature when they do not have an Advanced Electronic Signature”.

1.2 “Optimization” of the right to equality

The main legal argument presented as support for Law 2213 of 2022, in a systemic sense and in terms of strengthening the institutional framework, is the optimization and operability that extends to the right to equality in access to the administration of justice. This is identified from the reading of the first article of the mentioned norm that establishes its object:

ARTICLE 1º. OBJECT. “(...) Access to the administration of justice through technological and computer tools must respect the right to equality, therefore, they will be applicable when the judicial authorities and the procedural subjects and legal professionals have the appropriate technological means to access digitally, not being able, under penalty of its use, to omit the face-to-face attention in the judicial offices when the user of the service requires it and providing special measures to the persons in vulnerable conditions or in places of the territory where connectivity is not available due to its geographical condition.”

2. Public issues approach

In this section, we would like to argue that the review of Law 2213 of 2022 can be subject to academic and legal criticism and this can be expressed in terms of public issues that affect the —necessary— strengthening of the institutional framework.

Then, from an introspective point of view, we will unfold our thesis through the following three (3) arguments: a) *Scarcity of resources*; b) *Perverse effects*; and c) *Systemic asymmetry*.

2.1 Shortage of resources

The norm establishes guidelines based on the assumption that the right to equality can - de facto - overcome scenarios of scarcity of material resources (such as access to the Internet, and technological terminals, among others). This implies refraining from considering —satisfactorily— the short and medium-term social cost of the access barrier constituted by the limitation.

Unfortunately, Law 2213 of 2022 was built on the logic that a legal norm does not cost and is *-per se-* free of charge. It forgets that the monopoly of *ius imperium* by the State does not cancel the generation of explicit opportunity costs¹² and that, at the end of the day, these must be assumed by all social actors.

This assumption of the norm as a *free lunch* scenario,¹³ certainly, is not overcome with the possibility established by the legislation to allow the physical presentation of claims and others at the court venue in case of technological barriers by the users of the administration of justice (Article 78 of the CGP, Cruz Tejada, 2022 and ICDP, 2022). If procedural economy and celerity are the goal, it is necessary to be more meticulous about the real transcendence of the accounting of (administrative) costs and not to confuse the suppression of these costs with their involuntary transfer to the parties (private parties).

This opens the door to the current discussion of the incidence that procedural optimization may have as a mechanism for the privatization of the right and its exercise of action.

¹² Defined as the cost of the alternative we give up when we make a certain public policy decision and its different forms of manifestation and materialization.

¹³ An expression widely used in economics and social sciences that refers to opportunity cost and attempts to explain it from a perspective relevant to planning and harmonious social control.

2.2 Perverse effects

Assume a scenario of no perverse effects.¹⁴ That is to say, that these effects may not occur or may be null. This is because the need for *ex-ante* completion of a literacy process in the use of digital tools was *not* adequately considered.

Certainly, in a society where wide gaps exist, collective action is required. However, this collective action must be effective and based on policies that, by generating equality and parity, realistically and pragmatically weigh the beneficial versus perverse effects with a comparison established for the short, medium, and long term. This becomes more salient, for example, when we think of digital technical management.

Without adequate literacy in the use of technological tools, we *cannot* expect that the requirements of the regulation will be easily understood or operationalized, for example, let us think about what it means that “powers of attorney granted with a personal presentation note or created through a data message with digital signature remain valid. What perverse effects can occur when it is assumed that “in these events it will not be necessary to indicate the e-mail address of the attorney-in-fact and the proof that it corresponds to the one indicated in the national registry of lawyers” (Cruz Tejada, 2022, n. p.). An answer to this unknown, based on evidence, will require permanent attention and recourse to the opinion of experts in the matter, considering the need —potential— to reform a rule that undoubtedly cannot be conceived as a stony clause.

2.3 Systemic Asymmetry

It is a mistake to assume symmetry within society when the literature in the social sciences mostly and reliably shows that Colombian society corresponds to the characterization of an “unstructured society” and, therefore, represents a scenario where “systemic asymmetry” prevails, which requires that the processes of change be developed with a strong and reliable basis.¹⁵ It requires that the processes of change be carried out with a gradual accomplishment and a continuous review in terms of beneficial versus negative effects and results.

This leads us to think about the real affectation of the rights of the parties to a judicial process and the efficient and correct development of a judicial process. Let us think about the asymmetry generated when it is admitted that personal notifications can be made through “digital channels” (Facebook, WhatsApp, others), without it being necessary to previously send a summons or notice. Then, if the possibility of extending asymmetric effects remains, the search for justice in society is disadvantaged.

3. Thoughts on the Law 2213 of 2022: The Case of the Colombian Criminal Justice System

After several health measures were taken to curb the transmission and prevent the spread of the infectious respiratory disease caused by the new strain of Coronavirus (hereinafter, COVID-19), there was sufficient evidence to indicate that this respiratory disease was transmitted from person to person by droplets

¹⁴ Defined in this document as those effects contrary to those pursued by a legal reform.

