Judicial Electronic Data Interchange in Italy

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Abstract: In recent years Italy has invested a lot on ICT projects for the judiciary to improve the efficiency of its justice system. This paper deals with the most important ICT projects and applications developed, with the strategy adopted, and with the critical issues encountered to path the difficult way towards judicial electronic data interchange and e-justice.

1. Introduction

It is a matter of fact that judicial electronic data interchange is the „natural" development of case management systems. In particular, in Europe a continuum emerges from traditional case management systems to applications developed to support e-filing, electronic data interchange, and the buzzword e-justice.[1] The number of running applications around Europe is quite limited and Italy is not an exception. However, in the last years the Italian judiciary has invested a lot on ICT projects, in particular after 1993 when an Authority for Information Technology in the public Administration (AIPA) was established. This paper will consider the change in the strategy to develop information and communication technology (ICT) in the public sector, and, in particular, in the judiciary. Then, it will deal with the main ICT projects and applications in the Italian judicial system. The concluding remarks will offer some reflections on the Italian experience.

2. The strategy to develop ICT in the Italian judiciary

The initiatives on information and communication technology in the Italian judiciary have to be related to the framework in which the projects

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[1] *Fabri M.* and *F. Contini* (2001) (eds.), Justice and Technology in Europe: How ICT is Changing the Judicial Business, The Hague, The Netherlands.

are developed. Not many ICT projects that are currently under way would have occurred without a new government policy about technology in the public administration that led to the creation of the AIPA.[2]

The Authority was established to promote, coordinate, plan and control the development of information systems in all the branches of public administration. The ultimate goal was to improve the services supplied by public administrations to the citizens through the use of ICT. In particular, the Authority coordinates strategically all the ICT projects in the public administration, approving the three-year ICT plan that each administration and government agency has to present to the Authority yearly. However, it is worth mentioning that the new government, which has been ruling the country since April 2001, created a new Ministry of Innovation and Technology to further boost the use of ICT. This Ministry, accordingly to the „E-Government Action Plan 2002",[3] should take over the tasks of AIPA, without changing the functions performed to assist the public administrations in the development of ICT projects.

The law that established the AIPA provided also for the creation of ICT Departments in each Ministry. The goal was to connect the single administrations with the Authority, giving also a new organizational structure to ICT Departments within the public administrations. In particular, in the last years the ICT Department of the Ministry of Justice has known a huge growth in both budget and personnel.[4]

The creation of the Authority has dramatically changed the strategy of the ICT governance in the public sector. The Authority, as a parallel learning structure,[5] was also established to try to breakdown the previous fragmented ICT governance setting, that had given very poor results and had wasted a lot of resources in all the public administrations in the recent past. However, after the initial boost, the ICT Department of the Ministry of Justice shows some tendencies to reply the traditional bureaucratic logic

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[2] The Authority for Information Technology in the Public Administration (AIPA) was created by the law n. 39 of 1993.

[3] Among the main goals of the Ministry for the public sector in 2003 there are: the distribution of at least one billion of digital signatures within the public administration by 2003, a 50% increase in the use of e-procurement, one third of personnel trained through e-learning, two third of all the public offices with an on-line access for the public. „E-Government Action Plan 2002" at: http://www.pianoegov.it.

[4] The ICT Department of the Ministry of Justice has invested about 149 million Euro in 1999, 169 milion Euro in 2000, and 202 million Euro in 2001. The Department has now more than five hundred people such as administrative personnel, information technology specialists, organizational analysts. It has also thirteen regional offices (CISIA) spread through the country (Augusto, 2002).

[5] *Bushe G.* and *A. B. Shani* (1991), Parallel Learning Structures, Reading, MA., Addison-Wesley.

of action,[6] losing the needed flexibility which is fundamental to promote innovation processes.

3. ICT projects and applications in the Italian judicial system

If on the one side, in the recent years ICT projects have certainly burst into the Italian judicial system, on the other side, the main problem is still the implementation of these numerous projects, that in many cases are stuck in the feasibility study or in an everlasting piloting stage.

This section describes some of the projects that have the interest of the criminal and the civil business as well as the administrative operations of both courts and prosecutor's offices, along with the Ministry of Justice.

The *criminal area* has known a large number of applications due to two major events: the introduction of a completely new Code of criminal procedure in 1989, with an accusatorial structure that superseded the previous inquisitorial one, and the assassination of *Giovanni Falcone*, General manager of the criminal affairs department of the Italian Ministry of Justice, by a mafia bomb in May 1992. The first event pushed the Ministry of Justice to adopt a basic automated case management system that, since then, has been constantly upgraded and disseminated to all the courts and prosecutor's offices in Italy. The second, tragic event, drove the Ministry of Justice to invest resources into a quite sophisticated database and information retrieval system specifically designed to deal with data connected with mafia crimes.

It is important to recall how these two still very important projects were born, since the genesis of these projects tells us how the implementation of information technology in the Italian courts, before the institution of the AIPA, was not planned, but were the result of contingencies.

