# THE DIGITALPUBLIC ADMINISTRATION. LEGAL RULES AND ORGANIZATIONAL MODELS.

# Pasquale Luigi DI VIGGIANO\*

**ABSTRACT:** Although the achievement of electronic public administration and digitalization is a tormented process with ups and downs, innovation policies have been able to start up a revolutionary process, silently and steadily, that slowly but inevitably will lead to the realization of the so-called e-government.

Its components have mainly cultural, organizational and technological characteristics. The application of the rules that govern the establishment of digital public administration comes up against a residual and persistent incapacity of public administration to jettison the ballast of an administrative organization still rooted in the 19th century.

Regulations and technologies imply an innovation process that requires in the first place a rethinking of the organization of public administration by the use of ICT, the Web and dematerialization, and the implementation of legal and technological tools to guarantee security.

At the same time, it requires a re-thinking of national and European law, and the preparation of common homogeneous organizational patterns to carry out at medium-

The process needs a new educational approach and suitable pedagogical technologies developed within the European lifelong learning programme (LLP) to foster a European culture of public administration that interests both civil servants and citizens dealing with public administrative issues.

KEYWORDS: E-government, Electronic Public Administration, ICT, Legal Rules, Organizational Models, European Lifelong Learning, Pedagogical Technologies. JEL CLASSIFICATION: K00. K10

\* Professor in *General theory of State*, Faculty of Philosophy, PhD. in Juridical Sciences. Member of the Study Centre on Risks (CSR) and of the Scientific Council of the *Laboratory of e-Government*(LEG) – University of Salento, Lecce, ITALY.

#### 1. INTRODUCTION

The modernity of the contemporary society is determined by the evolution of its structures and by the functional differentiation of the social systems that constitute this society and represent, from time to time, the social environment wherein functional differentiation can develop. Resistance against differentiation generates outskirts of society and social exclusion.

The same exists for the law system, for the economy system, for the political system, for the education system. In their being modern, the functionally diversified social systems need organizations to work. Law needs the organization of justice, economy of the market, politics of the public administration, education of the formative agencies.

Since the end of last century, the establishment of computer sciences<sup>1</sup> has, among other things, produced a description of the global society, defining it as "the society of information and of communication" and, at the same time, it has provided a binary vision of the world, rooted in the thought of the most ancient western logic. The asserting of a new computational paradigm intertwines also with the widest variety of analyses in the sectors of computer science, of epistemology and of the social systems theory.

The idea, therefore, emerges, that the whole universe, following the relativity theory of Einstein in the field of the quantum mechanics, with its operational consequences on the computer and computer sciences in various disciplinary sectors, can be represented as an enormous and complex machine, steadily processing digital information in 1 or 0 bits.

These are the themes, applied definitely to the study of logic, studied in depth by the so-called digital philosophy, that, departing from the Italic School of mathematics <sup>3</sup>, of Pythagoric matrix, passing by Leibniz<sup>4</sup>, to end up at Touring<sup>5</sup> and the cybernetics<sup>6</sup>, infers on the scientific hypotheses that try to explain the extraordinary phenomenological complexity of the universe using the analysis of the results obtained in research centers and laboratories of the whole world.

The algorithmic models of information, making use of the systems theory, set out to become the instrument to sustain that the common denominator of the contemporary theoretical research is identifiable in the binary figure used by every computer. This digital perspective makes it possible to reflect on the world in a reasonable and

<sup>3</sup> Cfr. U. PAGALLO, *Introduzione alla filosofia digitale*, Torino, Giappichelli, 2005, p. 9. As to Aristoteles, the Pythagorean were the first to believe that the universe was eventually referable to numbers. Cfr. ARISTOTELE, *Metafisica*, It. transl., Milano, Bompiani, 2000, p. 27.

<sup>&</sup>lt;sup>1</sup> Cfr. E. P. CERUZZI, Storia dell'informatica. Dai primi computer digitali all'era di internet, It. transl., Milano, Apogeo. 2005

<sup>&</sup>lt;sup>2</sup> Cfr. A. MATTELART, Storia della società dell'informazione, It. transl., Torino, Einaudi, 2002, pp. 7-10.

<sup>&</sup>lt;sup>4</sup> Cfr. U. PAGALLO, cit., pp. 29-38; A. MATTELART, cit.; N. WIENER, *Cybernetics: or Control and Communication in the Animal and the Machine*, It. transl., Paris, Hermann, 1948.

<sup>&</sup>lt;sup>5</sup> Cfr. D. LEAVITT, L'uomo che sapeva troppo - Alan Turing e l'invenzione del computer, It. transl., Torino, Codice edizioni, 2007

<sup>&</sup>lt;sup>6</sup> Cfr. N. WIENER, *Introduzione alla cibernetica. L'uso umano degli esseri umani*, It. transl., Torino, Bollati Boringhieri, 1966

discontinuous way, and this mathematical model, for a growing current of thought, represents the most economic way to think the universe.<sup>7</sup>.

These theoretical premises, founding "philosophically" the information and communication society, go together with the practical applications of computation and, more generally, with the use of the computer and computer sciences.

Computer science is the "discovery" that mostly characterized the XX century. The observation of its origin <sup>8</sup>, and of the first timid beginning, the acknowledgement of the moment in which it changed from study object of a limited number of experts into a totally absorbing experience, the discovery of its connotation as data communication as well as the birth of internet, leads to affirm that, until today, its applications have pervaded and changed society on the whole. In such a way that, as to Niklas Luhmann, one can define society as "the universe of communication". Economy, law, the economic and productive systems, the system of the social relationships and communications have been changed thoroughly both in their formal and instrumental aspect.

Now, law and computer science applications to the same law are also touched by this really revolutionary process. Indeed, some new disciplines were generated from the computer science applications to law, or from law dealing with computer sciences. The most important and most pervasive among these is Legal Information technology 10, which is also dealing with Digital Knowledge management and e-Learning.

Its definition as autonomous discipline and its disciplinary collocation constitute matter of reflection and animate the scientific community. From the study of legal information technology emerges how a remarkable part of it is represented by that thematic and disciplinary area that we commonly point out as " Public Administration Information technology", whose field of application ranges from the study of organization<sup>11</sup> and re-modeling of administrative activities up to the application of norms and technologies, oriented towards the achievement of the principles of effectiveness, efficiency, inexpensiveness and transparency for P.A. at all levels. Today one can speak about Digital Public Administration, while law is up to define the rules and to model the behaviour of the PA and its bureaucracy, which now with extreme slowness and then with unbelievable rapidity, is ready to become also digital.

<sup>&</sup>lt;sup>7</sup> Cfr. J. D. BARROWS, *Perché il mondo è matematico?*, It. transl., Bari-Roma, Laterza, 2004.

<sup>&</sup>lt;sup>8</sup>The origin of information technology goes back to 1642, when Blaise Pascal invented a mechanical calculator, able to add and to subtract numbers. Regardless of this ideal distant origin, information technology has to be considered a very young science, daughter of the electronics. Skipping the start of the first vacuum tubes calculators, the true beginning of the computer era can be set with the advent of the transistors, in the 60's. A the time the calculators were very big, expensive, and almost exclusively used by universities, research centers or large industries. The dissemination of the electronic calculators among the general public began with the birth of the first Personal Computer (PC), developed by IBM around 1983. Shortly afterwards, Olivetti, with its mythical M24, has greatly favoured the introduction of the PC in Italy.

 <sup>&</sup>lt;sup>9</sup> cfr. N. Luhmann, R. De Giorgi, *Teoria della società*, Franco Angeli, Milano 1992
 <sup>10</sup> N. Palazzolo, (edited by), *L'informatica giuridica oggi*, Atti del Convegno ANDIG (Roma, Dec. 1,2005),

For a quick description of the concept of organization and its most important theoretical models, Cfr. F. BOCHICCHIO, T. DI SABATO, Lineamenti di organizzazione e gestione delle risorse umane, Lecce, MoviMedia, 2007, pp. 17-61.

The specific interest of the present study essentially is to observe how the impact of the *Information and Communication Technologies (ICT)* modifies Public Administration and how new organizational models define the structure and function of the digital public administrations.

This process of transformation, often evolutionary, requires a reflection on juridical norms at a national level, but also at a communitarian level, and it demands the predisposition of homogeneous and shared organizational models, to realize on a European base on mid-term.

This process pretends new formative approaches and suitable pedagogic technologies within the European area of the Long Life Learning (LLL) Programme, for the construction of a European culture of public administration that interests both public officials and the citizens interfacing Public administration.

