# UNIVERSITY OF LJUBLJANA FACULTY OF ECONOMICS

# MASTER'S THESIS

# AN ANALYSIS OF THE SLOVENIAN E-JUSTICE STRATEGY FOR THE PERIOD FROM 2008 – 2013

#### **AUTHORSHIP STATEMENT**

The undersigned **Luka Narat**, a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), declare that I am the author of the master's thesis entitled **AN ANALYSIS OF THE SLOVENIAN E-JUSTICE STRATEGY FOR THE PERIOD OF 2008 – 2013**, written under supervision of **prof. Miro Gradišar**, **Ph.D.** and co-supervision of **Miguel de Castro Neto**, **Ph.D.** 

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# INTRODUCTION

Wolfensohn (in Malik, 2002, p.1) says the following: "The capabilities of information and communication technologies, together with a rising sense among people all over the world that they are entitled to participation openly in government and society, offer enormous potential for advances that can be of great and lasting benefit to all people of the world... and particularly to the poorest people of the world."

The justice system has an important national and strategic purpose within each and every country and economy. It is undoubtedly among the key factors when it comes to providing security, economical progress and prosperity. Globalization and social trends keep presenting new demands on judiciaries internationally, while at the same time technological and communicational advances offer opportunities to judicial policy makers to make Justice more transparent, effective and accessible to citizens, (Malik, 2002, p.4). Based on this, it seems crucial that the functioning methods, processes and the material pillars of the justice system are kept up to date with technological advances which are already aiding various other sectors in modern day economies.

Information and communication technology (ICT) is perhaps among the most important and in many ways the least exploited fields of the current justice systems in many countries to-date (Agusti, 2009, p.21). It is generally accepted that most of the increase of productivity and functionality within any given system may come from a properly planned, managed and thought out implementation of modern ICTs. Furthermore, ICT should not only bring support to existing processes, but also the possibility of increasing effectiveness and efficiency of both business practices and processes.

It is therefore not surprising, that developing and implementing an e-justice system seems to be of somewhat high priority in most countries. While some pride themselves on already functional systems, others trail behind having invested heavily with little improvement in the performance and accessibility of judicial sector institutions (Carnevali, 2006, p.35). These uneven returns result in a need for consideration of several factors when it comes to electronic enhancement of the judicial system.

In accordance with these developments, the European Union has established an online justice system on its level as well, aiming to facilitate cross-border disputes and providing citizens and businesses all over Europe with a fast and affordable civil procedure which applies in civil and commercial matters where the value of the claim does not exceed €2,000 (European Union Agency for Fundamental Rights, 2011).

It is, however, important to note that, in spite of the appealing benefits of electronic systems, the Court of Justice of the European Union (CJEU) recently underlined the importance of justice systems not to strive towards exclusively electronic means of access due to the danger that thus "the exercise of rights might be rendered in practice impossible for certain individuals" (European Union Agency for Fundamental Rights, 2011). Therefore, the

electronic version of justice should remain a branch of the traditional system, but may prove to carry substantial loads of weight as it reduces costs and workloads and increases effectiveness and efficiency in various sectors of Justice.

On October 12<sup>th</sup> 2006, the government of the Republic of Slovenia accepted the resolution of national development projects for the time frame of 2007-2023 in which it has outlined the task of connecting the services of the institutional environment with the use of technological innovations as crucial. This task is being carried out in the framework of the strategy of computerization of the justice system, which is coming to its end in 2013 (Slovenian Ministry of Justice, 2008).

A new strategy of computerization of the Slovenian justice system will have to be formulated to ensure the ongoing development and improvement of the justice system. This strategy should be based on ICT advances and knowledge gained in the previous 5 years of strategic implementation of the e-justice system in Slovenia. However, keeping in mind the increase in development of e-justice within many other European countries, a comparative analysis should also be considered as a key aspect in formulating the new strategy.

A strategy based on comparative analysis could benefit greatly from examples of best practices, and would also make it less likely for undesired outcomes to arise in the future.

The purpose of this thesis is to thoroughly examine the state of e-justice systems in Slovenia, Portugal and Austria and compare the strategies of their development. The purpose is also to understand how a specific strategy influenced the success of the development and implementation of e-justice systems in particular countries. It will be necessary to establish a common framework, based upon which, a clear comparison can be created.

Focusing on locating common grounds and areas within a state's strategies will provide clear visibility of distinctions in these same areas and should thus allow a comparison of strengths and weaknesses of a specific distinction based on the current state of a specific e-justice system. These strengths and weaknesses will also allow us to establish an optimal model for a new strategy of e-justice in Slovenia.

The final goal and outcome of the thesis is a proposal for renovation of the strategy of e-justice development and implementation in Slovenia that will need to be formulated by the Slovenian Ministry of Justice in 2013.

For the purposes of writing my thesis, I will be using knowledge acquired from my studies thus far and practical experience gained on the field of information technology. Both primary and secondary sources from foreign and local literature will be used for information and data searching. In accordance with the topic of my thesis, I anticipate that numerous sources will also be ones found electronically on the internet.

In writing my thesis I will also use:

- Literature and other information resources in European Union's initiatives, directives, regulations and action plans;
- Surveys and reports on the accomplishments to-date in the implementation and usage of e-justice systems in various countries;
- Studies, reports and white papers on Strategy assessments;
- Other references in order to meet the objectives of this thesis.

Among the primary sources I will be using, a good part of my examination and writing will be based on the "Study of the Effect of Computerization on the Justice System" conducted by the Faculty of Economics. Said study has been carried out in Slovenia by the cooperation between the Faculty of Economics and Faculty of Law, both of which are members of the University of Ljubljana, as part of the research program entitled "Competiveness of Slovenia 2006-2013".

Extra caution will be paid when it comes to terminology. As the field of study is known to be very diverse and rapidly changing, the key terms within chapters will be clarified and defined. As the field of study is known to be very diverse and rapidly changing, numerous definitions exist for the same term and terms can carry various meanings. For example, the "e" in ejustice can very easily be understood in different scopes and meanings. Therefore, the key terms within chapters will be clarified and defined.

Techniques such as SWOT analysis and the comparison of the current state and future needs will be used to examine the strengths and weaknesses of independent current strategies. Comparative analysis will be done for comparison of different strategies and the method of synthesis used to determine the optimal guidelines for a strategy renewal.

# 1 ELECTRONIC JUSTICE SYSTEMS

# 1.1 Computerization of business processes

It has become nearly impossible to imagine a business environment with the absence of Information Technology (IT). Globally oriented business is forcing all economic sectors to change their ways of doing business and apply new technologies where suitable at an increasing pace. Government sectors experience weaker pressure to incorporate new technologies into their business processes due to the fact that they are not ruled by competitive forces, nevertheless, they are pressured by their residents, who demand short response rates, fast processing of requests and an up-to date system in general.

The need for computerization, however, brings about the necessity to restructure or reengineer business processes. Information technology can have different roles in the implementation of business process reengineering in organizations.

It can act as a restrictor, where existing information systems, inflexible IT infrastructure and the integration of business processes into information systems prevent business process reengineering. All of the above can be further catalyzed by the lack of investment in new information technology because of financial constraints.

Another role of information technology can be as a catalyst, which means that the acquisition of new IT enables business change. Neutral role of IT can be a result of a lack of information technology systems and infrastructure within an organization. The latter exists in industries with low intensity or low information competition.

The next possible role of information technology in the renovation of business processes is the role of momentum, which means that the organization has the technological capabilities to want to take advantage of business opportunities through which information technology is not one of the limiting factors.

If information technology is a key factor in the performance, we are talking about information technology as an enabling and not a restrictive factor. There is sufficient investment, and the management has a clear business vision.

The last possible role of information technology is a proactive one, where management has a clear business vision. Information systems and infrastructure are properly developed and there is little restriction in the development of information technologies. Management in this case acknowledges the potential of information technology.

The different roles of information technology can effectively support the various types of renovations of business processes. If business process reengineering (BPR) is not compatible with the state of information technology in the organization, the probability of success of BPR is reduced (Eardley, Shah & Radman, 2008, p.629-635).

The main goals of restructuring and redesign of business processes are oriented towards (Bauer, 2007, p.12):

- reduction of time,
- enhancing quality,
- reduction of costs,
- providing key capabilities.

The impact of the information age (Kaplan, 2000) is, however, much more revolutionary for service-oriented organizations rather than industrial ones. Many service organizations in the fields of shipping, utilities, communications, finance and health have existed for decades in low or uncompetitive environments, while also being protected by governmental mechanisms from potentially more innovative competitors by dictating rates and prices that provided profit, suitable for investment and cost basis. In the last two decades, however, initiatives to reduce state control and increase privatization of governmental services and organizations around the world have taken effect and have changed the paradigm of the service industry. The judicial system logically remains under governmental control to a large degree, but in order to produce less costs and operate at a greater efficiency, it is in need of changes and forced to follow trends set by other service-oriented organizations as much as any other privately owned company.

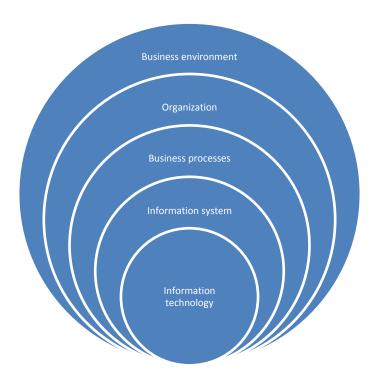
Additionally contributing to the difficulty and an increased risk for successful implementation of changes in organizations are the following factors (Bauer, 2007, p.15);

- complexity management,
- provision of facilities,
- ensuring the integrity of operations and
- ensuring the integrity of information.

In the past, organizations dealt inadequately or with poor integrity of information with the consumption of other resources (human, financial). In a time when the economy is based on different leverages, such approach is no longer affordable. Many organizations have responded to the changes of environmental factors with the introduction of more sophisticated information architecture and system planning, basing these plans on business strategies attempted to build complete IT environments – Information Systems (IS) which consist of the interaction between people, processes, data and technology (Markič, 2004, p.41).

The planning and placement of IS in the organization's environment must necessarily take into account all relevant aspects of its functioning. Every project of construction, renovation or improvement of IS must be clearly laid down and have clear benefits for the organization itself. Based on these criteria the management of an organization should create an IS plan and provide funds for the project (Markič, 2004). The result of this plan should be a strategy for IT implementation and it is based on this strategy that changes in processes will be harmonized with the successful implementation of new technologies (Ward & Daniel, 2006, p. 84).

Figure 1: Information technology and Information system in business codependence



Source: M. Markič, Inoviranje procesov: pogoj za odličnost poslovanja, 2004, p.40.

# 1.2 Strategic planning of IT

IT strategic planning can be defined as the analysis of an organization's operations and the analysis of its existing information system, which enable the organization to elaborate a strategic plan for IT, which will in turn enable it to achieve its strategic objectives and long-term competitive advantage.

Burlton (2001, p.10) notes that organizations devote much attention to the kind of architecture or IS structure, that allows a clear identification of participants, processes, the organization itself and the possible interconnections.

The environment in the information age demands new capabilities of the organization in order for it to achieve competitive success. The ability of an organization's management to engage and exploit their intangible assets (data, knowledge in the minds of people, formal and informal connections, reputation, etc.) has become more important than investing and managing physical, tangible assets. Intangible assets enable the company to (Bauer, 2007, p.18):

• build relationships with customers to ensure loyalty of existing customers and enable efficient and effective delivery of services to new segments, customers and market areas;

- introduce innovative products and services that want to target customer segments;
- produce high quality products and services, tailor-made, low prices and short delivery times;
- exploit knowledge of employees and their motivation for continuous improvement, production capacity, quality and response time;
- use information technology, databases and information systems.

A long-term IT strategy should be updated and coordinated with the guidelines on the development of IT on one side and changes in business processes on a yearly or even on a monthly basis. It can be said that the IT strategic planning process is an ongoing one.

Strategic planning begins with a vision and the establishment of the necessary IT resources for its achievement. The medium-term planning goal is the selection and prioritization of the projects.

There are a number of methods to support strategic planning. Some are primarily focused on ensuring consistency between the IT strategy and the business strategy, and others on the impact of IT on business renovation. Some of the most important ones are (Turban & Volonino, 2010, p.64);

- 1. Business service management (BSM) is an approach that links the key performance indicators (KPI) IT and business goals in order to determine the impact of IT on their effect. The BSM approach can be used to understand the impact of business needs of the IT services and infrastructure. This understanding is important in planning business and IT services with changing needs and objectives.
- 2. Business Planning System (BPS) was developed by IBM. The methodology starts with a business strategy based on business objectives. The objectives are derived from business processes from which data models that represent information architecture are then made.
- 3. Balanced Scorecard (BSC) is a method of organization management, which is based on key performance indicators and accounts for financial and non-financial indicators of the operational state and the functioning of the organization.
- 4. Critical success factors (CSFs) are the factors that a have a key impact on the success and survival of organizations. The methodology assumes that the organization needs to determine 3 to 6 factors and control them. If it can do that, it is successful. The methodology has various versions adapted to different types of profit (manufacturing, services) and non-profit organizations.
- 5. Scenario planning is a methodology that begins with the creation of several scenarios and then a group of participants tries to find as many events in the future that can influence the outcome of each scenario. The methodology is appropriate when the future is highly

uncertain. This is often the case when IT plays an important role within a scenario, especially in electronic commerce.

If an organization wishes to exploit to the maximum the benefits of business management (business strategy and organizational processes) and IS/IT capabilities (IS/IT strategy and IT infrastructure and processes) combined together, it needs to also consider and review the concept of strategic alignment. Implementing a strategy with a focus on strategic alignment reflects on the business end with a high state of synergism that leverages IS/IT capabilities and enables a company to achieve competitive advantages and an increase in business value (Henderson & Venkatraman , 1993, p.2-16)

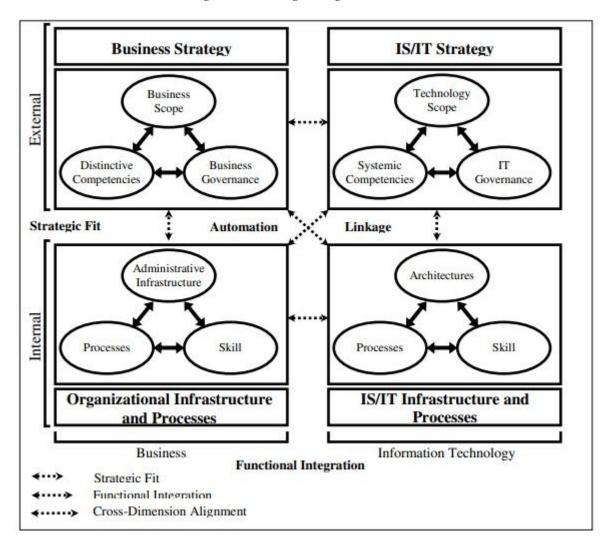


Figure 2: Strategic Alignment Model

Source: R. Shamekh, Leveraging Organizational Performance through Enterprise Business Architecture, 2010, p.16.

