

“THE MAKING OF LAW”: TECHNOLOGICAL AND ORGANIZATIONAL CHANGES IN COURTHOUSES IN THE CONTEXT OF UNI4JUSTICE

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Abstract: *Digitalization is not an easy endeavour neither for public institutions nor for enterprises, addressing many heterogeneous issues. In this contribution, we present the design of our research, focused on the digitalization within the Italian courthouses, which is part of the wider national project “UNI4JUSTICE”. Specifically, we aim at addressing (1) the epistemic background required to rethink the processing of legal documentation in a digital environment; (2) the organisational changes required and possible best practices in the interaction among humans and artificial agents; (3) the legal challenges emerging from (1) and (2).*

1. Introduction

The present contribution draws an overview on the theoretical premises, research design and preliminary findings of a research activity currently conducted by an interdisciplinary research group in the University of Udine (IT), which is participating in an Italian National research project called “UNI4JUSTICE”, led and coordinated by the University of Bologna (IT) (<https://site.unibo.it/uni4justice>).

1.1. Context and scope of the research project

The Italian National project “UNI4JUSTICE” aims at investigating digitalization and the introduction within courthouses of “Ufficio Per il Processo” (henceforth UPP, translated as “office for the proceeding”), according to a recent legislative reform. UNI4JUSTICE is a complex project involving a consortium of universities coordinated by the Alma Mater – University of Bologna. This research project promotes organizational, technological, and professional change in the courts based on objective and verifiable knowledge of work practices, methods in using the resources, and monitoring tools. It is an interdisciplinary project, funded under the PON Governance and Institutional Capacity 2014–2022, and involves socio-legal experts, legal informatics, and management scholars. The research design includes different steps, sources and methods for data collection and analysis. A first research step refers to the collection and analysis of secondary data related to digitalization. A second step consists of collecting primary data through in-depth interviews and focus groups with a variety of respondents, including civil and criminal judges and court clerks. A third and final step, which will be conducted in the

next months, includes field research of data and participatory observation. Data are collected through different sources in order to increase the validity of the observations, and also to draw findings from multiple perspectives. Since this research project is still in progress, the purpose of this work is to illustrate a few preliminary findings and identify potential future research directions for our research unit.

1.2. Main research problem: Digitalization and the making of law as an artefact

As we know, digitalization had a tremendous increase during the pandemic in every economic field¹, including the legal sector. As regards the judicial proceedings, the consequences have been twofold. On one hand, after a brief suspension of ordinary hearings and other activities, available technologies have been customised to specific needs (e.g. remote hearings via Teams, Zoom and so on) and new tools have been implemented (e.g. remote certified notification in Italian criminal courts) introducing, after a first chaotic wave of conflicting regulations and practical uncertainties, unexpected benefits. We can argue that each kind of actor involved (lawyers, judges, court clerks) hardly would abandon the improved optimization of the workload achieved, notwithstanding the drawbacks still unresolved. On the other hand, many concerns were raised by the unscrutinised adoption of ICTs by courts. For example, an outburst of indignation spread in May 2020 when two convicted criminals – one in Nigeria² and the other in Singapore³ – were sentenced to death after having sustained trials entirely conducted through remote meetings. In such cases, worldwide public opinion claimed that death punishment violated fundamental Human Rights such as self-defence and fair trial, due to the lack of in-presence hearing.

Consequently, it can be argued that any attempt to increase the level of digitalization in judicial systems – not only in Italy, but also in another Country, whether European or not – cannot succeed without a thorough approach – a proper methodology, which is the leading theme of this year’s IRIS Conference – suitable to: (1) maintain a strong commitment to the principles underpinning the rules governing trials, such as Human Rights, despite the different interpretations brought by ECHR and national Constitutional Courts, (2) integrate humans with advanced levels of virtualization (e.g. remote hearings, cloud storage) and automation (e.g. decision-making algorithms, legal chatbots), while abiding by common ethical values, shared legal principles and procedural rules, (3) involving in the narrative many different stakeholders at an international level (e.g. CEPEJ⁴), taking into consideration a large spectrum of “viewpoints”. To do so, it is crucial to tackle at least three main issues: (1) what is digitalization, and why there is a substantial difference between a paper folder and a digital archive? (2) what is the impact of digitalization on human organizations and how it affects the judicial system (the Italian one in particular)? (3) how the legislator should address the digitalization of the judicial system, and what can be learnt from the first steps made by introduction of the UPP in Italy? Each of these concerns is discussed in one of the next sections, which are followed by a short conclusion offering a synthesis and a few remarks.