# 2. ORGANIZATION AND E-GOVERNMENT

To talk about digital administration with reference to public administration requires the effort not to think immediately about technologies, but it imposes to re-think an organizational model for administrative activities, the allocation of the human and instrumental resources as well as a continuous updating of the formative measures and communicative models of public administration. This means that, in order to effect a reorganizational intervention, it is necessary to start from the analysis of the context (organizational model, resources, tools, etc.) to individualize the fittest interventions for the fulfillment of the institutional *mission*: to serve the citizen-consumer. In a common European area for public administration, where the demand for shared, approved and practiced models is emerging and conducting towards the individualization of a European, and not exclusively national, bureaucracy, the main issue will be the effort to organize the offices in line with a digital vision of the procedures.

Recently the juridical and technical norms of the ICT, the regulations, the guidelines and the EU directives indicated an initial rationalization of the administrative activities as necessary before starting whatever activation of informative systems for the PA at all levels. Until recent times, only few unheeded precursors <sup>12</sup> defended this point of view and behaved as such in innovation projects for the local PA.

To verify the most appropriate organizational context for the processes of technological innovation and e-government, means to analyze the organizational rather

\_

<sup>&</sup>lt;sup>12</sup> Several rationalization projects of the organizational activities in municipalities and provinces, but also in legal environment, such as the *Pilot project of rationalization of the public prosecutor's Office of Lecce*, carried out by Prof. Donato Limone and his team (of which the writer takes part), have highlighted how the clarification of the normative premises of e-government, as a reference for whatever initiative to reengineering (BRP) administrative processes, has always encountered the idea, rooted in administrations (directors and employees), as to which innovation of the PA means only the renewal or upgrading of computer equipment and/or networks. The most challenging work of the expert, in these cases, turns out to be the one carried out in the initial phase of the project, during which, as a rule, it will be made clear which model will be used to streamline the administrative tasks. In this phase, the use of information technologies and data communication is seen only as a last stage, after having registered, filed, streamlined, validated and inserted into a database, the new rationalized activities whose execution is , at that point, developed through a workflow managed online.

than the technological conditions. In fact, if the organizational context doesn't respond to "concrete" parameters of efficiency, effectiveness, publicity and inexpensiveness (new organizational models; re-engineering of processes and activities; control of management; analytical accounting; computer protocol; online services; quality service for the users; etc.) even the same e-government process<sup>13</sup> would be under discussion, or would slow down. And therefore, the necessity to draw the attention to the back-office (structures and inside functions) and not so much to the front-office (sites; portals; internet access points; etc.) has been object of specific regulation<sup>14</sup> in a lot of EU regions, including Italy. It will be sure that a systematical intervention on the back-office will also reflect positively on the automation processes useful to a better functioning of the front-office. In this way the processes of technological innovation enter in the organizational ones and these, on their turn, are supported by institutional innovative processes.

Different researches<sup>15</sup>, indeed, show that the PA, in particular the local ones, don't operate in a modern organizational context as defined by the most recent European and national norms. This constitutes a strong "restraint" to the development of the egovernment for local Autonomies in Italy.

Some studies of the actual models of local public administration have produced an evaluation of these models and enabled to put at the disposal of the local authorities, in line with their own competences, a consultation and assistance service, with the purpose to introduce "methods" and "systems" for the rationalization of the administrative activities on the whole, for the definition, the experimentation and the application of modern administrative and managerial models, creating the best conditions for the passage towards "electronic bureaucracies." <sup>16</sup>.

The problem of e-government is therefore first of all an organizational problem, and only secondly a technological one. This new paradigm asks for an approach in base of which the front-end systems and technologies function on condition that the back-office is organized. The back-office includes the whole procedural, administrative and documentation system of a public body. If the back-office is organized then the functionality of a corporate body is insured and consequently also the services online.

If the normative picture regarding the information society represents the whole of the principles and the most advanced standards on reorganization and automation, the application of such norms has often been effectuated with an exquisitely and prevailingly formal-bureaucratic type of approach. The result, as far as the innovative processes are concerned, is that the internal organization has not been able to benefit from the notable positive effects that were expected from the application of these regulations, since the principles of simplification and rationalization of the administrative activities, generally

<sup>&</sup>lt;sup>13</sup> Cfr. L. Marasso, Manuale dell'e-government. Attori, strategie e strumenti di innovazione nella pubblica amministrazione locale, Rimini, Maggioli editor, 2005.

<sup>&</sup>lt;sup>14</sup> In Italy, the legal corpus, which regulates the matter, finds in the Legislative Decree No. 82/2005 and subsequent integrations, the most important and advanced references.

<sup>&</sup>lt;sup>15</sup>Cfr. P. L. DI VIGGIANO, *Rapporto di ricerca e linee di tendenza*, in D. LIMONE, P. L. DI VIGGIANO, G. PREITE, *L'innovazione organizzativa e tecnologica nei comuni*, Report of the "Letter of intent between the Ministry of Innovation and Technologies, and the University of Lecce", Dec. 23, 2002, p. 7-45.

spoken, have not been applied. The technological context of the e-government is therefore in perennial contrast with the organizational one.

# 3. EVOLUTIONARY MODELS OF PUBLIC ORGANIZATION

It seems to be useful to provide a short historical-social description of how the actual concept of PA has been reached both from the organizational point of view and regarding the actual use of the tools employed in this iter, which is far away of being concluded, starting from the term "bureaucracy." <sup>17</sup>.

# 3.1. The classical model

The organizational models of the PA, starting from the 19<sup>th</sup> centuryn, make use of the fundamental contribution of Max Weber <sup>18</sup>,, through the study of the formal organizations and their relationship with power. In this context the concept of bureaucracy has been established.

The term *bureaucracy* is used to indicate the whole body of public employees that, professionally, continuously and in virtue of specific competences, is at the service of the state or of other public authorities. This has been fundamentally possible by the application of three legitimation forms of power: charismatic power, traditional power and legal rational power. According to this last form of legitimation, people in exercise of their power are legitimated in base of their adherence to the law, while the organization, founded upon the legal rational principle, needs the bureaucratic apparatus.

Bureaucracy is characterized by the fact that a public office has always a specific *competence* <sup>19</sup>. No office or public employee can operate but inherent at the own competences.

The second principle of the bureaucracy recalls the concept that the bureaucratic apparatus is structured in base of a precise *hierarchical organization*.

The third principle is that of the *de-personalization*: bureaucracy is a complex of de-personalized systems and this de-personalization guarantees the impartiality of the P A.

The balanced application of these principles prevents pathological forms of public administrative management and, anyhow, these principles are observed with a prevalence of some of them to others. For the application of the automation processes to the PA , it is possible to identify some organizational attitudes in the form of "models."

11

<sup>&</sup>lt;sup>17</sup>The hybrid etymology of the word, from the French bureau (office) connected to the Greek krátos (power), shows its antique origin and the evident francophone derivation.

<sup>&</sup>lt;sup>18</sup> Cfr. M. Weber, *Economia e società*, trad. it., Edizioni di Comunità, Milano, 1995.

Competence, substantially, designates a certain level of knowledge with respect to a specific task to accomplish; formally, competence authorizes the office/ the employee to exercise the function for which it/he is responsible.

# 3.2. The technological Model

The so-called "technological" model, originating in parallel with the mechanization process of the offices during the second halve of the XX century, introduces technical constraints in its application. In fact, the processes of automation of the PA are not confronted with the processes of organization, but follow a separate course of more general organizational needs that aim to resolve contingent and localized problems.

The technological model is a bureaucratic type of model and is characterized by:

- the particular attention for the formal aspects;
- the scarce attention to the processes of effectiveness and efficiency;
- the overemphasizing of the legitimacy controls;
- the fact that it is a "closed system" (on itself and in comparison to the other bodies).

### 3.3. The functional Model

The so-called "functional" model introduces organizational and technological planning restraints. Yet it allows to programme the Informative Systems in line with the most recent regulation on ICT, for the realization of the e-government.

The functional model is SYSTEMIC and it is characterized by:

- the interrelation between bureaucracy and the external world on which it is based:
- the particular attention dedicated to the processes of effectiveness and efficiency;
- the easiest definition of the management control system;
- the evaluation of the costs-benefits that becomes a systemic and permanent action;
- the fact that it is a "open" model;
- the fact that it puts the users in the center of the same system.

The element that is able to characterize and to implement this PA model is information technology. Information technology, indeed, is not only a technology; it implicates logics and cultural approaches inherent to the modernization of public administration. The use of information technology, in fact, allows to obtain the transparency and the mutual integration of this information flow. The question is, therefore, to guarantee both the correctness of the procedures that they produce and use, and the conservation and quality of the data themselves.