According to Shamekh (2010, p.89), achieving strategic alignment is a crucial issue in enterprise architecture. There is a general model of business IT strategic alignment (SAM) developed by Henderson and Venkatraman (1993, p.2-16) presented in figure 2, which can be

used as a management framework to achieve strategic alignment which enables successful implementation of business and IS/IT and their corresponding infrastructure components (Goikoetxea, 2007, p.125).

The SAM framework has two very essential characteristics of strategic management (Shamekh, 2010, p.16):

- 1. Strategic fit (interrelationships between external and internal components)
- 2. Functional integration (integration between business and functional domains)

The model can be used to evaluate the range of strategic choices that managers today face, and allow them to explore how these choices interconnect with one another (Ward & Peppard, 2002, p.29). The strategic alignment model is composed of twelve components that further define business-IT strategic alignment (Luftman, Lewis & Oldach, 1993, p.198-221). According to Luftman (2000), these components are as follows:

- **Business Strategy**: Includes the business scope (markets, products, and services where the organization competes), distinctive competencies (critical success factors and competitive edge) and business governance (relationship between management, stakeholders and the board of directors).
- Organizational infrastructure and processes: Consist of administrative structure (the way the organization organizes its businesses), processes (how the organization's activities operate) and skills (how the organization hires, motivates, trains and what kind of culture it promotes).
- IT strategy: Includes the technology scope (important information applications and technologies), systemic competencies (the capabilities that distinguish the organization's IT services) and IT governance (how risk, conflict resolution and responsibilities for IT are managed).
- **IS/IT infrastructure and processes**: Includes the IS/IT architecture (the technology priorities and policies that allow it to be integrated into a cohesive platform), processes (the practices carried out to develop and maintain applications) and skills (IT human resource considerations such as how to hire/fire, motivate, train or educate).

# 1.3 The history of electronic justice

The addition of "E" in front of a concept introduces the use of information and communication technologies (ICT) to certain fields. Following the recently developed ideas of e-governance and e-democracy, it appears inevitable that the concept of "e-justice" should gain on importance as well (Xanthoulis, 2010, p.3).

The core of the justice system is essentially based on information exchange. ICT potential is therefore extremely high in this area. It can lead to reduction of costs and time and also

improve citizen access to judicial services. All in all it can and has greatly improved the quality of justice in certain countries (Carnevali & Di Cocco, 2006, p.51-58).

There has been a noticeable increase in investments in ICT applied to the justice sector all around the world. At the basic level, this means the development of case management systems (CMS) from case tracking to automation of workflow as a whole. At a more mature level, however, it means the development of applications supporting e-filing systems. These applications can be interpreted as what we know today as e-justice or, more correctly, the Judicial Electronic Data Interchange (JEDI) (Fabri & Contini, 2001, p.112).

There is a crucial difference between the mentioned levels of technology not only in their potential benefits but also in the way security needs to be addressed. The transition from CMS to JEDI has proven in many cases to be accordingly complicated. This is mainly due to the fact that CMSs were initially planned to work as "closed information systems" of single agencies or courts (LAN and client-server architecture). LAN stands for Local Area Network, which is a type of network between 2 or more computers, usually in a limited area such as home or school. In contrast to Wide Area Networks, LAN's limit the amount of users connected (Donahue, 2007).

The main reason for the existence of CMSs was the automation and computerization of certain existing administrative tasks and keeping track of proceedings. They were developed without any particular legal constraints since the exchange of data between judicial offices or courts was not allowed electronically. (Carnevali et al., 2006, p.41-43) This is not to say that security at the level of CMSs is absent, as these systems still inherited standard security systems and methods (redundancy, back up, disaster recovery, etc.), however the fact that they run in a closed circuit environment makes them easier to secure.

The evolution of these CMSs has been gradual and one of the first major steps forward was the shift from being an automated equivalent of a single business process, to being the management system for an entire workflow of a case. The criminal sector was the main drive for these second generation CMSs as it demanded interoperability among different institutions in order to be effective. As early as the 1990s, Finland, Italy and Norway, for example, have already developed systems that supported this interoperability between different judicial offices and courts. As a result, the CMSs and their ICT infrastructure gradually began moving from a "closed local area network" to a multiplatform and, more importantly, an interconnected system. (Fabri & Contini, 2001, p.114)

This newly established form of a more open system connecting different subjects and institutions brought with it a great increase in organizational and technical complexity and therefore risks for security. Since these pre-mentioned connections were, at this stage, still finite and well defined, the problems were easily overcome with the use of virtual private networks (VPN) that are basically extended LANs designed as secured networks on a larger scale between specific entities.

However, due to the nature of economic efforts and necessary changes to the rules, this stage of CMS required a reconstruction of certain business processes and procedures. In many cases it has led to new ways of doing things in organizations and increased productivity and response times. The outcome of adaptations varied among different countries. In some cases, the problems were simple refusals to use certain instruments, while in other cases new methods required great deals of employee training (Contini, 2000, p.76). The security aspect at this point was still generally managed by the public sector as it was considered a "widespread information system" open to manageable degree (Fabri & Contini, 2001).

The current last step of CMS evolution and the ideal that countries are striving to achieve, has been the attempt to "open" the judicial information system so as to allow external subjects to view and exchange data electronically. This includes attorneys, courts and the general public and is in effect considered as JEDI when achieved. For this purpose, many countries have active projects involving enhancing their ICT infrastructure within the justice sector and upgrading or supplementing their current CMSs. Only a few countries had actual working JEDI applications in 2006, these are Finland, Austria and England. This number has grown since then, however it does reflect the level of complexity and security concerns that arise with establishing and developing these systems to their full potential (Carnevali et al., 2006, p.75). The main issue, which is driving and slowing down progress at the same time, seems to be the correlation and management of the increased potential and demand of data exchange on one hand, and the increasing perception of risk and security concerns on the other.

# **1.4** Justice online

The aim of such new technologies as JEDI is to help rationalize and simplify judicial procedures and make judicial services more accessible not only to the justice sector but also to the general public. The use of an electronic system in this area reduces procedural deadlines and operating costs, to the benefit of citizens, undertakings, legal practitioners and the administration of justice (Council of the European Union, 2008).

Based on Contini et al. (2001), applications providing e-services by electronic transactions were present in 2003 and active in the United States, most European countries, Australia and Singapore. These JEDI applications were nothing more than government portals, providing one way service which has been defined as "unidirectional" as it only provided downloadable electronic data and information. It did not provide real interaction or data exchange between the justice system and the public (Fabri & Contini, 2001, p.65).

An important thing to consider is that in order to transit from a CMS based "closed system" on to an "open system" it is not enough to simply introduce new technologies. It means "the notion of information system must leave space to the more complex notion of information infrastructure" (Hanseth, 2002, p.385).

The reason for this are not network infrastructure or security, but the complex information infrastructure generated by the different interconnected applications and networks which are

not perceived as safe enough in the justice environment. Risk management plays an important role.

According to Wildavsky (1988, p.56) "net benefit, not no harm, should be the criterion of choice (for policy makers)": "benefits will never be discovered unless risk (in the form of trial and error) is tolerated". This is still true today and typically applies to the potentials offered by information infrastructures such as JEDI. Strategies with more resilience and less anticipation are therefore preferable as the anticipation strategies may lead to more negative results and induce unexpected and unacceptable costs for safety (Wildavsky, 1988, p.89).

These complex information infrastructures introduced with the transition to an online or open judicial system, bring alongside an increased amount of changes in the business processes. It is a reasonable assumption that among all of the stages of the technological development of the justice system throughout history, this most recent step to making it an open and accessible system, available to at least some degree online, merits the highest rate of attention regarding change management.

The resistance to change within any established institution is always a strong or at least an important factor. This is even more the case when it comes to the domains of law and justice, both very bureaucratic fields, bound by numerous procedures. As a result of this heightened resistance to change, it is necessary to guarantee the principles of legal certainty, integrity, authenticity of documents, data privacy and an independent judiciary, if implementation of ICTs aims to really be successful.

Since legal efficiency and effectiveness are not only requirements but also a fundamental part of the judicial process, the reform of management roles following the widespread and increased use of networks and ICTs is a necessary occurrence (Agusti, 2009, p.15).

# 1.5 Perceived benefits of e-Justice

If implementation and integration were received as positive from the parties involved and the implementation itself was successful, the application of ICTs in justice would bring multiple documented benefits (Agusti, 2009, p.54):

- A more efficient judicial system in the way it increases productivity and diminishes costs of transaction from a system which, as we have said, is highly information intensive;
- A more effective judicial system, by reducing the duration of procedures—thus saving both time and money—and through putting systems for document resource administration as well as other associated tools (video-conferencing, software for working in collaboration online, etc.) within the reach of judges and courts;
- Increasing the citizens' level of access to the judiciary by providing the best information available and a better understanding not only of the way the courts work but

also, more importantly, of the legal instruments in their reach to ensure recognition of their rights;

- **Improved transparency** of the way the judiciary works, in that the technologies facilitate an improved control of cases and allow a better qualitative evaluation of outputs;
- Increase in the confidence of citizens and business in the judicial system. The sum of which results in a.
- Greater legitimacy of judicial power.

# 1.6 E-Justice security concerns

As already briefly indicated in previous chapters, security remains the issue of greatest concern in almost all countries, particularly those that have not developed any JEDI applications so far (Walker, 1999, p.57). It needs to therefore be addressed appropriately, and a theoretical background needs to be established in order to implement ideas into successful ICT implementation strategies.

In order to establish e-filing as a standard and help move it along its steps on the road to large-scale usage, a system will need to step in place to manage security. Current trends indicate that the future and further development of judicial data interchange in Europe will depend on the development of a reliable digital signature system and smart cards, both of which need complex infrastructures. It has been these exact infrastructure needs and the absence of clear procedures that have been slowing the pace of implementation of digital signatures and have impeded progress. The issues addressed by employing digital signatures, however, are straightforward and are presented in Figure 3: Ensuring authenticity of the sender and the integrity of documents within the justice system (Walker, 1999, p.59).

However, it does not come down to purely physical aspects of which technologies need to be implemented, when discussing security within organizations. "The core of any agency's information security program is risk and vulnerability management, which is the process used to determine whether to eliminate, mitigate, or accept vulnerabilities based on risks and cost. This process is intended to make IT environments more secure and to improve an agency's regulatory compliance" (U.S. Department of Justice, 2008, p.15). Justice departments should therefore document their vulnerability management policies and procedures in a Vulnerability Management Plan.

Message. **Digital Signature** and Senders X.509 Message Sender Create Signature Verify Signature Recipient Different keys are used to create and verify Digital Signature Sender's Sender's Private Public Key Key

Figure 3: Creation and verification of a digital signature

Source: Microsoft, X.509 Technical Supplement, 2005.

The idea that traditional paper procedures are safer than electronic versions is still very much present and is hindering the development of JEDI in many countries. It is more of a prejudice than a reality however as it is in fact well known how easy it is to manipulate or lose paper folders and documents. Searching for an "absolute security" also seems to be deterring development as it is leading most policy makers of the European countries in a clear opposition with one of the key principles of ICT development: granting high user friendliness.

Another aspect of security within e-justice is the question of information privacy. Privacy is described as "the inter-related values, rights and interests unique to individuals" (Office of the Ontario Information, 2000). When discussing information privacy this involves the right to control one's personal data and the ability to determine if and how that information should be obtained and used. The potential misuse of personal information, however, can have dramatic consequences for individuals involved.

As the involvement of ICTs in justice is increasing, so is the amount of integrated and shared information. The systems developed this way enhance the ability to collect access information and use personal and other delicate information. These systems allow the entry of information at a single point and make it available across and between many different agency systems, which is, of course, one of the reasons for their appeal in the first place. However, it is this precise simplicity that makes it equally simple to produce mistakes or harmful acts that could result in dire consequences.

As a result, a process called the Privacy Impact Assessment (PIA) can be used to evaluate privacy implications of information systems. The process in question is designed to guide justice agencies in assessing privacy throughout the early stages of JEDI development and implementation. It consists of three main parts (Office of the Ontario Information, 2000):

- 1. a map of information flows associated with the justice agency (to determine information decision points and potential privacy vulnerabilities);
- 2. a privacy analysis of the information flow that examines if the privacy principles match those that were agreed upon;
- 3. an analysis of privacy issues raised by the system review (including a risk assessment and discussion of the options available for mitigating any possible risks).

Although the term privacy is not synonymous with security they are tightly interrelated. When privacy policies are established within an organization, they normally define the mechanisms and procedures for enforcing these policies. In this sense, security is a tool or technique for implementing organizational policies, which include privacy. Security can also be divided into six basic functions (U.S. Department of Justice, 2000, p.19):

- 1. Authentication: definitively identifies individuals before they are allowed to request information resources;
- 2. Access control: permits individuals to access only those information resources they have been given permission to use;
- 3. Confidentiality: protects data from disclosure to unauthorized individuals;
- 4. Non-repudiation: verifies that transactions occurred, prevents one party from refuting the transaction to a second party;
- 5. Integrity: protects data from unauthorized modification or destruction;
- 6. Availability: minimizes business process disruption caused by information availability issues.

The first three functions indicated are considered essential in order to implement privacy policies. Privacy risks should be carefully evaluated and effective security infrastructures should be designed in order to mitigate applicable technical risks.

Cybercrime has also been an important factor in IT security and should be considered within justice departments as well. It has, in fact, become fierce enough to force the European Union to create a group to manage and oversee security of large-scale information technology systems that run throughout member countries.

In 2011 the EU member states decided that a new IT agency is to begin its mission in the summer of 2012 and operate out of Tallinn, Estonia with management and development based in Strasbourg, France. A backup site will be built in Austria. This announcement was to some degree arguably a follow-up on the installation of tougher prison sentences for cybercrime, which were agreed upon in June of 2011.

The group will oversee the Schengen Information System, (a national law enforcement database) the Visa Information System (which tracks cross border movement) and EURODAC (a fingerprint database for identifying asylum applicants and illegal immigrants) (Council of the European Union, 2011).

# 2 E-JUSTICE IN PRACTICE

# 2.1 E-Justice development worldwide

The stages of development of e-justice in various countries around the world differ greatly and their timelines are far from similar. Moreover it seems that various approaches and driving forces can be found leading to completely unrelated strategies in each country. As a result of all this and the general lack of information on the topic, it was impossible to establish a common ground for the comparison of e-justice's worldwide development. Therefore, important milestones will be outlined and put into context for a select group of countries from each continent excluding Europe, as it will be covered in the next chapter.

In Australia, the development of ICT applications was done by top law firms independently. Throughout the 1990s they developed advanced courtroom support systems featuring new forms of ICT. Interestingly, the main reasons for the development were not litigations, but rather more commercial transactions that required legal consideration or interaction such as mergers and acquisitions and initial public offerings (IPOs). Law firms with more advanced ICT applications were at a strategic advantage in their cases as they had a better and faster outlook of documents and information. These commercially driven innovations led to the creation of an export market in justice related ICT products and consulting services in Australia following the year of 1998 (Wallace, 2004, p.649).