The criminal automated case management (Re.Ge.) is currently running in all of the 166 courts of first instance as well as in the attached prosecutor's offices, and in quite a few of the 26 courts of appeal. The software is a typical automated case management system based on a client-server architecture. The software allows a limited data interchange between the courts and the attached prosecutor's offices. Each court or prosecutor's office end user is differently qualified with a user ID and a password to access the system, and then modify or update records.

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[6] *Friedberg E.* (1993), Le pouvoir et la règle. Dynamiques de l'action organisée, Paris, Edition du Seuil.

Re.Ge. was designed as a „perfect functional equivalent"[7] of the previous paper docket, it actually automated the *status quo* and it was not projected to be an informing technology[8]. Therefore, it was not designed to help judges and prosecutors in their decision making process, even if in some limited cases, empirical research[9] has shown how courts' personnel tried to increase its potentiality. For example, some typical database functions were used to automate the production of standard judicial documents, as well as a smart use of the database allowed some prosecutors to develop the investigations about massive crimes related to car thefts.

However, judicial offices have a very little margin to customize the software disseminated by the Ministry of Justice, which is in charge of its design, planning, implementing, monitoring, and developing. Customization is strongly discouraged by the ICT Department in the attempt to have a strong control over the applications all over the country, and also to prevent security problems.

The second system which is worth mentioning is the database used by anti-mafia prosecutors. Italy has this special unit of prosecutors which has a central bureau in Rome (*Direzione Nazionale Antimafia*) and 26 prosecutor's district offices (*Direzione Distrettuale Antimafia*), which correspond to the 26 districts of court of appeal. These antimafia units use a specifically designed standard query language (SQL) database (SIDNA and SIDDA)[10] which helps the prosecutors in their investigations process by a quite powerful information retrieval system. The software application has been implemented in all of the 26 district offices and in the central Rome bureau where all the information about mafia crime are processed. The communication between the local units and the central bureau is still one of the major problem of the working system. Many times important information is not transmitted to Rome from the regional offices to preserve the absolute secrecy of the information. In addition, the data entry process, and its indexing, is still extremely cumbersome with a prejudice for the effectiveness of the investigation.

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[7] *Contini F.* (2000), Reinventing the docket, discovering the database, *Fabri M.* and *Langbroek, P.* (eds.), The Challenge of Change of Judicial Systems. Developing a Public Administration Perspective, Amsterdam, IOS Press.

[8] *Zuboff Shosana* (1988), In the Age of the Smart Machine, New York, Basic Books.

[9] *Fabri M., Contini F.* and *A. Negrini* (1999), Progettazione organizzativa e information technology nell'amministrazione giudiziaria italiana, „Working paper IRSIG-CNR", Bologna, Lo Scarabeo, n. 9.

[10] SIDNA stays for „Sistema Informativo Direzione Nazionale Antimafia", „Information System for Antimafia National Bureau". SIDDA stays for „Sistema Informativo Direzione Distrettuale Antimafia", „Information System for Antimafia District Bureau".

These are the two applications that are currently running in the Italian criminal judicial offices. Many other projects are under way, and they cannot be described in this brief paper, but it is important to point out the huge gap between what has been projected and what has been implemented so far. This is certainly the most important problem that the Ministry of Justice has to address.

In the *civil area,* less applications have been implemented so far in comparison to the criminal area, but many projects are under way. There are still a few outdated civil case management systems based on a mainframe architecture, which were tested in a few cities in the late 1970s. These systems should be shortly replaced with automated case management systems based on a client-server architecture and an Oracle database. Pilots have been already used in a couple of courts and the software has been progressively disseminated to the other Italian courts.

Similar automated case management systems have been implemented for the offices of the Justices of the Peace, while they are supposed to be implemented quite soon for bankruptcy courts – they are special sections of the courts of first instance.

In the civil area, it is certainly worth mentioning a project (POLIS) that has been piloted in some courts and that is finalized to create a database of the sentences of both the court of first instance and the court of the appeal of a particular district. Some sentences, as well as a limited access to the state of the proceedings, are already available on the web for remote access by lawyers (POLIS WEB). One of the most relevant difficulties right now it is not technology, but the need to make judges work with the personal computer in order to have the sentences in the data base, as well as to change the organizational workflow. The application should be progressively extended to the other courts and be connected to the case management systems but, once again, the step between the pilot and the software dissemination seems to be always very difficult in the Italian experience.

POLIS, and POLIS WEB, should also be further developed to implement a „full civil proceeding on line".[11] This is the most ambitious projects in the civil area, which is also connected to the diffusion of the digital signature.

One of the projects that cuts through both the civil and the criminal areas is the development of the database of the Court of Cassation, which contains European Union, State, and regional legislation, as well as jurisprudence of the Court of Cassation, the Constitutional Court, the Council

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[11] The Presidential Decree n. 123 of 13 February 2001 has established the so called „technical rules" to implement the „civil proceedings on line".

of State, and the Court of Account. Historically, the Court of Cassation has been the only one court to provide an electronic access to abstracts of its sentences through an information retrieval software (Italgiure-Find) based on a mainframe technology. This service is available for free to judges and prosecutors and on payment for all the other users. The system should shortly migrate to a client-server architecture, with a more user-friendly interface as well as a more powerful full text research engine. In addition, an XML (eXtensible Markup Language) schema has also been used to tag the sentences of the Court of Cassation.