It is, therefore, not enough for the PA to simply use some computer technology to be *digital*; it is necessary to overcome the "particularisms of the single administrations and to guide the introduction of the ICT in respect of the principles of transparency, the certainty of the information, and the control effectiveness, in order to guarantee the

<sup>&</sup>lt;sup>20.</sup> For a synthetic presentation of the characteristics of systems, cfr. F. Giglietto, *Alle radici del futuro. Dalla teoria dell'informazione ai sistemi sociali: una introduzione*, Milano, Franco Angeli, 2005, pp. 55-95

interest of the general public."<sup>21</sup>. When decisions are not taken anymore on the base of the information at disposal of the single official, or through procedures characterized by a tall rate of subjectivity, rather than on the base of shared information and computerized procedures, it will be clear that presuppositions are created for an effective transparency and impartiality of the administrative action.

We believe that there exist "cultural", more than technological and procedural conditions, that can allow the passage from the *bureaucratic* model to *the systemic* model. An essential condition resides in the presupposition that *the Informative System*<sup>22</sup> exists only in relationship to the Organizational System.

This first condition concerns, in particular, the relationship between the *Informative* system and the *Organizational* system. The intervention of computerization, that a lot of Public Administrations have promoted (and what they have *tout court* interpreted as "the informative system"), is often limited to the investment of resources, requiring often heavy expenses, for the purchase of hardware and software, without examining the real utility of such an investment and without considering the environmental and psychological impact that similar interventions could produce in a working environment and its people. The new policies to address the administrative action towards the consumer <sup>23</sup>, has exerted a lot of influence, in such a way that this concept has slowly been set aside in favour of the "re-engineering" of the administrative organization, wherein the computerization (ICT) of procedures would be at the service of the organizational model and not disconnected from it, following the following principles:

\* the Informative System must be projected in relationship to the Organizational System: it is the organizational system, oriented to satisfy the internal and external needs of the administration, that lays down the rules for the employment of technologies and

<sup>&</sup>lt;sup>21</sup> Cfr. D. A. LIMONE, *Autorità: questi i punti da chiarire*, in Il sole 24 ore, Sept. 24 1993; Camera dei Deputati, V Commissione Bilancio Tesoro e Programmazione Economica, Audizione del Ragioniere generale dello Stato Prof. Andrea Monorchio. *Considerazioni in margine al ruolo dell'innovazione tecnologica nel processo generale di trasformazione della pubblica amministrazione*, with special attention to the evaluation of administrative activity, 28 marzo 2000.

An information system may be defined as a set of interconnected components that collect, process, store and distribute information, to support decision-making and to control activities in an organized structure (company – public or private). There are several types of operating systems that refer to strategic levels, managerial levels, levels of knowledge management and operational levels. Information systems accomplish the model of Business Intelligence, i.e. that model in which all the processes, technologies and tools need to transform data into information, information into knowledge and knowledge into action plans. Within an information system, the technological systems developed to support decision making, are called Decision Support System (DSS), and perform this function through the use of infrastructures called Data Warehouse (storing of data). Cfr. *Business Intelligence*, supplement nr.11 of "Office Automation", Milano, Soleil International, November 2004; P. MERCATALI, *Informatica applicata alla pubblica amministrazione*, Napoli, Simone, 2003; P. Mercatali, G. Soda, D. Tiscornia, edited by, Progetti di intelligenza artificiale per la pubblica Amministrazione, Milano, Franco Angeli, 1996.

23 For a more accurate perception of this PA topic, just consult the relative documents of the Government's

<sup>&</sup>lt;sup>23</sup> For a more accurate perception of this PA topic, just consult the relative documents of the Government's guidelines for the development of the information society in the legislature, issued by the Minister for Innovation and Technology (Lucio Stanca) in June 2002 (Decision not published in the Official Journal), passing through the Three-year plan for ICT in Central Public Administration 2008 – 2010 (approved by the College of the CNIPA (National Centre for Information technology in Public Administration) in the Meeting of November 22, 2007), and the recent *Strategic guidelines for the Government, for the predisposition of the Three-year ICT plan 2009-2011* (approved by the CNIPA in the meeting of February 28, 2008).

evolved models of information processing and it is the informative system that has to adapt itself to these rules; *the planning model cannot be only technological*: in administrations technology will assist the organization, to plan the use of the whole set of resources, while the organization, in its structuring, must be aware of the limits and possibilities of the same technology;

- the organizational and computer systems must be projected as integrated and open systems, set to enter online and to use data communication services as best one can. Today information is the core issue of the regular functioning of public administrations. It follows that a modern vision of the way how "to make administration" not only requires the achievement of informative systems, in order to be able to decide, to manage and to check, but it asks also for the integration of these informative systems in one unitary informative system, that guarantees the decisional and managerial autonomy, the cooperation of the applications and the sharing of the data;
- the training of the human resources cannot be episodic and disconnected to the needs of the administration, of the single public employee and of the social context wherein the administrative action is fulfilled. The training of the civil servants must be programmed, projected and accomplished, starting from the analysis of the explicit and hidden training needs, in the awareness that otherwise this training will only satisfy the needs of the trainers and not those of the people to be trained;
- the sustainability of the administrative processes using non renewable resources, must effectively be guaranteed and practiced, avoiding the trendy demagogy of despicable politics, and has to guarantee procedures and best practices able to reduce the consumption of energy, of paper, and of spaces organized for the storing of archives, by implementing the regime of the Digital Public Administration model.

# 3.4. The digital model

The completion of such an enormous change, as described above, implies a lot of organizational and staff difficulties, as for instance the training and the requalification of the personnel, but it implies also technological difficulties, regarding, in particular, the integration of the components and the interoperability of the various systems, whose accomplishment require an engineering commitment as never seen before, not only in Italy. It constitutes nevertheless a *remarkable occasion* of rationalization and enhancement of the public informative system and, more in general, of the administrative work on the whole.

In Italy the regulations <sup>24</sup>in the field of document management in Public Administrations are conveying the various public authorities to a reorganization of the computer infrastructures, to face the new services required: already today, all the PA's must be prepared to support the flow of electronic documents, legally validated through a

<sup>&</sup>lt;sup>24</sup>For a complete overview, divided into different thematic and sectorial areas, the legal and technical regulation on assistance required for the implementation of the digital administration, see: www.cnipa.gov.it. The "Quaderni" published on the same web site are particularly useful.

digital signature<sup>25</sup> and techniques of temporal marking. Besides, they must provide external access, appropriately checked, to the different administrative documents, as well as the control of the state of advancement of each of them. Such exchange of data must be possible both inside the same administration, both between administration and citizen, and between different administrative structures, through data communication of the informative systems of the public body. <sup>26</sup>

The objectives, intended to reach by the application of the corpus of norms on digital administration in Italy, are fundamentally two:

- make administrations more efficient through the elimination of paper archives, the diminution of the offices of protocol, and the rationalization of the flow of documents.
- at the same time, *improve the transparency of the administrative action* through tools that allow an effective practice of open access to the proceedings and relative documents for the interested subjects (citizens and enterprises).

The documentary system, therefore, must be transformed into an informative and at the same time specialized system with uniform standards, they have to be highly qualified and submitted to the computer technology and data communication through <sup>27</sup>:

- the sharing of information (and therefore of the documents) both inside the administrative system and outside with the citizens;
- the reduction of the routine operations and the improvement of the quality of the results:
- the automation of the activities of acquisition and organization of the archive documents (recording, classification / fasciculation of the documents);
- the communication exchange of registration data and the internet access to the documentary systems (in line with the limits dictated by the regulation on the safety and privacy of personal data) through the development of rules and formats that guarantee the interoperability;
- the production, the transmission and the conservation of legally valid, authentic and reliable administrative computer documents, resorting to mechanisms of electronic or digital signature<sup>28</sup>;
- the integration of the administrative and documentary work flow, thanks to the use of *workflow management* programmes and tools of remote working (management of the documentary flow ).

<sup>&</sup>lt;sup>25</sup> In fact, since early January 2004 public administrations should have had adopted a technological and organizational model, capable of making them "digital"(art. 50, c. 3 DPR 445/200). Cfr. D. Brunetti, edited by, La gestione informatica del protocollo, dei documenti e degli archivi, Rimini, Maggioli editore, 2005; M. Cammarata, Firme elettroniche. Problemi normativi del documento informatico, Trento, Monti&Ambrosini Editori, 2005.

