SHORT ARTICLES

DIGITALISATION AND REFORMS OF PUBLIC ADMINISTRATION IN ITALY

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Abstract

This article aims to discuss how and to what extent "digitalisation" is affecting and should affect the functioning of public administration in Italy. With the Public Administration Reorganisation Act of 2015, a quite comprehensive reform of the organisation of Italian public administration has been set in motion in which digitalisation is meant to be the main means to change the State. The article purports that terms such as 'digital citizenship' and 'digital first', upon which the reform hinges, should not be overestimated. In acknowledging digitalisation (and e-government) as an incremental process driven by the technological sophistication deployed, one should bear in mind that it is made of various dimensions such as information, transaction, political participation and different manners of interaction within PA and with citizens. Each of these present opportunities and risks and the concrete outcome depends both on the cultural and economic context in which information and communication technology is placed and political choices. The paper suggests that a normative model of the implementation of e-government should be based on information and bureaucracy organisation rather than on the ambiguous conferment of 'digital rights'.

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TABLE OF CONTENTS

1. Introduction

This article aims to discuss how and to what extent "digitalisation" is affecting and should affect the functioning of public administration in Italy, building on a research project whose outcomes will be published in one of a series of volumes revolving around the past and future of administrative law after 150 years from the so called statutes of administrative unification of 1865 under the general coordination of the Department of Law of the University of Florence.[1]

Two questions constitute the thread of the article. The first is whether we can still speak of a 'digital administration' as distinct from a traditional administration. We are undoubtedly going through a transitional era even though our daily experience teaches us that a great deal of Italian public administration keeps working according to the 'dusty files' culture celebrated by some

[1] S. Civitarese Matteucci, L. Torchia, *La tecnificazione della pubblica amministrazione* (Technologisation of Public Administration), forthcoming (2017). Hereafter when referring to one of the papers collected in this book I will use the acronym TPA.

great XIX Century novelists. It is hardly deniable though that within a few years the 'administrative transactions' could be ordinarily digital and thus the 'code of digital administration' might become the 'code of public administration' tout court. With the Public Administration Reorganisation Act (of Parliament) n. 124 of 2015, a quite comprehensive reform of the organisation of Italian public administration (PA) has been set in motion in which, according to the Italian Ministry for Public Administration Marianna Madia, «digitalisation is *the* means to change the State at long last and not simply one among many others. This is why it represents the heart of the reform»[2].

Secondly, we wonder whether and to what extent changing the means of communication within the public administration arena changes the substance of interactions which occur there. In a way this is the old issue of the relationship between form and substance, where the first now bears the semblance of a powerful technology. This is a question which especially besets public law scholars. Although it depends on the scope of the application of ITCs to public administration, it is not audacious to foresee the extreme scenario of the replacement of human decisions with computer decisions, which, thanks to the Internet, can store and elaborate a huge amount of information. In such a case we would have a 'technical' decision replacing a 'political' one. It is not clear, though, whether recent reforms by bringing forward digitalisation pave the way for automated decision-making too.

The article is structured as follows. In the ensuing section some terminological and conceptual clarifications are offered, viz. the notions of "online public services" and *e-government* taken in an incremental perspective. I contend, namely, that within such a perspective the transactional dimension of e-government is to be conceived as the main goal to pursue as it is somehow more complete and desirable than the informative dimension only. The third section deals with the impact, both quantitative and qualitative, of e-government upon government and public administration, especially regarding the level of diffusion of e-

[2] See at http://www.corrierecomunicazioni.it/pa-digitale/39379_marianna-madia-il-digitale-cuore-della-riforma-pa-basta-indugi.htm (last visited 16 March 2016).

government also in light of the "digital agenda" policy. The fourth section discusses the literature on the analysis and assessment of the practice and change brought about by ICTs in the activity of bureaucracies with an attempt to model the possible impacts upon different segments of such an activity. The fifth section sheds light on some analytical and conceptual aspects of the impact of the use of the ICTs on the structure and functioning of public administration, particularly by taking on open data, administrative procedure and participation, and the so called re-engineering of bureaucratic processes, while the sixth section offers some final remarks.

The point I shall make is that the introduction in the legislation of terms such as 'digital citizenship' and 'digital first' should not be overestimated. The idea of shifting the focus from policy to rights to change the inertia of e-government, which inspires the said reform, is little more than a good slogan. This choice belongs to the rhetoric of rights widespread in our contemporary public discourse which is particularly inadequate in this field. In describing e-government as an incremental process driven by the technological sophistication deployed, we should bear in mind that there are various dimensions of ICTs such as information, transaction, political participation and different manners of interaction within PA and with citizens. Each of these dimensions present opportunities and risks and the concrete outcome depends both on the cultural and economic context in which ICTs are placed and political choices. I purport that a normative model of the implementation of e-government should be based on information and bureaucracy organisation rather than on the ambiguous conferment of 'digital rights'.

2. Conceptual and Terminological Premises. An Explicative-Normative Model for E-government

First of all, we need to delimitate the phenomenon we want to enquire about, to which I will indifferently refer as ITCs or e-government. It has evolved across the years, moving from the advent of the computer with the employment of simple software

to the design of complex informatics, to cloud computing.[3] The phenomenon of e-government has a global nature. It concerns all the states and it has been the object of an ever growing attention by scholars of different social and political fields. Suffice it to think of the collection of cases analysed in the book 'Comparative E-government' edited by Christopher Reddick (Springer, 2010) or of the several volumes (21) in the series *Public Administration and Information Technology* by the same Reddick for Springer.

According to one widely acknowledged conceptual framework e-government can be described as a bi-dimensional phenomenon.[4] The first one regards the level of technological sophistication, ideally placed on the x-axis, the second the type of interaction between the recipients and the service, ideally placed on the y-axis (see fig. 1).

	STAGES OF E-GOVERNMENT				
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Type of government	Information	Two-way communication	Transaction	Integration	Political participation
Government to Individual — Services	Description of medical benefits	Request and receive individual benefit information	Pay taxes online	All services and entitlements	N/A
Government to Individual — Political	Dates of elections	Receive election forms	Receive election funds and disbursements	Register and vote. Federal, state and local (file)	Voting online
Government to Business — Citizen	Regulations online	SEC filings	Pay taxes online Receive program funds (SBA, etc.) Agricultural allotments	All regulatory information on one site	Filing comments online
Government to Business — Marketplace	Posting Request for Proposals (RFP's)	Request clarifications or specs	Online vouchers and payments	Marketplace for vendors	N/A
Government to Employees	Pay dates, holiday information	Requests for employment benefit statements	Electronic paychecks	One-stop job, grade, vacation time, retirement information, etc.	N/A
Government to Government	Agency filing requirements	Requests from local governments	Electronic funds transfers		N/A

Figura 1 from Hiller-Bélanger, 2001.

[3] A. Osnaghi, '*Pubblica amministrazione che si trasforma: "Cloud Computing", federalismo, interoperabilità,* Amministrare 59 (2013).

[4] J. Hiller, J, F. Bélanger, *Privacy Strategies for Electronic Government*, E-Government Series Pricewaterhouse Coopers Endowment for the Business of Government (2001).

By service I mean here "online service", expression which stands for the peculiar manner of interaction between providers and users whilst the actual content of such services includes any administrative task, namely – employing a traditional Italian doctrinal distinction – both 'functions' (PA prerogatives) and services in the strictest sense. A quite comprehensive definition of online service states it is «an activity or a series of activities, of a more or less intangible nature, which result in an exchange between a provider and a client where the subject of the transaction is an intangible good».[5]

The level of sophistication can in turn be articulated in five stages: information, bi-directional communication, transaction, integration, and political participation.[6] They are the first four that refer more closely to public administration for the latter prevalently concerns the issue sometimes evoked in terms of e-democracy. It goes without saying, however, that e-democracy is significant to admin law as well. Article 9 of the Code of Digital Administration (CDA) establishes that administrative authorities should favour as much as possible any use of new technologies which is able to enhance citizens' participation in the democratic process and facilitate the enjoyment of political and civil rights both individually and collectively.

