



UDC 342.9

## INFORMATION TECHNOLOGIES IN PUBLIC ADMINISTRATION AND IN THE JUDICIARY

Galina SYTNIK,

Postgraduate Student of National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

### SUMMARY

The article marked approaches to the use of information technologies in the judiciary. It is noted that the information is the most important resource of the country, along with financial, natural, labor, material and other resources. The implementation of a sound system of governance will help court organizations work together to achieve common goals, instead of working as discrete, competing units. It will produce a single set of priorities that will allow resources to be focused more effectively on solving the highest priority problems as quickly as possible. The article outlines approaches to the definition of the category "information resource" in Ukraine and in the world. Analyzed are normative legal acts that use the term "information resource".

**Key words:** judicial authority, information, management, administrative law, government.

### ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В СФЕРЕ ГОСУДАРСТВЕННОГО УПРАВЛЕНИЯ И В ДЕЯТЕЛЬНОСТИ СУДЕБНЫХ ОРГАНОВ

Галина СЫТНИК,

аспирант

Национального технического университета Украины «Киевский политехнический институт имени Игоря Сикорского»

### АННОТАЦИЯ

В статье обозначены подходы к использованию информационных технологий в деятельности судебных органов. Отмечается, что информация является важнейшим ресурсом страны наряду с финансовым, природным, трудовым, материальным и другими. Внедрение надежной системы управления поможет судам, работающим вместе, достичь общих целей, а не работать в качестве дискретных конкурирующих подразделений. Она будет создавать единый набор приоритетов, которые позволят более эффективно сосредоточить ресурсы на быстром решении наиболее приоритетных задач. В статье обозначены подходы к определению категории «информационный ресурс» в Украине и в мире. Анализируются нормативно-правовые акты, которые используют термин «информационный ресурс».

**Ключевые слова:** судебная власть, информация, управление, административное право, правительство.

### REZUMAT

Articolul descrie abordările privind utilizarea tehnologiilor informaționale în activitățile sistemului judiciar. Se remarcă faptul că informațiile reprezintă cea mai importantă resursă a țării, împreună cu resursele financiare, naturale, de muncă, materiale și alte resurse. Introducerea unui sistem de management fiabil va ajuta navele să lucreze împreună pentru a atinge obiective comune, în loc să funcționeze ca unități concurente discrete. Acesta va crea un set unic de priorități care vă va permite să concentrați mai eficient resursele pentru a răspunde cât mai repede posibil sarcinilor cu cea mai mare prioritate. Articolul descrie abordările privind definirea categoriei "resursă informațională" în Ucraina și în lume. Sunt analizate actele normative legale care utilizează termenul de "resursă informațională".

**Cuvinte cheie:** autoritate judiciară, informații, management, drept administrativ, guvern.

**Introduction.** Information Technology (IT) has captured unprecedented importance at national as well as global level as one of the vital factors for growing and sustainable economy, good governance, and administration of justice.

The use of information technology (IT) in public administration has been developed in two dimensions: office automation and information systems. The first dimension (i. e. office automation) seeks to raise efficiency and productivity of office business; the second one aims at organizing and utilizing information to support administration and management, as well as policy development and

decision-making, so as to improve effectiveness, efficiency, and productivity of an organization as a whole.

IT revolution is sweeping the globe. The idea that Information Technology (IT) can be an enabling force, not only for business and trade but also for government, has now been widely accepted. However, a cursory glance at the existing initiatives in developing countries seems to suggest a mixed picture. With the exception of several worthwhile utilization of IT in particular sectors, IT applications seem to have had no remarkable effect on the manner in

which citizens benefit from the services of the government. Against this backdrop, the efforts of the developing countries to harness Information Technology seem like a major initiative to deliver an improved administration [1].

**The purpose of the article.** In the study of this topic, we need to identify approaches to the use of information technology in public administration and in the activities of the judiciary. We also need to define the category of "information resource" in Ukraine and in the world.

