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# A Model of Justice as a Platform: A Case Study of Open Data Disclosure

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Abstract. Digital technologies influence operations and managerial processes in Courts of Justice. Notwithstanding peculiarities, Courts are incrementing the amount of available data that represent a huge opportunity. Proposing an exploratory case study, this Chapter aims to connect the reflection on new policy making models to the reflection on digital practices in the judiciary offices. An open data disclosure process is a case proposed to reflect about a shift in public administrations' model of interaction with organizational environment: from revising processes to face operational emergencies (extractive interaction model) to revising processes to provide knowledge and interpretative tools to its environment (platform interaction model). Judiciary services produce a platform providing a deep understanding of social and economic systems. Enabling justice to become a platform, where different subjects can acquire information and data, is a goal of primary importance for the elaboration of public policies, but also to empower social innovation and entrepreneurial opportunities.

Keywords. open data, open government, digital transformation

#### 1. Open Data, Open Government and the Role of Public Administration

To perform their tasks, many public administrations produce and collect data. The quantity and sensitivity of data make them particularly significant as a resource for increasing transparency, to provide a better understanding of government actions and increase accountability [1]. Data disclosure could produce several benefits of different types. The phenomenon of and the discussion about open data start from this assumption and can be described in several ways.

Considered as an object, open data are sets of data, generated by the action of a public administration or at its disposal, which are made public and made available – on the Internet – to anyone who wants to consult or elaborate them.

Data can be defined as the lowest level of abstraction from which information and then knowledge are derived [1]. Open data initiatives disclose raw data that can be managed and processed by anyone. This leads to other fundamental characteristics of open data as objects: data must safeguard the privacy of those involved in public proceedings; the sharing format must be manageable without the use of specific non-free software.

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On the other side, taken as a concept and as a movement of opinion, open data represent an evolution of public administrations' action: data produced and used by government and public administrations should be available to all [2]. In this sense, the debate on open data is strictly linked to the theme of open government, or rather the political ideal that demands citizens' right to the utmost transparency in relation to the public administrations that operate against them.

The literature presents a long list of open government's benefits for societies: a government more transparent, more efficient and the possibility for citizenship to affect decision-making processes [2]; the potential to increase participation, interaction, self-empowerment and social inclusion of open data users and providers [3]; the stimulation of economic growth [4].

Open government debate is fully consistent with the evolution in the way of analyzing and framing the work of the public administration that has occurred in the last few decades which can be defined by three evolutive stages.

The first stage is the highly bureaucratic and hierarchical public administration, close to bureaucracy Weberian ideal type. This model was challenged in the last decades of 20<sup>th</sup> century by the affirmation of New Public Management (NPM): the public administration should be able to incorporate managerial issues from the private sector increasing control and monitoring of process inputs and outputs; standards of quality and productivity had to be fixed and entrepreneurship within organizations had to be stimulated and rewarded [5].

From several years, even the NPM appears as a superseded paradigm. The new model that has been gradually affirming in the literature, but above all in practice, is New Public Governance (NPG): an idea of plural and pluralistic public action, focused on the management of inter-organizational networks, processes and outcomes of processes, alternative to the institutional structures of private companies [6]. NPG is a paradigm that fully recognizes the fragmentary and uncertain character of public action in the new millennium, where several actors outside the public administration, linked by trust bonds, play a key role in the production and implementation of public action [7].

In the NPG model, the administrative action proposed is that of Public Value Management: a new way of managing processes able to offer greater recognition to a wide audience of stakeholders, to activate deliberative decision-making, open to dialogue with instances of citizenship and negotiation for organizational goals [8]. In this perspective, there is a clear claim for public policy implemented with an active role of stakeholders and citizens.

## 2. The PCT and the Digitalization of Italian Judiciary System

The empirical case and the elaboration that will be presented in this Chapter spring from a long digital transformation process occurred in Italy in the last decade.

*Processo Civile Telematico*, or PCT, is the name used to refer to the digital reform occurred in Italy in civil judiciary system. PCT was fully operational a few years ago thanks to the legal obligation of electronic filing for lawyers and professionals, but the change process began more than ten years ago.

Nowadays, nonetheless several pitfalls and opportunities to improve effectiveness, PCT can be considered a successful policy and one of the most relevant public administration's digital transformation – perhaps on the European level – because of the impressive amount of data and official documents stored in and generated by the system. The database on which the system is based collects a huge amount of information on any civil procedure handled by an Italian Court.

More than this, PCT introduced new forms of interactions between Courts and primary procedures actors, and transformed Court offices' work, introducing new practices and operational goals. Together, they introduced a strong datification of civil Court operations.