Some Italian literature in the 80s, embracing an optimistic view of the then dawning relationship between ICTs and democratic institutions, envisaged that the development of informatics would be the turning point for a change in the relationships between public institutions and citizens – within which admin law had to be adjusted as well – inspired to a full and authentic democratisation bolstered by the direct participation of people in government.[7] At the beginning of the 90s the advent of the Internet led a number of authors to consider it as the best solution to the old issue of the lack of quality and

[5] C. Batini, *Un'introduzione ai servizi di e-government*, 23 Amministrare 38 (2013).

[6] One can find a similar classification in the Guidelines of 2011 regarding how to set up the institutional websites of any public administration issued pursuant to article 4 of the Directive n. 8/2009 of the Minister of la public administration and innovation.

[7] G. Berti, *Diritto e Stato. Riflessioni sul cambiamento* (1986).

quantity of representation that impairs liberal democracies.[8] In such a climate several governmental programmes to boost e-government assisted by conspicuous investments were implemented.[9] Such Panglossian views are nowadays far less popular as their auspices have been proven largely unattainable until now.[10] Due to such failures, the present mainstream view, which can be named pragmatic, purports that technology has nothing particularly new to offer to democracy but reinforce the existing practices and political and social institutions.[11] Along with such conceptions a third coexists, which has been defined dystopian, where ICTs are viewed as a means of massive danger both to democracy and basic freedom up to their destruction.[12] Taking heed of such major concerns, the dominant pragmatic approach appears to be the most relevant if we focus on public administration. This is slippery terrain, however, because most of the times such an approach is all but neutral and in fact the rise of e-government has very often been associated with those positions that consider technology as an instrument of the new public management (NPM) ideology. For example to such ideology belongs the idea that ICTs might reduce negative externalities caused by the formalisation of administrative decisions into strictly codified procedures. We shall discuss this aspect throughout the paper, while now it is appropriate to turn to the sophistication issue.

Among the other four levels of e-government sophistication, the information stage essentially concerns the

[8] D.R. Johnson, D. Post, *Law and Borders – the Rise of Law in Cyberspace*, 48 Stan. L. Rev. 1367 (1996); B Santos (ed), *Democratising Democracy: Beyond the Liberal Democratic Canon* (2007).

[9] J. Morison, *Online government and e-constitutionalism*, 14 Pub. L. 15 (2003).

[10] B. Schafer, *Democratic Revival or E-Sell Out? A Sceptic's Report on the State of E-Governance in the UK* Report to the XVIIth International Congress of Comparative Law, 9-11 July 2006; G. Longford, S. Patten, *Democracy in the Age of the Internet*, 56 U. New Brunswick L. J. 5 (2007).

[11] P. E. Agre, *Real-Time Politics: The Internet and the Political Process*, (2002) 18 The Information Society 311, 317; Longford and Patten (n 5) 9.

[12] B. Koops, *Criteria for Normative Technology: The Acceptability of "Code as Law" in Light of Democratic and Constitutional Values* in R Brownsword and K Yeung (eds) *Regulating Technologies: Legal Futures, Regulatory Frames and Technological Fixes* (2008) 158.

creation of the institutional website pursuant to article 53 CDA, which establishes that institutional websites shall operate through a network which complies with principles of accessibility, enhanced usability, and availability and be disabled people friendly, complete and clear in information, inter-operational, reliable and easy to use. The second level, relating to bi-directional communication, consists of a non-fully complete form of interaction with the users because it does not include any online transaction. It contemplates an exchange of information between officials and users. It is possible that online forms have to be filled in, but the service is provided in an ordinary way. This is still a 'documentary' stage, whilst transaction and integration are the levels of sophistication where the service is appropriately online and ICTs operate in a 'meta-documentary' way.[13] In such cases one can speak of digital procedure in the specific meaning that the decision which shapes a particular legal relationship is operated through the website, namely by using data elaborating software which produces that decision. In many cases such transactions – for example the payment of a fine – do not seem to appear that different from what happens in e-commerce. In other cases, more complex administrative decisions are dealt with, such as permits or benefits. The difference between the transaction and integration stages regards the fact that in the latter a thorough transformation of back-office practices is pursued, so in a sense the stress is more on specific organisational tools. There is in the literature the idea that the integration stage would imply a proper shift from a bureaucratic-centred concept to a citizen-centred concept of public administration, where, that is to say, both the organisational and service dimensions would adapt according to the users' needs.[14]

Considering the other dimension of the phenomenon at hand – which looks at the recipients of e-government – a point stands out as regards the sophistication scale, which is whether the passage from the information stage to the transactional stage is to be considered a sort of progress towards the achievement of "true" e-government, as if, in other words, the higher the

[13] M. D'angelosante TDA.

[14] A. Tat-Kei Ho, A., *Reinventing Local Governments and the e-Government Initiative,* 18 Pub. Admin. Rev. 434-44 (2002)

sophistication the fuller digital citizenship is. This seems to be the NPM approach, whose model is e-commerce and whose paramount value is efficiency. Such an approach may have influenced policy implemented by the EU commission in agreement with Member States between 1999 and 2006, which clearly show a trend to privilege the e-commerce/transaction side. In this period indeed one notes a sizeable increase in supply of online services, which reached 70% in 2007.[15] However, this was not accompanied by an analogous rise in the employment of online services by the users. Viz. a clear asymmetry persists in Europe between supply and demand of e-government in favour of the former. The "Digital Agenda Targets Progress Report" (Digital Agenda Scoreboard) of June 2015 speaks about a slow increase in e-government. The use of e-government services, measured on the quantity of online forms submitted (only 25% of which is indicated as complete), has risen from 38% to 47% in five years. Such data constitute the average between remarkably differentiated situations in each Member State. As for Italy – which is among the countries at the bottom of the list (third last) – the figure is little more than 10% and it has not seen change across the five-year period.

Those who simply do not have access to the Internet, a number, by the way, which is constantly dwindling, constitute a sub-cluster of people who do not benefit from online e-government. The mentioned Digital Agenda Scoreboard refers to the Internet as a "success story" and in fact at the level of the Union the percentage of Internet users reaches 75%. As regards this point there are also considerable asymmetries between Member States and in fact in the majority of them around a third of the population do not access the Internet. This group includes disadvantaged people who are the most likely candidates to access social services aimed at fostering their social inclusion such as education, social assistance, job activation, etc. They are, moreover, those who are less likely to become ICT users, while to favour their access to social services an astute use of ITCs could

[15] C. Codagnone, D. Osimo, *Beyond i2010. E-Government current challenges and future scenarios,* in P.G. Nixon, V.N. Koutrakou, R. Rawal, eds, *Understanding E-Government in Europe* (2010) 39 fig. 3.1.