**Methods and materials used.** The issue of legal and methodological aspects



related to the information and legal activities of the state was covered in the works of A.I. Bryzgalov, I.P. Golosnichenko, D.A. Kerimov, and others.

Office automation consists mainly of three components: word/text processing, data processing and calculation, and communications. Word/text processing technology includes word processors, electronic editors, scanners, printers, plotters, project panels, and desk-top publishing. Capture devices (optical mark reading, optical character recognition, digitizer) and mass storage support (magnetic, optical: CD-ROM, WORM, CD-R/W) are designed for accelerating data input and storage. Database and spreadsheet software are used for data processing and calculations in an office environment. Multi-function telephones, facsimile machines, electronic mail, electronic conferencing, etc., are the tools provided by information technology to improve communications between offices. In addition to the three aspects, some other applications of computer software, such as presentation, graphics, and various business software, are also extensively used to raise the efficiency and productivity of office business [2].

A foundational component of public administration, Information Resource Management (IRM) can be understood as a philosophy of management that recognizes and calls for the creation, identification, capture and management of information resources as corporate assets to enable and support the development of policy and effective decision making.

The roots of modern IRM have a very long history, and may logically be traced back to the College of Notaries and the nascent bureaucracies of the Italian city-states and Signorie beginning in the mid-14th century, the great state chancelleries which emerged in England and France during the 15th and 16th centuries through to the appointment of a new class of public records administrators and archivists, seminally in France in the period immediately following the Revolution of 1789. Essentially, as the administration of the state became more complex and more sophisticated over time through the late medieval and early modern periods, so too did the management of its documents and records. By the end of the 19th moving into the early 20th century, codifications of rules and procedures for records management

emerged in a series of administrative manuals, ultimately leading to the rise of a new professional class of bureaucrats uniquely occupied with the administration of documents and records [3].

Information Resource Management is an idea whose time has come. While the notion has existed for more than a decade, recent developments in the field of information processing have made the concept and the philosophy underlying it, not only viable but imperative. Interpreted literally, IRM suggests that information should be recognized as a valuable entity, independent of the technology that manipulates it. As such, it is recognized as a significant organizational resource in much the same way as people, machines, and capital. Therefore, information should receive serious management attention [4, p. 257].

Most enterprises today are critically dependent upon automated information for both daily operation and management control. Today, information is the most important and highest-leveraged resource the enterprise controls – the means by which all other resources are managed. Yet, few businesses have begun to exploit the enormous strategic potential of a well-integrated information environment. Most enterprises function at a small fraction of their potential productivity with a set of terribly dis-integrated, inconsistent, and often redundant application systems, operating on an underlying redundant, inconsistent, and untimely data mess. The main obstacles to exploiting the information resource are internal to the enterprise, and can be easily overcome – it is truly a common sense proposition [5].

An urgent is the need to develop a legal definition of the general category of “information resources”, which is widely used in modern rule-making and enforcement. Solving these problems requires first of all refer to the interpretation of the concept of “resources”. In general, under the Resource understand stocks, sources of funds, the funds are used, if necessary. Resources are considered to be a necessary element of a backbone (or condition) is appropriate given the organization of human activity in which the input resource is transformed into an output caused by the resource form and quality appropriate for the purposes of activities. The basis of these processes – handling of knowledge, which are converted into a form

accessible to the user – the information they accumulate, generalized, systematized according to various criteria, and shall be in the form of information resources.

According to the Law “On information”, information is documentary or publicly announced news about events and phenomena in society, state and environment. The Law shall apply to informational relations arising in all spheres of life and activity of society and state while getting, using, spreading and keeping information [6].

