Interrogating e-Justice: Lessons from Digitalizing Courts in Chile

Joaquin Santuber1, Reem Abou Refaie1 and Christoph Meinel1

1Hasso-Plattner-Institut, Universität Potsdam, Prof.-Dr.-Helmert-Straße 2 - 3, 14482 Potsdam, Germany

Abstract
The digitalization of justice is emerging worldwide partially due to the most common narrative surrounding digital government being more efficient, cost-effective, and democratic. In recent times, the global pandemic has pushed forward many digitalization efforts waiting to be implemented. The complexity, normative thickness, and heavy regulative status of justice systems, demands addressing the role played by digital technologies in reshaping judicial practices from a legal, judicial, and digital perspective. In an in-depth case study of the Chilean courts’ implementation of technologies during Covid-19, we examined the digital government objectives and interrogated them in light of the concepts: digital by default, social media in courts, and restorative justice. This ongoing research paper presents findings derived from thirty (30) interviews with key stakeholders from the Chilean judiciary system in Santiago, advances our understanding of the intricate relationship between justice, digital technology, and government.

Keywords
courts of justice, digitalization, judicial administration, digital government, Chile

1. Introduction
Technology has promised to reduce costs, improve efficiency, and automate technical aspects of judicial work with varying degrees of success [1, 2]. There is consensus among researchers and practitioners that digital government aims to make public institutions more transparent and accountable [3]. With the exception of exacerbating the digital divide and security concerns [4], digital government is largely perceived as a gateway to the betterment of the relationship between government and citizen [5, 6, 7].

Nevertheless, previous work claims that the “switch from conventional or paper-based procedures to digital ones is not just a change of the tools used to access information and exchange procedural data and documents, nor just a way to make justice more efficient and effective” [8]. Instead, it represents a reconfiguration of agencies, ranging from technologies to established legal agencies [9]. In this regard, e-justice projects have an administrative and political goals [3]. The first relating to making justice for efficient, reducing complexity, saving cost by using digital technologies. The political goal relates to the need of transparency and legitimacy of the judiciary addressed by leveraging digital technologies. To better understand the peculiarities of justice systems we study the role of digital technology in the Chilean Judiciary during the global pandemic in the years 2020 and 2021. Accordingly, we pose the following
research question: “How does the digitalization of justice challenge the objectives of digital government in Chilean courts?”

Courts have traditionally been resistant to digitalization due to their “unique normative thickness and heavy regulative status” [10]. However, the time of global pandemic has revealed more about the digitalization efforts in Courts, than in previous years [11]. The judiciary’s response highlighted some friction between existing judicial processes and certain technology. Yet, court’s members and administrators have been able to overcome such limitations in multiple forms worldwide (for a collection of crowdsourced stories consult [12]). To understand these responses better in a local context, we conducted qualitative interviews complemented by video analysis of online-hearings and legal documents. By adopting an inductive qualitative research design, we draw situated findings from the experiences of digitalizing justice in Chilean courts, and how this challenges the objectives of digital government.

In this ongoing research, our contribution is twofold. On a theoretical vein it contributes to an ongoing effort to understanding the “hidden entanglements between law and technology in court operations” [13], and their implication to the objectives of digital government. At a practical level, we aim to bridge the gap identified by previous work to gain “a deeper understanding of how innovation is shaped between the rules of technology and law and between the organizing principles of bureaucracies and markets” [10].

2. Theoretical Background

In the last three decades information systems have slowly been introduced in judiciary systems around the world [14]. This long spanning process, made of incremental changes, has been successful in improving access, efficiency, and efficacy [15]. According to Contini [13], most of the studies on e-justice, take a functional paradigm seeing technology as a tool or instrumental to achieve “better justice”. A recent literature review on e-justice [3], identified four areas of research: success and risk factors for implementation (i.e., [16]), assessment and evaluation of impact of digitalization in courts (i.e, [17]), user experience and design principles, and judicial websites.