<sup>&</sup>lt;sup>26</sup> Smart cards (CIE, CNS, health cards, electronic passport, etc.) are the most advanced and secure tools to access services of PA, also locally. Cfr. G. Riem, A. Zivez, *La Carta d'Identità Elettronica*, Napoli, Simone, 2005; C. Rosello, G. Finocchiaro, E. Tosi, edited by, *Commercio elettronico, documento informatico e firma digitale*, Torino, Giappichelli, 2003; I. Tsiouras, *La sicurezza dell'informazione*, Milano, Franco Angeli, 2004; G. Pacifici, edited by, *Le smart Card*, *i sistemi elettronici di pagamento e la rete*, Milano, Franco Angeli, 2004.
<sup>27</sup> Cfr. M. Guercio edited by, *La gestione elettronica dei documenti e la tenuta degli archivi*, 2001; ID., *Le norme* 

sulla gestione informatica dei documenti in Testo Unico e Autocertificazione: la guida per le amministrazioni, Civil Service Department – Presidency of the Council of Ministers, 2001.

<sup>&</sup>lt;sup>28</sup> Cfr. D. Brunetti, edited by, La gestione informatica del protocollo, dei documenti e degli archivi, cit

The current normative picture on computer management of the administrative documentation is enriching because of the possible accomplishment of innovation and improvement of the Public Administration services. The development of tools as the *digital signature* and the *computer protocol*, suitable to the impressive expansion of the data communication network and of the services of electronic interoperability, enables the effective achievement of a completely automated management of the documentary flows and the consequent realization of deep innovations in the way how administrations work.<sup>29</sup>

The activation of this model in Italy foresaw a precise date of reference: 1 January 2004. Before this deadline the PA should have had adopted the computer protocol and produced its actions, data and documents on the computer, as states art. 50, paragraph 3, of the DPR 445/2000. From January 1<sup>st</sup>, 2004 the era of the "electronic" administration has officially initiated and the "paper" bureaucracy would have ended, inaugurating the era of telematics for the PA. But many problems and difficulties still prevent this model to be definitely adopted <sup>30</sup>.

# 4. PUBLIC ADMINISTRATION: POSSIBLE ORGANIZATIONAL SCENERIES

From this scenery derive new tasks both for the central and the local PA . In particular, public administrations, besides the commitment to achieve or to revise automated informative systems set to the management of both computer protocol and administrative procedures, in conformity with the dispositions of the DPR. 445/2000 and to the dispositions of the law 196/2003, as well as of article 15, paragraph 2, of the law 59/1997 and its relative rules of accomplishment, have to:

- to identify, with an appropriate decree within its own system, which offices to take in consideration for the unique or coordinated document management for large homogeneous organizational areas,
- to designate the person (an official or competent executive, expert in the technical-archival sector) responsible for the computer management of documents and archives,
- to adopt and publish the manual of management, describing the system of management and maintenance,
- to define times, procedures and measures to overcome the fragmentation of the documentary system (elimination of sectorial or departmental register).

In digital environment, therefore, the documentary service won't be characterized anymore as a unity with a low organizational centrality, that develops marginal and routine activity and has a role of "bureaucratic control". It becomes, on the contrary, a structure with a high centrality, regulated and with an elevated rate of bureaucratic automation, providing service functions for quick retrieval and sharing of the documentary resources of the administration.

<sup>&</sup>lt;sup>29</sup>AIPA, Linee guida alla realizzazione dei sistemi di protocollo informatico e gestione dei flussi documentali nelle pubbliche amministrazioni, (GEDOC 2) 2000

<sup>&</sup>lt;sup>30</sup> Cfr. L. MATTALUCCI, A. VINO, edited by, L'Information Technology nella P.A. – Ostacoli organizzativi e culturali, Milano, Franco Angeli, 1993.

The putting into effect of the regulation is based on one essential condition: the use of human resources professionally prepared to fulfill a demanding job, from the point of view of both the organizational and technological organization. From the current normative references emerges, therefore, the full possibility to replace, to all intents and purposes, the papery documentation with the digital one, if accompanied by the digital signature and by the temporal marking Indeed, this can only be achieved with the full accomplishment of what has been issued by the regulations on the documentation and digital (electronic) signature.

The effective fulfillment of what has been foreseen by the regulations depends on the ability of the different authorities to carry out a proper programme of organizational and technological interventions, coordinating the initiatives, and individualizing the structures to which to assign the accomplishment of these regulations, with particular reference to the development of systems of protocol and computer management of documents, without neglecting the application of the norms on the treatment of personal data (Privacy). All the initiatives tending to the improvement of the efficiency and the effectiveness of documentary management activities, depend in a decisive way from the way the administration succeeds in the structuring of the organizational unities, and from how the single unities interact among them. Using the trace proposed by Gedoc2 <sup>31</sup>, we examine hereafter the possible situations regarding the organizational collocation of the protocol activity and the typology of documents dealt with.

# 4.1. Organizational collocation of the protocol activities

It is possible to individualize three different organizational collocations for protocol activities. They are:

- The Unique protocol. An only office protocol/archive that supplies the protocol service of the whole organizational area. This is a logical type of definition, which organizes the one office as a whole of coordinated and interconnected structures;
- The Federation of protocol systems. A federate totality of protocol offices, intended as a whole of independent organizational structures, each of which supplying services to the single component of the organizational area, but structured in such a way as to allow a cooperative interaction among the various offices;
- Independent systems of protocol. A strongly autonomous totality of protocol offices, intended as a whole of organizational unities independent between each other, linked between each other by the only membership of the same administration and characterized by the absence of coordination and interchange of services.

# 4.2. Typologies of documents essays

Theoretically three categories of documents can be defined:

• Paper documents, that exclusively imply manual management;

\_

<sup>&</sup>lt;sup>31</sup>AIPA, Guidelines for the achievement of computerized protocol systems and management of documentary flows in public administration. cit.

• Paper documents with electronic cataloguing, that are still on paper; but for them exists, in the computer system of management of the documentary flow (the so-called system of computer protocol), a model or synthetic description in electronic format;

• Electronic documents, that make complete use of computer technologies; the computer management system for this category of documents is the system of computer protocol. With the D. Lgs, 82/2005 the electronic document gains primary dignity in comparison with the analogical document. That means that the PA forms its own documents in electronic modality and format, and only for exceptional cases the use of papery documents is admitted.

# 4.3. Feasible levels to achieve

The computer protocol project<sup>32</sup> can be approached in different ways, as has been already underlined, and it foresees a range of different technical alternatives, each of which introduces advantages and disadvantages.

Since the aim is to improve the primary processes of the administration, it is necessary to programme and to accomplish systems, that don't limit themselves to the computerization of the paper, transforming the physical support of the documents and leaving unchanged the operational logic of the process.

It is important to define which "feasible level" to achieve, in correspondence with the functionalities that the same administration wants to achieve. One could define, therefore, four levels of achievement of the computer protocol and, accordingly, four possible typologies of intervention:

# 4.4. Minimum team of protocol

The minimum team of protocol includes all "protocol projects", that intend to fulfill the minimum functionalities required by the regulation. Its functions foresee:

- to maintain a computer archive that stores all the information concerning a document;
- the marking on the document of the information concerning the same document (number, dates, homogeneous organizational areas);
  - an archival classification that allows a correct organization of the documents.

To restrict the achievement to this first level means to bound the objective of the intervention to the certification of the documents, it means to involve only the protocol office in the computerization process, and to allow computer access to the information related to the documents, but not to the documents themselves and, therefore, to lose a great occasion from an organizational point of view. The principal advantage of this level regards the necessary resources; indeed they are, both in terms of time and costs, very restrained. The disadvantage, instead, consists in the fact that one loses the opportunity to start a project of radical reorganization. It handles obviously about a first footstep that could only find support in a pioneer initial period. Unfortunately a lot of administrations

<sup>&</sup>lt;sup>32</sup> Cfr. D. BRUNETTI, Il processo di trasformazione della pubblica amministrazione, cit., pp. 34-48.

have adopted it without worrying anymore to evolve towards other, more advanced, models, invalidating in this way the revolutionary potential that the protocol computer contains in its genetic code. Public administrations that persist to adopt this model have lost and keep on losing a great occasion.

#### 4.5. Documentary Management

The second typology of intervention, the *document management*, foresees, unlike the preceding one, the dematerialization <sup>33</sup>:

of the papery documents and therefore their availability at computer level. It involves:

- recording with treatment of the images (scanning of the paper documents);
- assignment by computer to the recipient;
- advanced management of the classification of the documents (use of thesauri and checked dictionaries, etc.);
  - connection of the documents to the management of the proceedings.

To progress to this level of accomplishment means, in synthesis, to favour the objective of the creation of the informative patrimony, to take all the documents in consideration and not only the registered ones, to involve more offices in the computerization project, to have a classification that directly allows computer access to the documents. The documentary management allows, therefore, to proceed to an organizational intervention that engraves on the organizational structure of the administration, and prepares the carrying out of the Workflow.