The importance of information resources management also increases with the evolution of computer applications from transaction processing to information processing. At the early stage of computer applications, data processing (DP) systems are developed for clerks. The DP systems process the transactions of operating a business, which are of course important in the operational or lower level control of business activities, and computers have allowed important improvements in the productivity of these clerical workers. However, the applications, no matter how effective, rarely reach into the office of the management. Thus the role of information resources management beyond simple transaction processing is not even considered by management in many organizations [2, p. 194].

The Chinese government was famous for the way it guards information, but nowadays many national, provincial and municipal government offices regard the provision of information as a key function of government services. This fundamental change of the government’s attitude towards information has a strong impact on library collections and services. As China continues to emerge as a key political and economic player in the world arena, the demand for information on China is growing [7].

Despite the fact that Ukraine has accumulated a large number of information sources, a number of information centers, a network of public, scientific and educational libraries, and data volumes are constantly increasing, the questions of formation and use of national information resources remain constantly relevant and difficult to address. Law “On Basic Principles of Information Society Development in Ukraine for 2007–2015” suggests that one of the areas for the development of an information society in Ukraine is creating public electronic



information resources on the basis of taking into consideration national, outlook-based, political, economic, cultural, and other aspects of Ukraine's development.

According to the article 10 of the Law "On Scientific and Technical Information" informational resources of the national system for scientific and technical information are a system of information and reference funds equipped with an appropriate indexing and search engine and necessary technical facilities for storage, processing and transmitting, which is owned, managed and used by the state bodies and scientific and technical information services, scientific and research libraries, commercial centers, enterprises, institutions and organizations [8].

The Law of Ukraine "On the Basic Principles for the Development of an Information-Oriented Society in Ukraine for 2007–2015" referred that certain legal principles for building an information society in Ukraine have already been formed: the Verkhovna Rada of Ukraine adopted a number of regulatory and legislative documents that, in particular, shall regulate social relationships connected with the creation of information electronic resources, the protection of intellectual property for these resources, the institution of electronic document circulation, and the protection of information.

The development of an information society in Ukraine and the institution of the latest information and communication technologies in all areas of the life of the society and the activities of government bodies and bodies of local government shall be determined as one of the priority areas of government policy [9].

Thus, we can conclude that the information resources are a multifaceted subject of legal regulation, which are of particular importance for the formation of a complete and effective public administration. Moreover, the specific role of information resources in the implementation of government activities leads to his position as an object of state administration and the activities of legal entities on the use of state information resources – as an object of administrative and legal regulation.

In order to determine which information technology can improve jurisdiction, it is necessary to know what the work of the judiciary is, and how it uses information to do that work. The judiciary in The

Netherlands is quite similar to a large business. In 2002, the judiciary had more than 8 500 staff employed, a budget of 650 million and a turnover of approximately 1 583 000 cases. There are 19 district courts with normally four sectors each: a civil law sector, a criminal law sector, an administrative law sector and a local courts sector. The civil law sectors have a specialized commercial unit and a unit for summary proceedings. The formerly over 60 local courts were administratively integrated into the districts courts in 2002. They deal mostly with small money claims, traffic violations, minor family matters, and employment and rent contracts. In these fields, they also have summary proceedings. There are five appeal courts which hear appeals of civil, criminal and some administrative cases [2, p. 190].

In common law court systems, like the U.S. and the U.K., in both civil and criminal justice, cases are ultimately decided by trial if they are not settled in an earlier phase. Very few cases actually come to trial, and trial rates vary widely across countries. Some of those trials are conducted in front of a jury. In those trials, the principle of immediacy of evidence is very important. This means the evidence itself needs to be presented in the courtroom: witnesses making a statement, exhibits like original documents and objects. This has given rise to implementation of information technology to support conducting trials [3].

Dory Reiling said that Finland, Austria and the United Kingdom, but also Estonia, Slovakia and Hungary, are in the very high implementation group. High levels of implementation can be found in France, Germany, Sweden, Latvia, Bulgaria and the Netherlands. Belgium, Ireland and Croatia are in the moderate level group. In the low level group we find Cyprus, Ukraine and Russia [4].