2. Law as an artifact

The “UNI4JUSTICE” project aims mainly at introducing new digital tools and methods within the court-houses. Such an initiative is going to determine a methodological shift in the way in which legal documents are produced since real digitalization requires documents to be natively digital.⁵ But one might wonder: how

¹ ROMANELLO/VEGLIO, COVID-19 Crisis, Digitalization and Localization Decisions, in *International Business in Times of Crisis: Tribute Volume to Geoffrey Jones*, Progress in International Business Research, 2022, pp. 253–271.

² <https://edition.cnn.com/2020/05/07/africa/nigeria-zoom-death-sentence-intl/index.html>.

³ <https://www.reuters.com/article/us-singapore-crime-idUSKBN22W016>.

⁴ <https://www.coe.int/en/web/cepej/cepej-european-ethical-charter-on-the-use-of-artificial-intelligence-ai-in-judicial-systems-and-their-environment>.

⁵ See: Sartor/Palmirani/Francesconi/Biasotti (Eds.), *Legislative XML for the Semantic Web. Principles, Models, standards for Document Management*, vol 4, Springer, Dordrecht Heidelberg London New York, 2011.

is the introduction of such technological tools provided by legal informatics going to impact the study of Law and to what extent are such tools going to make jurisprudence closer to the rigor of the natural sciences? To answer such a question, it is crucial to take into account the nature of Law and how it differs, as an object of study, from the natural reality. One might optimistically think that the use of technology will transform the study of Law into a rigorous science just like the use of new technological tools has greatly favored the development of natural sciences, but it seems that the ineliminable artefactual character of Law,⁶ might stand in the way of such a methodological shift.

Legal sciences and natural sciences might seem more similar than they actually are since they both deal with laws. Scientists often think of themselves as working to uncover the laws of nature. We should bear in mind though that such a way of speaking should not be taken literally but as a metaphor. Laws of nature are purely descriptive, they don't tell how natural phenomena should be, but how they actually are. On the contrary, laws within a legal system are prescriptive, they contemplate the possibility that people might not abide by the law, but such a possibility does not make sense in the case of natural sciences. If scientific laws are not able to capture the phenomena, then they must be wrong. Furthermore, and most importantly, scientific explanations do not appeal to ends and purposes whereas such an appeal seems to be unavoidable if we aim to understand the nature of an artefactual reality.

After a first phase dominated by an anti-realist stance towards artefactual entities,⁷ philosophical investigations into the ontology metaphysics of artifacts have rehabilitated such a category of objects by taking seriously into consideration how our intentions and goals are somehow built-in into the nature of artefactual objects.⁸ In other words, in order to understand what a certain artifact is, it is critical to grasp its function, and for what purpose it was made. This change of perspective makes it clear how it is crucial to take into consideration the intentions of the maker in order to fully understand what a certain artifact is.⁹ This seems to bring into the explanation of the nature of artifacts an unavoidable reference to ends and purposes that can hardly be reconciled with a fully scientific approach. Furthermore, artifacts are objects depending on us for their existence and identity and this makes them very different from natural phenomena.

We should not conclude though that the development of new technological tools designed to facilitate the work of those involved in legal practice will not make any difference as far as the study of Law is concerned. On the contrary, it can stimulate us to gain a better understanding of the legal concepts. For instance, the use of AI to extract and represent information from legal documents presupposes the development of legal ontologies¹⁰ capable of describing the entities and the relations mentioned in the documentation in such a way that a machine can “understand” it. This in turn makes it necessary to investigate and have a better understanding

⁶ On the artefactual nature of Law see: Burazin/Kennet/Roversi (Eds.), *Law as an Artifact*, Oxford University Press, Oxford, 2018.