# 4.6. Documentary Workflow

In this category are exclusively included the activities of rationalization (and consequent computerization through workflow <sup>34</sup>) of the documentary processes of an administration, excluding the primary activities. This doesn't mean that there will be no benefits for the whole organization, there will be, but only indirectly, acting on the documentary flows. In other words, in such case one decides not to go deeply into the matter of the internal procedures. This could also be the case, for instance, of those Administrations that already provided to effectuate organizational rationalizations.

http://www.cnipa.gov.it/site/\_files/estratto%20demt%20Quaderno\_25.pdf. This pubblication reproposes an already published paper in the review "Rivista degli infortuni e delle malattie professionali" INAIL, n. 3/2005, pag. 387. Pierluigi Ridolfi has been member of the board of the National Centre for Information Technology in Public Administration (CNIPA), President of the Workgroup for the dematerialization through digital support.

<sup>&</sup>lt;sup>33</sup> P. RIDOLFI, *Dematerializzazione dei documenti: idee per un percorso*, N. 25 "I QUADERNI" – Centro Nazionale per l'Informatica nella Pubblica Amministrazione – maggio 2006.

<sup>&</sup>lt;sup>34</sup> A work flow can be thought of as a set of *activities* that together make up a *proceeding*. Each activity, in its turn, is separable in more work units, each of which is assigned and performed by a *resource* (a hardware entity, a software system or a person that has the features to perform a particular task). The units of work that need to be done are listed in a *queue of over flow*, from which each of them are gradually extracted and assigned to a resource. The order in which units of work and activities are carried out shall be determined by a set of rules that describe in which sequence, and with which priority they should be performed.

It foresees one or more of the following activities:

• computerization of the processes related to the documentary flows in entrance and in exit;

- computerization of the processes related to the internal documentary flows;
- integration with the possible work flow related to the primary processes.

To progress to this level of accomplishment means, in general (considering the range of feasible alternatives):

- $\bullet$  to favour the objective of the rationalization and computerization of the documentary flows;
  - to consider all the documents, also those related to the proceedings;
  - to involve all the offices in the computerization process;
  - to allow computer access to the proceedings.

# 4.7. Business Re-engineering Process (BRP)

Finally, the last and more advanced typology of intervention, the *Business Reengineering Process*, is that activity that foresees the re-engineering of the processes of the body, with the purpose to computerize them successively. All processes are managed through integrated systems of work flow, in particular, all the processes that possess the so-called qualification of convenience, individualized in the complexity, repetitiveness and stability of the procedure.

The BRP is, therefore, a complex activity that requires, for the disturbed equilibrium it causes, the total adhesion of the vertices of the administration that must support changes in every possible way and the assent of a direction attentive to the management problems caused by the change (*change management*).

In the BRP, the introduction of new technologies must be preceded by specific feasibility studies, not only limited to the analysis of the technological part, but, above all, concentrated on the analysis of the processes, the relationships with the organization and the impact that the possible reorganization can have on the human resources. In particular, it will be necessary:

- to redraw the various phases of the documentary management process, constructing the totality of the most appropriate management proceedings to answer the demands of the principal operational processes, considering, therefore, all the various phases (external acquisition of documentation, access to the available documentation and its diffusion, documentation flow in the execution of the procedures, production of the acts and their external diffusion, archiving) and all the transversal problems (identification, certification, authentication, authorizations);
- to clarify the interactions between the documentary management, the whole of the computer system and the systems of other administrations;
- to programme on this base the technological system, individualizing its components and choosing the procedures of cooperation;
- to underline the management procedures of the new operational way, with the correlated attribution of responsibility;
- to programme times and ways to introduce the model, dedicating due attention to the necessity of sensitization, training and support of the staff involved.

It is important to underline that, if the chosen objective is that of the Business Reengineering Process (or of the Process Improvement, if one has decided to complete a less radical intervention), this becomes also the preparatory phase for the accomplishment of the documentary management project. The choice of the type of intervention, therefore, has not only heavy relapses in terms of complexity, costs, training, involved roles, etc; before all it has a specific strategic value at the moment in which it defines and it qualifies the same project.

# 5. THE TRAINING IN PUBLIC ADMINISTRATION

The information society, the *Information and Communication Technologies* (ICT)<sup>35</sup>, the digital public administration<sup>36</sup> and their regulating norms, are constructions that ask for new and more incisive initiatives of training, also through the use of non conventional instruments<sup>37</sup>.

In all cases, the training action organized by the public administrations for its employees, is not only an action that supports the changes, but it also favours the construction and the career service.

# 5.1. The training in public administrations

The evolution of the training in public administration during the last years in Italy, starts from the consideration that, despite the consistent changes in the tasks assigned to the Administrations and despite the limited turnover of the personnel <sup>38</sup>, there has been a limited training activity, both in relationship to determinate categories of employees (for instance, the new recruits) and relatively to the far to insufficient use of the new technologies of communication and information. Therefore, the training in the public sector is still characterized by scarce dynamism and limited innovative ideas on methodologies<sup>39</sup>. Nevertheless, in the last decade, there has been a constant commitment to renew the public administrations, even though factually not corresponding to expectations, especially to match the training of new professionalisms and some expected

<sup>&</sup>lt;sup>35</sup> Cfr. A. Mattelart, *Storia della società dell'informazione*, It. Transl., Einaudi, Torino 2002.

<sup>&</sup>lt;sup>36</sup>Cfr. P.L. Di Viggiano, L'amministrazione digitale negli Enti Locali. I modelli organizzativi e gli strumenti tecnico-giuridici,, in M. Mancarella (edited by), Profili negoziali e organizzativi dell'amministrazione digitale, Tangram - Edizioni Scientifiche, Trento, 2009, pp. 177-213.

<sup>&</sup>lt;sup>37</sup> P.L. Di Viggiano, *L'amministrazione digitale. Progetti e tecnologie per l'E-Government*, «Electronic review of Law, Economy, Management», 1, n. 1, 2010, pp. 162-180.

<sup>&</sup>lt;sup>38</sup> The limited turnover has been connected with the staff replacement at the end of the professional career, which was not always exempt from blocks, or by constraints on the maximum number of assumptions in comparison with the number of people placed at rest. See the ISPA-Observatory on training needs in public administration (eds.), the 13<sup>th</sup> Report on training in P.A. in the year 2009, Rome, 2010. The limited replacement of personnel should have suggested major training activities for staff in active employment, in order to constantly adapt the "dated" skills of the remaining workers, compared to the fast evolution of the company, market and public administration.

<sup>&</sup>lt;sup>39</sup> Cfr. F. Battistelli (edited by), *La cultura delle amministrazioni fra retorica e innovazione*, Franco Angeli, Milano 2002.

organizational changes. 40 Also the quality of the training is evaluated in the renewed commitments of the Public Administration, that is oriented at the execution of its institutional duties, both traditional and more innovative, towards citizens and enterprises<sup>41</sup>. The available data, coming from research institutes and centers, indicate that in the last ten years the training in the public sector is consolidated and diffused, not only from the point of view of the offer, but also for what concerns the demand of training. Public employees consider the enrichment of the proper knowledge both an investment and a necessity, in order to continue to be competitive. In this way, access to training has lost that halo of privilege, typical of the past, while it becomes a right / duty for everybody, included for executives.

#### 5.2. Civil servants training

To determine the training results, that are even substantial, has been the constitution of structures internal to the Administrations, delegated to the continual training of the employees. A trend that has favoured a large part of the Administrations of middle-great dimensions, determined by the emanation, in 2001, from the Ministry of Public Works, of the Directive on the training and valorization of the personnel of the public administrations <sup>42</sup>. This document expresses the necessity for the PA, to establish ad hoc structures inside the administration itself, dedicated to the training and valorization of the human resources, capable to assure the planning of the training activities <sup>43</sup>.

A particularly interesting characteristic concerning this topic, in the 2001 Directive, regards the indications on the procedures of the planning of this training.

As regards the predisposition of the Annual Training programme, the document stresses the factors that must find a collocation in the programmatic tool. In particular, there is a specific requirement for surveys of the training needs, for the individualization of the necessary competences <sup>44</sup> to reach the goals, and to accomplish new tasks (mission) of the administration of reference and, finally, it is necessary that the training is dealing with the normative and technological innovations.