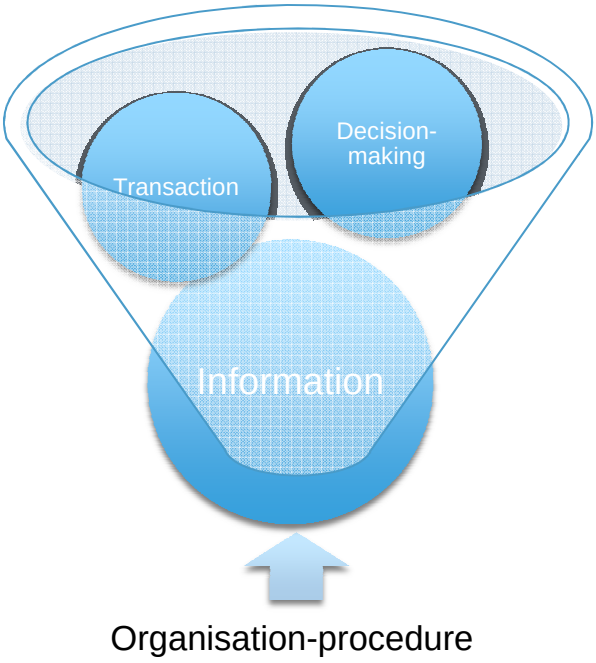
make a real difference in the good management of such services.[16] In other words, many of such non ICT users might never become e-government demanders. As has been noted a desirable policy would be to shift the objectives of digitalisation policies from «traditional efforts to help them use ICT to new approaches aimed at using ICT to help them».[17] In brief, the idea that the focus of e-government is to be seen in the transactional stage is not at all undisputed, as, on the contrary, one can sustain that the main value of digital administration is in information and that the transaction stage is neither inevitable nor fully desirable irrespective of contextual conditions.[18]

It is undeniable that the moment of the decision on an administrative affair (transaction in the Hiller-Bélanger matrix) is the one which mainly attracts the curiosity of legal scholars. Suffice it to think of the various attempts to configure a species of "digital administrative act".[19] However, the effects of ICTs should be look into above all on the organisational dimension and how the latter adapt to or resist external inputs. As has been noted, the most crucial aspect resides in the difficulty of reconceptualising and actualising in terms of digital work how bureaucracies operates both internally and as a network of public administrations. [20] Hence the phenomenon of e-government should be further anatomised or simply more accurately analysed assuming a different explicative (partly normative) model from the Hiller-Bélanger matrix, centred on the functioning of public administration. I propose, thus, a mono-dimensional model in four stages, which combines sophistication and interaction according to different normative precepts (fig. 2). It considers mono and bidirectional information as the first dimension; transactions in the strictest sense, that is to say relating to those services supplied by PA which can be assimilated to e-commerce,

[16] C. Codagnone, D. Osimo, *Beyond i2010. E-Government current challenges and future scenarios,* cit. at 15, 42-43.
[17] Ibidem, 43.
[18] P. Dunleavy, H. Margetts, *New Public Management Is Dead – Long Live Digital-Era Governance,* 16 J. P. Admin. Res. Theory 467-494 (2006).
[19] I.M. Delgado TDA.
[20] G. Duni, *Verso un'amministrazione integrata nei procedimenti amministrativi*, 14 Informatica e dir. 43-47 (2005).

represent the second dimension; the third dimension regards the functional or purposive element of administrative action, that is to say in which transaction has to do with the outcome of decision-making; the fourth dimension deals with procedure as an element of organisation in order to reshape fundamental patterns of the functioning of public administration. The first and fourth dimensions, information and organisation, are transversal. They constitute the infrastructure of e-government, in other words what makes the other two possible and determines their scope as well and which probably embody the main value of e-government.

Fig. 2. Model of e-government centred on organisation-information



3. Digital Agenda and the Principle "Digital First"

As seen in the previous section, one of the key-points concerns the quantitative and qualitative incidence of e-government on government and public administration, even though, surprisingly, there are not exhaustive studies regarding the Italian situation. Surveys and reports exist as regards the international context. When talking of ICTs and public institutions the literature refers to two aspects or at least the following stand

out. The first regards the level of diffusion of e-government and therefore the success of digital agenda initiatives. The second, much more meaningfully, regards the analysis and evaluation of the practices which are brought about by the use of such technologies. In this section we deal with the first point, while the second will be addressed in the following section. There is a further aspect on which we will turn in section five which concerns the identification of the possible scenarios deducible from the legal rules which accompany the introduction of such technologies and that affect central notions of administrative law such as decision-making, procedure and participation.

As to the first aspect, a sort of paradox lurks here. On the one hand, the pervasiveness of ICTs seems to exert its influence on the very structure of social and institutional models, as much so that it is familiar to refer to our historical time as the digital era. On the other hand, they are phenomena which require a specific governmental implementation, without which, that is to say, change barely takes place. In other words, one cannot say that politics is merely superseded by technology if choices, plans and investment are needed to make e-government become an ordinary practice and if such choices are not neutral towards the model of e-government one wishes to pursue. As we are going to see below, it seems that the employment of ICTs may enhance or emphasise the features of certain ideal-types or models of public administration but it does not constitute a model per se. It is somewhat evident, anyway, that such a digital era yields new asymmetries and disequilibrium. One of the so-called digital divides regards in fact the chasm between the traditional functioning of public administration – suffice it to mention the time issue – and new modalities of socio-economic interaction which develop thanks to the internet.

Governments are expected to be able to detect and acquire remarkably complex and sophisticated operating systems and make them functional and – as the experience of some UE Member

States show – one should not take for granted that such an ability is just a function of the amount of resources invested.[21]

It is in such a framework that "digital agenda" initiatives are to be located. At the level of the EU, the Digital Agenda for Europe, launched within the Europe 2020 strategy, has got broader scope than the digitalisation of PA, for it mainly regards economic growth and employment to be pursued in seven priority areas and 101 actions. Among the most prominent objectives there is the adoption of a new and stable regulatory framework for broadband, the creation of specific infrastructure for digital public services and the increase in digital skill. As mentioned before, the level of achievement of such goals by all Member States is yearly measured in the Digital Agenda Scoreboard where Italy is among the strugglers. The Italian Digital Agenda aims at filling this gap.

Another figure, more comprehensive and refined than the Scoreboard, the Digital Economy and Society Index (DESI) (http://ec.europa.eu/digital-agenda/en/desi) provides more precise data regarding each country. This is a composite index, developed by the European Commission, with the purpose of assessing the growth of the Member States towards a digital economy, which considers a cluster of factors dealing with five dimensions: connectivity, human capital, Internet use, integration of digital technology, and digital public services.

In the DESI report for 2015 Italy is ranked 25th within EU countries. Among the factors that determine such a result there is scarce connectivity, due to the little availability of fast Internet connections, paucity of digital skill and generally a limited use of the Internet. 31% of Italians have never used the Internet and the wariness towards online transaction is still widespread. Only 42% of habitual Internet users use online banking and only 31% trade online. All such factors bounce back on the development of e-government and influence the dimension of online public services, which although closer to the EU average is however underdeveloped. The report pins down the lack of digital skill among bureaucrats as an explanation of this condition.

[21] J. Keen, *Integration at Any Price: The Case of the NHS National Programme for Information Technology,* in H. Margetts, C.Hood (eds.) *Paradoxes of modernization; unintended consequences of public policy reform*, (2010) 138.

What the Italian CDA has promised for a decade, that is to say that central and local public administration shall rethink their organisation and operational way in light of new ICTs to «secure the availability, management, access, transmission, storage and fruition of information in digital modality» is far from being achieved. Another actual issue is that the CDA – which have already been amended many times – provides for the adoption of a sizeable number of measures of implementation through a variety of sources – such as regulations, ministerial decrees, guidelines, technical rules – most of which have not been issued yet.[22] The delegated legislation, Act 26 August 2016, n. 179, passed by the government pursuant to article 1 of the Public Administration Reorganisation Act (of Parliament) n. 124 of 2015 tries to face this problem by bestowing most of such a technical regulation upon the governmental Agency for Digital Italy.

The same article 1 of the PA Reorganisation Act – pompously headed "digital citizenship" – aims at changing and integrating the CDA in order to further strengthen the centrality of digital administration. Particularly committing is the wording of article 1, par. b), which introduces the new principle "digital first". Digital first means that by adopting digital technology on a large scale, administrative procedures and back-office practices have to be redefined and simplified to seek quick decision within certain time and transparency towards both citizens and corporations. It is uneasy to see, however, how the formulation of new principles – allegedly more convincing than the previous ones – can per se make the Italian Digital Agenda more effective.[23] Article 3 of the CDA, in turn, provides citizens and corporations with a new right to the use of ICTs when they communicate with public administration. [24] Thereby such a right refers only to the

[22] 'Monitoraggio dell'attuazione dell'Agenda digitale italiana del Servizio Studi della Camera', 20 March 2015, n. 159 http://documenti.camera.it/Leg17/Dossier/Pdf/TR0270.Pdf.