Datification can be defined as the digital commutation of any activity provided by informatic systems, software and online platforms. The adoption and the utilization of digital devices and softwares are constantly producing data about activities performed that can be exploited to improve work effectiveness and produce knowledge.

### 3. A Model of Justice as a Platform

In last decades and throughout PCT digital transformation, the relationship between Courts and their organizational environment can be defined by an *extractive model*. This interaction is primarily based on operational needs: Courts engage the environment when acknowledging a shortage of resources of different kind.

Resources' scarcity narrows the possibility to improve services or to promote innovations, because of the duty to provide services without interruptions. At least a minimum amount of resource slack is a key driver for creativity and prompt reaction to problems.

Thus, the extractive model of interaction has the judiciary system itself as key valuesetting reference. Relationships based on this model are mainly generated by Courts willing to take action and looking for support among stakeholder. The primary goal of this model is improving Court internal efficiency. The Court is in the position to choose the level of engagement and the areas of activity that need more support or organizational change.

A different model of interaction with organizational environment is possible: we define it here as *platform model* (Table 1).

In platform model the primary cause of interactions is public value and the will to contribute to the administration of socio-economic phenomena. The starting point is not a specific operational need, but rather the feeling of being an important subject in the inter-organizational network producing public value and solutions to social hardships.

Being the primary goal very different from the extractive model, the focus of relationship is not based on the judiciary system itself, but rather on public policy and social innovation sponsorship. This imply the possibility to engage with subjects that, until now, has hardly been used to get in relation with judiciary authorities. This also imply for Courts the will to engage with stakeholders in a relation between equals: Court does not select stakeholders but provides resources and knowledge that can be gathered by any subject interested.

The perimeter of collaborations is not determined. Major focus is placed on the right allocation of public resources and to the construction of a network able to analyse and implement effective policies in the region.

The focus on inter-organizational network is essential in the platform model. This new perspective is needed because of a contemporaneity shaped by high uncertainty and fast-changing scenarios, where nor the government nor the market alone seems to have a possibility to manage and solve societal problems [9].

Variables	Extractive model	Platform model
Reference values	Judiciary system values	Collaboration in the inter-organizational network managing public value
Primary goals	Operational critical issues Development of innovative service	Management of socio-economic phenomena
Actors	Selected within the judiciary system	All the actors interested in taking action
Scope	Restricted and defined by Court	Unrestricted Unfocused on Court's needs
Court's contribution	Limited willingness to change	Open data disclosure Willingness to collaborate
Actors' contribution	Operational resources Technical resources Adoption of innovative practices	Analyses of social challenges Public policies Project addressed to critical issues

Table 1. Extractive model and Platform model of interaction with stakeholders

#### 4. Methods and Research Question

There are very few empirical contributions to open data field, focused mostly on evaluating policies and governments' actions to foster open data disclosure [1]; [10]. The empirical analysis proposed in this work is rather focused on organizational and managerial issues related to data disclosure in the judiciary system.

This study is not intended to prove the solidity and soundness of the platform interaction model that is an ideal type, a theoretical instrument supporting reasoning and research.

The research questions concern the understanding of the dynamics emerging when judiciary world meets open data government frame from an organizational systemic point of view. The case study offers the opportunity to dig into very important issues: which could be the best procedures to engage with open data? What are the main obstacles to the disclosure process? What are the drivers supporting Courts engaging the environment outside from their comfort zone?

The empirical case that will be presented in Section 5 has been investigated from a very peculiar perspective: as members of *Opendatagiustizia*<sup>2</sup> collective, we have been directly engaged in the project. From the methodological point of view we engaged in an action research [11].

It must be remarked that the case study is highly explorative: in Italy there hasn't been any attempt to introduce at the Court level the open data debate and open government actions. At the same time, there are initiatives that occurred for specific juris-

<sup>&</sup>lt;sup>2</sup>Opendatagiustizia (http://opendatagiustizia.it/) is a research stream of C.O.Lab, the center for research and development of C.O.Gruppo Srl, in partnership with Associazione Ondata (http://ondata.it/).

dictions or at national level. For example, from 2016 the Constitutional Court provides archives with open data standards on its web site<sup>3</sup>.

# 5. Empirical Case

Turin is a Metropolitan city in Northern Italy and its Court of Justice is one of the biggest in Italy. From several years Turin Court is considered as one of the most virtuous and innovative in Italy, developing organizational innovations in the relationship with citizens, in service design for lawyers and professionals, in monitoring procedural delays.