Singapore, representing one of the more developed Asian countries, much like Australia was one of the first and few countries to give electronic access to court records and the option to download information. Their initiatives to increase justice efficiency range back to 1992. Due to already mentioned high security concerns, most of the European countries did not allow electronic access to specific court records until much later. The Paperless Tribunal in Singapore represented one of the first experiences of "complete e-filing" even though they were available in relatively simple (small claims) and quite serial cases (Political and Economic Risk Consultancy, 1998). They were able to procure e-filing by using advanced digital signature software (PKI) with smart card access. In the 1999 World Competitiveness

Yearbook, covering 47 countries, Singapore was ranked first in the viability of the national legal framework (Subordinate Courts Singapore, 2008).

In South America, Argentina began the application of IT in the judiciary in 1981, by building a system that distributed cases among judges in the civil appeals court. This program automatically distributed cases among judges equally and ensured that the cases a specific judge received were related, by searching for related information in the data bank (Malik, 2002, p.16).

Brazil's size makes it difficult to discuss a single unified view of experience regarding their e-justice. ICTs have been and still are in use in federal and state court systems, but the experience and coverage varies greatly. One of the major initiatives of the federal judiciary from the early 1990s has been the computerization of electoral courts. This was followed by increase in motivation in some state judiciaries to advance court automation in different jurisdictions. As a result, public information, case management and document archiving all received updates accordingly. Following these events, the Supreme Federal Tribunal initiated a project of reforms in May of 1998 and started carrying out surveys to identify the problem areas relating to infrastructure, training, access and management strategies (Malik, 2002, p.17).

Chile implemented an ICT system for case records, processing documents, and for the Records of Courts' Current Account in 1987. In 1989 they grouped together their Civil Courts and integrated their ICT support. The objective of this ICT Model was to provide support to administrative functions and act as a medium for monitoring and control so as to improve efficiency and rationalize resources. Their ICT system consisted of 3 main aspects (Malik, 2002, p.19);

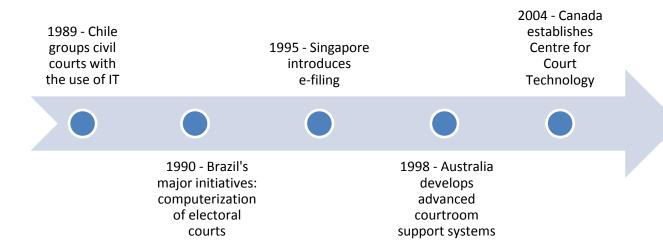
- Implementation of jurisdictional and administrative management systems;
- Juridical databases for legislation;
- Interconnection of internal and external judicial institutions.

In North America, Canada established a Centre for Court Technology (CCCT) in 2004, based on the need for organizational change and an establishment of a national system of e-justice. Up to 2004 they have been restricting the analysis of ICT needs to "what judges require", which proved to be misguided as; "Judges' computer resources were rather mundane and computer systems used in courts were isolated and clearly outside the realm of judges' concerns" (Canadian Centre for Court Technology, 2004). The center began improving the state of e-justice by conducting studies on E-filing and factors of success in recent large integrated justice system projects.

The USA seems to be leading in the field of e-discovery and presentation technologies but lacking capabilities in the fields of e-exchange and integration of ICTs. In 1998 the National

Center of State Courts in Virginia adopted Australian technologies into its Courtroom 21 Project. These technologies are in essence evidence presentation systems installed in courtrooms by or for counsels to use during trials. Other states have followed this local trend of prioritizing innovations in court based technologies. In general, justice ICTs in the U.S. have given lawyers great opportunities for presentations in the courtrooms however there is no information available on an integrated e-justice system, allowing e-filing and open interactions, on a state or federal level in the U.S. to date.

Figure 4: Timeline of important events related to e-justice in the world



# 2.2 E-justice on the Pan-European level

The first systematic appearance of the term "e-Justice" at EU-level can be traced back to 2007 in a number of the EU Council's documents. The Commission of the European Communities (Commission) published a strategy entitled "Towards a European e-Justice Strategy" in May 2008, which is considered a milestone in acknowledging the concept of e-justice. The document defines e-justice as a specific field under the more general umbrella of e-government, the latter being understood as the application of ICTs to all governmental administrative procedures (Commission of the European Communities, 2008).

The Commission feels that "Issues such as European-wide judicial co-operation and cross-border access to justice may not be effectively dealt with at national level or on the basis of bilateral agreements between Member States". To ensure the ultimate objective of creating an EU-wide judicial system that is beneficial to citizens, businesses, magistrates and legal professionals, coordination at EU level needs to be adequate. In the Commission's opinion, the EU actions will not replace national initiatives in this field but should complement them, as they would allow integration of national projects. As a result, the national competence of the member states will not be called into question (Commission of the European Communities, 2008).

For the Commission, "e-Justice" represents an initial response to the threefold need to improve access to justice, cooperation between legal authorities and the effectiveness of the justice system itself on a pan-European level. Establishing such a system aims to create synergies between the efforts at European and national levels and offers the added value of economies of scale. It also improves citizens' access to justice and makes legal actions more effective.

According to the Commission's strategy (Commission of the European Communities, 2008), efforts related to e-Justice must:

- Give priority to operational projects;
- Put particular emphasis on decentralized architectures without neglecting the need for coordination at European level;
- Respect the existing legal framework by using ICT tools to improve the effectiveness of the legal instruments that have been or will be adopted.

"In response to a request from the European Council and the European Parliament, this Communication proposes an e-Justice Strategy that aims to increase citizens' confidence in the European area of justice, a major source of legitimacy in a Union where the rule of law is one of the defining values" (Commission of the European Communities, 2008).

The Commission aims to create and promote a framework of development entitled the European Interoperability Framework (EIF) which would put particular emphasis on security protocols and procedures. Work on e-Signature and e-Identity is already particularly relevant in the legal field, where authentication of acts and individuals is considered essential.

Commission's justifications for the implementation of this new technology aside, the main practical reason the EU needs its own pan-European Justice portal is the need for cross-border data and document interchange and interoperability between internal and external users and applications of Courts and other Justice entities within the Member States.

According to the Commission of the European Communities (2008), the functions most improved by this Portal would be;

- access to registers,
- document issuing and retrieval,
- legal notifications,
- Obtaining of evidence.

In the European sphere, e-justice is a policy aiming to improve and modernize the delivery of justice in two categories of litigations. On one hand, there are litigations completed internally in the national judicial orders and on the other, cross-border litigations. Today, it is estimated that more than 10 million people are involved in cross-border litigations in Europe. The portal

helps these people find relevant information when dealing with events such as divorce, death, litigation or even moving house. They can also find a legal practitioner in another country and learn how to avoid costly court cases through mediation, where to bring a lawsuit, which country's law applies to their case and whether they are eligible for legal aid.

Figure 5 (page 20) shows the home page of the European e-justice portal launched in July 2010. It provides access to practical tools and information about justice across the EU for citizens, businesses, legal practitioners and judiciary. It is the joint winner of the European Information Association (EIA) Award for European Information Sources of 2011 (EIA, 2011).



Figure 5: European e-justice portal

Source: European Commission, European e-justice portal, 2012.

# 2.3 E-justice in EU member countries

In the European Union the European Commission for the Efficiency of Justice (CEPEJ) holds responsibilities in the field of ICT integration in Justice, aiming to improve the efficiency and functioning of justice in the member states and the development and implementation of solutions adopted by the Council of Europe.

The working group CEPEJ-GT-EVAL within CEPEJ regularly publishes evaluation reports of judicial systems. The Authors have tried to show the trends of the judiciary, as well as reforms in individual countries. The report does not only illustrate the classification, but also

provides insight into the state of justice in individual countries, particularly with regard to the characteristics of the judicial system, geographical features (size, population) and economic criteria.

ICT implementation represents only a small portion of the evaluation reports provided by CEPEJ and covers approximately 7 pages of strict facts regarding ICT status in European countries. Data collection is done by state self-assessment using elaborate surveys sent out by CEPEJ.

A brief summary of their findings will be presented, pointing out relevant information regarding current states of electronic justice and ICT development within EU member states.

European Commission for the Efficiency of Justice (2010, p.91) defines 3 areas of ICT application in their report on European judicial systems:

- Level of implementation of computer equipment for the direct assistance of judges and/or court clerks (at the basic level this concerns word processing and office facilities where a judge or staff member can draft decisions or prepare a court case in an electronic file. It also concerns access to the internet and media device standards in use);
- Systems for the registration and management of cases (concerning mainly the replacement of traditional court docket books and other registers with computerized databases containing court records);
- Availability of computer equipment for the communication between courts and their environment (concerning court websites as they are defined by CEPEJ to be one of the most common tools of providing different information on the court activities and organization. Typically, they should offer downloadable forms or enable claims to be submitted electronically).

The level of implementation of IT equipment for the direct assistance of judges and court clerks was reported to be rather high. The Majority (29) of member states indicated high scores in this segment. Greece and Montenegro are pointed out as able to develop further and are expected to show better results soon, while some countries, such as Moldova, Serbia and Ukraine seem to be experiencing such financial difficulties that paying for IT facilities is not their primary concern and it is difficult to find financers for projects.

Fewer efforts were, however, noticed when it comes to providing computer equipment for facilitating the communication between the parties and the courts. The trend is nevertheless positive. Nine countries, including Slovenia and Austria, have particularly high scores. A good level of computer facilities can also be found in one third of the states concerned with the report, however, it is of the upmost importance to stress that the indicators used in their assessment did not assess the performance of the systems in question.

As stated in the report: "Generally speaking, the use of ICT in courts is constantly increasing in Europe. Many states or entities reported recent or ongoing reforms (Albania, Bosnia and Herzegovina, Luxembourg, Spain, Switzerland and the former Yugoslav Republic of Macedonia)."

European Commission for the Efficiency of Justice (2010, p.94) outlines 7 states or entities that reportedly have 100% implementation of computer facilities in all the sectors listed in the questionnaire: Austria, Denmark, Finland, Malta, Russian Federation, Turkey and UK-Scotland. In contrast, Moldova and Georgia were reported to have relatively low level of computerization compared to other states or entities.

Based upon these areas and a pointing system which was based on the presence and the development of ICTs in each of the areas within each country, the levels of computerization of courts for all three areas of application can be seen in figure 6, page 22.

Three groups have been established based on the level of ICT development in courts, the green group as the best one, ranging from 40 points and more, the orange group somewhere in the middle, and the red group representing the countries in need of some improvements. Even though Slovenia is listed in the middle column in figure 6 (page 22), it is important to note that it received 39 points in the process, which is only one missing point from entering the green and best group. In general, Slovenia received fewer points because it did not have procedures in place for electronic files for judges, systems for recording and case management for administrative staff, and electronic forms online for customers of courts.

It is perhaps important to mention that CEPEJ has not introduced questions regarding the implementation of video conferencing and sound recording in judicial proceedings or detailed information about other electronic communication facilities. This is relevant because Slovenia, alongside with Ireland, is a pioneer in this matter.

Figure 6: The Level of computerization of courts for the three areas of application

	Albania	
	Bosnia and Herzegovina	
	Belgium	Bulgaria
	Latvia	Czech Republic
	Sweden	Lithuania
	Netherlands	Switzerland
	Croatia	UK-Northern Ireland
	Italy	France
	Monaco	Norway
	Poland	Portugal
	Hungary	Slovakia
Moldova	Luxembourg	Estonia
Azerbaijan	FYROMacedonia	Turkey
Georgia	Ireland	Austria
Cyprus	Romania	Denmark
Greece	Armenia	Finland
Montenegro	Slovenia	Malta
Andorra	Spain	Russian Federation
Serbia	UK-England and Wales	UK-Scotland
< 30 points	30 to < 40 points	40 points and over
(8 countries)	(19 countries)	(17 countries)
18%	43%	39%

Source: European Commission for the Efficiency of Justice, Efficiency and quality of justice, 2010, p.97.

# 3 THE CURRENT STATE OF E-JUSTICE STRATEGIES IN SPECIFIC COUNTRIES

E-justice strategies of three European countries are going to be compared; Slovenian, Portuguese and Austrian. It is hard to establish a common framework, based upon which the summaries of these strategies could be presented, as they are not composed based on any kind of standard. For the purpose of this thesis, the structure of summaries for each country's strategy will consist of three segments:

• Document basis and structure; presenting possible theoretical backgrounds and the structure of each strategy,

- Actions and objectives; presenting what each strategy defines as the core contributions and improvements to the justice system,
- Other relevant information; presenting important segments and aspects of each strategy which do not fit into the previous two segments.

# 3.1 The state of e-justice strategy in Portugal

Portugal's current strategy is based on a relatively new document, established by their Ministry of Justice in 2011.

For the Portuguese Ministry of Justice (2011), the policy of modernization of justice involves the use of ICTs in order to make the whole system more accessible to citizens and more appropriate to business needs. Providing better access to the identification of people and goods, the dematerialization of proceedings in the courts and allowing the definition of management indicators (such as processes, completed cases, disputes, recovery rates, duration and costs business insolvency and tax cases) should give a fundamental contribution to the operation and efficiency of the system, with inevitable impact in the context of economic modernization and in the legitimacy of the Portuguese justice plan.

#### 3.1.1 Document Basis and Structure

Despite the progress made in recent years in digital services provided to citizens and businesses, particularly in the scope of registers and notary, it has been determined that the Ministry of Justice should conceptualize a plan for information systems sustained in the productivity and reuse of existing resources and therefore, implement a plan of action for justice in information society by updating the concepts in the light of technological advances and best international practices, including principles of the European e-Justice established by the European Union.

One of the objectives of Program XIX signed by the Portuguese Government on May 17<sup>th</sup>,2011 between the Portuguese State, the European Commission, the Central Bank and the European and International Monetary Fund, is to achieve significant improvements of the functioning of the judicial system, essential for the proper and fair functioning of the economy. The Portuguese strategy for e-justice was created and put into action half a year later, on November 18<sup>th</sup>, 2011.

This strategy is based on the policy of the current European e-Justice and includes a plan of action for e-justice in the Information Society, whose objectives and priority initiatives are divided into 4 sections (Portuguese Ministry of Justice, 2011);

1. The first section [Courts] contains the purpose, framework and intended actions regarding the modernization and implementation of additional IT support in the courts and related institutions,

- 2. The second section [Registers and Notary] contains the purpose, framework and intended actions for strengthening the justice portal as the primary means of interaction between the country and its people,
- 3. The third section [Portal of justice and the promotion of the information society] contains the purpose, framework and intended actions relating to the use of the internet as a desirable means to interact with users and promote awareness of the importance of the information society.
- 4. The fourth section contains information on participants in the project, pointing out their responsibilities.

Each of these parts will be summarized and discussed individually.