⁷ This anti-realist stance extended to ordinary objects as well. See on this: Korman/Zemack (Eds.), *Objects: Nothing out of the Ordinary*, Oxford University Press, Oxford UK-New York NY, 2015. Three influential anti-realist accounts are found in: VAN INWAGEN, *Material Beings*, Cornell University Press, Ithaca NY, 1990; WIGGINS, *Sameness and Substance Renewed*, Cambridge University Press, Cambridge, 2001; MERRICKS, *Objects and Persons*, Oxford University Press, New York, 2001.

⁸ Influential realist accounts are found in: Margolis/Laurence (Eds.), *Creations of the Mind: Theories of Artifacts and Their Representation*, Oxford University Press, Oxford, 2007; THOMASSON, *Ordinary Objects*, Oxford University Press, Oxford, 2007; BAKER, *The Metaphysics of Everyday Life: An Essay in Practical realism*, Cambridge University Press, Cambridge, 2007; EVNINE, *Making Objects and Events: A Hylomorphic Theory of Artifacts, Actions, and Organisms*, Oxford University Press, Oxford-New York, 2016.

⁹ It is interesting to note that the XML scheme Akoma Ntoso used for the marking up of legal documents incorporates in its informal ontology the FRBR (Functional Requirement for Bibliographical Record) general model proposed by the IFLA (International Federation of Library Association), namely a system for describing and keeping track of documents and their evolutions through successive versions. Such a model presupposes four levels: work, expression, manifestation and item. Very roughly, a work is an abstract object, an idea in the mind of the maker, an expression is a realization of the abstract content, so, for instance, two translations of a same work are two different expressions, expressions are embodied in manifestations, for instance, the PDF or the paper version, finally, an item is a particular copy, physical or digital. So, two physical copies of a same work result as different items, but might be identical manifestations (with the same ISBN).

¹⁰ See: Sartor/Casanovas/Biasotti/Fernández-Barrera (Eds.), *Approaches to legal ontologies: Theories, domains, methodologies*. Law, Governance and Technology series, Springer, Dordrecht Heidelberg London New York, 2011.

of legal concepts and legal actors. In other words, the necessity of making the legal notions comprehensible to machines, will at the same time push us toward a better understanding of those very notions.

Another way in which the development of legal-informatic tools could have significant theoretical implications concerns legal reasoning and the representation of norms.¹¹ As is well known, standard classical logic is not well suited for representing legal argumentation. Very roughly, classical logic is monotonic and this means that any conclusion that follows from a given set of premises also follows from any set of premises having the first one as a sub-set (this is why theorems follow from any set of premises because they follow from the empty set of premises), but legal reasoning seems to be revisable in light of new knowledge and hence, any system supposed to represent legal reasoning and argumentation will have to be based on some sort of defeasible (*i.e.* non-monotonic) logic.

In conclusion, the artefactual nature of Law makes it very hard to imagine how jurisprudence may evolve into a discipline methodologically similar to natural science. To do so would mean depriving itself of the resources to properly understand its object of investigation. Furthermore, legal informatics must take into account the purposes of Law if it is to produce tools that are effective and useful. This claim is quite trivial. Every tool has to be evaluated in relation to its function/s. From this point of view, it is important to consider how the new technological tools and specialized figures are to be integrated within the already existing institutions (how for instance the UPPs are to be integrated within the courthouses like a “new gear in an already existing mechanism”). At the same time, it is also fundamental to identify the changes needed on the part of the already existing institutions in order for the new tools to be fully integrated in a productive way as we will see in the next sections.