It is specified that the Training programme has to indicate, in a detailed way, which are the objectives and resources (internal and communitarian) destined to the accomplishment of the training interventions. It has also to foresee to clearly individualize

<sup>40</sup> Cfr. C. Kaneklin, F. Natili, *La formazione nei servizi pubblici*, «For», Franco Angeli, Milano, n. 44-45, 2000, pp. 7-12. For a survey of the social dynamics of organizations, connected to comments on the main trends, that contributed to the development of modern theory on organizations, cfr. A. Etzioni, Sociologia dell'organizzazione, Il Mulino, Bologna 1967.

Cfr. M. Lichtner (edited by), La qualità delle azioni formative, Franco Angeli, Milano 1999. Also, cfr. F. Grassi, La qualità percepita della formazione, Celid, Torino 2005; M. Rotondi, Facilitare l'apprendere. Metodi e percorsi per una formazione di qualità, Franco Angeli, Milano 2000.

The indication of the Directive on training has become law (L 3, Jan. 16, 2003).

<sup>&</sup>lt;sup>43</sup> Cfr. C. Bentivogli, D. Callini, *I piani formativi aziendali*, Franco Angeli, Milano 2000.

<sup>44.</sup> Organizational studies share the definition of competence, seen as an intrinsic feature of an individual, measurable on the basis of predetermined criteria. . Morelli U. (1988) (edited by), La formazione: modelli e metodi, Franco Angeli, Milano. Also, cfr. C. Kaneklin. G. Aretino, Pensiero organizzativo e azione manageriale, Cortina, Milano 1993.

the formative methodologies, oriented to the recipients and their different abilities of learning. It, finally, foresees the possibility to use teachers both internal and external of the administration.

As regards the didactic methodologies, the use of the so-called new media, that in the private sector represent a factor of effectiveness and efficiency of expenses, has not had the expected success in the public sector. Such methodologies, indeed, have been used for a far minor number of formative activities.

It's enough to think that, in 2008, classroom training has represented in all the compartments of the public sector, the most used methodology to imply formative forms. Accordingly, also the cost impact of the employment of new formative technologies results to be very limited<sup>45</sup>. This means that a methodological invariant continues to favour traditional methodologies for training and learning.

The formative methodologies of the PA, other than the classroom training, don't only provide methodologies based on the use of the new technologies, but they recall different activities as for instance conferences, self-learning, internships, that on the whole cannot be considered to be innovative.

Nevertheless, it has to be noticed how the use of internet (in formative, or more simply, in informative terms) has entered by now the daily experience of many employees of the Public Administrations, even if such use is not formally enumerated among the training activities <sup>46</sup>. The more, there has been an increase and intellectual curiosity towards easy forms of training, also in the public sector, based on the technology webinar <sup>47</sup>.

On the whole, the crisis of the last years, that has determined the fall-off of the training investments, has had some positive consequences.

In the first place, there is a higher attention towards the expenses, observable both in the choice of the suppliers and in the choice of the contents of learning, favouring those solutions with immediate and tangible benefits.

Secondly, there is a minor trust in classroom training (analogical or digital), to advantage of the *training on the job* (training at the location of employment) and of the self-learning, two solutions facilitated today by the computer and data communication technologies.

<sup>46</sup> Cfr. L. Sartori, *Il divario digitale. Internet e le nuove disuguaglianze sociali*, Il Mulino, Bologna 2006.

<sup>&</sup>lt;sup>45</sup> Cfr. SSPA, XIII rapporto sulla formazione nella pubblica amministrazione, cit. p. 85.

<sup>&</sup>lt;sup>47</sup> The term webinar is a neologism, short for Web-based Seminar, a presentation, a Conference, a workshop or seminar that is transmitted through the Web. The webinar is used to conduct meetings, training courses or presentations, in which each participant logs in from his/her own PC and is connected with the other participants through the internet. Unlike webcasts, this is an interactive system where participants can interact with each other and with the Coordinator (auditor) of the seminar, using tools made available by web conference software such as: chat, audio and video chat, whiteboards, etc. Some argue that the webinar may be one-way: from the speaker to the audience with limited audience interaction. However, the webinar can be more collaborative as it allows question and answer sessions enabling full participation between the audience and the presenter. In some cases, the presenter may speak over a standard telephone line, pointing out information presented on the screen, and the audience can respond with web conferencing technologies available on the market, that incorporate the use of Voice over Internet Protocol (VoIP), audio technology, to allow a completely web-based communication. Depending on the company, the webinar may provide hidden or anonymous functions, making participants aware of the other participants in the meeting itself.

Finally, there is a major turning to internal, rather than to external didactic resources, definitely available at inferior costs: a situation that has favoured the organization of training activity done by internal trainers, allowing thus non professionals to learn and to apply the fundamental elements of adult teaching, even if only occasionally.

# 5.3. The planning of the training

The consideration according to which the PA can be compared with a company in possession of a specific  $know-how^{48}$ , seems easy to share in virtue of the fact that the training in the public sector represents, as remembered, a fundamental aspect in the system of human resources management, in a specific historical moment of deep organizational and cultural transformations <sup>49</sup>. Transformations that have also marked the transit of the traditional staff administration towards the management and the development of the human resources.

In such a changed context, training assumes the role of the instrument of change and, at the same time, a tool for the "maintenance" of the competences. In Italy the most recent norms on public administration, draw a PA that is forced to re-engineer its own organization, to innovate its own systems of communication and to re-think administrative activities. On the other hand, the rate of innovation and necessary change to fulfill this complex operation, demands knowledges, that only a scientifically structured training can assure.

The quality of this type of training finds its reason to be in the prodromal actions to the planning of the formative interventions, or in other words, in the analysis of the  $training\ needs^{50}$ .

Training for the PA has often been intended simply as a cost, rather than an investment, and in this sense it has been treated as an issue of secondary rather than of primary importance. There is currently an inversion of tendency from the moment that correct premises are set for quality training, measurable in the consequences that it determines <sup>51</sup>.

From the regulations and the successive related interventions, it is clear that "within the reform strategy of the administrative system, central policies are the

<sup>&</sup>lt;sup>48</sup> Cfr. L. Hinna, *Il ruolo della formazione nel processo di riforma in atto*, in SSPA, *13° Rapporto sulla formazione nella pubblica amministrazione*, cit. p. 195. If the enterprise is a company of know-how, i.e. registers large concentrations of knowledge, the training assumes an advertising function for companies that operate on large consumption goods, such as cement for a building firm or money for a bank: an ingredient of the activity of which you can't do without.

<sup>&</sup>lt;sup>49</sup> Cfr. C. Lefebvre, G. Raspino, *La valutazione e lo sviluppo delle risorse nella pubblica amministrazione*, Il Sole 24Ore, Milano 2002. Cfr. also: Cfr. M. Regini, *La formazione delle risorse umane*, Il Mulino, Bologna 1996.

<sup>&</sup>lt;sup>50</sup> Cfr. E. Tezza La domanda di formazione: uno schema logico di rilevazione, «Professionalità», 29, 1995, pp. 95-110; from the same autor see also: «L'analisi dei bisogni formativi: l'emergere del territorio», Professionalità, 19, 1999, pp. 15-18.

<sup>&</sup>lt;sup>51</sup> Cfr. F. Bochicchio, F. Grassi F. (edited by), Le ricadute della formazione. Significati, approcci, esperienze, Amaltea, Melpignano (Le) 2009.

valorization of the human capital and knowledge management, whose effectiveness inside each organizational system definitely depends on the quantity, and, above all, on the quality of the training resources."

Beginning from the normative requirements – even if not explicitly indicated - it appears to be clear that, in the chain of values, staff training is a strategic tool of change, also in relationship to the new set up of the public administration system <sup>52</sup>. It appears to be clear, also, that the subjects interested in training are the executives and all the civil servants.

In this picture of innovative references, oriented to draw the digital public administration, in which learning and knowledge have a strategic role for the training of civil servants with a European predisposition, the *participated training* assumes a particular meaning.

What does this mean "participation"? The concept refers to the action of " taking part", but also to the possibility of "having part", or to the symbolic dimension of "feeling oneself part." Part of a larger entity in comparison to the unity, necessarily excluding that someone could participate alone at something, in absence of a frame of reference (social, relational, factual, etc.)<sup>53</sup>.

Likewise to the meaning of training, the concept of participation asks for difference (differentiation) and community (integration); participation as condition that unites while distinguishing, and that distinguishes while uniting<sup>54</sup>. On the one hand, indeed, participation is necessarily an individual contribution to the collective action of a group, to participate has sense in the measure in which it favours the individual contribution, that, in turn, finds legitimacy in the recognition of the individual differences (regarding experiences, competences, ideas etc.). On the other hand, participation is necessarily oriented to "to do" e/o to "to be", whose recognition is given by conditions of community (of affairs, tasks, objectives, etc.).