[23] The main provisions concerning the Italian Digital Agenda can be found in the following law decrees: D.L. n. 83 del 2012 (c.d. "Crescita"); D.L. n. 179 del 2012 (c.d. "Crescita 2.0"); D.L. 69 del 2013 (c.d. "del Fare"); D.L. n. 90 del 2014 ("Semplificazione e trasparenza amministrativa ed efficienza degli uffici giudiziari"); D.L. n. 133 del 2014 (c.d. "Sblocca Italia").

[24] This discipline resembles the Spanish's one as set up by the Act of Parliament n. 11 of 2007, where a right to communicate with PA through electronic means

information level. We wonder whether article 1.1 of the PA Reorganisation Act, which delegates the government to reform ample sectors of the organisation of public administration, by broadening the scope of this right to enable citizens and corporations to have access to all data, documents and services now refers to the transactional stage as well. The report which accompanies the cited act of delegated legislation emphasises that the principle which inspires the reform is to put digital rights first so that – one can argue – processes of digitalisation of PA should be treated as the object of an obligation to fulfil them. This delegated legislation amends the CDA by establishing that PA makes its services (so apparently all its activity) digitally available and providing for a 'public class action' in case an administrative authority does not comply with such "obligations". The idea of broadening the scope of digitalisation to any "service" coupled with attributing a right to have PA to comply with such an organisational requirement may seem the best way of making sure that e-government becomes at last ordinarily practised.

There are, however, a number of downsizes to this scheme. Firstly, one has to wonder whether and to what extent we can actually speak of a right-obligation relationship, as such judicially enforceable. The provision of a class action is far from decisive to this regard, as in Italian law it is a tool – available either to any consumers or their associations – conceived as a way to assess that either public services comply with the obligations set out in the consumer charters and qualitative and economic standards or that providers do not fail to adopt such charters or other framework regulations. Administrative courts are just allowed to issue recommendations to make amends of the mismanagement of the service if that is the case and provided that the action recommended does not negatively affect public finance. It is extremely difficult to fathom how such a pattern can be adapted to the sort of 'obligations' at hand. Anyway it is even more difficult to reconcile this action with the protection of specific individual digital rights and it is implausible that administrative courts would interpret these 'rights' as enabling individuals either to

has been established. See I.M. Delgado, *Las notificationes electronicas en el procedimiento administrativo* (2009) 63.

challenge PA to perform digitally or to impugn decisions not digitally processed/made as procedurally biased. An actual possibility is that the class action will become concretely available if and when the above mentioned governmental Agency issues technical standards and quality levels for PA to comply with. This will occur, though, when digitalisation has already gone well forward.

Secondly, the same alleged extension of the right from the communication to transaction stage makes the notion of digital rights as proper rights even more implausible. It is then more plausible as well as desirable to interpret the reference to "rights" in a moral sense, linked in fact to citizenship, hence as the content of a principled political activation. We should not be too preoccupied with this rhetorical resort to the language of rights – which we are well used to in recent times – in so far as it is not taken in the wrong way. It can become harmful in fact if one wants to interpret it as empowering the courts to manage the policy behind such 'rights'. To be fair the same idea of a right to an indeterminate digitalisation of administrative activity is disputable for the reasons we have expounded above and others we are going to add in the next two sections.

Leaving rights aside, it is more likely that the Italian struggle with digital agenda has to do with cultural and technological structural problems, which one should look into and cope with before investing on programmes which risk remaining manifestos. [25] Administrative and administrative law cultures represent in turn but a fraction of such structural problems. The paramount question regards, thus, how the use of ICTs interact with practices and modes of functioning of PA. In the ensuing section we shall discuss two examples, drawn from the literature, which seem representative of generalizable features.

[25] Harshly critical remarks are made by G. De Michelis, *Agenda digitale: di cosa si sta parlando?,* Amministrare 69 (2013).

4. The Problem of Measuring the Impact of ICT upon Public Administration

In my view two questions particularly stand out. The first is how to gauge the qualitative impact of ICTs on the functioning of PA, where by qualitative I mean not only efficiency gain – for example a reduction in procedural times and financial savings – but also the specific interaction between procedural patterns, decision-making, interaction with external subjects, etc. The second point, rather dependent on the first, revolves around whether, faced with either different models of public administration or different inputs coming from politics, ICTs determine a different impact and/or their qualitative features change.

As to the first question the problem is what indicators to adopt to measure the impact. The following four indicators – drawn from a study which builds on an extensive survey of the literature – seem sufficiently explicative of the effects of ICTs on the functioning of PA: capabilities, interactions, orientations, and value distribution.[26]

Impact in terms of capability concerns the effects of e-government on how a certain administrative unit relates with its work environment, especially as regards quality of information and change in efficacy and efficiency of services. To a certain extent this first indicator is reconcilable with the informative dimension of e-government which we referred to in section 2 above. The factors which are most relevant are the possibility of accessing data and the quality of the latter in terms of completeness and reliability. The impact on other factors traceable to 'capability', such as enhancement of productivity, reduction in costs, and improvement in programming activities is, however, less clear, scarcely perceptible or merely not that studied. By concentrating on interaction between administrative units one wants to look into how e-government exerts influence on the patterns of power exercise and control as well as communication, coordination and cooperation between public offices and private players. Orientations concern cognitive and evaluative

[26] K.N. Andersen, H. Z. Henriksen, R. Medaglia, J. N. Danziger, M. K. Sannarnes, M. Enemærke, *Fads and Facts of E-Government: A Review of Impacts of E- government (2003–2009),* 33 Int'l J. Pub. Admin. 564-579 (2010).

considerations, for example whether concerns of a quantitative type have gained momentum in decision-making processes to the detriment of qualitative factors; whether there is a different way of structuring administrative problems; whether decision-makers sense that their discretionary power has been altered by e-government. By value distribution, finally, possible change dealing with general goals sought out by public administration is meant, especially as regards rights and the individuals' wealth, safety, health, freedom, etc.

The analysis demonstrates that the greater and generally positive impact of ICTs is visible especially as regards capability relating to access and quality of information. Appreciable and positive is also the impact of the "interactions" indicator, even though it is unclear whether it is just the unidirectional process of information dissemination or an actual change of procedures involving the public to boost a better disposition of citizens towards PA. The impact of e-government in terms of value distribution (11%) and orientations (3%) is, however, rather scarce.[27] Although this research was done more than five years ago, it is sensible to assume that it still provides a reliable picture of the impact of e-government. As to the limited impact of value distribution and orientations it might simply be the consequence of the greater sophistication necessary to apply ICTs to substantive aspects of administrative tasks as well as the difficulty in assessing them empirically. Be that as it may, in the study at hand the impact of ICTs upon the modalities of decision-making is praised by quoting a research carried out on four Swedish local authorities where the informatics applied to political components of administrative decisions has brought about more formalised decisional procedures, thereby simpler to hold to account as well.[28] It goes without saying that before such data any evaluation remains debatable, because one can object, say, that such a formalisation inevitably impoverishes decision-making process (see below section 5).

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[27] K.N. Andersen and al., *Fads and Facts of E-Government: A Review of Impacts of E- government.* cit. at 26, 574-5.

[28] Å Grönlund, *Emerging electronic infrastructures: Exploring democratic components*, 21 Soc. Sci. Computer Rev. 55-72 (2003).

Before coming back later to such a discussion, what we can stress here is that the unremarkable impact of ICTs on how PA evaluates policy, interests, etc. reflects overarching aspects of their functioning which are barely changeable in the short term, in Italy least of all. This leads to the second question, relating to the influence of ICTs on the models of public administration on which they are grafted. A review carried out through Parliament, central government, and prime minister websites of 19 OECD countries, concerning the so called financial accountability – that it to say the level of reliability of information on the condition of public finance – shows that the differences detected between such countries do not depend on different implementation of ICTs. It depends, instead, on the "style" of public administration and legal requirements regarding the setting up and management of balance sheets and budget adopted in each legal system.[29] In other words, this study confirms that a strong instrumentality of ICTs to other institutional aspects exists. Regarding this point, ICTs seem to work as factors of amplification and greater effectiveness of dynamics which should be otherwise ruled. Digitalisation tends to reflect and reinforce political and administrative models already well in place, particularly one of the four as described by the OECD, the Anglo-American, the German, the Southern European and the Scandinavian. The Internet constitutes a help to change towards a greater accountability of public institutions, but it is not an especially efficacious means of alteration of the distinctive features of any different models, such as citizen participation, public debate or other factors of enhancement of deliberative democracy in decision-making. The picture emerging from the research mentioned at the beginning of this article upholds such outcomes.