3. “The making of law” and the ANT theory

Investigating the relationship between the institutional dimension and organizational change, the research project considers the problem of how the “adventures” of a “requested reform” in the Italian judicial system are marked by the general need for «facilitating a comprehensive introduction of managerial vocabulary and knowledge into the public domain»¹². However, since managerial notions of accountability and performance, of organizational change and digital transformation are enacted by law,¹³ «they enter into a terrain governed by legal framework and terminology»¹⁴. The rhetoric of change and “management by decree” constitutes a paradox in the reform of the Italian public sector and in this work we consider the concept of “decoupling” as it applies to organizations: Bromley and Powell (2012) suggest that “the common understanding of decoupling – as a gap between policy and practice – obscures the rise of a more prevalent and consequential form of decoupling – a gap between means and ends»¹⁵.

Meyer and Rowan (1977) highlighted the problem in these terms: «prevailing theories assume that coordination and control of activity are the critical dimensions on which formal organizations have succeeded in the modern world»¹⁶. This assumption, however, is based on the view that organizations function «according

¹¹ See on this: ATHAN/GOVERNATORI/PALMIRANI/PASCHKE/WYNER, LegalRuleML: Design Principles and Foundations. In: Faber/Paschke (Eds.), Reasoning Web. Web Logic Rules. Reasoning Web 2015. Lecture Notes in Computer Science(), vol 9203, Springer, Cham, 2015.

¹² PANOZZO, Management By Decree. Paradoxes in the Reform of the Italian Public Sector, Scandinavian Journal of Management, volume 16, 2000, p. 357.

¹³ Ibidem.

¹⁴ Ibidem, p. 347.

¹⁵ BROMLEY/POWELL, From Smoke and Mirrors to Walking the Talk: Decoupling Contemporary World, The Academy of Management Review, volume 1, 2012, pp. 483–530.

¹⁶ MEYER/ROWAN, Institutionalized Organizations: Formal Structure as Myth and Ceremony, American Journal of Sociology, volume 83, issue 2, 1977, p. 342.

to their formal blueprints: coordination is routine, rules and procedures are followed, and actual activities conform to the prescriptions of formal structure». Our empirical research also questions this hypothesis, so that (1) there was a great gap between the formal and the informal organization, and (2) formal organizations are often “loosely coupled”: in the processes of reciprocal adaptation between micro and macro (decentralized “judicial/administrative districts” and centralized administration at the “Ministry/Government” level), «structural elements are only loosely linked to each other and to activities, rules are often violated, decisions are often unimplemented, or if implemented have uncertain consequences, technologies are of problematic efficiency, and evaluation and inspection systems are subverted or rendered so vague as to provide little coordination»¹⁷.

Considering these assumptions, the purpose of our research group is to investigate the “translation process” of the UPP and the related professional roles, as an organizational change introduced within two courthouses located in the North-East of Italy (Udine, Pordenone). Through primary data collection and analysis, our study aims at (1) collecting needs and challenges of UPPs, (2) contributing to identify and promote best practices for the “UPP”, and (3) draw organizational models and processes that optimize the coordination of activities and the knowledge sharing within the courthouses. Thus, we hope to favour the alignment between the objectives of the initial implementation of UPPs, and the monitoring and evaluation processes enacted by the justice system.

The organizational work in the reform of the Italian justice system is heterogenous, requiring different actors and viewpoints. In our theoretical approach, a declination of Science & Technology Studies-STS (between Actor-Network Theory-ANT and Social Construction of Technology-SCOT: CALLON 1984; LAW 1986; LATOUR 2005; BIJKER et al. 2012; CZARNIAWSKA 2016; NIMMO 2016)¹⁸, we present a model of how actors managed this tension in “the making of law”. It draws on the “working practices” of people involved in the processes of organizational and institutional change¹⁹: (1) if the process of “translation into practice” of the reform of the justice system in Italy involves the adoption of digital technologies and the introduction of the “office for the trial-UPP”; (2) we will investigate the evolution of this process considering “the file” as the “unit of analysis” (starting from the case of the “digital civil trial”); (3) considering the digital evolution of archiving practices as “infrastructure processes” and digital archives as “artifacts” (“boundary objects”); (4) and, as well as, the “office for the trial” as a “centre of coordination” (forms of “situated work”: a “technologically dense” workplace and a “technology in use”).