Additionally, most studies on digital government look at digitalization of public services including the digital configuration of justice in an overwhelmingly optimistic way. So far, such digitalization efforts have not been questioned using an overarching conceptual tool such as the digital government objectives. From the literature we draw the following agreed upon objectives of digital government [18, 19, 20]:

1. Formulate a policy framework that sets policy goals and specify the rules and conditions under which information is gathered, used, protected, and shared by government, individuals, and the private sector to achieve them.

2. Enhance public services by replacing an organizational perspective with a customer orientation, providing access, convenience, and choice to citizens seeking information or services from government.

3. Achieve high quality and cost-effective government operations through managerial, professional, and technical improvements that address not only efficiency but also infrastructure investments, information management and use, organizational innovation.
4. Engage citizens in democratic processes by enhancing accessibility and usability of technologies and information content that foster public interaction with government.

5. Foster accountability, transparency, and trust pertaining to the structures and processes of government as well as to the roles and responsibilities of government actors.

However, to properly account for the context in which online courts emerge, a more nuanced approach is required due to the focal role of technology in determining the course of justice [9]. Thus, we interrogate this narrative by looking at work around justice, technology, and digital government from three perspectives, which highlight the major areas of digital justice implementation and uptake:

**Digital by choice vs Digital by default.** Previous work has highlighted the practical challenge of implementation of digital technologies before policy (digital by default), in contrast to a more desirable policy making followed by implementation (digital by choice)[21]. This leads to problems of policy becoming irrelevant, limited ownership, and development of silos. In the context of e-justice, members of the practice face a dilemma: to freely exploit the features of the digital medium and perform new procedures and objects that may benefit the practice or to “transpose them [old procedures] into the new medium and try to make them work” [10].

**Social media in Courts.** Existing research has looked into the relationship between justice and social media platforms [22] and their far-reaching implications beyond the courtroom [23]. Recent work, has conducted a comparative analysis on the use of social media by high courts in Latin America, showing that intensity in use does not correlate with influence [24]. However, the implications of using social media platforms, and particularly their design and algorithmic structures in the relation between the courts and other civil society stakeholders—i.e. traditional press— is not yet clear.

**Restorative justice and digital technology.** Novel development on sociolegal research has brought in the concept of restorative justice, which aim to give the victim a central role, through a victim-offender relation during the criminal process [25]. Relevant to our study, are the challenges that digital technology pose to restorative justice regarding interpersonality [25], resonance, and embodiment [26]. A question that remains open is how digital technology enable and disable possibilities for alternative forms of justice to be realized.

### 3. Research Design and Method

By drawing on the aforementioned theoretical foundations, this ongoing research aims to interrogate the digitalization of justice in light of the objectives of digital government and their implementation in the Chilean courts’ emergency responses during COVID-19. We chose the case of Chilean judiciary system in Santiago de Chile due to access key stakeholders of judiciary systems and respective interviews, which we secured through a cooperation agreement. Specifically, we focused on two focal types of courts (i.e., criminal and civil courts) in the Chilean judiciary system in Santiago. To achieve this, we conducted an in-depth study of the Chilean judiciary system “Poder Judicial de Chile”; a unitary organization that serves a population of 18 million citizens with a high territorial distribution — Chile’s length equals the US’s width from NY to Seattle, or the distance from north Norway to Libya. It is composed of the Supreme Court, 17 Courts of Appeals and 448 lower courts, with a total of 1490 judges plus more than 11,000
employees. For all these reasons, it is likely to assume that posts containing images produce more engagement than posts that do not contain images. Hence, we hypothesize that:

**Data Collection.** To obtain an adequate set of interviewees, we used snowball sampling [27], which we stopped when we reached saturation of a specific perspective (e.g., different agencies, departments). To collect data, we developed a semi-structured interview guideline. In detail, we conducted two rounds of interviews: 1) An explorative, open first round to gather rich information on the overall context and goals of targeted institutions from April 2020 to April 2021. The exploratory first round of interviews included prosecutors, defense lawyers, human right office’s lawyer, and a private practice lawyer; 2) A focused second round to understand the digitalized practices in the context of the increased introduction of digital/ICT technologies in the judiciary. In total, we recruited 30 interviewees (n= 30).