# 3.1.2 Actions and objectives

In the first section, the Portuguese Ministry of Justice (2011) has indicated the following purpose, framework and actions regarding the modernization and implementation of additional IT support in **courts and related institutions**;

Purpose – To establish the basis for a computerized system of process management in all jurisdictions, with high security and different degrees of access, to follow/to establish the principle of independence of the judiciary system, and to transform the courts into organizations focused on the citizens, with acceptable service levels as well as to ensure the effectiveness, efficiency and satisfaction for all system users.

Framework - Over the past few years, various computer applications were developed for each specific court area. Existing applications are based on different technological bases, resulting in difficulties in linking themselves with and operating between various courts. This reality has led to the existence of dysfunctions and difficulties in processing processes that resulted in failures of effectiveness, efficiency and widespread dissatisfaction of users in the widespread use of technology. A proper analysis of the functionality of the system as a whole, ensuring that the specificities of each constitutional area, is crucial to increase the efficiency of the system and to improve the suitability of technologies for people by ensuring their efficient use and contributing significantly to an overall increase in productivity. The work is even more pressing as it is certain that common information system architecture can enhance the applications that are most effective and will be accepted by all the legal professions, encompassing all the various courts and levels of jurisdiction. It is also one of the keys to success of the implementation of the judicial map, and for better management of state resources.

#### Actions:

1. Develop an information system architecture of justice as the basis for the development of applications;

- 2. Establish a common database;
- 3. Update and upgrade management system processes;
- 4. Review the metadata associated with the processes for greater transparency of operations;
- 5. Update the mechanisms that link the application with the national judicial institutions and other legal institutions;
- 6. Create a platform for analytical information system;
- 7. Update the ways to access applications (communications equipment);
- 8. Ensure the security of access, as well as the possibility of remote access to IT systems of courts;
- 9. Promote a platform for alternative dispute resolutions integrated in the justice information system architecture, resulting in an electronic platform for online mediation services;
- 10. Increase the use of the citizen identity card as a mechanism for authentication and citizen access to justice information systems.

In the second section, the Portuguese Ministry of Justice (2011) has indicated the following purpose, framework and actions regarding the **strengthening of the justice portal** as the primary means of interaction between the country and its people;

Purpose – To strengthen the justice portal as the site of privileged access and contact between citizens / economic agents and the State for the collection and management of information related with legal and civilian acts.

Framework - The notarial and registry records include some of the key events in the 'life' of citizens and economic agents. Recognizing just how much has been done in recent years in this area; it is intended to improve service standards provided to citizens and businesses, and to introduce new features in the system.

#### Actions:

- 1. Extend the acts and proceedings available online, supported by the use of citizen identity card as a mechanism of privileged and more secure access to platforms;
- 2. Establish technical solutions to ensure the integration of the register in the national land register;
- 3. Create unified book building. A single real estate cadaster is to be created, with all the information related to buildings;

- 4. Create the register of state assets;
- 5. Create an automated system for managing information about deaths and maximize the interoperability between various agencies of the state, including tax, social security, health services, statistical offices and military recruiting centers;
- 6. Encourage retention of digital documents and make "on line" certification for the production of documents;
- 7. Provide conditional registration of documents by other entities, by making bridged applications for registration either by integration of information or by providing access via online secure authentication, for example, courts, city councils or finance services.

In the third section, the Portuguese Ministry of Justice (2011) has indicated the following purpose, framework and actions regarding the **use of the internet as a desirable means** to interact with users and promote awareness of the importance of the information society.

Purpose – To position the Internet as the preferred channel of relationship with users through the stimulation of the e-justice portal. In addition, to ensure the appropriate interfaces to access this portal, this action also aims to promote awareness and promote the information society.

Framework - As part of the work carried in the European Union, it was decided that a single portal would be created for European e-justice, giving access to the justice system and other European electronic services. It is necessary to adjust the model to the Portuguese case, adapting the portal of e-justice to act as a binder of information and services to be provided and, also, as a platform for providing content in the European project.

On the other hand, the reduced knowledge of civil society and the business world about the possibilities and advantages that the information systems of justice, in the broadest sense, can provide to users, creates the necessity to monitor all the reforms of this action plan with an appropriate communication plan to provide information, disclosure and to promote the inclusion of citizens.

#### Actions:

- 1. Develop the portal of e-justice;
- 2. Readjust the contents of the portal of e-justice to increase its integration into the European portal of e-justice;
- 3. Establish a user-friendly way to use the portal by deploying the use of "frequently asked questions" and location-specific guidelines for information regarding the nearest court;

- 4. Promote the dissemination of knowledge through the use of drills and seminars for citizens and institutions;
- 5. Create an online repository for the dissemination of the contents accessible to all citizens, including training sessions and online web seminars.

#### 3.1.3 Other relevant information

# Participants and responsibilities

The working group for the development of the e-justice action plan in the information society, consisting under direct supervision of the Minister of Justice, should develop, promote and monitor all the initiatives described in the preceding paragraphs and may propose that others be added should this prove necessary to the scope of the work that is to be done.

Funding for initiatives that constitute the action plan for justice in the information society is ensured by the budget of the Ministry of Justice and the use of structural funds.

# 3.2 The state of e-justice strategy in Austria

The availability of web services, including the possibility of consulting on-line legislation and case-law is another example of good practice. In this context, in particular is worth mentioning the Austrian "Rechtsinformationssystem" (Law Information System) which provides not only case-law of all branches on a cost free basis (constitutional, administrative, civil and criminal) and levels (not only case-law of the supreme courts, but also of courts and tribunals of appeal and even of first instance tribunals) of the judiciary, but also a range of legal instruments on both federal and regional level. It is possible to access not only the current consolidated version, but also the initial version and all amendments, as well as the formal text of official publication; in addition, also official drafts and governmental proposals of federal legislation may be found.

The Austrian justice system received the eEurope Good Practice Awards in 2001 and 2005 and the E-Government Award of the European Union in 2009. This confirms the high degree to which objectives have been achieved so far.

#### 3.2.1 Document Basis and Structure

The IT strategy of the Austrian ministry of justice (2010) is based on scientific literature, which suggests a consistency between an organization's business strategy and its IT strategy. Figure 4 provides a general model of the relationship between internal and external factors and the business and IT strategy as suggested by Venkartraman, Henderson and Oldach (1993, p. 139-149).

The Austrian ministry acknowledges the theory and practice which have shown that investments in IT judicial systems reach the maximum effect when the business and the IT strategy are aligned (Austrian Ministry of Justice, 2010).

Figure 7 shows the actualization of the general model in Figure 2 (page 8), for the example of the Austrian Judicial system at the strategic and structural levels. The results of the IT strategy are the objectives, principles and standards (see [1] in Figure 7) and the resulting target IT architecture and development plan of the strategy (see [2] in Figure 7). The goal of the management process is the coordination between business and IT strategy on one side, strategies and structures on the other, and the structure of the judicial system and the structure of the IT on the third.

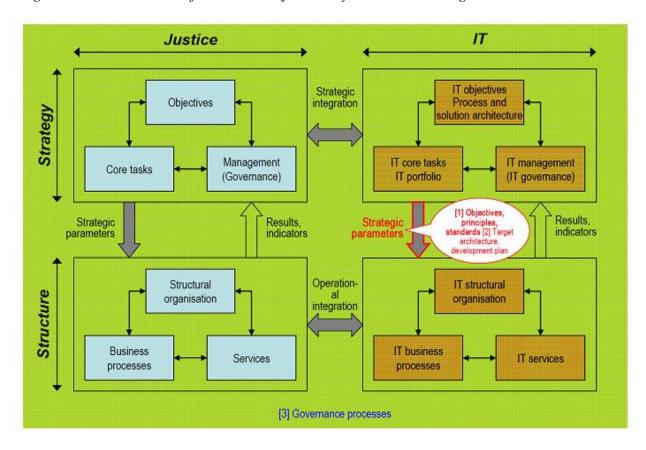


Figure 7: General model of the Austrian judicial system at the strategic and structural level

Source: Austrian Ministry of Justice, IT strategy of the Austrian Justice System, 2010, p.5.

The Austrian strategy is relatively extensive as it consists of 30 pages. The document is divided into 2 parts. The first part has 5 sections;

1. The First section [Document Information] contains the formal details and summary of the document content,

- 2. The second section [Objectives and Environment] describes the goals of the judicial system and objectives of IT in the scope of the justice system,
- 3. The third section [Principles] lays down rules that describe how objectives of justice IT would be achieved,
- 4. The fourth section [IT standards] describes the binding judicial IT standards of the system
- 5. The fifth section [Federal Government's E-Government Vision 2020] sets out a vision of the federal government in 2020 and includes international recommendations and quantitative information on the legal informatics in the context of the judicial system and a list of important applications.

The second part of the document describes the target architecture, development plan and management processes.

Each of these parts will be summarized and discussed individually.

# 3.2.2 Actions and Objectives

Objectives of the **judicial system** are;

Towards a fair and safe society;

- 1. Clear legal relations.
- 2. Individuals enjoy legal protection and the protection of fundamental rights.
- 3. Promotion of collective redress.
- 4. Crime prevention where possible.
- 5. Fight against crime in cooperation with other authorities.
- 6. Offenders who are sentenced to terms of imprisonment are detained in a safe place and re-integrated into society after appropriate therapy.
- 7. Fair ground rules for efficient economy.
- 8. Laws designed in an open and democratic manner.
- 9. Clear and understandable legal norms.
- 10. Legislation that responds to the challenges of development

Towards legal protection based on independent judiciary;

- 1. Making sure that the basic conditions for appropriate decisions in legal disputes are met.
- 2. Operations are carried out quickly and objectively, making everyone equal under law.

- 3. Court costs are reasonable if someone cannot afford to enforce his rights in court, they can receive free legal aid.
- 4. Legal relations of companies are registered in the court register and legal status of the property in the Land Registry, both being accessible to everyone.

# The justice system as a service company;

- 1. The modernization of courts and acquisition of appropriate equipment.
- 2. The success of the service of justice is reflected at the level of an individual.
- 3. The staff of the judicial system is carefully selected and receives the best training and continuous education.

# Objectives of **IT** in the judicial system (sorted by priorities)

# First priority;

- 1. Modern services for the justice system, citizens and the economy.
- 2. Speed up and simplify.
- 3. IT is the engine of modernization of the judicial system.
- 4. Specific solutions for particular user groups.
- 5. Create savings.
- 6. Provide data management.
- 7. Base IT implementation projects feasibility on a business approach by calculating costs and benefits.
- 8. Automation of processes that are often repeated.

# Second priority;

- 1. Create a decent income in return for services rendered at a lower cost to the general public.
- 2. Modern IT working tools for employees which do not lag far behind those in use in the private sector of the economy.
- 3. Access to IT solutions regardless of the user's location.
- 4. Establish functional and modern IT solutions.
- 5. An appropriate image of the judicial system both internally and externally.

- 6. Effective and efficient methods of development of IT solutions.
- 7. Secure IT solutions.

# Third priority;

- 1. Risk management in introducing modern technical solutions.
- 2. Long-term transition to electronic records taking into account cost efficiency.
- 3. Improving the quality of the judicial system as a result of easier access to information and avoiding mistakes.
- 4. Avoiding data loss with the introduction of IT.
- 5. Reducing the routine work of employees by increasing the degree of automation.
- 6. IT does not replace the courts and agencies in decision-making, but provides optimal support.
- 7. Exceptional cases based on the Pareto principle are still to be performed manually.
- 8. Transfer of knowledge related to IT in the judicial system to other countries.
- 9. Holistic approach in defining goals and planning solutions.

#### 3.2.3 Other relevant information

#### **Standards**

The Austrian Ministry of Justice (2010) believes that the IT involved with justice systems should be based on uniform broad-established standards and those that are also applicable to e-government, like the modules for online applications (MOA) already are. These standards represent components of the target e-justice architecture;

- 1. Java programming language,
- 2. Java J2EE environment.
- 3. Standards for connecting the portals of public authorities,
- 4. Modeling language UML,
- 5. Extended Markup language XML,
- 6. Open Document Format (ODF) for office applications,
- 7. Portable document Format (PDF/A) for displaying text,

8. Compliance with open source solutions.

## **Principles**

Strategic principles (SP) determine the manner in which legal informatics intends to achieve strategic goals within the justice system;

- 1. Strategic principles should apply to all units of the judicial system,
- 2. In designing IT solutions the benefit is greater if the usefulness of the entire judicial system and not just a single unit is taken into account,
- 3. Legal information is relevant to all and so all its units should collaborate in decision making,
- 4. A total IT solution that covers the needs of the entire justice system has the advantage over similar and comparable solutions for individual units,
- 5. Changing business processes, IT solutions and development methods of these solutions should be simple and cost-effective,
- 6. Development of IT solutions should follow a uniform service-oriented IT architecture of the judicial system.

# 3.3 The state of e-justice in Slovenia

#### 3.3.1 Document Basis and Structure

The strategy has both national and strategic importance. Its implementation will help improve the efficiency of justice, which will result in a better economy, greater legal certainty for individuals and increased prosperity. It also contributes to the quality of citizens' life and the effective protection of rights.

The document consists of the following eight sections:

- 1. The strategy: The importance of the strategy and the reasons for it. Noting the primary goals of the judiciary of the Republic of Slovenia.
- 2. Basic elements: The purpose for the establishment of e-Justice, components which are intertwined and the target users.
- 3. Slovenia and the EU: Strategic and program documents of Slovenia and the EU, which directly or indirectly affect the strategy of e-justice.
- 4. Vision of e-Justice: Describes the vision of e-justice and defining terminology.

- 5. Key areas: presentation of the four key areas of computerization
- 6. Strategic orientation: describes the strategic direction that realizes the vision of e-justice.
- 7. Objectives and indicators: Key objectives and indicators for each key area, which act as guidelines for the continued progress of the computerization of the Slovenian judicial system.
- 8. Priorities and Decision: some projects are prioritized in accordance with the anticipated effects based on the vision, strategic policies and objectives of e-justice.

In order to produce an easier comparison, these sections will be somewhat summarized and explained in an order which is more similar to the Portuguese and Austrian strategies.

### 3.3.2 Actions, Objectives and indicators

Implementation strategies will be realized via the four key areas of justice computerization:

- 1. The cooperation between all stakeholders at all levels,
- 2. Information and communication infrastructure,
- 3. Development of solutions,
- 4. Knowledge and education.

### Objectives in the field of **Cooperation**:

- A regular coordination of the persons responsible for the information technology, which
  consists of everybody involved in the field of justice. Meetings would be held at least
  every two months to share experiences, information, discuss problems and agree on
  ongoing joint projects.
- 2. It is necessary to arrange for the exchange of information and documents that will enable all entities of the judicial system to enjoy rapid, safe and reliable exchange of information, provision of electric services, standardized and transparent communication and connectivity with similar systems in the EU.
- 3. It is necessary to undertake the establishment of security and technology standards for secure communication, management and storage of data in the justice system.

#### **Indicators:**

- The number of formalized forms of cooperation between institution (the number of concluded agreements, certain number of working groups, etc.).
- The number of initial projects with two or more carriers.