This innovation-friendly spirit is related with leadership, because of Presidents eager to take advantage of opportunities offered by PCT and digital tools. In addition, Court has been in the centre of a system in which key stakeholders, such as lawyer Association and bank foundations, contributed with economic support and resources to implement projects.

The first contact between Turin Court and Open Data was in the spring of 2017 in a public event connected with the International Open Data Day. In 2018 the appointment has been replicated with the will to start an explorative project in the Open Data field with the support and the endorsement of Court President and administrative chief.

Relevant figures of the administrative staff was contacted after a few weeks to carry on the work. Main occasions of interaction have been workshops held after the opening hours of offices.

The workshops were conceived to compose a typical *service design thinking* double diamond [12]. The adoption of design thinking framework was intended to treat open data as a service that Court could be able to provide. The process was structured in four moments: Discovery; Focus; Exploration and Operation.

People were separated into small teams to focus on a subject, taking account of specific competencies. During workshops, teams were asked to deal with canvases and reasoning schemes to deepen the knowledge of the subjects, the relation between procedures and data produced, the stakeholders involved and possible partners of the project.

The focus phase brought out the main themes sensible for further workshops activities. The most important themes were related to procedures involving forms of social hardship: the support of non-autonomous people; procedures related to broken families; evictions; financial difficulties of families and persons. More than this, a bunch of other themes emerged, more connected to Court administrative functions such as the list of registered professionals nominated by judges for impartial expertise.

The exploration phase had the role to transform hypothetic ideas in operative projects. Groups were asked to image how Court disposable data and activities could become meaningful for external organizations and citizens. At the same time, much attention has been placed on obstacles, on useful but not disposable data, on the issues related to privacy and on the resources needed to manage the disclosure and the update of open data.

Once the ideational work was done, groups dealt with the informative system database and test specific data mining strings to check the presence and the format of sensitive variables. Other work was needed to verify the consistency of data and to remove variables that could compromise in some way the anonymity of users and citizens.

<sup>&</sup>lt;sup>3</sup>https://www.cortecostituzionale.it/jsp/consulta/rapporti\_cittadini/open\_data.do.

#### 5.1. Operational Issues

Once the ideational side of the project was completed, the operational side raised several obstacles and pitfalls for the disclosure. Some of them were just snags for the provision of the most meaningful data, while others were quite conclusive.

The team working on family procedures faced the fact that a huge amount of information about families are stored in a template provided by the National statistics institute. The template is a handwritten paper form, therefore data aren't retrievable and useless for disclosure. The judiciary software stores quite exclusively information related to the procedure, avoiding social and economic data, because a double registration would require too much effort.

The team working on procedures supporting non-autonomous people decided to pay attention on georeferencing in order to map social hardship. The idea was to provide anonymous information through the ZIP code. The team found out that ZIP code was rarely filled in the database and other parts of the addresses were poorly filled. Georeferencing has been framed as the most important variable also by the team working on evictions but, also in this case, the ZIP code is never filled in the database.

Operational pitfalls can be considered unavoidable dealing with an explorative project. One of the main goals of the initiative can be considered an assessment of open data feasibility in the judiciary system and a full recognition of operative obstacles can be considered a first outcome of the project.

#### 5.2. Systemic Considerations

Beyond operational issues, Open Data Giustizia Torino offered the opportunity to observe individual and organizational behaviour facing a potentially disruptive innovation. The case led us to investigate three levels of analysis that should be managed to implement a platform model of interaction with stakeholder and organizational environment: technological, bureaucratic and organizational, cultural and institutional.

#### 5.2.1. Technology

In Italian judiciary system, the informatic system led to PCT reform and has been an instrument of organizational integration and efficiency within offices. Nonetheless, it has been designed to be as coherent as possible with offices traditional work. The informatic system has been mainly intended to reproduce paperwork on a digital support. Stretching system's potential exposes several elements that could restrain open data disclosure rather than easing it.

First, the system is not designed to manipulate and analyse data. It doesn't allow to have immediate account of statistics and metrics, and it doesn't easily enable business intelligence: information is not easy to pick up from the system and extractions are possible only through code strings.

Second, the insertion of data by offices is mainly about procedural issues. Data regarding individuals and families are often not taken in consideration. This makes sense for efficiency needs but prevents the system from being a social knowledge platform.

Third, some issues could be resolved by a direct connection with other public databases such as registry offices and tax agency, but judiciary system acts as a monad, rarely and insufficiently connecting to other public databases.