At the convergence between “legal informatics”, “methodology of law” and “organizational change”,²⁰ we propose an analytical framework that interprets the processes of administrative change as “institutional learning”²¹. The expression “the making of law”²² refers to the knowledge that circulates within processes of change and that is institutionalized (“legitimized” and “taken-for-granted”) within the process of “translating” any reform into practice.²³ The expression “translating-a-reform-into-practice” (investigating “decoupling” in organizations) distances itself from the concepts of: 1) “implementation” (of a policy) that places the problem

¹⁷ MEYER/ROWAN, *Institutionalized Organizations: Formal Structure as Myth and Cerimony*, p. 343.

¹⁸ CALLON, *Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St. Brieuc Bay*, *The Sociological Review*, volume 32, issue S1, 1984, pp. 196–233; LAW, *Power, Action and Belief. A New Sociology of Knowledge*, *The Sociological Review*, volume 32, issue S1, 32, Routledge, 1986; BIJKER, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, MIT press, 2012; CZARNIAWSKA, *Actor-Network Theory*, the SAGE Handbook of Process Organization Studies SAGE, 2016, pp. 160–175; NIMMO, *Actor-Network Theory Research*, SAGE, 2016.

¹⁹ GHERARDI, *How to Conduct a Practice-Based Study*, Edward Elgar, 2012.

²⁰ LATOUR, *An Inquiry into Modes of Existence. An Anthropology of the Moderns*, Harvard University Press, 2013; MCGEE, *Latour Bruno: The Normativity of Network*, London, Routledge, 2014; MCGEE, *Latour and the Passage of Law*, Edinburgh University Press, 2015.

²¹ GHERARDI/LIPPI, *Tradurre le Riforme in Pratica*, Raffaello Cortina, 2000.

²² LATOUR, *Reassembling the Social: An Introduction to Actor-Network-Theory*, Oxford University Press, 2005; LATOUR, *An Inquiry into Modes of Existence. An Anthropology of the Moderns*, 2012.

²³ GHERARDI/NICOLINI, *To Transfer is to Transform: the Circulation of Safety Knowledge*. Organization, 2000.

within a model of rational and temporally linear decision; 2) “diffusion” (of an innovation) that recalls the absence of “agency” and logics of “replication”, “imitation”, “selection” or institutional isomorphism²⁴. Change and innovation as learning processes recall the “cultural dimension” of organizational phenomena: «[an ecological model] gives ontological priority to neither humans nor non-humans nor discursive practices: [...] the difference is based on the attribution to practice of a realist ontology (that objectifies practice as primary unit) and a social constructivist conception that does not distinguish between the production of knowledge and construction of the object of knowledge»²⁵.

In other words, “translating-a-reform-into-practice” is a metaphor that allows us to look at many interpretive processes, as well as the social and material processes that make knowledge travel (translate) from one place to another (the UPPs as coordination centres in a courthouse) and materialize it in a situated practice (memory practices and digital transformation involving the “legal file”, digital archives and archiving practices as boundary objects) within a specific organizational context (sociomaterial practices in technological dense environments). A two-dimensional scheme considers the two fundamental concepts, where:²⁶

- the boundary objects are *«a major method of solving heterogeneous problems. BOs are objects that are both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. They are weakly structured in common use, and become strongly structured in individual-site use. [...] A BO ‘sits in the middle’ of a group of actors with divergent viewpoints. There are different types of Bos depending on the characteristics of the heterogeneous information being joined to create them»*²⁷
- the coordination centres are *«representative of a set of situations which have to do with ‘working together’ [the world of humans interacting with the world of non-humans and with ICTs which support distance work]. These places [...] make it possible to revise categories of analysis like cooperation and individual/collective work, as well as ‘organizing’ understood as an activity situated in practice»*²⁸

According to Star and Griesemer,²⁹ we identify four types of BOs: repositories, ideal types, coincident boundaries, standardized forms. Based on the Suchman’s study of an air traffic control tower³⁰, we consider eight themes for research and analysis: technology as material practice, reading a scene, (re)producing a normal order, structures of participation, constituting workplaces, the development of competence, authoritative knowledge, and designing for change.