To triangulate our findings, we utilized multiple data sources including digital regulations, national strategies, and pandemic related laws. Especially relevant for this ongoing research, was the observation of the official social media activity of the judiciary (website and their official social media channels such as YouTube, Facebook, Instagram, and Twitter) which are publicly available data sources.

**Data Management and Analysis.** Recognizing the nascent stage of topic knowledge, we adopted a predominately inductive approach. Moreover, we collected and analyzed data iteratively, shifting between empirical data and theoretical concepts in a cycle between interviewing, transcribing, analyzing, and checking back with the theoretic body of knowledge on e-Justice. Due to the novelty of the topic, we pursued a step-wise coding which consisted of open, axial, and selective coding in order to elaborate on digitalized practices and patterns undertaken by Courts employees [28]. After the first round of interview write-ups and summaries, we employed the open-coding stage to generate first codes, which were used to condense the transcripts and obtain an initial overview of all case data [29]. During coding, we corroborated the detailed insights derived from analyzing the interviews by constantly comparing and triangulating these insights with the results obtained from the videos of online hearings and legal documents material [30]. To do this in a systematic way, we used ATLAS.ti as our computer-assisted qualitative data analysis software. The interviews were conducted, transcribed, and analyzed in Spanish. We later translated them using Deepl software, checked, and corrected afterwards.

### 4. Findings

#### 4.1. Judicial policies adapting to technology, instead of technology adapting to justice procedural regulation and policy

According to a civil judge, at the beginning of the pandemic, the multiplicity of legal sources “required a lot of proactive resourcefulness on our part, but it has been difficult at times to reach agreement. This made it difficult for the lawyers to interpret the law, as some courts did one thing and others another.”

With the first cases of pandemic, the central government restricted public mobility via supreme decree N° 104 (18th March 2020), limiting access to the courts physical space. However, legal regulation of court proceedings and procedures was left behind and took weeks to react to
these changes with Law N° 21.226 (2nd April 2020). This vacancy of legal agency was filled by individual proactivity and judicial regulation by the Supreme Court Acts 41 (13th March 2020), Act 42 (18th March 2020), Act 51 (31st March 2020), and Act 53 (8th April 2020).

This institutional complexity is characterized by multiplicity: court members encounter multiple sources and regulation be subject to interpretation. In the case of the civil court...

“In this law that power is given to the Supreme Court and in turn the Supreme Court delegated that also to the Courts of Appeals in each jurisdiction. So, we have the law, the instructive of the Supreme Court, the instructive of the Courts, and each court or committee of judges in each subject” Court Coordinator.

Between the lockdown and the law regulating the situation there was a 3-week gap in which every court leadership and team pulled out existing resources to keep functioning remotely. As stated by a public servant “we were sort of on the go, learning how to function correctly, and that’s because there were no guidelines from the law, from the Supreme Court.” Official Civil [A4]. Despite the existence of judicial and legal regulation (SC Act 41, 42, 51, and 52 together with Law 21.226), this multiplicity of texts generates ambiguity and uncertainty.

Against this background, videoconferencing tools served as plug and play resource for rapid adaption and certainty allowing for uniformity in the practices across different civil courts. The uniformity of a chosen software helped the users to navigate an already highly fragmented system – every civil court is a self-organizing unit. In this sense, the software architecture, functions, and features of the chosen videoconferencing platform came to fill in the missing details of the new configuration. It came to define the short-falling and late-coming regulation. From the video analysis of online hearings, evidence was presented to the court through “screen sharing” feature. This feature, which was and could not yet be regulated in any protocol or document, enact a particular configuration in which all parties benefit from richer multimedia to present evidence and argumentation to the court. This was only possible after engaging with the features offered by the videoconferencing platform.

In April 2021, the ministry of justice presented a reform to the civil justice which includes videoconferencing as a tool to conduct remote hearings, based on the experience during the pandemic. With this project the use of video conferencing tools in trials will be regulated.