5. The Effects of Digitalisation on the Functioning of Public Administration

Taking heed of what we have expounded so far regarding the fundamental characteristics and impact of e-government on

[29] V. Pina, L. Torres, B. Acerete, *Are ICTs promoting government accountability? A comparative analysis of e-governance developments in 19 OECD countries*, 18 Critical Persp. Accot. (2007) 583–602.

PA, we can now turn to discuss three more specific questions emerging from our research: open data, administrative procedure and participation, and the so called re-engineering of bureaucratic work.

5.1. Open Data

The "informative dimension/impact as capability" pair constitutes the most momentous aspect of our topic because it is likely to exert major consequences on the substance of administrative law in the short term. It particularly regards the access to information that PA possesses both by the individual and the public (so called civic access). This is part of the broader phenomenon – not entirely traceable to the question of accessing PA's files – of the management of a massive amount of data boosted by the Internet, which has become the object of a heated debate. In the Italian legal system one can make out legal grounds for a sort of presumption that all information produced or possessed by PA is publicly significant and must be managed with the appropriate technique and organisation. From this point of view technology is often considered a source of opportunities and progress, for it creates the condition to enlarge and make rights to information more effective. Somebody speaks of a revolution which will transform our ways of living, working and even thinking.[30] By managing such a huge and increasingly complex mass of information it would be possible not only to guarantee more efficient and personalised public services rather than having them provided on a category base, but also to drastically improve decision-making processes in any branches of public administration.[31]

There are, however, those who raise various objections and suggest a more cautious stance. More commons remarks revolve around the threat to privacy and the warning that behind the enthusiasm for big data the commercial interests of powerful multinationals hide. There are also those who are sceptical about

[30] V. Meyer-Schönberger, K. Cukier *Big data: a revolution that will transform how we live, work and think* (2013).

[31] G. Misuraca, F. Mureddu, D. Osimo, *Policy-Making 2.0: Unleashing the Power of Big Data for Public Governance* in M. Gascó-Hernández, *Open Government. Opportunities and Challenges for Public Governance* (2014) 174

the actual impact that the mere increase in data availability may have on decision-making and stress that such phenomenon does not touch on the ability and willingness of decision-makers to take into account such enhanced information dispassionately.[32]

We wonder, anyway, whether and to what extent the practice of big data can change dynamics and individual legal positions within administrative procedure in the Italian legal system. The starting point is that the notion of open data has been acknowledged as regards databanks retained by PA by shifting from a conception founded on intellectual property – from which licensed economic rights are derived – to another founded on the freedom to reuse such data. As noted by a scholar, it is a process that emerged as a practice as the legislation still makes the access of individuals to data retained by PA subject to a fee.[33] What happens with data that an administrative authority wants to set access free is that it issues a sort of non commercial licence rather than a commercial one so that anybody can reuse the data in any venue on condition that certain requirements are met, such as the user avoids attributing official character to such information, he or she makes sure that information cannot be misunderstood etc. UE and domestic legislation has then been favouring such a trend by making the possibility of charging access to information with a fee an exception to the rule of freedom of access. Article 1.1 par c) of the Public Administration Reorganisation Act enlists the guarantee to access and freely reuse information produced and possessed by PA in an open format as a criterion for the government to abide by in adopting the delegated legislation.

The interesting problem is how to use open data instrumentally. The idea is that their active use can trigger processes of "good administration" improvement as well as enable people to exercise a more effective political control. As to the former it means that individuals should be able to make such information count to uphold their own interest as participants in an administrative procedure. The issue here is that in such a case data belonging to a databank of an administrative authority is used to give substance to "participatory rights" pursuant to article

[32] D. Kahneman, *Thinking Fast and Slow* (2012).
[33] D. Marongiu TDA.

10 of the Administrative Procedure Act 1990 in a procedure carried out by the same or another authority. The main problem is the level of reliability of such data and the way in which it should be taken into account by the proceeding authorities at the moment of adopting a decision. As we have seen the spontaneous origin of open data entails the paradox that their open usage depends on accepting their unofficial character. This is, however, a recurring topic of the information society and big data phenomenon, because it challenges the principle of authoritativeness of information based on the source from which it is drawn. In such a context one should sustain, though, that open public data – usable by any person who takes part in an administrative procedure at his or her own risk – does not present a different legal characteristic from any other data retrievable from the Internet and thus it does not bind public administration more than the normal allegation of parties to support their claims.

5.2. **Administrative Procedure and Participation**

The latter point evokes the question of the bi-directional and deliberative (or transactional) dimensions of e-government, which as we have seen shows ambivalent aspects from the point of view of their impact on PA. Here we are ideally at the watershed of two separate concepts of e-government: one that considers it a means of affirming new public management and another that radically contends this equation between e-government and NPM and on the contrary conceives the rise of e-government a symptom of the crisis of NPM. It is worth noting that an identical conceptual dialectic goes through the very idea of administrative procedure, respectively seen either as an avenue to ascertain and compose as many interests as possible or as a means of rationalisation/simplification of the tasks assigned to public authorities. This inevitably reminds the Italian reader of the old discussion regarding the presence in the Administrative Procedure Act of both a guaranteeing and efficiency inspiration at the same time.

In fact, the assimilation between NPM and ICTs – with the accusation that administrative procedure is helplessly long, non-transparent, and bureaucratic – is not at all conceptually clear-cut. The fact that, for instance, the use of ICTs should lead to overcoming the linear-like pattern of procedural decision-making

to be replaced by a sort of simultaneous decision-making[34] does not seem to undermine either the fundamental notion of a serial interdependence between the acts which form a procedure or the feasibility of continuing to purport a notion of administrative action as having a legal-bureaucratic character according to the Weberian tradition. I shall come to this point again in the next sub-section. An important article published ten years ago openly challenges the assimilation between NPM and ICTs by proposing a new explicative model called DEG (digital-era governance) where the paramount importance acquired by informatics in changing administrative practices and interactions with citizens has determined the definitive decline of NPM.[35] We find an ample reference to the nexus between participation and digital administration in article 1.1, par c) of the Public Administration Reorganisation Act where it is established that participation to decision-making of public institution shall be digitalised.

A reference to this orientation can also be found in what an Italian scholar suggests about a concept of ameliorative participation which would especially fit the so-called digital environment 2.0, whose fundamental feature is interaction. Such an ameliorative participation presupposes the adoption of organisational patterns which foster the active role of citizens in conceiving and implementing public goals and actively cooperating with public institutions to implement them. This idea hinges on the concept of adaptation of the cycle of online administrative services to the needs of the users and so it emphasises those legislative provisions which get administrative units to change their behaviour to meet the outcome of internal and external assessment, such as directives regarding the charters of public services and the discipline of the so called "performance cycle".[36] Apart from the fact that one can still contend that this shift from a model of administration based upon the transmission to bureaucrats of a fraction of political representation to a model of deliberative democracy is desirable, such a scenario – which clearly springs out of a normative endeavour – does not look

[34] G. Duni, *L'amministrazione digitale* (2008) 53.
[35] P. Dunleavy e al., *New Public Management Is Dead – Long Live Digital-Era Governance* cit. at 18, 478.
[36] G. Cammarota, TDA.

implausible in the medium term if one considers the massive presence of social media in our lives. There are hurdles to overcome, though, many of which we have mentioned earlier and among which traditional culture and values imbued in our bureaucracy especially stand out.