### Objectives in the field of **Infrastructure**:

- 1. It is necessary to determine common minimum standards for information technology and communication equipment whenever it is possible and reasonable.
- 2. Jobs in the judiciary are to be equipped with appropriate computing devices and communication equipment according to accepted minimum standards. Appropriate training must also be provided.
- 3. The development of such infrastructure that provides services to the widest range of participants from the justice system should be promoted in particular. Therefore the development of modular solutions that can be applied to all; signing, mailroom, payment, common network, archives.
- 4. It is necessary to upgrade the basic information structure of justice and to allow for safe and transparent exchange of information between citizens and judicial institutions.
- 5. It is necessary to enable interoperability of information systems in the justice system on a national level

#### **Indicator:**

• A list of minimal standards for computer and other technological equipment and communication gear.

#### Objectives in the field of **Solution Development**:

- 1. It is necessary to support core business processes of all justice entities with IT.
- 2. Usefulness to various user groups should be considered when developing IT solutions, and a modular design with clearly defined standard interfaces that allow connection to the broadest possible range of information should be prioritized.
- 3. In cases where it makes sense, it is necessary to enable participants both to make applications and follow the process electronically.
- 4. It is necessary to establish and regularly update a list of projects, individual items and the total number of participants and projects while simultaneously considering ready solutions provided by the public sector which may already be suitable for e-Justice.

#### **Indicators:**

• The aggregate inventory of core business processes, action plans for computerization and if necessary, their renovation.

• The number of renewed IT systems and applications and documents received and sent by these systems.

# Objectives in the field of **Knowledge and Education**:

- 1. An adequate system for the collection of generated knowledge must be established in the process and appropriate support for access to IT must be provided.
- 2. All employees should be provided access to the information they need in their work in electronic form.
- 3. The use of innovative information technology solutions in e-Justice should be encouraged.
- 4. High quality training is necessary to establish information literacy among employees of all ranks, from support to decision making levels as well as the entire legal sector.

Indicator:

• The number of participants in education and training programs (granted certificate count)

#### 3.3.3 Other relevant information

#### **Strategic orientation**

Strategic directions are as follows:

- 1. Establishing cooperation between all stakeholders, to ensure consistency of IT development in the judiciary and the inclusion of citizens of the Republic of Slovenia, legal persons and other stakeholders;
- 2. Promoting mutual cooperation and integration of judicial institutions and effective exchange of information between participants;
- 3. Implementation of e-commerce as a normal way of working within the Slovenian judiciary;
- 4. Providing quality management information to improve the management, administration and organization of the judiciary;
- 5. Providing full-time education and training in IT within the judiciary;
- 6. Developing e-justice compliance with the guidelines and development standards that are already widely established in Slovenia, EU or the world.

## **Priority tasks and conclusion**

Priorities for the development of the envisioned model are:

- 1. Development of projects which indirectly eliminate court delays or increase possibility of overcoming them, and increase efficiency of the judiciary;
- 2. Base computerization and establishment of IT infrastructure in the justice system, which includes the projects of the EU initiatives;
- 3. Renovation or upgrade of existing information systems, which are partly obsolete, but it is still possible to include them in e-justice with more or less effort;
- 4. Development of projects that increase added value in the justice system, but only indirectly contribute to the improvement of its efficiency.

### 4 COMPARISON OF CURRENT STRATEGIES

The comparison will be conducted by assessing similar fields in each of the three strategies (Slovenian, Portuguese & Austrian), pointing out variations and the degrees of variations of the same or similar topics, while also providing an outlook and assessment of the topics which are present only in certain strategies. The breakdown of important issues and topics, which make it possible to compare different strategies, is based on the Study of the Effect of Computerization on the Justice System (Gradišar et al., 2012) with several new topics added into the assessment.

The structure of the comparison will firstly state the topic being compared; secondly indicate the topic's presence, degree or variation for each country in question; and thirdly establish a summary indicating a ranking of the countries within the given topic, where this makes sense.

#### 4.1 Theoretical basis

Austria: The strategy is based on scientific and professional basis. Studies of efficiency and coordination of Business and IT have been conducted.

Portugal: The strategy is generally not based on scientific basis. An appropriate analysis of system functionality will be conducted in order to attain a professional approach in the implementation process.

Slovenia: The strategy is not based on scientific or professional research.

With regard to the theoretical basis used for the construction of the strategy, Austria is definitely leading with a full and precise study conducted and the results included in the

strategy. The other countries do not base their strategies on any professional or scientific basis.

#### 4.2 Stakeholders

Austria: All participants of the justice system: courts, state attorneys, the Federal Ministry of Justice, registries, public officials, contracted workers, doctors...

Portugal: Merely courts, registries and notarial offices.

Slovenia: All participants of the justice system: the Ministry of Justice, the Constitutional Court, the Supreme Court, the State Prosecutor's office, state attorneys, lawyers, notaries, citizens of the Republic of Slovenia...

# 4.3 Analysis of current state of e-justice

Austria: The analysis of the current state of e-justice is not explicitly present; however, it is somewhat indicated indirectly and unstructured.

Portugal: No current state analysis is present.

Slovenia: Analysis given in general. Basic requirements and needs of the judicial system are also indicated as a result of the analysis.

Slovenia is ahead in this topic, even though the analysis is given in general. The Austrian strategy does not contain explicit information on the matter, but an overview of what has been achieved thus far can be distinguished. In contrast, however, the Portuguese strategy contains no information whatsoever on the matter.

# 4.4 Objectives of the justice system

Austria: The strategy covers 18 objectives, divided into three groups: fair and secure society, legal protection from an independent judiciary and justice system as a service company.

Portugal: Objectives of the judicial system are not present.

Slovenia: The strategy covers long-term objectives which are: to ensure right to trial within a reasonable period of time, to establish higher confidence in the justice system, to expand access to legal (judicial) protection and to ensure greater legal certainty (reliability and predictability), which is based on legality and impartiality.

The objectives of the judicial system are best developed in the Austrian strategy as they are described in detail and divided into three groups. This is mainly because the key to their strategy lies in the coordination between the business strategy and the IT strategy. In this case, the business of jurisdiction. Objectives are also present in the Slovenian strategy, but not

described in such detail. The Portuguese strategy does not contain objectives of the judicial system as its goals seem to be strictly related to IT.

# 4.5 Objectives of legal IT in the justice system

Austria: The strategy covers 26 objectives that are divided into 3 groups based on their projected advantages.

Portugal: The main objective is to establish a basis for a computerized system of process management of all judicial units with a high degree of security and various levels of access. It also indicates a necessary change in the court organization that needs to be more focused on citizens and provide performance efficiency and satisfaction of all users of the system.

Slovenia: The main objective is to establish modern information and communication services, which contribute significantly to the mission of an effective judicial system. It covers 16 goals that are based on the contents divided into four key areas: collaboration, infrastructure, application development and knowledge and education. The priorities in achieving objectives are also determined.

All strategies contain a high amount of information regarding the objectives of IT in the justice system, which makes sense as this is the primary goal of all strategies. As they each give importance to different things it is difficult to establish a ranking among them. The Austrian strategy however stands out as it explains the objectives in the greatest detail.

# 4.6 Ways of achieving goals

Austria: Nine fundamental ways (principles) for the achievement of strategic objectives are given.

Portugal: The objectives will be implemented through 23 proposed actions relating to Court registers, notarial professions and the portal of justice.

Slovenia: The achieving of objectives is guaranteed through 6 orientations.

All strategies studied contain descriptions of ways to achieve their objectives. It is again difficult to establish a ranking among various goals and proposed actions as backgrounds and necessities for each country differ greatly. However from a strategic standing point, higher levels of specificity and clarity should result in a more beneficial effect of strategy realization. Taking this into account, the Austrian strategy shows the most clarity as it not only defines the tasks at hand but also prioritizes them upfront, while the Portuguese strategy seems to have the highest level of specificity regarding actions involved in IT implementation.

# 4.7 Priority tasks

Austria: Priorities are carefully and exactly defined.

Portugal: No priorities are defined within the strategy.

Slovenia: Individual projects are measured by importance in accordance with their anticipated effects.

### 4.8 IT standards

Austria: The strategy takes into account the widely established standards and those that apply to their e-Government.

Portugal: No standards are given but an emphasis on the need for a proper analysis of the entire system functionality and technological unification of standards and architecture is established.

Slovenia: The strategy takes into account the guidelines for the development and standards that are already established in Slovenia, the EU or the world.

Both the Slovenian and the Austrian strategy account for established European standards in the field of IT and e-government, but also contain recommendations for mirroring and utilization of best practices abroad. The Portuguese strategy is lacking the topic of standards.

# 4.9 Target architecture

Austria: The architecture is based on 9 key components.

Portugal: No target architecture is present.

Slovenia: The target architecture for each project is given in the tender documents.

The Austrian strategy includes a description of the target architecture of justice computerization. The Slovenian strategy does not describe the target architecture, but a detailed description can be found in a document labeled "The analysis of processes, legislation and provision of computerization of judicial entities in the Republic of Slovenia and the creation of an action plan to further develop the project of e-Justice" (Ipmit, 2008) - Appendix 3: Descriptions of standards and technologies in the field of IT. The Portuguese strategy gives no information regarding the target architecture.

# 4.10 Project financing

Austria: The sources of funding are not given, but the recommendations that need to be taken into account in the development of information solutions are outlined.

Portugal: Funding initiatives which relate to the modernization of e-Justice are provided by the Ministry of Justice and the use of structural resources.

Slovenia: The strategy does not identify the sources of funding.

The Portuguese strategy includes detailed description regarding project financing and sources of funding. The Austrian strategy only provides general guidance to the provision of financial resources, while the Slovenian strategy does not define any sources of funding.

# 4.11 Education & Training

Austria: Only a single sentence within the strategy indicates the concern for staff education and training.

Portugal: The strategy includes actions devoted to promoting the dissemination of knowledge through the use of seminars which are intended for citizens as well as institutions.

Slovenia: Education is covered in a whole segment entitled "Knowledge and Education" which is entirely devoted to establishing guidelines regarding technology, access and systems required to achieve appropriately trained personnel.

The Slovenian strategy has the biggest emphasis on education and training, as its intentions are described in detail. Portugal has a somewhat vaguely presented concept of the importance of training and education, whereas Austria has no guidelines established.

# 4.12 The portal of e-Justice

Austria: The portal of e-Justice is mentioned on the list of Main justice applications.

Portugal: One of the four segments that describe actions for e-justice in the information society contains the purpose, scope and actions for strengthening the justice portal as the primary means of interaction between the country and its people.

Slovenia: There is no mention of a portal in the Strategy.

A single portal of e-justice has proven to be a useful tool for enhancing the power citizens and institutions have to communicate and solve judicial problems. A portal model enables all key sources of information to be organized into a single point of access for the user. More importantly, the system automatically configures a customized desktop view for the user based on their security and user profile. In more advanced systems the software also 'learns' the user's common information requirements (Potter, 2005, p.13-26)

It also greatly increases the productivity and reaction times of the justice systems communication with the public. Portugal has an entire segment devoted to this topic and has established detailed actions regarding the portal's deployment and outlook. Austria mentions

the portal as one of the applications in need of being implemented, while Slovenia has no guidelines established.

# 4.13 Integration with justice electronic systems of the EU

Austria: International and national compatibility is a priority ranked third most important in the Austrian strategy, however, it does describe conformity with recommendations of the Council of Europe, the eGovernment and eEurope.

eGovernment, short for electronic government is a phrase used to describe the digital interaction between a government and its citizens (G2C), government and business (G2B) or government to Employees (G2E), in rare cases it also includes Government to government interaction (G2G) (Jeong, 2007).

eEurope, short for Electronic Europe is a phrase coined to promote and ensure that full benefits are experienced from the changes in the Information Society from 1999. E-Europe's key objectives are to bring every citizen, home and school as well as business and administration into the digital age and online (Europe's Information Society, 2005).

Portugal: The entire strategy has its basis in the policy of the current European e-Justice and considers EU guidelines concerning justice, which have been approved by the European Council, for example, the instruments for the Multi-Year action plan 2009-2013 on European Justice Electronics, among others. It is also stated that the national portal of e-justice should be made compatible with EU standards in order to achieve easier integration.

Slovenia: Describes a working group for the processing of data in the EU council which intends to connect and integrate data of legal information systems between EU member states and Slovenia. It is also one of the objectives of the strategy to ensure interconnectivity with various systems in the EU.

The Slovenian strategy expresses in greatest detail the means with which issues of interconnectivity and integration should be handled. The Austrian strategy, however, has received the eEurope Good Practice award twice already, which indicates high levels of conformity with EU recommendations. The Portuguese strategy is itself based on EU practices, which should provide interconnectivity and matching standards to some extent, however, it does not provide enough details to predict an outcome.

### 4.14 Indicators of success

Austria: Indicators are mentioned in the theoretical basis, while it is noted that they are yet to be elaborated for practical use.

Portugal: No indicators of success are either mentioned or established.

Slovenia: The indicators of success are clearly defined under each objective and include an explanation, making the way how success is going to be measured completely straightforward.

The Slovenian strategy is definitely superior when it comes to defining success rates. It presents in detail the indicators used to quantify and assess the success rate of each objective group. Austria and Portugal are both lacking established indicators of success.

# 4.15 The reasoning/explanation behind the objectives

Austria: Each objective is explained in great detail and the reasoning behind its necessity is established with great care in most cases.

Portugal: The framework and purpose are established before each of the three groups of objectives.

Slovenia: Objectives are merely stated as necessary and only a general reasoning for improvement within the justice system is given.

The strategies of both Portugal and Austria have very exact explanations regarding why things need to be done for each outlined objective, while the Slovenian strategy lacks clearly expressed reasoning.

# **4.16** General Specificity level

Austria: A document of 30 pages and five extensive sections, has its basis on theoretical documentation, includes very detailed reasoning for not only objectives but also architecture and standards. Includes numerous subsections and explanatory paragraphs and provides recommendations.

Portugal: A relatively short document compared to the other two strategies, presented on 2 pages in 2 columns, sectioned mainly by objectives.

Slovenia: A document of 19 pages with numerous sections related to both reasoning behind the strategy, principles, objectives and visions for the future.

Austria most certainly shows the highest degree of detail in all of the topics which are present in all three strategies compared. The Slovenian strategy includes more sections but provides lower degree of specifics. The Portuguese focuses very strictly on objectives and includes fewer topics in general.

### **4.17** Vision for the future

Austria: A vision of E-government up to 2020 is provided in the annex of the strategy.

Portugal: No vision is given directly.

Slovenia: Includes a topic entitled "the vision of E-justice" which describes the entities affected by the computerization of the justice system.

# 4.18 Final summary of the comparison

Based on the documentation available at this time, the Austrian strategy can be viewed as the most advanced and developed. The Slovenian strategy follows behind with a more general and less detailed approach to solving issues, while still providing extra documentation that adds to specificity regarding certain topics. The Portuguese strategy covers the lowest amount of topics, while emphasizing details within the topics it does cover, resulting in a more direct and, what appears to be, a very objective-oriented approach.