4.2. Online courts in social media: reshaping the role of traditional press

Since 2013, the Judiciary has a centralized social media and communication strategy, using different digital platforms as they became relevant: Facebook, twitter, YouTube, Instagram. This is centralized in a large spatially extended organization. This long-term effort helped the judiciary to create a strong base of followers, mostly to communicate judicial news and as a crisis “intelligence” source. Furthermore, the use of social media created a direct channel with citizens that allowed the judiciary to better “control” the message being delivered – as opposed to being filtered, trimmed and recomposed by journalist from traditional media channels and the press. An interviewee from the Communications Department of the Court highlighted that “the organization understood this need of the citizenship [...] being a consumer of the Judiciary’s own social media channels, it was better for the people to find out by ourselves than to outsource the information [to the press and journalists].”

Furthermore, the use of social media with such purpose, was part of a strategy to better
position the judiciary in the public opinion. In this regard, as mentioned by a journalist working in court “we convinced the judges that in communication, the one who strikes the first communication blow is the most relevant and even with little information, and the one who gives the frame of what is happening, is the one who wins most of the battle” (Communications Department).

During COVID-19 in a highly volatile courts operations, quick, direct, and effective communication with users became crucial. The large network of users, followers and contacts in social media platforms built during the previous 8 years, served as the basis – and convenient ally- to an organization on the move. “The attention to public, which used to be a service over the counter, became absolutely social media” (Communication Dept.). That can be seen also in numbers, going from 3.000 inquiries in 2019 to 13.000 during 2020. Despite the large demand, social media is managed from the central offices in Santiago. In contrast, the traditional engagement with media and journalists is decentralized in every region – local radio stations, local newspapers, local tv shows.

4.3. Seeking a space for restoration in a virtual room

Against the background of using videoconferencing tools, some goals and objectives of restorative justice become difficult to attain in the practice of interviewing victims of sexual crimes. In this context, interviewing victims has two goals, on one side it is an opportunity to obtain information necessary to start the case, and on the other side it is an opportunity to build trust, establish a connection that helps the victim to restore their dignity:

“One has to balance the need to obtain information and the need to care for the other person [the victim], because what one is doing here, from our perspective, is collaborating in a process of repairing that person.” (Lawyer from Victim Center)

To achieve both goals, the interviewees refer to a physical space created for the specific purpose of interviewing. In the absence of that physical space where the encounter with the other becomes possible, virtual spaces do not fill the gap.

“We have a specially equipped room in the legal clinic to attend people, especially when they are victims of sexual crimes, and we usually take the interview in that room. Now with the pandemic we have had to resort to these video calls by Zoom or WhatsApp to interview people, obviously we cannot resort to this room.” (Lawyer Victim’s Center)

The lack of a physical space to talk to the victims creates new challenges in a already difficult task. In this process, not only the place is virtualized, but the body too as said by another interviewee “there are interviews in general, when people, for example, are very affected. Your whole body can hold that situation, you see? And you don’t necessarily have to say anything. And sometimes through a screen it’s difficult to do that.” (Psychologist Victim’s Center).

In those circumstances the use of words, sometimes empty, are used as a mean to bridge the gap between victim and lawyer: “I must have said it about three times, as if to compensate for that lack of presence. Maybe that’s... Maybe it’s a lack of presence.” (Lawyer Victim’s Center)
5. Discussion

Digital-by-default and the Lack of a Policy Framework Formulation for the Digitalization of Justice in Chile. One of the objectives of digital government is to set policy goals and specify the rules and conditions under which information is gathered, used, protected, and shared by government, individuals, and the private sector to achieve them. Our research indicated that in the case of the Chilean courts, in the context of the pandemic the process is inverted following an implementation-followed-by-regulation approach instead of the traditional approach of regulation followed by implementation. Digitalization occurs in expected and unexpected ways, embracing some new technologies and discarding others. We found that this multiplicity of configurations each court enacts and defines their own working routines and practices, creates more complexity that affects the systems usability. This finding is in line with research done in long-term ICT development in courts [31]. In this highly normative and regulated institutional setting technology development and implementation is decided after careful and time-intense study.