The nationwide „Public Administration's Unified Network" (RUPA),[12] should foster the development of electronic data interchange, but so far it has not been so. Actually in Italy, by law[13] it would be already possible to exchange documents electronically but the necessary working procedures to make it really happen have not been adopted yet. The law allows the electronic transmission of documents among public administrations and private organizations or citizens. Technical rules[14] were enacted to set up the rules for the use of the digital signature[15] and at this time seven companies have been authorized by the AIPA to act as the certification authorities[16] of public keys. The Ministry of Justice, as all the public agencies, according to the technical rules, „shall on [its] own authority, generate, store, certify and use [its] own public keys".[17]

A „Justice Unified Network" (RUG)[18] is already operational as sub-network of the National public administration's unified network. At this time, judges and prosecutors, through the Justice Unified Network, have access to the National Criminal History Record, the database of the Court

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[12] The RUPA project („Rete Unica per la pubblica amministrazione"), was approved by the Council of Ministers on September 5, 1995 (Official Gazette n. 272 Nov. 1995), it supplies a broad band for the public administration's network. RUPA stays for „Public Administration's Unified Network".

[13] Presidential decree n. 513, Nov. 10, 1997.

[14] Council of Ministers decree February 8, 1997: „Technical rules to implement the Presidential decree n. 513, Nov. 10, 1997".

[15] „Digital signature means the result of a computer-based process (validation) implementing an asymmetric cryptographic system consisting of a public and a private key, whereby the signer asserts, by means of the private key, and the recipient verifies, by means of the public key, the origin and integrity of a single electronic document or a set of such documents", Presidential decree n. 513, Nov. 10, 1997, 1/b.

[16] „Certification authority means the public or private entity that affects the certification, issues the public key certificate, makes the public key and the corresponding certificate publicly available, and publishes and updates certificate suspension and revocation lists", Presidential decree n. 513, Nov. 10, 1997, 1/k.

[17] Presidential decree n. 513, Nov. 10, 1997, sect. 17/1.

[18] RUG stays for „Rete Unica Giustizia", „Justice Unified Network".

of Cassation, and the database of the Department of Prison, as well as to e-mail services.[19]

4. Concluding remarks

The establishment of the AIPA has certainly contributed to boost the development of ICT projects in the public administrations in general, in the Ministry of Justice, and in the courts. The evaluation on infrastructure, hardware investments, and new rules enacted certainly can be positive, but a lot has still to be done on software applications, training and project management. Unfortunately, the gap is very deep between what has been projected and what has been realized until now. Actually, the working applications that are currently running in the Italian courts and prosecutor's offices are very few, considering the huge numbers of projects, and in comparison with some others European countries.[20] In the Italian courts there are a lot of feasibility studies, initiatives, pilots, prototypes, but the number of working systems in a large number of judicial offices is still quite low. With a motto we could say that in the Italian Judiciary „everything is feasible, but few things are realizable".

At least in the Italian courts, ICT has not been yet the enabler of change that many policy makers expected it to be.

Technology has not really challenged the actual organizational structures, the structure of power,[21] the procedures, ICT has not produced so far any perceived improvements in the justice system performance[22] as well as any significant organizational change. The judicial organization does not seem able to enhance a learning process,[23] while it is stuck in the old procedures, practices, routines, and power structure.

The risk of a goal displacement in the introduction of information technology is very high. The introduction of information technology is not a

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[19] In 2002, the Ministry of Justice had already over 24,000 e-mails accounts (Augusto, 2002).

[20] *Fabri M.* and *F. Contini* (2001) (eds.), Justice and Technology in Europe: How ICT is Changing the Judicial Business, The Hague, The Netherlands.

[21] *Weick Karl* (1990), Technology as Equivoque: Sensemaking in New Technologies, in *Goodman P.,* Sproull L. and Associates (eds.), Technology and Organizations, San Francisco, Jossey Bass, 1-43. *Garvin D.* (1993), Building a Learning Organization, „Harvard Business Review", July-August, 78-91.

[22] Italy has probably the biggest backlog and the slowest pace of litigation, both criminal and civil, among all of the Western countries. For the excessive duration of trials Italy has been repeatedly condemned by the European Courts of Human Rights.

[23] *Senge P.* (1990), The Fifth Discipline. The Art and Practice of the Learning Organization, New York, NY, Doubleday Currency.

goal itself, but it should bring a perceived benefit to the functioning of courts such as: more visibility, more accountability, a better quality of decisions, a faster pace of litigation, a decrease in the cost of the proceedings.

The judiciary has been quite poor at evaluating and measuring the actual contribution made by technology to the administration of justice. Technology is a great opportunity of support to the judicial process and a stimulus for the revision of old and dysfunctional practices but it is not a „plug and play" tool. It needs to be carefully sustained and put in the correct institutional governance setting to give some positive organizational outcomes.