# 5.2.2. Bureaucracy and Organizational Structures

From a macro-organizational point of view, Courts' administration is focused on supporting the technological core [13] that can be identified in judges' decisions: the primary function of offices is channelling and shrinking uncertainty, together with formal controls imposed by law. Besides, Italian Courts administrative workers are in average quite old and difficult to stimulate because of laws regarding public workers. Very often the staff is underpowered.

These elements produce in Courts a strong focus on the contingent situation and on immediate operational needs. There is little room for strategic initiatives and long-term organizational goals. Organizational charts promote this situation, because, even in big and important Courts, there isn't an organizational role responsible for strategic longterm innovation programs and stakeholders' relationships, nor accountable of quality and quantity of data collected in the database with a systemic perspective. Italian judiciary organizations are very adherent to Weberian bureaucratic ideal type: this imply also little economic and organizational motives toward innovation and quality of work, because a public officer is hardly rewarded for producing effort toward organizational improvement and innovation.

In the Turin Court case, strategic organizational functions have been successfully held in last years by the President judge and the administrative chief, but a healthy organizational structure should be able to prevent too much pressure and commitment on individuals.

# 5.2.3. Organizational Culture and Institutional Logics

More than this, discussion can be carried on the ground of institutional logics and organizational culture.

Institutional logics have been defined as socially constructed values, beliefs, and rules, by which individuals constantly provide meaning to their reality, ordering material and social context [14]. Institutional logics operate at a macro-societal level but strongly influence organizational cultures: in the same organization there can be multiple institutional logics leaving space to diachronic processes of cultural change, to individual agency [15] triggered by institutional entrepreneurs [16] or competing logics [17].

Working in a Court means receiving a socialization based on a strong bureaucratic ideal type [18]: programmed and precise processes are the core of activities with little space to spontaneity and flexibility; formal rules define compulsory activities and legitimacy; hierarchy defines individual action space.

In relation to Courts' innovative processes, bureaucratic institutional logic implies that individuals have strong cognitive boundaries toward innovative practices. Everyday routinary activities are the only way to frame personal role, therefore a strong cognitive effort is required to reason on the Court systemic role on the territory in connection with stakeholders.

Given the bureaucratic organization, every office has a precise goal supporting organizational ends. Widening this frame to discuss how to reach general social goals, individuals could suffer the lack of the stable normal positioning.

Bureaucratic institutional logic influences also the way data are defined, treated and stored. In traditional way of working, administration of data is useful to report and certificate - e.g. to answer at an inspection. This strongly restrains the appreciation of knowl-

edge produced by datification, mainly because an analytic approach to procedures is not required. There are strong impacts also on data quality, because data providing qualitative intensity and a better comprehension of social phenomena are often considered completely useless.

#### 6. Conclusions

Our intent in this work is to stimulate the debate about the role of judiciary organizations in contemporary public administration's interaction with its environment in collaborative inter-organizational networks producing public value.

We frame this issue starting from some believes. First, public administrations – and particularly judiciary systems – has not yet understood how to make the best use of data produced by its own action. Second, the connection between judiciary system and stakeholders is crucial for quality and quantity of services provided, as demonstrated also by several elements of PCT reform implementation. Third, open data initiatives are a fundamental mean to energize and fill with meaning the relationship between judiciary organizations and their organizational environment.

Digital technologies offer several opportunities to engage with social environment, through the disclosing of data that can be meaningful to a large array of stakeholders. This is particularly true for Courts, given the wide magnitude of social and economic variables touched by their procedures.

In this sense, open data can be considered as a medium to establish new relationships and an innovative model of interaction with citizenship, that we described as platform model. Going further, analysis of data generated by judiciary organizations introduces other relevant issues: for example, artificial intelligence could be developed to provide instant insights on organizational effectiveness and social hardship emergencies.

In our opinion, the case study is particularly interesting because of several features. First, participatory methodologies are an instrument very effective and they should be spread more and more in the public sector: they offer the possibility to avoid enforcing top-down order that usually produce a formal and passive acceptance of new practices. Second, the disclosure process that has been described and analysed didn't derive from an imposition or a specific policy, but rather from the Court leadership willingness to find and explore innovative solutions. Third, the exploratory nature of the project predictably let emerge several obstacles and pitfalls.

It is necessary to highlight an important limitation of the case study: being the disclosure process *in fieri*, the project will produce outcomes mainly in the future. Nowadays, we don't know how many datasets will be disclosed, how disclosure will be managed at the organizational level, how the stakeholders will react to the disclosure, if the stakeholders will be ready to collaborate with the Court in order to reach more meaningful dataset, if there will be space for the creation of an effective collaborative interorganizational network, for dialogue and shared reflection.