¹⁵ In that document, it is defined as the prevalence of a social moment (assuming that legal moments and their correlates are in turn social moments) in which the relationship of the individual as “client or citizen” takes place in an unfavorable environment, that is, asymmetric vis-à-vis the State and its different forms of materialization.

expelled from a person's nose or mouth. According to the World Health Organization (hereafter WHO), there was sufficient evidence to indicate that this respiratory disease was transmitted from person to person by droplets expelled from the nose or mouth of an infected person when coughing, sneezing, or talking. Most people who become infected suffer a mild respiratory illness and recover over time, but in other cases, it can be more severe and lead to death. The speed of spread of this virus crosses geographical borders, which is why the Director General of the WHO described it as a pandemic and invited countries to adopt extraordinary, strict, and urgent measures to curb its devastating effects on the world's citizenry.

The measures adopted to combat the effects of COVID-19 on the world citizenry were not long in coming and as if it were a philharmonic orchestra where all the instruments are tuned to achieve a perfect melody; a good number of countries worldwide harmoniously adopted the sanitary measure of mandatory social isolation to prevent the growth of infected people and deaths due to COVID-19. This caused citizens who had turned to the judicial system to resolve a conflict to be harmed, to the point of restricting a fundamental right of access to the administration of justice (Tapias, 2017). While it is true that at first the decision was made to suspend all judicial proceedings to safeguard life and stop the spread of the disease, this caused. After several months, there was a latent need to reopen access to the administration of justice (CSJ, 2020).

The central axis of this reopening was the employment of the use of the so-called new information and communication technologies in judicial proceedings, with the sole purpose of no longer interrupting access to the administration of justice and expediting the processing of judicial proceedings before the different jurisdictions. At this time, Decree 806 of 2020 was adopted, acknowledging to use of these technologies in judicial scenarios to hearings under the virtual modality through the different platforms available to the judicial branch.¹⁶ However, it was an emergency decree that became law with the same haste (Universidad de los Andes, 2022).

Once face-to-face presence began to be resumed in different academic, labor, cultural, etc. scenarios, the discussion of whether to maintain virtuality in judicial scenarios was put on the table, and a strong academic discussion between various supporters was evident (Fajardo, n.d.). One group of these proposed that virtuality should be maintained in the different judicial scenarios, highlighting the benefits of this modality, thus affirming that the number of hearings developed under this modality had increased, which generated a reduction in the number of adjournments of hearings since the easy access to the platform resulted in a very low number of adjourned hearings (Bernal, 2005). They also emphasized that it was no longer necessary to travel to different places in Colombia to attend the different judicial commitments and that the State was able to save on the rental of the different judicial scenarios (Legis - *Ámbito Jurídico*, 2021, n. p.).

On the other hand, a sector that opposed virtuality stated that it should be based on the conditions and realities of the Colombian territory where not all places had access to the Internet (Palomo and Ubilla, 2023), which hindered the access of that citizenry to a virtual justice and the lack of digitization of judicial processes (CEJ, 2021). Likewise, there was talk of the possibility that witnesses could lie in the different proceedings to be rendered, since, given the impossibility for the judge to prove the witness' behavior, it was easier for him to deceive the administration of justice.

¹⁶ This decree was provided in line with previous legal norms such as Law 270 of 1996 modified by Law 1285 of 2009 and Law 527 of 1999. Also, it must be mentioned Law 1395 of 2021, and Law 734 of 2002 among others.

Despite the existence of the Statutory Law for the Administration of Justice 270 of 1996, which in its article 95 obliged the Superior Council of the Judiciary to incorporate technologies in the administration of justice, this step would not have been possible if the pandemic had not occurred. This new reality that arose in the administration of justice forced all judicial officials and other intervening parties to adopt urgent measures, among which virtuality in the administration of justice was adopted. This step represented a great advance but at the same time brought with it new challenges that were not present in the face-to-face system (Castaño, 2022).

After the discussions that took place in the Congress of the Republic, Law 2213 of 2022 was introduced to the internal Colombian legislation, which adopted virtuality in judicial proceedings. However, in Article 7 related to the hearings, the judge is allowed the possibility of ordering the presence of evidence when he considers it pertinent or when the request is made by any of the parties. Now, as for the presence of the other participants and parties in the process, they could do it virtually, that is, only the person who is going to give the testimony at trial is obliged to attend in person.

Subsequently, the Full Chamber of the Constitutional Court through Ruling C-134 of 2023 announced that oral trial hearings in criminal matters must be held in person and ended with virtual hearings. This decision was adopted after having studied the project of Statutory Law 475 of 2021 Senate and 295 of 2020 House that reforms the Statutory Law of Administration of Justice.¹⁷

There remains doubt about the decision not to apply virtuality in the criminal jurisdiction regarding the oral trial hearings since this same conclusion was not reached in the other jurisdictions. However, indeed, the interests at trial are not the same, since in a criminal proceeding liberty is at stake while in a civil proceeding, economic patrimony is at stake. Instead of prohibiting virtuality in trials, a virtual hearing protocol would have been implemented in criminal matters, in which the deponent is required to always have his camera on, to be in a place without noise and with good internet access, among other measures that allow the judge as coordinator of the hearing to control the statement and arrive at the procedural truth.