In conclusion, participation is functional to improve the planning process. In comparison to other approaches, the advantages of participation consist in the elevated probability of effectiveness due to the similarity – not to say coincidence - between the users of the policies and those who decide the policies. A similarity that favours the construction of work hypotheses and project courses, coherent in comparison with the users' demand.

This participated approach produces particular advantages:

- it favours innovation through the interaction between the different competences;
- it allows to overcome rigid distinctions between the project designer and the direct recipient of the interventions;
- it develops, in the recipients of the project, a greater involvement and sense of belonging;

\_

 <sup>&</sup>lt;sup>52</sup> Cfr. F. Bochicchio, T. Di Sabato, Complessità organizzativa e risorse umane, Libellula, Tricase (Le) 2011.
 Also cfr. G. Costa, M. Gianecchini, Risorse umane. Persone, relazioni e valore, McGraw-Hill, Milano 2005.
 <sup>53</sup> T. Mannarini, C. Pacucci, C. Talò, Il volontariato tra altruismo e azione sociale. Una ricerca sui donatori di

T. Mannarini, C. Pacucci, C. Talò, *Il volontariato tra altruismo e azione sociale. Una ricerca sui donatori di sangue*, in B. Gelli, T. Mannarini (edited by), *La partecipazione: modi e percorsi. Dai papa boys ai no global*, Unicopli, Milano 2007, pp. 149-166.

<sup>&</sup>lt;sup>54</sup> Cfr. S. Colazzo, S. Patera, *Verso un'ecologia della partecipazione*, Amaltea, Melpignano (Le) 2008.

• it favours the recognition of the utility of the evaluation as instrument to improve the quality of the interventions<sup>55</sup>.

The involvement of subjects with competences and diversified experiences favours the individualization of original answers to the needs, avoiding standard solutions that generally are ineffective in the treatment of complex problems, not of routine.

Particularly, the participated planning is a process that by definition tends to let the expert (project designer) interact with the direct and indirect recipient of the product, in order to create an interchange of ideas and a comparison between demands of the public and the project imagery <sup>56</sup>. This type of elaboration course is a method of intervention where the project, on the whole, is of primary importance. The construction of events and situations is essentially based on a clear definition of the background data, of the general and specific objectives, of the activities, of the typology of the target and the way of its involvement, as well as of the necessary, financial, human, organizational and structural resources, of the methodologies of intervention and possible contents and methods of evaluation. The planning, as method, is "participated" if and when it is built not only by the project designers, but based on the synergic cooperation between all the interested actors, the experts and the subjects to which it is addressed. The project designer is involved in more articulated ways: rather than to work in an autonomous way and isolated from the context in examination, he is urged to communicate and to negotiate his own ideas with other, not experienced, subjects, co-parties to the project.

A methodology to fulfill a participated training (also through a participated planning) being the model that already is applied in some of the most innovative training projects for European public officials, consists in assuming as reference-guide the concept of *community of practice*, according to which learning means to participate in a legitimate way to a community, that operates favouring behaviours and procedures, of the collaboration type, where learning to learn from participation is a fundamental condition.

To practice the participated planning asks for to learn and to use formal and informal methodologies that allow to assume shared decisions in the intent to accomplish authentically co-determined actions, beginning from the sharing of meanings and knowledges.

#### 6. CONCLUSIONS

The process of innovation in public administrations is still object of "theorization" and it wearily dilutes in thousand "discussions" on models to apply and on why to innovate, achieving limited and partial meaningful cases of really digital administration. The passage towards administrations, organized for the quality of the services to citizens and enterprises with the mature appeal for information technologies, has just overcome

<sup>&</sup>lt;sup>55</sup> Cfr. A. Balducci, Il Metodo: la progettazione partecipata, in A. Balducci et al. (edited by), Ci sarà una casa, Angeli, Milano 1995.

<sup>&</sup>lt;sup>56</sup> Cfr. S. Tagliagambe, L'albero flessibile. La cultura della progettualità, Masson, Milano 1998. Cfr also V. Sarracino, Progettare la formazione, Carocci, NIS, Roma 1997.

the initial phase and, above all, has only now traced a true and attractive line of start and development.

The simplification of primary norms has left the place to a wide production of secondary norms and everything risks to end up in a "unstructured administrative system" in which the political deciders, the executives and the civil servants operate with a lot of rules that, as Chinese boxes, refer to other rules with a certain and manifest result: no real simplification and reorganization of the body and services is produced, determining, in this way, perimeters of responsibility ever more vanished and transitory. In this context will increase, or risks to increase, the disorganization, administrative discretion, and the waiting for the "innovation" event. The processes of automation, till now activated (regulated in Italy since 1993, with a very advanced system of norms) have not contributed to the complete transition toward the digital administration.

The situation is not yet entirely positive, and, nevertheless, it is necessary to promote the digital administration model since it is the only model that allows real innovation and it assures the bases for quality services to the users. The traditional organizational reference (manual and analogical) is heavily structured, complex, expensive, self-referenced and, in reference to this, the operators carry out actions, vertically oriented and delimited in a non integrated system, where "form" and "paper" are the purpose and the final result.

The new model of digital administration, instead, is founded on some very simple organizational standards:

- the organization is an integrated system of decisions and data;
- the digital datum is the adhesive factor of the system, while it is the patrimony of the body and indispensable for the services. In a really digital administration there cannot coexist mixed models of digital and analogical data;
- the digital datum is, by definition, a "defined" datum, identifiable, accessible, enjoyable, certain, reusable by many subjects, transparent and public;
- the digital administrative datum (as the non digital one) must be a certified datum and evaluated by the persons who decide the administrative system;
- the proceedings and digital document system is, therefore, a system of decisions, activities, documents and data that for its nature must be transparent, simple, fast, without "paper";
- the digital organizational system asks for a new work organization and new professional profiles of the public employees;
- the training of the employees must be based on the digital organizational model and has to be innovative in all the topics of the new model: without a serious and advanced training the innovation culture is impossible. Currently one still notices the assignment of non systematic, improvised training, that doesn't take in consideration the real formative demands because they are not known, in comparison with the organizational models presented as "containers" of apparently modern rules, of resources that operate on long and expensive administrative procedures, of nonexistent systems of control.

The passage towards a digital administration doesn't characterize only a new technological administration, but, above all, individualizes a "redefined" administration in the structures, in the functions, in the services, in the processes.

It is a transit towards an organizational model, where the "activities" (the back-office) are managed in a digital way, with few human resources, while the greatest part of the resources is used for the predisposition and digital allocation of the "services"; where the planning, the decisions, the procedures are defined in relationship to the demands of the community, of the territory, of the users. The back-office today is still partly manual or mixed, constituting a heavy constraint for every form of technological and functional innovation.

The digital datum (and the resulting administrative electronic document) on which the digital administration is founded, introduces specific characteristics that engrave in a significant way on the administrative model:

- the digital datum is patrimony of the body, therefore, it is necessary to pay attention to the costs and the functionality of the datum;
- the digital datum is formed, managed, usable, accessible according to precise rules;
- the digital datum is not redundant (because it is produced according to the principle of necessity);
- it is kept in safety being a public patrimony, and also for its specific value indispensible for the planning, the management, the direction;

The base of the new administrative model is the digital datum that:

- is usable online;
- is at the base of an administration where the procedures are simplified, rationalized, digitized, and the "practices" are without paper;
- can be recovered and reused by different subjects and in comparison to different institutional levels, without costs for the "reproduction" of the same data;
- is owned by who effectuates the training, and, therefore, it can be transferred to other public or private subjects within agreements and exchanges of data, or it can be sold for its added value:
- is conserved in the time, in a technological way (for exhibition and probatory effectiveness) and without costs for the storing and logistics of the archives.

The cultural tool is training of the public employees, from whom the formative needs are known and satisfied by the use of the most modern technologies for e-learning.

From the application of a such a juridical, organizational, technological and formative model, originates the possibility to make public administration, both Italian and European, effective, efficient, transparent and economic: in short, a *digital* public administration.

#### REFERENCES

Amovilli L., *Imparare a imparare*, Patron, Bologna 1995.

Aristotele, Metafisica, trad. it., Milano, Bompiani, 2000.

Balducci A. et al. (edited by), Ci sarà una casa, Angeli, Milano 1995.

Barrows J. D., Perché il mondo è matematico?, It. transl., Bari-Roma, Laterza, 2004.

Battistelli F. (edited by), *La cultura delle amministrazioni fra retorica e innovazione*, Franco Angeli, Milano 2002.

Bentivogli C., Callini D., I piani formativi aziendali, Franco Angeli, Milano 2000.