5.3 Organisation and Procedural Forms. Orientation Effect of ICTs. Discretionary Power and Accountability

The third point still concerns procedure, but this time from the viewpoint of its structure and its relationship to organisation, the overarching element in our model depicted in fig. 2 above. We can conceive the organisational dimension both in narrow terms and with reference to the decision-making process.

5.3.1. Re-engineering Public Administration

Two are, then, the more relevant factors of such a "mature" or enhanced stage of e-government. It is often said that e-government programmes aim at "re-engineering" administrative procedure at the integration stage, where, that is to say, the design of organisational patterns and manner of decision-making (also involving different authorities and even citizens and corporations) is embedded in one point of access only. Re-engineering should take on the challenge to reorient the organisation and practice of PA around users' needs by reforming procedural rules so as to conceive them as centred on the delivery of service rather than the exercise of power. One should bear in mind that such a shift of the barycentre of administrative procedure is neither neutral nor simply derived from the different technology employed. The idea of a user centrality can be instrumental both to the corporatisation of PA – which was dear to the first rise of e-government – and opposite ideas such as administration democracy, ameliorative participation, etc. Digitalisation can empower either of such objectives, but, while it remains important to choose one, the fact stands that our present knowledge suggests that ICTs is somewhat parasitic of existing models of PA rather than a factor which changes their fundamentals.

Having said this, the transformation of the information vector from paper and ink to bits plays a major role in the dissemination of information necessary to determine a course of action. Through digital technology information can be centralised,

on the one hand, and easily shared and analysed among several units, in this way decentralised, on the other hand. It is supposed that this process of centralisation-decentralisation of information ensures both more transparency and accountability of officials.[37]

In the Italian legal system, the discipline of the 'digital file' pursuant to article 41 CDA seems to embody such an idea. All acts, documents and data that pertain to a certain procedure, irrespective of whom has produced them, have to (should) be collected in a digital file which has to be directly accessible by all the authorities involved in that procedure. Still more comprehensive, for it affects the subjective dimension of PA, is the solution adopted in the Spanish legal system, where the legislation has set up an 'electronic site of public administration' which is meant to be a virtual room for carrying out administrative tasks, thereby trying to change the perception that citizens have of public administration as a complex web of inaccessible offices. The law establishes a specific link between the 'electronic site' and the discharge of administrative duties as well as between the former and a specific legal responsibility to act on the part of certain public bodies.

Such coordination-cooperation between different public authorities seems to generalise the precept of "points of single contact"[38]. In the political science literature this issue is often treated under the label of joined-up government.[39] Although there are those who underline the problems of a holistic concept of PA where vertical and horizontal integration (which absorbs even private parties in the unit which operates as the access point) risks confusing duties and accountability,[40] the idea that this approach yields positive outcomes tends to prevail. Sharing tasks and duties between different administrative units should discourage self-regarding behaviours, boost greater transparency in reciprocal

[37] D. Petrakaki, *Accountability in the Context of E-Government*, in P.G. Nixon e al., , *Understanding E-Government in Europe* cit. at 15, 100.

[38] Article 6 of the Directive 2006/123/EC of 12 December 2006 on 'services in the internal market'.

[39] C. Pollitt, *Joined-up Government: a Survey,* Pol. Stud. Rev. 34-49 (2003).

[40] S. Zouridis, V. Bekkers, *Electronic Service Delivery and the Democratic Relationships between Government and its Citizens.* in J. Hoff, I. Horrocks, P. Tops, eds, *Democratic Governance and New Technology* (2000) 132.

interactions and greater accountability relating to a common achievement.[41]ù

5.3.2. Automated Decision-Making

At the apex of the integration stage e-government entails the automation of administrative procedures, which in a sense change from material to electronic, where human activities are replaced by bestowing ICTs with a number of automatic operations. [42] This too is deemed to bring about greater transparency, the foreseeability of outcomes, time certainty, easiness of control, strong accountability, and the possibility that procedures are looked after by personnel lacking specific professional skill once the software has been set up and appropriately instructed.

In the Anglo-Saxon area the downsizes of such a shift are usually addressed from the perspective of the lawfulness and fairness of automated decision-making. A ground-breaking report of the Australian Administrative Review Council of 2004,[43] which led in 2007 to issuing a best practice guide by the Australian Ombudsman, aired a number of concerns regarding automated decision-making. [44] This report acknowledged that the use of

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[41] M. Cole, J. Fenwick, *UK Local Government: The Impact of Modernisation on Departmentalism* 69 Int'l Rev. Admin. Sci. 259-270 (2003); B. Illsley, G. Lloyd, B. Lynch, *From Pillar to Post? A one-Stop Shop Approach to Planning Delivery,* Planning Theory & Practice 111-122 (2000); N. Curthoys, P.M. Eckersley, P.M. Ecklersley, *E-Government* (2003) 227-257.

[42] By automated decision-making one means «breaking down a decision to a set of 'if then' rules and criteria: a decision is understood as an algorithm (a sequence of reasoning) that selects from predetermined alternatives. An 'inference engine' can systematically check whether the condition of a rule is met; if so, it can 'conclude' that the consequent of that rule applies» (A Le Sueur, 'Robot Government: Automated Decision-making and its Implications for Parliament', in A Horne and A Le Sueur (ed), *Parliament: Legislation and Accountability* (2016) 184.

[43] Administrative Review Council, 'Automated Assistance in Administrative Decision Making: Report to the Attorney-General', Report No 46 (2004) available at http://www.arc.ag.gov.au/Documents/AAADMreportPDF.pdf.

[44] 'Automated Assistance in Administrative Decision-Making' http://www.ombudsman.gov.au/__data/assets/pdf_file/0032/29399/Automated-Assistance-in-Administrative-Decision-Making.pdf

'expert systems', [45] whilst important to improve public administration performance and make savings, had to be attentively assessed to ensure its compatibility with the core administrative law values that underpin a democratic society governed by the rule of law. To this purpose it put forward as many as 27 guiding principles, the first seven of which directly relating to basic characteristics and values of administrative law. The most relevant precepts were based on the distinction between 'making a decision' and 'helping a decision maker make a decision'. The first case should be restricted to decisions involving non-discretionary elements, whilst, when expert systems are used to assist an officer in exercising his or her discretion, the systems should be designed so that they do not fetter the decision-maker in the exercise of his or her power by recommending or guiding the decision-maker itself to a particular outcome. Both these alternatives were deemed to require a statutory recognition of the use of computer programmes, even though the report mentioned views that this would not be necessary because such programmes are simply tools. Equally, the delicate power to override a decision made by or with the assistance of an expert system should be legislatively provided for and disciplined.

As has been recently noted, also in the UK the issue of the legal basis of automated decision making is still to be dealt with.[46] In Le Sueur's view the fact that there are specific provisions that expressly allow for decisions to be «made or issued not only by an officer of his acting under his authority but also (a) by a computer for whose operation such an officer is responsible» [Social Security Act 1998 (c. 14) Ss. 2-3], in spite of a rather loose approach in English admin law to the need for specific legislative authority for executive action, may be interpreted as a legal necessity for an express legal basis for automation.

As regards this we can note that in the Spanish legal system there is a general provision referring to administrative action carried out via an information system appropriately set up so as to

[45] In the report an expert system is defined as 'expert systems' as a «computing systems that, when provided with basic information and a general set of rules for reasoning and drawing conclusions, can mimic the thought processes of a human expert».

[46] A. Le Sueur, *Parliament: Legislation and Accountability,* cit. at 42.

make sure that the intervention of a person is not necessary.[47] This ample clause does not exclude from its semantic scope any typology of decision and thereby it is open to any technological evolution in the realm of artificial intelligence. The question is that such a general and apparently unconditional acknowledgment of automated decision-making, while formally meets the requirements of the rule of law, risks turning out to be too thin a safeguard of the above mentioned administrative law values. The best way, the one however implied in the Australian Administrative Review Council report, should be to require a specific legal authorisation referring to each and every type of decision-making.