The ranking established this way does not necessarily determine the superiority of one strategy over another, as country policies and agendas are not in any sense equal, yet alone comparable. Each country's view on the importance of the level of the strategy's complexity differs accordingly. However, this is not to say lessons cannot be learned from comparing different approaches to creating e-justice strategies.

On the basis of topics that are directly comparable based on their presence in a strategy, we can distinguish a visible ranking of the three strategies as shown in Figure 8, page 44. It is, however, important to note, that since not all topics discussed are present in the table and since there is no distinction of importance for each topic, it is not a completely accurate representation of the state, although it does provide a faster and easier overview. Even due to these limitations, the ranking resulting from this table remains similar to the one established based on all the topics in the previous section. Austria is leading with most topics covered, Slovenia not far behind and Portugal in need of improvements.

Figure 8: Presence of directly comparable topics covered in each strategy

	Countries		
Directly comparable topics covered in strategy	Austria	Portugal	Slovenia
Time Frame	2006-2020	2011-*	2008-2013
Theoretical or Scientific basis	✓	0	0
Analysis of the current IT state	0	0	✓
Objectives of the justice system	✓	0	₩
Objectives of judicial IT within the justice system	4	•	✓
Priority tasks	4	0	✓
IT standards	4	0	✓
Target architecture	4	0	0
Project financing	0	✓	0
Education & Training	•	0	✓
National portal of E-justice	0	•	0
Integration with justice electronic systems of the EU	•	•	✓
Indicators of success	0	0	✓
Purpose & Reasoning behind the objectives	•	•	0
Vision for the future	✓	0	0
Ways of achieving goals	✓	•	€
Security of IT solutions	✓	0	0
Total	12/16	6/16	9/16

Legend: (\*): The documentation does not provide a date of expiry of the strategy.

# 4.19 Strengths and weaknesses analysis

Based on the strategy comparison, it can be seen that certain parts of the Slovenian strategy stand out as positive while other parts still have potential for improvements. A SWOT analysis is typically used to determine strengths, weaknesses, opportunities and threats within an organization in order to produce an appropriate strategy. However, as our object of focus is

in fact already a strategy, it lacks the characteristics which would enable it to have threats or opportunities, as an organization, on the other hand, would have. For example, the current financial crisis could be perceived as a threat to the successful financing of the objectives, but this would really be a threat to the justice system and not to its defining strategy. As a result, a similar approach will be used to analyze our strategy, but it will only include the aspects of strengths and weaknesses.

## Strengths:

- **Gives importance to education and training;** in some countries, technology literacy is still a big problem; (Agusti, 2009, p.54), providing user-friendly interfaces, FAQ segments<sup>1</sup> and learning seminars helps to avoid the misuse of new technology.
- Indicators of success present for each group of objectives; this makes it easier to display the levels of success of ICT implementation and communicate it to project leaders and financers.
- Contains analysis of the current IT state of the justice system; provides understanding of how things stood prior to the strategy's effect and makes it easier to observe progress, while also providing reasoning behind what needs to be done.
- **Gives importance to IT standards**; "The use of standards promotes re-usability of IT components, data and skills and helps to avoid costs which arise due to lack of standardization" (Austrian Ministry of Justice, 2010).
- Integration with justice electronic systems of the EU; helps to connect and provide easier communication with the justice system of the EU as an entity as well as with its other member countries.

#### Weaknesses:

- Low reliance on established methods for strategic planning
- Information architecture not defined
- No scientific or theoretical basis
- No predefined project financing plan
- Lack of details regarding security
- No expressed reasoning behind objectives
- Standards not clearly defined yet
- Indicators lack specificity capabilities

Weaknesses are further discussed in the following section under recommendations, where each weakness is further elaborated and other relevant recommendations are noted.

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<sup>&</sup>lt;sup>1</sup> FAQ stands for Frequently Asked Questions

### 5 RECOMMENDATIONS

Based on the theory of strategic IT planning, the strategy comparison and the analysis of strengths and weaknesses, the following guidelines are suggested in the further process of strategic IT planning within the Slovenian justice system:

- 1. Higher reliance on established methods. Among the basic methods that are described in Section 1.2, CSF is the preferred method for non-profit organizations. The most important critical success factor is certainly an increase in the speed of business Increased speed direct result processes in the judiciary. is a of faster communications, automation of routine procedures and faster search Information. Indirectly, the speed is higher due to the higher quality of processes which have fewer defects and, therefore, less need for repetition of procedures. Another critical factor is cost reduction. Higher speed means that employees in the judiciary spend less time on the same projects, which directly reduces costs. In this way the justice system is also contributing to a balanced budget. Costs may also be lower due to standardization and uniform architecture.
- 2. Information architecture should be determined. It should be present within the strategy itself, as opposed to being provided in tender documents. Unified information architecture of the justice system based on uniform standards greatly facilitates integration of IT solutions and implementation of electronic commerce.
- 3. Establishing a scientific or theoretical basis. This would enable the use of certain best practices gathered from other countries or even companies and also give a more precise overview, reasoning and more confidence to the project handlers, that success is achievable.
- 4. The project financing plan should be determined in order to further decrease or eliminate delays when it comes to practical aspects of implementation and development. Such details should be handled upfront by the same entity that drafted and created the strategy itself in order to maintain a proper outlook and divide financing accordingly, delegating the correct people while keeping the scale and aspect of the entire project in mind.
- 5. Generating a higher degree of security through the use of such technology as electronic and digital signatures and time stamps, and so ensuring safety and security of transition, authentication, stability and timeliness of documents.
- 6. The reasoning behind or an explanation of the objectives needs to be expressed in greater detail. Defining exactly why each objective is beneficial and how it might affect process change. As this might not seem important at first glance, it gains on importance rapidly when micromanaging comes into play within the implementation stages. People not understanding, or not having a clear enough idea why things need to change and what

- these changes will affect for the better, can seriously hinder the success rates of implementation.
- 7. The introduction of uniform standards. Even though importance is given to the use of standards in general already, which is considered a strength compared/in relation to the strategies in comparison, even more could and should be done on this topic. A clear definition of established uniform standards and those that apply to e-Government should be introduced and these standards should be binding.
- 8. Indicators actually indicate to what extent they implemented the basic functions of the system. Such an approach is appropriate, but a more accurate assessment of the process of computerization shows at least two shortcomings. The first is that there are many features that are necessary, but not included in the indicators. The second is that in this way it is difficult to determine the impact of computerization on the achievement of the basic objectives of the judicial system, which are more efficient, and the quality of the computerization itself (Velicogna, 2007, p.67-69). Instead of using indicators to determine the contribution of each project to the level of computerization, which certainly contributes indirectly to speeding up the implementation process, I propose directly observing its impact on time savings, which would bring direct and tangible benefits to financially evaluate and compare the cost of the project. It may use traditional methods of assessing investments such as ROI (return on investment), NPV (net present value), PP (period return of investment) and IRR (internal rate of return).
- 9. In-house development or outsourcing. The strategy should favor one of the two potential options as a result of a carefully conducted analysis of the long-term advantages and disadvantages of both alternatives. The choice of alternatives may also be affected by the possibility of cooperation with other countries that might show interest (for example, Austria) and the setting of standards and architecture, which results in outsourcing.
- 10. Consideration of the principle of availability of information solutions online. This means that they are accessible to anyone, anytime and anywhere. This also implies the introduction of some sort of a justice portal supporting an intranet<sup>2</sup>. Such IT solutions also allow work from home and enable less downtime for employees in various situations disabling their arrival to work.

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<sup>&</sup>lt;sup>2</sup> Intranet is a computer network that uses Internet Protocol technology to share information, operational systems, or computing services within an organization.

### **CONCLUSION**

The implementation of ICTs and the computerization of the judicial systems in European countries have been going on since the 1970s. Europe has achieved enormous progress on a pan-European scale as an entity connecting justice systems and offering cross border dispute resolution. EU member states have also progressed significantly as evidenced by the CEPEJ reports from 2006 to 2008. Even in Slovenia, developments in this area can be described as very dynamic.

Based on the current analysis of the states of e-justice in Europe it can be determined that Slovenia ranks relatively high in comparison to other EU member countries. While it is only missing one point on the CEPEJ scale of ICT implementations in justice, from being among the best and most developed member states, it was pointed out to be one of the two pioneers in video conferencing and sound recording in judicial proceedings.

The current development of e-Justice in Slovenia is based on an "Analysis of processes, legislation and provision of information to the judicial authorities of the Republic of Slovenia" and the preparation of a draft action plan or "strategy of e-Justice" in 2008. Contained in the mentioned document is a portfolio of projects, of which 14 have been completed so far and others are in various stages of development. The projects' aim is to raise the level of computerization of Slovenian justice.

Comparing Slovenia's e-justice strategy to those of Portugal and Austria it is determinable and not surprising that, while it has surpassed and overtaken both countries in comparison within certain topics, it also lacks specificity within others or even lacks whole topics in general.

In general, the strategy describes many aspects similar to the Austrian one; however, it lacks in specificity level noticeably and also does not introduce any theoretical or scientific background. On the basis of this paper, this can be considered a major weakness of the current strategy and should be revised and amended. There are numerous authors supporting the ideas of strategic planning and strategic alignment within it. In contrast, Austria has a whole segment devoted to theories of Henderson and Venkatraman, also described in chapter 1.2 which predict a beneficial impact of the alignment of the IS/IT and the Business strategy.

Even so, this should not be considered a letdown, since Austria has won numerous EU awards for their work on electronic justice and achieving their specificity levels should be considered as a goal to strive for. Portugal on the other hand seems to have taken a different approach to designing an e-justice strategy, making it more objective-oriented as well as practical. In comparison, the Slovenian strategy has less explained and detailed objectives defined, while the Portuguese strategy introduces a very clear picture of what and how things are intended to be done exactly.

As opposed to the Austrian strategy, the Portuguese document should, according to the findings of this paper, not be taken as a prime example and basis upon which Slovenia's new strategy should be drafted. As much as it might effectively communicate the purposed actions and objectives, it does so in an unorganized fashion. Not written with a variety of possible audiences in mind, it has no version accessible in English and is missing many features in comparison to both Austrian and Slovenian strategy, as displayed in Figure 8 (page 45).

Following the comparison of strategies and the applying of theoretical knowledge, the strengths and weaknesses were established and recommendations were given to further improve the strategic approach to implementing ICTs into the Slovenian justice system.

In drastic economic times such as the years preceding 2009 following the peak of the recession, project funding has become a problematic field. There is a so-called "crisis of public expenditure" present in all Western societies, which has put an end to all previously assumed growth of EU funds and public expenditure levels.

Advantages in applying for funding are therefore given to projects with the greatest difference between benefits and costs. Not only does this merit a plan of funding to be included in the strategy, it is also from this standpoint that one of the greatest weaknesses regarding the problem of indicators of the strategy should be addressed and altered in the drafting of a new strategy. Other methods should be carefully considered regarding measurement of the effects of computerization.

There are several methods that attempt to address the indirect effects of computerization (Turban & Volonino, 2010, p.64). The computerization of the judicial system, of course, affects not only increased speed of business processes and thus simplifies the procedures from the perspective of the participants, but also has an indirect impact on the efficiency and quality of the system (European Commission for the Efficiency of Justice, 2010).

The future of e-justice in Slovenia looks positive and continuous advances are sure to bring even more beneficial developments into the already established e-justice system. Expectations that these developments boost Slovenia's score in the next CEPEJ evaluation and allow it to join the representatives of the highest rated (most advanced) group of countries regarding ICT implementations, are certainly completely realistic.

Potential to improve, however, should not end when satisfactory standards within the European Union are achieved. Countries like Singapore, Australia and Canada been advancing in e-justice solutions since the early 1990's and some have since developed to a point where they are even able to export their knowledge and solutions, as is the case of Australia's advanced courtroom solutions. The pillars of the Slovenian justice system development should be continuous gain of new ideas from countries around the world as well as adapting and implementing technologies that could fit Slovenia's needs best.

Short term aspirations of Slovenia aside, the future of e-justice worldwide seems to be in the virtual world, as technology provides us with more and more sophisticated solutions to everyday problems. The electronic justice is just a first step of de-materializing the physical aspects of the justice departments' business processes. Further down the road of evolution, we can expect digitalization and computerization of basically every aspect, from video interaction among entities, to paperwork being obsolete completely as backup servers take over virtual space in the cloud computing<sup>3</sup> departments producing a world where a person's physical presence will never be necessary in order for him or her to conduct whatever business he or she may have, not only in justice, but other departments as well. A number of technologies can now be combined to make a virtual courtroom a real possibility, and the power of technology to create 'virtual spaces' for the delivery of justice is receiving increasing attention (Agusti, 2009, p.221).

It is important to stress that court strategies in relation to ICT also need to take into account general government policies and strategies on e-government, which is still a developing area in Slovenia. Applying this information to the notion of a completely de-materialized justice, it becomes clear that this new way of justice functioning is still relatively distant in the future.

Issues regarding security alone are already presenting difficulties in the development and implementation of ICT technologies, moreover in the implementation of e-justice. These issues can only be expected to produce even more difficulties when it comes to dematerializing of an even greater portion of the justice system.

Even due to all the limitations, the notion that law administration must take place in a physical courtroom is one that is now receiving critical examination, as this is both a waste of time and financing opposed to alternative solutions which could theoretically be operational. There are, however, a number of issues in relation to this concept that warrant further investigation (Agusti, 2009, p.221-223).

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<sup>&</sup>lt;sup>3</sup> Cloud Computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet).

### SUMMARY OF THE BASIC FINDINGS IN SLOVENIAN

### ANALIZA SLOVENSKE STRATEGIJE E-PRAVOSODJA ZA OBDOBJE 2008 – 2013

#### Luka Narat

### Predmet in cili naloge

Vlada republike Slovenije je 12. oktobra 2006 sprejela resolucijo o nacionalnih razvojnih projektih za obdobje 2007–2023 in v njej je povezovanje storitev institucionalnega okolja z uporabo tehnoloških inovacij poudarjeno kot ključna naloga Ta naloga se izvaja v okviru strategije informatizacije pravosodnega sistema, katere veljavnost se izteče v letu 2013 (Slovenian Ministry of Justice, 2008).

Potrebna bo torej nova strategija informatizacije slovenskega pravosodnega sistema, takšna, ki bo zagotavljala stalni razvoj in izboljšave. Temeljiti bo morala na znanju, pridobljenem v preteklih petih letih strateškega izvajanja sistema e-pravosodja v Sloveniji. Pri razvoju te strategije pa bo treba upoštevati tudi napredek na področju informacijsko-komunikacijskih tehnologij (IKT) in preučiti razvoj e-pravosodja v drugih evropskih državah.

Namen naloge je temeljito preučiti stanje e-pravosodja v Sloveniji, Avstriji in na Portugalskem ter izdelati primerjavo strategij razvoja e-pravosodja med temi državami. Prav tako je namen razumeti, kako strategija vpliva na uspeh pri razvoju in izvajanju e-pravosodja v vsaki od teh držav. Treba je vzpostaviti skupni okvir in na njegovi podlagi opraviti primerjavo. Osredotočenje na iskanje skupne podlage bo nedvomno omogočilo prepoznati razlike med strategijami in posledično ugotoviti prednosti in slabosti vsake izmed njih.