The episodes that intersect in the scheme and populate this analytical framework emerge from our research process: *“having identified the relevant social groups for a certain artifact, we are especially interested in the problems each group has with respect to that artifact. Around each problem, several variants of solution can be identified”*³¹.

²⁴ LATOUR, *Reassembling The Social: An Introduction to Actor-Network-Theory*; GHERARDI/LIPPI, *Tradurre le Riforme in Pratica*.

²⁵ GHERARDI, *How to Conduct a Practice-Based Study*, Edward Elgar, 2012, p. 77.

²⁶ BERG/BOWKER *The Multiple Bodies of the Medical Record: Toward a Sociology of an Artifact*, *The Sociological Quarterly*, 1997, BOWKER, *Memory Practices in the Sciences, Inside Technology*, MIT Press, 2005; BOWKER/STAR, *Sorting Things Out: Classification and Its Consequences*, MIT Press, 1999; PICKERING, *The Mangle of Practice: Time, Agency, and Science*, volume 3, University of Chicago Press, Chicago, 1995, MOL, *The Body Multiple. Ontology in Medical Practice*, Duke University Press, 2002.

²⁷ BOWKER/TIMMERMANS/CLARKE/BALKA, *Boundary Objects and Beyond*, MIT Press, 2015, p. 251.

²⁸ GHERARDI, *How to Conduct a Practice-Based Study*; SUCHMAN *Plans and Situated Actions*, Cambridge University Press, 1987.

²⁹ STAR/GRIESEMER, *Institutional Ecology, Translations’ and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology 1907-39*, volume 19, issue 3, *Social studies of science*, 1989, pp. 387–420.

³⁰ SUCHMAN, *Centers of Coordination: A Case and Some Themes*, In Resnik L.B., Säljö R., Pontecorvo C., Burge B., *Discourse, Tools, and Reasoning: Essays on Situated Cognition*. Springer, 1997, pp. 41–62.

³¹ BIJKER, *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, p. 28.

4. Digitalization as a matter of legislation

The digitalization of Justice in Italy has never been part of an overarching strategic program. In 2012, with Law Decree 179/2012, the UPP was introduced in Tribunals and Courts of Appeal as an urgent measure meant to reduce the length of trials, which has been an historic concern in the Italian judicial system. In these offices were employed even students in internship or on-training staff, auxiliary judges at the Courts of Appeal and honorary judges at the Tribunals, with the purpose of supporting full-qualified judges in their routine duties (e.g., writing minutes of the hearings and drafts of the decisions). Adapting similar legal initiatives enacted in other Countries (e.g., UK, USA, Spain and France) in 2021, with Law Decree 80/2021, additional personnel was recruited in order to increase the efficiency of the UPP as an extraordinary measure included in the programs financed by the EU Recovery Plan. Those resources, called “Addetti all’Ufficio del Processo” (translated: UPP staff employees) were aimed at supporting the legal workflow performing complementary tasks (e.g., organising files, planning hearings, and facilitating the imminent process of digitalization). The combination of said pieces of legislation brought further perplexity, increasing uncertainty in procedures, and establishing overlapping competences. Furthermore, the adoption of a “Law Decree” in itself was criticised as an abuse of the constitutional prerogatives by the Government, since the matter of digitalization does not integrate the requirements for such a provision (literally, “extraordinary cases of necessity and urgency”, Art. 77 of the Italian Constitution). Conversely, such hectic legislative intervention was considered the definitive proof of the absence of a clear political strategy in this field, since not only the lack of details on specification, harmonization, integration of the workload for many different agents (not only judges, lawyers, and court clerks, but also police officers, social assistants, and so on) interacting externally with the judicial system, but also the fact that such provision was introduced in a judicial system with a huge number – more than thirty – of technological platforms, with very poor or definitively lacking interoperability, and different levels of maturity. However, from the lesson taught by the defect of such initiative was quickly learned. that

Based on such past experiences, it can be learnt that to be effective, digitalization of judicial system requires not only a focused perspective but also a unified and consistent planning, together with substantial investment in new technologies and the involvement of international institutions (e-justice³², E-CODEX³³). In other terms, it is needed a rigorous approach – an overarching methodology – that combines theory and practice, namely the clarification of the nature of law as a digital artefact, an accurate planning, and a thorough monitoring of the operational changes introduced. This also implies the need to reformulate established categories of legal thinking on both the introduction and the governance of digitalization in judicial systems.