As to Italian administrative law, one can equally wonder whether i) a statutory recognition of automated decision-making power is even necessary, ii) such a recognition may already be in place.

i) Regarding the first point, the rule of law (principle of legality) is considered an unwritten principle of Italian admin law and as such its contours are vague. Pursuant to article 1 of the Administrative Procedural Act of 1990, no 241(APA) public administration has to pursue the objectives established by the law and conform its action to criteria of efficiency, impartiality, publicity and transparency. Moreover, when adopting measures that are not authoritative, it is expected to apply private law rather than public law except for when the law provides otherwise. A stronger notion of the rule of law (procedural fairness, obligation to give reason, hearing, etc.) is advocated when authoritative measures are issued, that is to say when any liberty or right of a person is affected by an administrative decision. In both cases it is difficult to decide whether that a human is accountable and responsible for the decision is or not a requirement of the rule of law. One could take the position that – also given that another clause of the APA reads that public authorities shall encourage the use of electronic communication between different authorities and between the latter and private parties – the resort to computing, as contended during the survey carried out by the Australian

[47] I.M. Delgado TPA.

Administrative Review Council, is only a means, as such neutral to the rule of law.

ii) As to the second point the hypothesis to confront with is that the delegated legislation amending the CDA, when it establishes that any administrative activity has to be made digitally available, covers automated decision-making as well. As one may recall this availability is meant to be the content of a citizen's right. Yet, it is hard to conceive a right to have a decision made by a computer rather than a human being irrespective of any other circumstance or specific provision. Perhaps, on the contrary, a right to be made aware that an administrative authority decision has been automated and a right to opt out from that process would make more sense.

Anyway, in both perspectives – which end up in a scenario not dissimilar to the Spanish one – the concerns expressed above would be far from overturned.

A general recognition of automated decision-making does not take into account, for example, the line drawn by the cited Australian report as to the desirability of automated decision-making, which relies upon the distinction between discretionary and rule-bound decisions and purports that, provided that all the measures advised are taken, when discretion is not at stake, the benefits of automated decision-making would overcome its drawbacks.

This point is addressed by Le Sueur by observing that automated decision-making might achieve more consistent implementation of written law than can be done by human officials: «automation based on the application of objective criteria holds out the promise of legal certainty (like cases are treated identically), the elimination of bias, ensuring that no irrelevant considerations are taken into account, and that all relevant factors are included. To this extent, automation can be regarded as enhancing the rule of law».[48] One can think, therefore, that the scenario of an automated procedure fulfils the Weberian ideal of a bureaucrat utterly dispassionate and fully accountable as long as

[48] See at note 42 above, 190.

he or she is part of a hierarchy that abides by a rigidly pre-set protocol.[49]

Yet there is another side to consider. Within such a perspective, other benefits which the functioning of complex organisations can provide thanks to non-conformist behaviours – the ones that Luhmann called useful illegality – get lost. In Luhmann's view an unlawful behaviour is one that harms formal expectations. From a systematic perspective, though, behaviours which we can classify in a sort of grey area between legality and illegality can be nonetheless useful, even though they frustrate formal expectations.[50] Luhmann provides some examples, such as following rules on the grounds of prohibited reasons or goals, abiding by the law but not within the time allowed, flouting habitually obsolete rules or rules whose application can harm more important interests etc. All these are unlawful but useful behaviours as they imply adaptive strategies which favour creative behaviours and adaption to a continually changing environment. One can look at this phenomenon from the perspective of the broader context in which an official has to make a decision. There is a sizeable amount of literature which, building on the work of Lispsky, suggests that administrative decision-making is informed by an ampler set of cultural values than the bureaucratic-legal ones.[51]

Purportedly, automation would get rid of such aspects of the functioning of administrative organisations, shifting the focus from the exercise of a kind of interstitial discretionary power accompanied by adaptive behaviours, which imply responsiveness for the use of some kind of contextual evaluation, to a form of accountability which turns into the technology employed. Relating to this there is another aspect discussed by Le Sueur, that is the chance that automated decision-making will favour a trend to design decision-making systems that hinge on

[49] What is missing of the ideal Weberian's bureaucrat is the intimate adhesion to a bundle of values and skills which inform bureaucracy as a profession.

[50] N. Luhmann , *Funktionen und Folgen formaler Organisation* (Berlin 1999-first ed. 1964) 304, V chap. I.3

[51] M. Lipsky, *Street-Level Bureaucracry: Dilemmas of the Individual in Public Services* (1980); S. Halliday, *Judicial Review and Compliance with Administrative Law* (2004) 100.

bright line rules and reduce or eliminate the margins of discretion expressly or implicitly conferred by the law.[52]

The issue of automated discretionary decision-making is undoubtedly the most challenging of all. In this case the problem regards the reproducibility through informatics of mental processes which occur when a political choice is made, that is to say to ponder facts and interests at stake to reach a correct decision whatever the meaning of a correct decision might be. In such a circumstance the problem is not only – and not much – the one regarding the ability to build "smart systems" but also to penetrate into the decision theory, which with particular regard to public organisations has long contended that decision-making processes can be encapsulated in a sequence of pre-set steps: for example, choice of the most appropriate course of action, implementation of the decision, and assessment of its effects. There are many other factors at stake, even of an emotional nature and it is not certain that their possible eradication from decision-making by entrusting it to software yields the best possible course of action.[53]

As we have seen the Australian Administrative Review Council's view was that automation of discretion collides with the administrative law values of lawfulness and fairness, even though expert systems can be used as an administrative tool to help officials exercise their discretion. The allure of such systems is that they are able to face the greater issue of information age, that is to deal with the innumerable amount of information available to the decision-maker, burdened with the nearly impossible task to select what is relevant,[54] which implies he or she is able in a relatively short time to assign meaning to such data in a certain context and structure them. Such a function of an expert system seems to suit

[52] The point is disputed actually. A Buffat, *Street-Level Bureaucracy and E-Government* 17 Pub. Mgmt. Rev., 149-161 (2015), in reviewing the relevant literature detects two opposite attitudes. which she labels respectively 'curtailment thesis' and 'enablement thesis', and calls for more empirical research on the topic.

[53] H.A. Simon, *Reason in Human Affairs* (1983); J.S. Lerner, Y. Li, P. Valdesolo, K.S. Kassam, *Emotion and Decision Making*, 66 Annual Rev. Psychol. 799-823 (2015).

[54] O.E. Klapp, *Meaning Lag in the Information Society,* J. Comm. 57-60 (1982).

the idea of computing as helping a decision-making process rather than replacing a human decision-maker.

However, scholars in the field of artificial intelligence applied to legal systems have long claimed that software-agents can be autonomy-furnished, viz. possessing the ability to detect connections with the organisational referring framework, choosing whether or not to abide by a rule, and establishing how to pursue individual and social goals within certain normative constraints.[55]. In other words they would be able to do things such as "exegesis, hermeneutics, legal interpretation, and scientific theorisation" and stimulate the emotional component which is part of dialectic reasoning, founded on typical features of human societies such as debate and discussion in the effort of attributing meaning to things.[56] In such an interdisciplinary area of research as the one regarding simulation of dynamic systems it is believed that we are not far away from the possibility to transform «intuitive policy making into model-based policy design».[57] A 'guru' of contemporary physics thinks that in the middle of the XXI century the era of "emotional robots" might be blossoming.[58]

It is clear that if this is the direction that the systems of public decision-making will take, then current concepts of accountability and justiciability of administrative decisions will require a complete revision.

The idea that we can limit ourselves to updating our traditional notions does not sound truly satisfactory. In a way, if we look at these problems from the familiar perspective of legal concepts we can apparently continue to rely on the received

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[55] R. Rubino, G. Sartor, *Source Norms and Self-regulated Institutions*, in P. Casanovas, G. Sartor, N. Casellas, R. Rubino, eds, *Computable Models of the Law* (2008) 263-274. P Lucatuorto, S Bianchini, *Discrezionalità e contemperamento degli interessi nei processi decisionali dall'Amministrazione digitale*, 10 Ciberspazio e diritto, 41-58 (2009), claim that e-government discretional decision-making, facing the reasonable and proportional comparison of competing private and public interests, could be supported by Artificial Intelligence tools.