Our findings show that existing infrastructures and procedures gave court members stability in times of high uncertainty. Thus, and since the goal was above all the continuity of the service, online courts homologue analog procedures to fit digital possibilities. On the other hand, digital agency introduced new objects and procedures, without it being explicitly intended by the COVID-19 legal regulation or the court members. Yet, our findings show that the technology regime aided -even guided- and set a basis for the legal one to act on, as a complement or support. This was very clear in the finding that in a matter of days different units tried out different videoconferencing tools without significant costs for the organization despite their rigid structures, rules, and processes for conducting legal affairs.

Digital technology provides Courts ready-made solutions to setup rapidly and cost-effectively. It also provides stability and uniformity in uncertain times. However, the one size-fits-all overwrites procedural regulation and policy is defined by the software architecture, functions, and features. We could argue that the design of the technology shaped the regulation. An example of this is the Law 21.394, November 2021, which introduces reforms to face the post-pandemic situation. In this law, many procedures are adapted to fit the digital technologies in use.

Interrogating Social Media and Engagement with Citizens in Democratic Processes in the Digitalization of Justice in Chile. Enhancing accessibility and usability of technologies and information content that foster public interaction with government is also one of the objectives of the digital transformation of governments. The Courts’ social media strategy paid off during the pandemic time. However, the increased relevance of social media gives them more power in the judiciary. This has consequences that may undermine democratic processes. The possibility to engage directly with the citizens while positive, might be used to bypass the traditional press. This may affect a practice of control and scrutiny that press has over governments, and could give the courts a monopoly over communication of their news.

Moreover, Courts being online put social media platforms at their fingertips, exploring and exploiting them according to their goals. By increasing their followers base on social media, amounting to thousands of followers, the judiciary maintain a tight grip on the flow of information to citizens from a centralized social media office in Santiago. However, social
media platforms are out of the judiciary’s control and their algorithms out of their knowledge. Furthermore, the judiciary can only control what is published on their end. What is seen by the users is controlled by the social media platform’s algorithm.

**Achieving High Quality and Cost-Effective Digital Courts Operations at the Expense of Space for Restorative Justice.** Another objective of digital government is through managerial, professional, and technical improvements that address not only efficiency but also infrastructure investments, information management and use, organizational innovation. This objective is challenged by the need of spaces for restoration in the context of criminal justice. These restorative processes are characterized by inter-personality, and an embodied experience. The victim-offender encounter, the face-to-face, and communicative action is hindered by the use of digital means like videoconferencing tools. To repair and restore, the relation between victims and offenders needs time and a shared space.

Against the objective of improving governments operation, in terms of having cost effective processes and high quality we interrogate the usual narrative of constant line of better, more effective, cheaper, and faster. As shown in our interviews, the character of restorative processes is connected to slower experiences. In line with previous research, this shows the need for assuring embodied experiences, places of contact, and face-to-face interaction for restorative justice in a digitalized justice system.

### 6. Conclusion

In this ongoing research we have looked at digital government objectives and interrogated them in light of the concepts: digital by default, social media in courts, and restorative justice. From our empirical research, we have provided evidence on how some of the principles are challenged by the implementation of digital technologies in the Chilean courts. In particular, the lack of a policy framework and the implementation of videoconferencing tools to conduct online hearings during the global pandemic. Additionally, we explored how an increased use of social media in the service delivery reshape the relations between the courts and traditional press. Last, we showcased that the uses of digital means might hinder the restorative practices related to interpersonality, shared places, and embodied experiences.

While this study advances our understanding of digitalization of justice, there are topics that emerged in our interviews referring to paradoxes of the use of digital technologies in the public sector. Therefore, future research should address questions on digital sovereignty, and the dilemma faced by government of being efficient, while at the same time maintaining control over their digital infrastructure. Topics associated with this include the choice of deploying their systems on infrastructures that escape their jurisdiction or choosing to take a long road of seeding and growing internal capabilities to achieve that goal.

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