But regulation "On access to public information in the Supreme Court of Ukraine" laid the foundations for the administrative and legal regulation of judiciary in the conditions of use of information technology [5].

Over the last several years, interest in high-technology courtrooms has grown. Traditional litigators and judges whose skills were honed without the newfangled gadgets were not the fastest to embrace new technologies. As time passed, however, the

population of old-school litigators dwindled and interest in litigating in hightechnology courtrooms increased.

At its foundation, courtroom technology is a means for putting evidence before everyone in the courtroom – the judge, the jurors, the opposing lawyers, the courtroom support staff, and even onlookers – at the same time. The displays – usually on monitors or projection screens – convey many kinds of information more efficiently. Most lay people can look at a display and follow along with an explanation more readily than they can find the place in a hard copy document and try to read the small type while also trying to listen.

Because lawyers are accustomed to handling documents and practice doing that every day, they often fail to appreciate that lay jurors often have no similar experience. Courtroom technology is also a means to draw attention to particular points, to emphasize certain aspects of the evidence, and to make visible that which otherwise would exist only as a mental picture formed from words spoken by an advocate or a witness. It is these enhancements and their messages that form the basis for objections concerning the limits of technological displays and new considerations with respect to the control that judges exercise in the courtroom and in creating the record [5].

Today's social and political environment places ever increasing demands on courts to share information with other courts and various law-enforcement agencies. One of the most promising technologies that facilitate information sharing is Extensible Markup Language, commonly referred to as XML. XML has been around for a number of years, but it has taken the development of standards and supporting applications to bring this technology to the courts.

XML is a technology that has matured over the last few years. The development of national and justice XML standards has established a platform that any court can use to produce their own IEPD and enable information exchanges with improved costeffectiveness.

Once information behemoths such as the FBI implement XML, then the accomplishment of mandatory reporting will show even greater improvements and implementing them will be much easier and cheaper. Missouri has already identified a handful of exchanges that could be



implemented in short order if the receiving agency could accept XML [6].

Placement of information about the activities of the courts on their official websites designed to ensure the rights of citizens to obtain information on the activities of the Court; improving the quality of justice at the expense of its public objective and fair coverage and discussion; raising the level of legal culture of citizens; assist in the implementation of constitutional rights of citizens to judicial protection, reducing the number of appeals to the court, and free access to legal and judicial information; ensuring the protection of information classified as privileged prevention of offenses and crimes; improvement of judicial practice and the establishment of civilian control over the judiciary.

Dr. Elizabeth R. Osborn writes about the Indiana Supreme Court through its "Courts in the Classroom" project to employ webcast technology (primarily through the broadcast of its oral arguments and the creation of related teachersupport materials).

Dr. Elizabeth R. Osborn finds that the justices, lawyers, teachers, students, and citizens all consider the installation of webcast equipment into the Indiana Supreme Court chambers as an unqualified success. Through a wide variety of webcasts, the court is reaching out to the public to educate them not only about how the judicial branch works, but also about the history of the courts and the law in both Indiana and the nation as a whole. While most courts might initially consider installing the equipment necessary for streaming video to broadcast their oral arguments, once the equipment is in place, it only makes sense to get as much use out of it as possible. Generally, the only additional expense incurred to broadcast a wide variety of other events that take place in the courtroom is the cost of the staff person to run the equipment. But the use of the equipment is limited only by your imagination [7].

The implementation of a sound system of governance will help court organizations work together to achieve common goals, instead of working as discrete, competing units. It will produce a single set of priorities that will allow resources to be focused more effectively on solving the highest priority problems as quickly as possible.

It will provide a forum for resolving related policy, business, and technical

issues in a thorough, systematic way. Better expectation management will result in a lower level of frustration. Conflicts will be resolved before they damage working relationships. Technology staff will receive clear, unambiguous direction. Solutions will be business driven, rather than technology driven [8].