Ključni namen in rezultat diplomskega dela so predlogi za prenovo strategije, razvoja in implementacije e-pravosodja v Sloveniji, kar bo delo slovenskega ministrstva za pravosodje letu 2013.

### Informacijsko-komunikacijske tehnologije v pravosodju

Globalno usmerjeno poslovanje sili podjetja vseh gospodarskih sektorjev, da spremenijo način poslovanja in uporabljajo najnovejše informacijske tehnologije (IT). Pritisk na vladni sektor, naj v svoje poslovne procese vključuje nove tehnologije, sicer ni tako močan kakor pritisk na podjetja, ki delujejo v konkurenčnih razmerah. Kljub temu pa je tudi v njem čutiti pritisk državljanov, ki zahtevajo krajši odzivni čas, hitro obdelavo zahtevkov in ažurni sistem delovanja vladnih organizacij in njihovih storitev.

Potreba po informatizaciji prinaša potrebo po prestrukturiranju in prenovi poslovnih procesov. IT ima lahko pri izvajanju prenove poslovnih procesov v organizaciji različne vloge. Lahko deluje kot omejevevalec tam, kjer obstoječe informacijske tehnologije onemogočajo uspešno

prenovo poslovnih procesov podjetja. Nasprotno pa lahko deluje kot katalizator tam, kjer pridobitev novih IT omogoča in spodbuja prenovo poslovnih procesov.

Pri načrtovanju in vzpostavljanju informacijske tehnologije v okolju organizacije je treba nujno upoštevati vse vidike njenega delovanja. Vsak projekt izgradnje, obnove ali zboljšanja IT mora biti jasno določen in mora organizaciji prinesti očitne koristi. Na podlagi teh meril je mogoče ustvariti dober načrt in zagotoviti sredstva za projekt (Markič, 2004, p.41). Rezultat tega načrta pa je strategija za izvajanje IT, na podlagi katere bodo potrebne spremembe v postopkih (poslovnih procesih) usklajene z implementacijo novih tehnologij.

Dodatek črke »E« pred koncept predpostavlja uporabo informacijskih in komunikacijskih tehnologij (IKT) za določeno področje. Po nedavnem razvoju e-uprave in e-demokracije, se zdi neizogibno, da tudi pridobi pomen tudi pojem e-pravosodje (Xanthoulis, 2010, p.3). Jedro pravosodnega sistema temelji predvsem na izmenjavi informacij. IKT ima torej na tem področju velik potencial. Ta lahko pripomore ne samo k zmanjšanju stroškov in skrajšanju časa izvajanja procesov, temveč tudi k izboljšanju kakovosti sodstva v državi (Carnevali et al., 2006, p.41-43).

Prvotno je napredek pri informatizaciji prava temeljil predvsem na razvoju t. i. sistemov za upravljanje primerov (CMS - Case Management Systems), ki so omogočali sledenje postopkov in avtomatizacijo nekaterih aspektov dela v pravosodju. CMS so tehnološko kot »zaprti informacijski sistemi« posameznih agencij (LAN<sup>4</sup> arhitektura), kar pomeni, da je bil dostop do sistemov in podatkov v teh sistemih na voljo zgolj posameznikom na lokalni ravni tj. zaposlenim na sodišču ali agenciji. Glavni razlog za obstoj CMS je bila avtomatizacija in informatizacija nekaterih obstoječih administrativnih nalog in sledenja postopkov. Ti so bili razviti brez posebnih pravnih omejitev, saj je bila izmenjava podatkov med pravosodnimi uradi in sodišči v elektronski obliki prepovedana (Carnevali et al., 2006, p.41-44). Potreba po varnosti je bila tako bistveno manjša kakor v »odprtih informacijskih sistemih«, v katerih so podatki dostopni več posameznikom, sodiščem in organizacijam in celo javnosti. To seveda ne pomeni, da je bila varnost pri CMS zanemarjena, saj so ti sistemi še vedno vsebovali standardne varnostne sisteme in metode (podvajanje, varnostne kopije ...).

Ključna faza evolucije e-pravosodja je torej prestop iz zaprtih informacijskih sistemov v odprte sisteme (JEDI – Judicial Electronic Data Interchange). V ta namen so mnoge države uvedle projekte, ki vključujejo povečanje njihove infrastrukture IKT v pravosodnem sektorju in izboljšanje ali dopolnitev trenutne podpore CMS. Le nekaj evropskih držav je imelo Do leta 2006 so imele delujoče sisteme JEDI samo tri evropske države, in sicer Finska, Avstrija in Velika Britanija. To število se je do sedaj že povečalo, vendar je še vedno tako majhno, da odraža raven skrbi glede kompleksnosti in vzbuja vprašanja glede varnosti, ki je potrebna pri ustanavljanju in razvoju teh sistemov do polnega zagona (Carnevali et al., 2006, p.51-53)

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<sup>&</sup>lt;sup>4</sup> LAN (ang. Local Area Network) je omrežje zaprtega tipa z omejenim številom uporabnikov.

Z novimi tehnologijami, kakršna je JEDI, naj bi racionalizirali in poenostavili sodne postopke ter dosegli, da bi postali dostopnejši ne samo znotraj pravosodnih entitet, temveč tudi za širšo javnost. Uporaba elektronskega sistema na tem področju skrajšuje procesne roke in zmanjšuje stroške poslovanja v korist državljanov, podjetij, pravosodnih delavcev in delovanja sodnega sistema (Council of the European Union, 2008)

Z uporabo IKT v pravosodju postane pravosodni sistem bolj učinkovit, poveča se njegova produktivnosti in zmanjšajo se transakcijski stroški. Prav tako se z zagotavljanjem najboljših razpoložljivih informacij in njihovega boljšega razumevanja poveča dostopnost sodstva. Poveča pa se tudi preglednost delovanja sodstva, saj tehnologije omogočajo boljše obvladovanje primerov in bolj kakovostno ocenjevanje rezultatov. Navsezadnje se poveča tudi zaupanje državljanov v pravosodni sistem (Agusti, 2009, p.21).

Pomembno je poudariti, kako ključnega pomena za razvoj in napredek IKT v pravosodju je problem varnosti. Če hočemo strategije IKT izvajati uspešno, jo moramo ustrezno obravnavati in določiti njena teoretična izhodišča,.

Obrambno ministrstvo ZDA (U.S. Department of Justice, 2008, p.19) je mnenja, da je bistvo informacijske varnosti, katere koli institucije, upravljanje tveganja in ranljivosti. To upravljanje mora vsebovati postopek za ugotavljanje ali odpravo, omilitev ali sprejetje šibkih točk na podlagi inherentnega tveganja in stroškov. Ta proces naj bi ustvaril varnejše okolje in izboljšal učinkovitost institucije. Sodni organi naj bi torej dokumentirali svoje politiko upravljanja ranljivosti in ustvarili t. i. načrt upravljanja ranljivosti (ang. Vulnerability Management Plan).

#### E-pravosodje na ravni EU

Na ravni Evropske unije se je začel izraz »e-pravosodje« uporabljati okoli leta 2007, in sicer v številnih dokumentih sveta EU. Komisija Evropskih skupnosti je maja 2008 objavila strategijo z naslovom za Evropsko strategijo e-pravosodja, ki velja za mejnik pri uveljavljanju tega koncepta. Dokument definira e-pravosodje kot posebno področje pod bolj splošnim okriljem e-uprave, pri tem pa se e-uprava razume kot uporaba informacijskih in komunikacijskih tehnologij v vseh državnih upravnih postopkih (Commission of the European Communities, 2008).

Komisija meni, da »vprašanj, kot so vseevropsko pravosodno sodelovanje in čezmejni dostop do pravnega varstva, ni mogoče učinkovito obravnavati na nacionalni ravni ali na podlagi dvostranskih sporazumov med državami članicami«. Da bi omogočili nastanek vseevropskega pravosodnega sistema, koristnega za državljane, podjetja, sodnike in pravne strokovnjake, je potrebna ustrezna koordinacijo na ravni EU. Po mnenju Komisije naj ukrepi EU ne bi nadomestili nacionalne pobude na tem področju, marveč bi jo dopolnili, saj bi omogočili povezovanje nacionalnih projektov. Nacionalna pristojnost držav članic tako ne bi postala sporna (Commission of the European Communities, 2008).

Za Komisijo je »e-pravosodje« začetek zadovoljevanja potrebe po boljši dostopnosti pravnega varstva, sodelovanja med pravosodnimi organi in učinkovitejšega pravosodnega sistema na vseevropski ravni. Z vzpostavitvijo takšnega sistema naj bi članice EU spodbudile sinergijo med prizadevanji na evropski in nacionalni ravni ter hkrati, kot dodano vrednost, omogočile ekonomije obsega. Prav tako bi ta sistem izboljšal dostop državljanov do pravnega varstva in omogočil, da bi postali pravni ukrepi bolj učinkoviti.

#### E-pravosodje držav članic EU

V EU je za vključevanje IKT v pravosodje – z njimi naj bi izboljšali učinkovitost in delovanje pravosodja v državah članicah – odgovorna Evropska komisija za učinkovitost pravosodja (CEPEJ). Delovna skupina CEPEJ-GT-EVAL redno objavlja poročila o ocenah pravosodnih sistemov v državah Evropske unije. Avtorji poskušajo prikazati trende v sodstvu pa tudi reforme v posameznih državah. Vsako poročilo sicer temelji na primerjavi med državami, vendar prinaša tudi vpogled v stanje na področju sodstva v vsaki članici EU.

Izvajanje implementacije IKT je le manjši del poročila CEPEJ, saj obsega le 7 strani strogih dejstev o stanju IKT v evropskih državah. Podatki se zbirajo na anketnih listih, ki jih pošilja CEPEJ, s samoocenjevanjem članic.

Povzetek njihovih ugotovitev predstavlja in poudarja pomembne informacije o trenutnem stanju e-pravosodja in razvoja na področju IKT v državah članicah EU. CEPEJ (European Commission for the Efficiency of Justice, 2010, p.91) definira v svojem poročilu o evropskih pravosodnih sistemih tri področja uporabe IKT.

Prvo področje je raven uporabe računalniške opreme za neposredno pomoč sodnikom in/ali sodnim uradnikom. Nanaša se predvsem na zmožnost obdelave besedil v pisarniških prostorih, kjer lahko sodnik ali član osebja pripravi osnutek odločitve v elektronski obliki. Prav tako se nanaša na dostop do interneta in stopnjo opremljenosti z medijskimi napravami in standardi v uporabi.

Drugo področje so sistemi za registracijo in upravljanje primerov. Predvsem v zvezi z zamenjavo klasičnih sodiščnih knjig in drugih sodnih registrov z računalniškimi zbirkami in kazenskimi evidencami.

Tretje področje je razpoložljivost računalniške opreme za komunikacijo med sodišči in njihovim okoljem. To so predvsem sodne spletne strani, ki zagotavljajo različne podatke o sodnih dejavnosti in pravosodnih organizacijah. Značilnost takih spletnih strani je, da omogočajo prenos obrazcev in njihovo predložitev v elektronski obliki.

Raven implementacije opreme IT za neposredno pomoč sodnikom in sodnim uradnikom je po raziskavi CEPEJ (European Commission for the Efficiency of Justice, 2010, p.93) v EU precej visoka. Večina (29) držav članic je navedla dobre rezultate v tem segmentu. Za Grčijo in Črno Goro je bilo poudarjeno, da se lahko z nadaljnjim razvojem hitro približata

uspešnejšim državam, medtem ko se za nekatere države, kot so Moldavija, Srbija in Ukrajina zdi, da bi lahko imele zaradi povečanega financiranja v infrastrukturo IT pravosodja hude finančne težave.

Precej manj prizadevanja je opaziti pri zagotavljanju računalniške opreme za lažjo komunikacijo med sodišči in njihovim okoljem. A trend je kljub temu pozitiven; devet držav, tudi Slovenija in Avstrija, je prejelo posebej visoke ocene. Visoko raven računalniške zmogljivosti je mogoče najti v eni tretjini držav, vendar pa je treba poudariti, da s kazalniki, uporabljenimi pri ocenjevanju, ni bila ocenjena učinkovitost teh sistemov.

V poročilu je zapisano: »Na splošno uporaba IKT na sodiščih v Evropi stalno narašča. Mnoge države ali organizacije poročajo o nedavnih ali tekočih reformah (Albanija, Bosna in Hercegovina, Luksemburg, Španija, Švica in nekdanja jugoslovanska republika Makedonija).«

CEPEJ (European Commission for the Efficiency of Justice, 2010, p.94) omenja sedem držav ali entitet, ki se lahko pohvalijo s stoodstotnim izvajanjem računalniških zmogljivosti v vseh sektorjih, navedenih v vprašalniku: Avstrija, Danska, Finska, Malta, Rusija, Turčija Velika Britanija in Škotska. Nasprotno pa o Moldaviji in Gruziji poroča, da imajo v primerjavi z drugimi državami razmeroma nizko stopnjo informatizacije.

### Trenutno stanje strategije e-pravosodja na Portugalskem

Politika modernizacije sodstva na Portugalskem predvideva uvedbo informacijske tehnologije in sodobnih oblik komunikacij z namenom, da bi bil sistem sodstva bolj dostopen za uporabnike (državljane) in hkrati primeren za zaposlene, oziroma za lažje opravljanje njihovega dela. Tak sistem dela lahko omogoči hitrejše dostopanje do podatkov (osebni in stvarni podatki ter identifikacijske številke) in spremljanje procesov (faze sodnih procesov, razprav, postopkov, vezanih na poslovanje podjetij – insolventnost, davki, itd). Na ta način se lahko definirajo kazalci, ki vplivajo na vodenje sistema (sodstva in gospodarstva). Ocenjuje se, da bo modernizacija sodstva pomenila velik napredek pri delovanju in učinkovitosti sistema, kar bo imelo učinek tudi na bolj ekonomično delovanje sistema in hkrati na boljše zagotavljanje pravnih okvirov za delovanje gospodarstva. Zato je plan modernizacije portugalskega sodstva upravičen in zakonit (Portuguese Ministry of Justice, 2011).

Kljub napredku, ki je bil storjen v zadnjih letih na področju nabora možnih digitalnih storitev, ki so na voljo državljanom in podjetjem, še posebej na področju registrov in notariatov, se zdi smiselno, da Ministrstvo za pravosodje oblikuje načrt razvoja informacijskih sistemov in možnosti ponovne uporabe obstoječih virov. S tem naj bi se zagotovila večja produktivnost in zadovoljstvo državljanov. Načrt informatizacije pravosodja je potrebno izvesti s posodabljanjem konceptov v sorazmerju s tehnološkim napredkom. Upoštevati je treba mednarodno priznane dobre prakse, ki vključujejo principe Evropskega e-pravosodja, vzpostavljenega s strani Evropske Unije.