The restriction of virtuality in the oral trial hearing implies a setback in the progress of the administration of justice proposed since 1996 when new technologies were adopted. However, having the deponent in person does not guarantee that he/she will always tell the truth since practice shows how in-person witnesses incur in the crime of false testimony. This restriction will lead to the suspension of hearings due to the impossibility of the witness to travel and, the lack of a hearing room, among others.

4. Technology and administration of justice

If we contextualize the need to technologically modernize the administration of justice from a public issues approach, i.e., a collective scenario that implies “social” dissatisfaction and requires a solution using *ius imperium* of the State and that for some imply the beginning of a great transformation (Polanyi, 1944-2007), we can argue that we must formulate policies without losing the north of “social innovation”.

¹⁷ This decision of the Constitutional Court again retakes the presence in the oral trial hearings and allows a “doctrinal debate” under Article 404 of the Code of Criminal Procedure since one of the factors to be considered to recognize the credibility of the witness is the non-verbal language.

Along these lines, Noveck (2022, p. 36 et seq.) argues that a series of skills are required to make it viable for the State and its agents or actors to stay on this course. We therefore consider it appropriate to propose a summary of the most relevant “set” of skills that are pertinent to the present contribution:

- a. **Problem definition:** This means that the State considered the need to technologically modernize the administration of justice as an advantage and extended a high degree of priority to it in terms of the level of urgency, however, no policy matrix document or action plan was proposed that was -continually- revised (Palomo and Ubilla, 2023).
- b. **Data analysis for rapid evidence review, proposal generation, and measuring what works:** An aspect that was not correctly identified revolves around the need to have specialized data analysis units for intelligent (evidence-based) and rational decision-making in the sense proposed by Arrow (1986, p. 385). As we have argued previously (Méndez, 2023), these “units should not simply be circumscribed to a single area or section, but it is necessary to consider that each area or division has this strength which will allow it to gain functional autonomy and will dynamize its capacity for response, action, among others.”

Certainly, and as we have expressed in other contributions, “(...) this type of unit must also be established by using new technologies that resort, for example, to a progressive incorporation of instruments such as artificial intelligence and others, to the extent that this correctly managed, contributes widely with the extraction and processing of information and data and with mitigating the *perverse effect* derived from the deviations inherent to the presence of *cognitive biases* and *ideological biases* that affect a complex process of strategic decision making” (Méndez, 2023; Castellanos, Paladines and Méndez, 2023).¹⁸

- c. **Service and performance design focused on the people being served and the establishment of teams and alliances for the achievement of change:** We consider that this aspect was not fully considered by the Colombian State to the extent that it implies working jointly and permanently (ex-ante and ex-post) with the people or subjects of rights who are being helped proactively, that is, deepening the understanding of problems (needs) through direct and/or indirect consultation (Noveck, 2022; Méndez, 2023).
- d. **Group, associative, and collective intelligence:** A final aspect that allows us to argue, this time regarding the public issues of the system adopted in Colombia, revolves around the need to consider the collective intelligence of the groups (communities) through the adoption of a participatory model, i.e., open, and democratic (Noveck, 2022; Méndez, 2023).

The above should be materialized through iterative planning and this as proposed by Noveck (2022, p. 36 et seq.) can be outlined through a problem-solving matrix such as the one we propose below:

¹⁸ Certainly, humans also make mistakes. Then, it is necessary to point out that there are many social scientists (Kahneman, Sunstein, among many others) who, based on experimental studies and/or derived from behavioral analysis, have shown that human errors can be systemic, observable, and predictable.

5. Conclusions

In this brief contribution, we have sought to contrast some ideas concerning the public or collective benefits and public issues corresponding to the entry into force of Law 2213 of 2022 within the Colombian legal system, especially in the field of the application of criminal law.

Undoubtedly, the exploratory nature of this qualitative proposal is not intended to provide conclusive (definitive) arguments in the face of the academic and pragmatic debate on the implications of a new legal framework, especially if the perspective of the analysis of public problems is brought into consideration.

This becomes even more important if we assume that a change in the way things are done in the (criminal) procedural field implies thinking in terms of dynamic change of the (criminal) justice system - long-term analysis or “long-run performance” - and not static or merely reactive - short term or “short term performance” - and in turn implies incorporating a foresight of *continuous improvement* and even integrating properly managed tools such as -previously mentioned- artificial intelligence. In other words, the need -especially in the legal field- for *critical reasons* to prevail over the foolishness of the ruler or the interests of interest groups or those with access to political power.

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