**Conclusions.** Thus, today the information is the most important resource of the country, along with financial, natural, labor, material and other resources. Moreover, the state officially recognized the information as a resource and in a number of normative acts use the term "information resource". The administrative – legal regulation of judiciary in the conditions of use of information technology includes the process of informatization of the judiciary, the establishment of regulations for the implementation of information functions of the judiciary, judicial statistics and staffing of courts in order to ensure free access to information on the activities of vessels. So, at the present stage of development of society the implementation of the information function of the state in the judiciary is above all to promote the development of the information society, improving the quality of life through the full implementation of technology in the judiciary, while creating the conditions for full protection of the rights of all subjects who take in the administration of justice.

#### References:

1. Globalization and Information Technology: Forging New Partnerships in Public Administration. URL: <http://unpan1.un.org/intradoc/groups/public/documents/eropa/unpan008237.pdf>.
2. Information resource management. URL: <http://www.unpan.org/Portals/0/60yrhistory/documents/Publications/Rethinking%20public%20administration.PDF>.
3. Brown R., Caron D.J. Information resource management. URL: [http://www.dictionnaire.enap.ca/dictionnaire/docs/definitions/definitions\\_anglais/information\\_rm.pdf](http://www.dictionnaire.enap.ca/dictionnaire/docs/definitions/definitions_anglais/information_rm.pdf).
4. Eileen M. Trauth The Evolution of Information Resource Management. North-Holland Information & Management. 1989. № 16. P. 257–268.
5. Concepts of information resource management (IRM). URL: <http://www.williamsmith.com/irm.html>.
6. The Law of Ukraine "On Information". URL: <http://zakon4.rada.gov.ua/laws/annot/en/2657-12>.
7. Chinese E-Government Information Resources and Services. URL: <http://www.white-clouds.com/iclc/cliej/cl28XL.pdf>.
8. The Law of Ukraine "On Scientific and Technical Information". URL: <http://zakon1.rada.gov.ua/laws/annot/en/3322-12>.
9. The Law of Ukraine "On the Basic Principles for the Development of an Information-Oriented Society in Ukraine for 2007–2015". URL: <http://zakon2.rada.gov.ua/laws/annot/en/537-16>.
10. Reiling D. Doing Justice with Information Technology. Information & Communications Technology Law. 2006. Vol. 15. № 2. P. 189–200.
11. Reiling D. E-justice: experiences with court IT in Europe. URL: <http://www.ijusticia.org/docs/Dory.pdf>.
12. Regulation "On access to public information in the Supreme Court of Ukraine". URL: [http://zakon5.rada.gov.ua/laws/show/v16\\_0700-11/conv](http://zakon5.rada.gov.ua/laws/show/v16_0700-11/conv).
13. Effective Use of Courtroom Technology: A Judge's Guide to Pretrial and Trial. URL: [http://www.fjc.gov/public/pdf.nsf/lookup/CTtech00.pdf/\\$file/CTtech00.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/CTtech00.pdf/$file/CTtech00.pdf).
14. Gibson R. Information Sharing and Extensible Markup Language (XML). URL: <http://cdm16501.contentdm.oclc.org/cdm/ref/collection/tech/id/575>.
15. Osborn E.R. Webcasting: It's Not Just About Oral Arguments Anymore. URL: <http://cdm16501.contentdm.oclc.org/cdm/ref/collection/tech/id/584>.
16. Webster Lawrence P. Technology: The NCSC Court IT Governance Model. URL: <http://cdm16501.contentdm.oclc.org/cdm/ref/collection/tech/id/578>.

#### ИНФОРМАЦИЯ ОБ АВТОРЕ

**Сытник Галина Александровна** – аспирант Национального технического университета Украины «Киевский политехнический институт имени Игоря Сикорского»

#### INFORMATION ABOUT AUTHOR

**Sytник Galina Aleksandrovna** – Postgraduate Student of National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"