We hope there will be further occasions to test the platform model with empirical evidences. This is particularly true even because, as pointed out in some contributions [19], open data on its own has little intrinsic value, because the value is created by its use: platform model could be the infrastructure able to create value from data.

In conclusion, we would like to provide suggestions for further research and an invitation for the community of practice.

Research in open data disclosure processes should be focused in looking for case studies and best practices in which the disclosure produced a concrete improvement in stakeholders' engagement. It could be important to find cases in which the interorganizational network produced systemic results, new policies, or social innovation initiatives.

On the other hand, from an organizational and administrative point of view, it could be primarily relevant to investigate the effects of open data disclosure on organizational behaviour and practices. It could be interesting to assess if workers would be able to develop a wider awareness of organizational systemic role and about the importance of data quality. More than this, it's very interesting the balance between strategic practices, innovative initiatives and bureaucratic requirements.

The invitation for the community of practice dealing with innovative solutions in the judiciary system is not to underestimate the potential relevance of open data in paving the way to an evolution of the interaction between the judiciary system and society at large.

Judiciary organizations could become an important catalyst for social innovation and data-driven innovative policies. To let this vision come true, it is necessary to explore new interactions with stakeholders and reframe in a strategic way several organizational practices. Opendatagiustizia group will gladly support all projects and experiences that will go in this direction.

#### References

- Ubaldi, B. (2013). Open Government Data: Towards Empirical Analysis of Open Government Data Initiatives. OECD Working Papers on Public Governance, 22.
- [2] Kassen, M. (2013). A Promising Phenomenon of Open Data: A Case Study of the Chicago Open Data Project. *Government Information Quarterly* 30(4), 508-513.
- [3] Bertot, J. C., Jaeger, P. T. & Grimes, J. M. (2010). Using ICTs To Create a Culture of Transparency: E-government and Social Media as Openness and Anti-corruption Tools for Societies. *Government Information Quarterly* 27(3), 264-271.
- [4] Borzacchiello, M. T. & Craglia, M. (2013). Estimating Benefits of Spatial Data Infrastructures: A Case Study on e-Cadastres. *Computers, Environment and Urban Systems* 41, 276-288.
- [5] Hood, C. (1991). A Public Management for All Seasons? *Public Administration* 69(1), 3-19.
- [6] Osborne, S. P. (2006). The New Public Governance? Public Management Review 8(3), 377-387.
- [7] Haveri, A. (2006). Complexity in Local Government Change: Limits to Rational Reforming. *Public Management Review* 8(10), 31-46.
- [8] Stoker, G. (2006). Public Value Management: A New Narrative for Networked Governance? *American Review of Public Administration* 36(1), 41-57.
- [9] Robinson, D. G., Yu, H., Zeller, W. P. & Felten, E. W. (2009). Government Data and the Invisible Hand. *Yale Journal of Law & Technology*, *11*, 159.
- [10] Zuiderwijk, A. & Jannsen, M. (2014). Open Data Policies, Their Implementation and Impact: A Framework for Comparison. *Government Information Quarterly*, 31(1), 17-29.
- [11] Lewin, K. (1946). Action Research and Minority Problems. Journal of Social Issues 2(4), 34-46.
- [12] Stickdorn, M. & Schneider, J. (2010). This Is Service Design Thinking: Basics, Tools, Cases. BIS Publishers.
- [13] Thompson, J. D. (1967). Organizations in Action: Social Science Bases of Administrative Theory. Transaction Publishers.
- [14] Thornton, P. H. & Ocasio, W. (2008). Institutional Logics. In Greenwood, R., Oliver, C., Sahlin, K. & Suddaby, R. Handbook of Organizational Institutionalism. Sage.
- [15] Boltanski, L. & Thévenot, L. (2006). On Justification: Economies of Worth. Princeton University Press.

- [16] Suddaby, R. & Greenwood, R. (2005). Rhetorical Strategies of Legitimacy. Administrative Science Quarterly, 50, 35-67.
- [17] Scott, W. R., Ruef, M., Mendel, P. & Caronna, C. (2000). Institutional Change and Health Care Organizations: From Professional Dominance to Managed Care. University of Chicago Press.
- [18] Weber, M., 1922 (1978). *Economy and Society: An Outline of Interpretive Sociology*. University of California Press.
- [19] Janssen, M., Charalabidis, Y. & Zuiderwijk, A. (2012). Benefits, Adoption Barriers and Myths of Open Data and Open Government. *Information Systems Management*, 29(4), 258-268.