With respect to the first aspect, traditional methodology, as shown even in today’s textbooks or treatises on adjective law, usually offers the distinction between two phases, one “structural” or statical, and one “functional” or dynamical (KELSEN³⁴): first the actors are identified and their respective competences established, then the rules of their interaction are determined. Instead, we can argue that it is possible to describe judicial proceedings as a succession of changes in the status of the legal artefact (the “file, or “dossier”, incorporating the case to be discussed and decided), which occur depending on the interactions among actors, which can be external or internal to courthouses, both human beings and artificial agents.

As far as governance is concerned, digitalization of the judicial system changes the relationship with its ecosystem. Indeed, the judgement, from being a tool for resolving disputes, or settling the interests of the parties involved, converts a factor of social innovation. Seen from a higher level of abstraction, the judicial proceeding itself becomes a technological artefact, i.e. the legal, organisational and technological infrastructure at the service of processes of optimising social relations. From the point of view of legal thought, this is perhaps the most problematic finding, recalling discussions raised a century ago by many scholars worldwide, such as the

³² <https://e-justice.europa.eu/>.

³³ <https://www.e-codex.eu/>.

³⁴ KELSEN, Reine Rechtslehre. Mit einem Anhang: Das Problem der Gerechtigkeit, Franz Deuticke, Wien, 1960.

“school of free law” (KANTOROWICZ³⁵) or the ‘jurisprudence of interests’ (JHERING³⁶), or in American legal realism (POUND³⁷), which are still open.

5. Conclusions

The project has strong theoretical and practical implications, as it promotes organisational, technological and professional change in courthouses, while identifying best practices in digitalization and other organisational changes within the courts.

In this work we suggest that a “new organizational design” emerges from different theoretical approaches to analyse the role of (digital) objects (and digitalization as a process, as “a matter of legislation”) in a different ontology (“law as an artifact”). In management and organization studies there are research streams that “have emerged putting back into play ‘socio-technical systems’ in various guises that have become a distinguishing feature of contemporary social studies of technologies”³⁸. The reform in the Italian judiciary system constitutes a phenomenon that surpasses the legal implication of the notion and experience of human agency, implied by the emerging paradigm of technology and the socio-technical infrastructures: “there is an increasing attention to the need to bring materiality back into the study of organizational, technology, and management phenomena and ask in which ways objects, artifacts and materiality actually matter in organizational activity. [...] From a performative (or practice-based) perspective, organizational learning is a practice that is carried out in socio-material contexts, in particular ways”³⁹.

From an institutional learning perspective and in terms of organizational design, when the relationship between means and ends is opaque, some consequences could emerge from our analysis of this form of “decoupling”:⁴⁰ (1) internal organizational structures become increasingly complex, (2) organization persist in a state of perpetual reform, and (3) resources are often diverted away from core goals.

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³⁵ KANTOROWICZ, *Der Kampf um die Rechtswissenschaft*, C. Winter, Heidelberg, 1906.

³⁶ VON JHERING, *Der Kampf ums Recht*, G. J. Manz, Wien, 1872.

³⁷ POUND, ROSCOE, *Jurisprudence*, West Pub. Co., St. Paul, Minnesota, 1959.

³⁸ CARLILE/NICOLINI/LANGLEY/TSOUKAS, *How Matter Matters. Objects, Artifacts, and Materiality in Organization Studies*, Oxford University Press, 2013, p. 2.

³⁹ *Ibidem*, p. 3.

⁴⁰ BROMLEY/POWELL, *From Smoke and Mirrors to Walking the Talk: Decoupling Contemporary World*.

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