[56] Ibidem.

[57] E. Pruyt, *From Building a Model to Adaptive Robust Decision Making Using Systems Modeling,* in M. Janssen, M.A. Wimmer , A. Deljoo, eds, *Policy Practice and Digital Science. Integrating Complex Systems, Social Simulation and Public Administration in Policy Research* (2015) 90.

[58] M. Kaku, *Physics of the Future* (2011) 83.

'fictional legal notions' (*fictio iuris*). In fact, it is sufficient to impute the artificial will of a software to a public body – in turn a *fictio iuris* itself – and thereby to a public authority to which the former belongs. This point, in other words, regards that special juridical attitude called doctrinal constructivism (dogmatic) which aims at mapping certain areas of law by employing a specifically constructed language.

Spanish and Italian scholars have long elaborated specific legal notions made out of the consolidated precepts of doctrinal tradition to describe such new phenomena. Namely, such key-notions of administrative law as 'organ' and 'administrative act' would not suffer from their being adapted to explain such things as the digitalisation of administrative decisions and the creation of virtual offices. Indeed 'organs' (those particular administrative units which are able to formally express the will of a public authority) can continue to be regarded as administrative units awarding legal powers which affect third parties, and 'administrative acts' as those declarations made by an 'organ' that, by using the power conferred to it, produces any specified legal effect. In this way we can straightforwardly make sense of a 'digital organ' and a 'digital administrative act'. In other words, the fictional nature of such legal concepts fits the even more fictional nature of digital administration. As has been highlighted, the will which an administrative act embodies it is not really a will of a human being, it is instead always a "procedural will"[59]: an administrative organ, irrespective of it being an office composed either of human beings or electronic agents, always comes to issue a declaration of will, judgment, knowledge or wish in order to implement a legal provision with the goal of taking care of public interest.

One wonders, though, what is the actual heuristic value of conceptual constructions which are capable of containing so very different substances, in other words of remaining unaffected by such a huge change of institutional practices as the one by which a human decision shifts into a 'robot' one. In fact, the notion of 'delegating' a decision to an automated system raises a number of

[59] I.M. Delgado TDA; M.S. Giannini, *Istituzioni di diritto amministrativo* (1981) 292.

unique problems, which cannot be faced by merely updating our fictional legal notions. For instance, just mentioning a couple, who at the end of the day should be identified as the 'decision-maker'? We cannot take for granted that it is the computer itself rather than the programmer, the policy-maker, the authorised operator. Moreover, is the concept of conferring a power by means of a rule appropriately used in this circumstance? As has been pointed out, unlike human agents, a computer software can never truly be said to act independently of its programmer or the relevant administrative authority.[60]

6. Some Final Notes to Continue

At the moment of drawing some final thoughts it is hard to resist the temptation to cast a glance at an aspect which lays in the backdrop of our topic as it is tangential to the scope of a research focused on ICTs and PA practices. It has to do with what somebody in the literature calls the Fifth State meaning a 'place', in principle anarchic, such as the Internet. It might be considered more a space that incorporates – or swallows – other social institutions based on political-territorial links than an instrument that public institutions use to pursue their goals. The question has been cursorily touched upon when referring to the relationship between State or public powers and democracy, but it has even broader boundaries. A scholar has recently conceptualised this idea of a Fifth State building on Castells' account of the Internet as a space of flows rather than a space of spaces,[61] that thereby lets huge masses of players reshape access to information, people, services, and technology. [62] Here two opposite futurology perspectives appear, the pan-democratic utopia and the cybernetic pessimistic dystopia. In such cases there is always someone who points out a third strategy. One very popular indeed is legal

[60] M Perry and A Smith, 'iDecide: the legal implications of automated decision-making' (FCA) [2014] FedJSchol 17, available at http://www.austlii.edu.au/au/journals/FedJSchol/2014/17.html.

[61] M. Castells, *The Rise of the Network Society* (1996).

[62] W. Dutton, *The Fifth Estate. Democratic Social Accountability Through the Emerging Network of Networks*, in P.G. Nixon et al., *Understanding E-Government in Europe* cit. at 15, 3.

pluralism where power is seen as a sort of field of multiple forces which challenges the notion of the State as the unitary centre of political power and contends the idea of the State as the main arena of political battle. Several contemporary administrative law scholars do not consider the fall or decline of the State a problem per se. The GAL (global administrative law) movement, for example, revolves around the application of certain mechanisms for subjecting decision-making made in legal spaces lacking of a political centre to the procedural guarantees familiar to the national traditions of administrative law. One could, then, apply this framework to that quintessential acephalous space that the Internet is. The issue is, though, well beyond the perspectives of e-government as a model of public administration whose legitimation is still derived from some relationships with political powers.

Coming back to this narrower scenario, let us see what main points we can draw from what we have discussed so far. Technological change is already producing a significant impact on the functioning of PA and its relationship with citizens and corporations and even though Italy is still at an embryonic stage it is not hazardous to speak about the dawn of a digital era. This new era, as it happens for every technological innovation or change of paradigm, did not begin thanks to planned actions by public institutions. However, they remain necessary to try to steer such developments towards general interest. Digital agendas seek to both include as much as possible society and the markets in the arena of digital relations by fighting digital divide and securing quicker and safer trades and identify which model of e-government a community wants to build. We should not take for granted, for example, that the overall inter-operability between public authorities and the one point of access to PA necessarily entails the assimilation of administrative decision to the concept of transaction (typical of e-commerce). Moreover, as we have seen, a polity should choose whether still to invest massively on getting everyone to become an Internet user by fostering demand or employ ICTs to make social welfare services more efficacious. In fact, as regards administrative decisions and procedural techniques of decision-making the range of possible developments and legal change are remarkably vast. The legislation has further emphasised the centrality of digital administration, introducing

symbolic terms such as 'digital citizenship' and 'digital first' as well as a number of measures to implement the expectations to which such terms allude. In light of such principles administrative procedures and back office practices should be redesigned ("re-engineered") to make them quicker and more timely, certain and transparent. To what extent this is going to happen in the short term and what kind of administration would turn out of this process is difficult to predict. In describing e-government as an incremental process driven by the technological sophistication deployed, we have noticed that all the dimensions of ICTs – information, bidirectional communication, transaction, integration, political participation – certainly present opportunities and risks whose concrete outcome depends both on the cultural and economic context in which they are placed and political choices. We have, in fact, proposed an explicative as well as normative model of e-government where information and organisation are the driving factors to take into account also in terms of technological sophistication, to which a wary attitude towards a too loose use of the language of rights (to digitalisation) should be added.

A final word regards what can be defined a pragmatic approach to the topic at hand. Especially for Italy much more empirical research is needed as to whether and how ICTs are changing PA and its law, for example as regards the debate on what has been termed as the 'curtailment thesis'. The literature teaches us two interesting aspects, however. The first is that along with some common features ways of implementing e-government and its impact vary from country to country.[63] The second concerns a rough evaluation of e-government as a whole. It is barely doubtable that the massive use of such technology can have disrupting effects, many of which we can already see for example on civil liberties. Let us think of the possible use of cookies by governmental websites. In addition, it can be the case that technology is instrumentally employed to reinforce citizens' trust in political institutions to avoid real processes of democratisation, as the high level of digitalisation of countries such as China,

[63] C. Reddick, *Comparative E-government*, cit.

Singapore, and Malaysia makes us suspect.[64] Having said this, case study shows that part of the negative externalities can be avoided and that some concerns are misplaced at the proof of fact, for they produce, for example, greater participation and satisfaction of citizen users as the case of Swedish local authorities mentioned in section 4 shows.

[64] L. Anderson, P. Bishop, *E-Government to E-Democracy: Communicative Mechanisms of Governance,* 2 J. E- Gov't 11 (2005).