Delovna ekipa, zadolžena za razvoj in izvršitev predlaganih ukrepov v zvezi z e-pravosodjem, naj bi, pod neposrednim nadzorom Ministrstva za pravosodje, razvila, promovirala ter nadzirala vsa področja, opisana v strategiji ter po potrebi predlagala dodatne postavke.

Financiranje iniciativ, ki se tičejo ukrepov modernizacije e-pravosodja, je zagotovljeno s strani Ministrstva za pravosodje ter z uporabo strukturnih sredstev.

Trenutno stanje strategije e-pravosodja v Avstriji

Strategija IT avstrijskega ministrstva za pravosodje temelji na znanstveni in strokovni literaturi, ki predlaga usklajenost med poslovno strategijo organizacije in strategijo IT. Usklajenost temelji na splošnem modelu povezanosti med zunanjimi in notranjimi dejavniki in poslovno ter IT strategijo kot ga predlagata Henderson in Venkatraman (1993, p.2-16).

Teorija in praksa sta pokazali, da imajo investicije v IT pravosodnega sistema največji učinek takrat, ko sta poslovna in IT strategija usklajeni (Austrian Ministry of Justice, 2010).

Cilji strategije IT izhajajo predvsem iz ciljev posameznih organizacijskih enot in iz ciljev pravne informatike. Pri tem pa upoštevajo cilje zvezne vlade, ki se nanašajo na e-upravo in cilje avstrijskega pravosodnega sistema ter mednarodna priporočila.

Po mnenju avstrijskega ministrstva za pravosodje (Austrian Ministry of Justice, 2010), mora informatika pravosodnega sistema temeljiti na enotnih širše uveljavljenih standardih in tistih, ki veljajo za e-upravo, kot so na primer modules moduli za spletne aplikacije (ang. Module for online applications - MOA). Ti standardi predstavljajo komponente ciljne arhitekture pravosodnega sistema.

Trenutno stanje strategije e-pravosodja v Sloveniji

Strategija ima tako nacionalni kot strateški pomen. Njeno izvajanje omogoča izboljšanje učinkovitosti pravosodja, ki bo omogočilo boljše gospodarstvo, večjo pravno varnost posameznikov in povečanje blaginje. Prispeva h kakovosti življenja državljanov in učinkovitemu varstvu pravic.

Glavni namen e-pravosodja je povečati učinkovitost pravosodja. Odvija se v okviru treh medsebojno prepletenih komponent. Prva je institucionalna, ki predstavlja pravno podlago, druga je organizacijska, ki zajema delovanje pravosodnih ustanov, tretja pa je tehnološka komponenta. Upošteva se načelo primerne rabe tehnologije – kako nove možnosti, ki jih ponuja tehnologija, najučinkoviteje uporabiti za uresničevanje strateških ciljev.

Namen vzpostavitve e-pravosodja je zagotoviti učinkovitost pravosodnih postopkov v pravosodnem sistemu in pospešiti uresničevanje temeljnih dolgoročnih ciljev Republike Slovenije v pravosodju.

Rešitve e-pravosodja so namenjene vsem udeležencem v pravosodju: fizičnim in pravnim osebam RS ter državam članic EU, pravosodnim organom ter organom ali organizacijam državne in javne uprave, ki so neposredno povezani s pravosodnim sistemom ali udeležencem pravosodja.

Strategija sledi povečani potrebi po elektronskem poslovanju, obvladovanju velike količine informacij, večjem pričakovanju državljanov glede dostopnosti elektronskih storitev v pravosodju, potrebi po zagotavljanju kakovostnih pravosodnih storitev glede na omejena javna sredstva in potrebi po povezovanju med nosilci v pravosodnih postopkih z drugimi ustanovami v državi in na ravni EU.

Vizija e-pravosodja je v pravosodnem okolju uveljaviti sodobne informacijske in komunikacijske storitve, ki naj bistveno pripomorejo k učinkovitemu poslanstvu pravosodnega sistema. Posamezni projekti so ovrednoteni po pomembnosti, skladno s predvidenimi učinki glede na vizijo, strateške usmeritve in uresničevanje ciljev e-pravosodja.

Priporočila za izboljšavo slovenske strategije e-pravosodja

Na podlagi primerjave avstrijske in portugalske strategije s slovensko je mogoče ugotoviti, da nekateri deli slovenske strategije izstopajo kot izrazito pozitivni, medtem ko drugi očitno niso izkoristili svojih potencialov. Ena izmed prednosti slovenske strategije je, da pripisuje velik pomen izobraževanju in usposabljanju, saj je tehnološka pismenost še vedno velik problem (Agusti, 2009, p.54). Prijazni vmesniki, FAQ<sup>5</sup> segmenti in učni seminarji izrazito pomagajo pri pravilni in optimalni uporabi tehnologije. Druga prednost so kazalniki uspeha za vsako skupino ciljev strategije: omogočajo boljši prikaz ravni uspešnosti izvajanja implementacije IKT in ga sporočajo vodjem projektov. Tretja prednost slovenske strategije je, da vsebuje analizo sedanjega stanja IT v pravosodnem sistemu, saj s tem zagotavlja lažje opazovanje napredka in hitrejše zaznavanje razlogov za dodatno prenovo. Prednost je tudi integracija s pravosodnimi sistemi drugih držav članic EU, ki pomaga vzpostavljati in zagotavljati komunikacijo s pravosodjem na ravni EU in z drugimi državami članicami.

Slabosti slovenske strategije pa so predvsem majhna odvisnost od uveljavljenih metod strateškega planiranja, nedefiniranost informacijske arhitekture, pomanjkanje znanstvene in teoretične podlage, pomanjkanje vnaprej določenega finančnega načrta, pomanjkanje informacij o varnosti, neizrazito argumentiranje ciljev, nejasno definirani standardi in nenatančnost kazalnikov uspeha.

Na podlagi teorije strateškega načrtovanja, primerjave strategij in analize prednosti in slabosti so bile sprejete smernice za nadaljnji razvoj strateškega načrtovanja IT v slovenskem pravosodnem sistemu, s poudarkom na naslednjih segmentih delovanja:

<sup>&</sup>lt;sup>5</sup> FAO (ang. Frequently Asked Ouestions) – Pogosto zastavljena vprašanja.

Močnejša naslonitev na uveljavljene metode strateškega planiranja. Med opisanimi metodami je najprimernejša metoda CSF<sup>6</sup>, ki temelji na kritičnih dejavnikih in je primerna za neprofitne organizacije. Najpomembnejši kritični dejavnik uspeha je prav gotovo povečana hitrost poslovnih procesov v sodstvu. Večja hitrost je neposredna posledica hitrejše komunikacije, avtomatizacije rutinskih postopkov in hitrejšega dostopa do informacij. Posredno je hitrost večja zaradi višje kakovosti procesov, ki imajo manj napak, in je zato manj potreb po ponavljanju postopkov. Drugi kritični dejavnik je zmanjševanje stroškov. Večja hitrost pomeni, da zaposleni v pravosodju porabijo manj časa pri istih projektih, to pa neposredno zmanjšuje stroške. Pravosodni sistem tako tudi prispeva k uravnoteženemu proračunu. Stroški so lahko tudi nižji zaradi standardizacije in enotne arhitekture.

Jasna definicija informacijske arhitekture. Vsebovati bi jo morala že sama strategija, namesto da je navedena v razpisni dokumentaciji. Enotna informacijska arhitektura pravosodnega sistema, ki temelji na enotnih standardih, bi zelo olajšala integracijo informacijskih rešitev in izvajanje elektronskega poslovanja.

Vzpostavitev znanstveno-teoretične podlage. To bi omogočilo uporabo najboljših praks, pridobljenih v drugih državah ali tudi v razvojno usmerjenih podjetjih. Teoretična podlaga bi zagotovila natančnejši pregled nad potrebnimi materialnimi in človeškimi resursi, potrebnimi za projekt, in dvignila stopnjo zaupanja v realizacijo projekta.

Definiranje finančnega načrta projekta. Ko gre za praktične vidike izvajanja in razvoja projekta, lahko podroben finančni načrt znatno zmanjša stroške realizacije in minimizira zamude. Če je elaborat ustrezen je mogoče finančni aspekt obravnavati in ocenjevati v preliminarni fazi in na raznih nivojih. Še zlasti je pomembno, da dokument podrobno prouči entiteta, ki je nosilec izvajanja projekta in ki mora svojo percepcijo strategije uskladiti z razpoložljivimi finančnimi viri.

Zagotovitev višje stopnje varnosti. Uvedba elektronskega oziroma digitalnega podpisa in časovnega žiga bi pospešila distribucijo dokumentov in jim zagotovila višjo stopnjo verodostojnosti.

Utemeljitev ciljev mora biti natančneje izražena. Ugotoviti je treba, za kaj bi bil vsak cilj koristen in kako bi vplival na proces sprememb. Kljub temu da se raven natančnosti sprva ne zdi pomembna, pridobi večji pomen, če se projekt upravlja na nizkem hierarhičnem nivoju, ko ljudje ne razumejo ali pa nimajo dovolj jasne slike o tem, zakaj so potrebne spremembe in na kaj bodo vplivale. Posamezniki, ki spremembam niso naklonjeni pa lahko resno ovirajo uspešno implementacijo strategije.

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<sup>&</sup>lt;sup>6</sup> CSF (ang. Critical Success Factor) – Ključni dejavniki uspeha je ena izmed metodologij strateškega planiranja. Temelji na ključnih dejavnikih ki vplivajo na uspeh in preživetje organizacije

Uvesti je treba enotne standarde. Čeprav so na splošno standardi že upoštevani v sedanji strategiji, bi bilo treba na tem področju storiti več. Jasno je treba določiti enotne standarde in tiste, ki se uporabljajo v e-upravi, njihova uporaba pa bi morala biti zavezujoča.

Dilema lastni razvoj ali nakup. Strategija mora odgovoriti na vprašanje, ali naj se rešitve razvijejo ali kupijo. Zavzeti se za mora eno izmed teh dveh možnosti, odločitev pa mora biti rezultat skrbno izvedene analize dolgoročnih prednosti in slabosti obeh. Izbira alternativ vpliva tako na možnost sodelovanja z drugimi državami, ki bi morebiti kazale zanimanje (na primer Avstrija), kakor na določitev standardov in arhitekture.

Uvedba portala za pravosodje. Obravnavati je treba načela dostopnosti informacijskih rešitev na spletu, kar pomeni, da bi bili dostopni vsakomur, in sicer kjer koli in kadar koli. To prav tako pomeni uvedbo portala za pravosodje. Te tehnološke rešitve omogočajo tudi delo od doma, to pa lahko prispeva k večji produktivnosti zaposlenih.

### Sklepne misli

Na podlagi sedanje analize e-pravosodja v Evropi je mogoče ugotoviti, da sodi Slovenija med bolj razvite države članice EU. Od skupine najboljših držav na lestvici CEPEJ implementacije IKT na področju pravosodja jo loči le ena točka, a bilo je poudarjeno, da je ena od dveh držav, druga je Irska, pionirjev na področju videokonferenčnih sistemov in zvočnih zapisov v sodnih postopkih.

Rezultati primerjave strategije e-pravosodja v Sloveniji s strategijo e-pravosodja v Portugalski in Avstriji ne presenečajo po tem, da je na nekaterih področjih uspešnejša, medtem ko je na drugih področjih šibkejša od ene ali celo obeh primerjanih strategij. V splošnem slovenska strategija opisuje številne vidike, podobne avstrijski, vendar manj natančno, in ne uvaja teoretičnega ali znanstvenega ozadja.

Avstrija je za svoje delo v e-pravosodju dobila številne nagrade Evropske unije in doseči raven njene natančnosti bi moral biti naš prioritetni cilj, za katerega bi si morali prizadevati. Portugalska je izbrala drugačen prijem pri snovanju strategije e-pravosodja; v njem najbolj poudarja cilje in praktično izvajanje. V nasprotju z avstrijsko strategijo je strategija portugalske bistveno šibkejša in je manj primerna za model, po katerem bi se zgledovala Slovenija. Čeprav portugalska strategija predstavlja, kakšni so nameni, ukrepi in cilji, počne to na neorganiziran način. Nima dostopne različice v angleškem jeziku in manjkajo ji številne tematike, ki jih zajemata tako avstrijska kakor slovenska strategija.

Prihodnost e-pravosodja v Sloveniji je pozitivna in pričakovanje, da se bo naša država že v naslednjem ocenjevanju CEPEJ pridružila skupini najbolj naprednih članic EU glede elektronskega pravosodja, je zagotovo povsem utemeljeno.

Možnosti za izboljšave pa seveda niso izčrpane, ko se dosežejo zadovoljivi standardi znotraj Evropske unije. Države, kot so Singapur, Avstralija in Kanada, napredujejo v izpopolnjevanju

e-pravosodja že od zgodnjih devetdesetih let in nekatere so od takrat razvila znanja in rešitve, primerne celo za prodajo. Razvoj slovenskega pravosodnega sistema bi moral temeljiti na stalnem pridobivanju novih idej iz držav in podjetij po vsem svetu.

Če odmislimo kratkoročno pričakovanje, se zdi da bo prihodnost e-pravosodja v precejšnem poudarku virtualna. Tehnologija nam iz dneva v dan zagotavlja boljše rešitve za vsakdanje težave. Elektronsko pravosodje je le prvi korak v smeri zmanjševanja potrebe po fizičnih kontaktih in materialih. Pričakujemo lahko digitalizacijo in informatizacijo prava v vseh pogledih, od izključne videointerakcije med subjekti do popolne zastarelosti papirologije. Podatkovni strežniki že danes omogočajo hrambo vse potrebne dokumentacije na isti točki, in to z odlično dosegljivostjo in hitrostjo iskanja. Z razvojem računalništva v oblaku pa se pričakujeta še boljša povezljivost med subjekti pa večja in lažja dostopnost podatkov in informacij. Več tehnologij se sedaj lahko združi v t. i. virtualno pravosodno dvorano, ki postaja vse bolj realna možnost (Agusti, 2009, p.221).

Pomembno je poudariti, da morajo sodišča v zvezi z strategijami IKT upoštevati tako javnofinančne strategije kakor strategije v zvezi z e-upravo, ki pa je v Sloveniji še vedno v fazi razvoja. Iz tega sledi, da je ta novi popolnoma nematerialni način delovanja pravosodja še vedno daleč v prihodnosti.

Problemi varnosti so težava pri razvoju in izvajanju informacijsko komunikacijskih tehnologij na splošno, še toliko bolj pa v sferi pravosodja države, saj si napak kratko malo ne mora privoščiti. Število problemov in vprašanj v zvezi z varnostjo pa se ob višji stopnji digitalizacije in informacijske dostopnosti samo veča.

Kljub vsem omejitvam se miselnost, da je treba sodne postopke opravljati v fizični dvorani, počasi opušča, saj je to zapravljanje časa in denarja v svetu, ki teoretično že ponuja alternativne rešitve (Agusti, 2009, p.221-223).

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