- Bochicchio F., Di Sabato T., *Complessità organizzativa e risorse umane*, Libellula, Tricase (Le) 2011.
- Bochicchio F., Di Sabato T., *Lineamenti di organizzazione e gestione delle risorse umane*, Lecce, MoviMedia, 2007.
- Bochicchio F., Grassi F. (edited by), *Le ricadute della formazione. Significati, approcci, esperienze*, Amaltea, Melpignano (Le) 2009.
- Brunetti D., (edited by), La gestione informatica del protocollo, dei documenti e degli archivi, Rimini, Maggioli editore, 2005.
- Camera dei Deputati, V Commissione Bilancio Tesoro e Programmazione Economica, Audizione del Ragioniere generale dello Stato Prof. Andrea Monorchio. Considerazioni in margine al ruolo dell'innovazione tecnologica nel processo generale di trasformazione della pubblica amministrazione, con particolare riguardo alla valutazione dell'attività amministrazione, 28 marzo 2000.
- Cammarata M., Firme elettroniche. Problemi normativi del documento informatico, Trento, Monti&Ambrosini Editori, 2005.
- Carloni E., (edited by), *Codice dell'amministrazione digitale*, Rimini, Maggioli editore, 2005.
- Castells M., La città delle reti, Venezia, Marsilio, 2004.
- Ceruzzi E. P., Storia dell'informatica. Dai primi computer digitali all'era di internet, trad. it., Milano, Apogeo, 2005.
- Colazzo S., Patera S., Verso un'ecologia della partecipazione, Amaltea, Melpignano (Le) 2008.
- Contaldo A., Dainotti, F., Diritto e tecnologie delle reti di informazione, Napoli, Simone, 2005.
- Costa G., Gianecchini M., Risorse umane. Persone, relazioni e valore, McGraw-Hill, Milano 2005.
- Di Viggiano P.L., *L'amministrazione digitale. Progetti e tecnologie per l'E-Government*, «Rivista elettronica di Diritto, Economia, Management», 1, n. 1, 2010, pp. 162-180.
- Di Viggiano P.L., L'amministrazione digitale negli Enti Locali. I modelli organizzativi e gli strumenti tecnico-giuridici, in M. Mancarella (edited by), Profili negoziali e organizzativi dell'amministrazione digitale, Tangram Edizioni Scientifiche, Trento, 2009, pp. 177-213.
- Etzioni A., Sociologia dell'organizzazione, Il Mulino, Bologna 1967.
- Forgheri C., Mele V., Gestire i rapporti con i cittadini. Comunicazione, multicanalità e citizen relationship management nella pubblica amministrazione, Rimini, Maggioli Editore, 2005.
- Gatti M., E-Procurement, Napoli, Simone, 2002.
- Gelli B., Mannarini T. (edited by), *La partecipazione: modi e percorsi. Dai papa boys ai no global*, Unicopli, Milano 2007.
- Giglietto F., Alle radici del futuro. Dalla teoria dell'informazione ai sistemi sociali: una introduzione, Milano, Franco Angeli, 2006.
- Grassi F., La qualità percepita della formazione, Celid, Torino 2005.
- Guercio M., (edited by), La gestione elettronica dei documenti e la tenuta degli archivi, 2001.

Guercio M., Le norme sulla gestione informatica dei documenti in Testo Unico e Autocertificazione: la guida per le amministrazioni, Dipartimento della Funzione Pubblica - Presidenza del Consiglio dei Ministri, 2001.

- Kaneklin C., Aretino G., *Pensiero organizzativo e azione manageriale*, Cortina, Milano
- Kaneklin C., Natili F., La formazione nei servizi pubblici, «For», Franco Angeli, Milano, n. 44-45, 2000, pp. 7-12.
- Lave J., Wenger E., *Situated Learning. Legitimate Peripheral Partecipation*, Cambridge University Press, Cambridge 1991.
- Leavitt D., L'uomo che sapeva troppo Alan Turing e l'invenzione del computer, trad. it., Torino, Codice edizioni, 2007.
- Lefebvre C., Raspino G., La valutazione e lo sviluppo delle risorse nella pubblica amministrazione, Il Sole 24Ore, Milano 2002.
- Lichtner M. (edited by), La qualità delle azioni formative, Franco Angeli, Milano 1999.
- Limone D. A., Autorità: questi i punti da chiarire, in Il sole 24 ore, 24 settembre 1993.
- Luhmann N., De Giorgi R., Teoria della società, Franco Angeli, Milano 1992.
- Marasso L., Manuale dell'e-government. Attori, strategie e strumenti di innovazione nella pubblica amministrazione locale, Rimini, Maggioli editore, 2005.
- Mariani P., Tiscornia, V., (edited by), *Sistemi esperti Giuridici. L'intelligenza artificiale applicata al diritto*, Milano, Franco Angeli, 1989.
- Marinelli A., *Connessioni, nuovi media, nuove relazioni sociali*, Milano, Edizioni Angelo Guerini, 2004.
- Mattalucci L., Vino, A., (edited by), L'Information Technology nella P.A. Ostacoli organizzativi e culturali, Milano, Franco Angeli, 1993.
- Mattelart A., Storia della società dell'informazione, It. transl., Einaudi, Torino 2002.
- Mattelart A., Storia della società dell'informazione, It. transl., Torino, Einaudi, 2002.
- Mercatali P., Informatica applicata alla pubblica amministrazione, Napoli, Simone, 2003.
- Mercatali P., Soda G., Tiscornia D., (edited by), *Progetti di intelligenza artificiale per la pubblica Amministrazione*, Milano, Franco Angeli, 1996.
- Merloni F., Pioggia A., (edited by), *Riforme organizzative e atti amministrativi*, Rimini, Maggioli Editore, 2005.
- Miani M., Comunicazione pubblica e nuove tecnologie, Bologna, Il Mulino, 2005.
- Morelli U. (1988) (edited by), La formazione: modelli e metodi, Franco Angeli, Milano.
- Pacifici G., (edited by), Le smart Card, i sistemi elettronici di pagamento e la rete, Milano, Franco Angeli, 2004.
- Pagallo U., Introduzione alla filosofia digitale, Torino, Giappichelli Editore, 2005.
- Palazzolo N, (edited by), *L'informatica giuridica oggi*, Atti del Convegno ANDIG (Roma, 1 dicembre 2005), Napoli, ESI, 2007.
- Quaranta M., (edited by), *Il codice della pubblica amministrazione digitale*, Napoli, Liguori, 2006.
- Regini M., La formazione delle risorse umane, Il Mulino, Bologna 1996.
- Ridolfi, P., *Dematerializzazione dei documenti: idee per un percorso*, N. 25 "I QUADERNI" Centro Nazionale per l'Informatica nella Pubblica Amministrazione maggio 2006.
- http://www.cnipa.gov.it/site/\_files/estratto%20demt%20Quaderno\_25.pdf.
- Riem G., Zivez A., La Carta d'Identità Elettronica, Napoli, Simone, 2005.

- Rosello C., Finocchiaro G., Tosi E., (edited by), *Commercio elettronico, documento informatico e firma digitale*, Torino, Giappichelli, 2003.
- Rotondi M., Facilitare l'apprendere. *Metodi e percorsi per una formazione di qualità*, Franco Angeli, Milano 2000.
- Sarracino V., Progettare la formazione, Carocci, NIS, Roma 1997.
- Sartori L., Il divario digitale. Internet e le nuove disuguaglianze sociali, Il Mulino, Bologna 2006.
- SSPA Osservatorio sui bisogni formativi nella Pubblica Amministrazione (edited by), XIII Rapporto sulla formazione nella P.A. anno 2009, Roma, 2010.
- Tagliagambe S., L'albero flessibile. La cultura della progettualità, Masson, Milano 1998.
- Tezza E., *La domanda di formazione: uno schema logico di rilevazione*, «Professionalità», 29, 1995, pp. 95-110.
- TEZZA E., L'analisi dei bisogni formativi: l'emergere del territorio, «Professionalità», 19, 1999, pp. 15-18.
- Tsiouras I., La sicurezza dell'informazione, Milano, Franco Angeli, 2004.
- Weber M., Economia e società, It. transl., Edizioni di Comunità, Milano, 1995.
- Wiener N., Cybernetics: or Control and Communication in the Animal and the Machine, trad. it., Paris, Hermann, 1948.
- Wiener N., Introduzione alla cibernetica. L'uso umano degli esseri umani, It. transl., Torino, Bollati Boringhieri, 1966.
- Ziccardi, G., Telematica Giuridica, Milano, Giuffrè, 2005.