# Analysis of ICT in the Strategic Modernisation Programme of the Paraguayan Supreme Court

by

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## **Declaration**

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## **Abstract**

Paraguayan Justice has been going through a period of deep transformation. The Justice has many challenges to face. Those challenges should be regarded as opportunities for transformation and not as threats.

It is a fact that information and communication technology (ICT) per se cannot solve all current challenges; however, it can offer solutions to the many problems that confront the judiciary. In that sense, ICT development becomes the best ally of Justice.

The Information, Technology, Processes, Objectives and values, Staff and skills, Management systems and structures, and Other resources (ITPOSMO) dimensions described by Heeks (2006) are applied as the basis for evaluating ICT in the judicial sphere. This research validates the opinion of the users with regard to ICT projects. Judges, court and administrative officials, managers and lawyers constitute the unit of analysis of this study. These stakeholders were interviewed and requested to complete a survey.

The study reveals the high level of relevance that ICT holds for the judiciary, in the sense of providing information and tools for interacting with different users. The objective of ICT is to act as support for improving court and administrative performance through the different ICT systems.

Nonetheless, this research has also uncovered limitations and flaws in the current information systems. These flaws tend to turn the benefits that ICT systems can bring into constraints.

This study makes various suggestions on how to overcome those flaws. The most important suggestion is the development of a holistic approach when ICT projects are conceived. Likewise, the early involvement of stakeholders who will be influenced by any ICT initiative should be encouraged.

### **OPSOMMING**

Paraquay se Justisie het deur 'n moeilike transformasie tydperk gegaan. Die Justisie het met baie uitdagings te doen gekry. Hierdie uitdagings moet beskou word as geleenthede vir transformasie en nie as bedreiginge nie.

Dit is 'n feit dat inligting en kommunikasie tegnologie (IKT) op sigself nie alle huidige uitdagings kan oplos nie, alhoewel dit oplossings kan verskaf vir baie van die probleme wat die regbank ondervind. In hierdie opsig is IKT ontwikkeling die beste roete vir Justisie.

Die Inligting, Tegnologie, Prosesse, Doelwitte en waardes, Personeel en vaardighede, Bestuurstelsels en –strukture, en Ander hulpbronne (ITPDPBA) dimensies wat deur Heeks (2006) beskryf word, is gebruik as basis vir die evaluering van IKT in die regterlike omgewing. Hierdie navorsing staaf die opinie van die gebruikers wat betref IKT projekte. Regters, regs- en administratiewe beamptes, bestuurders en regsgeleerders vorm die eenheid van analise in hierdie studie. Onderhoude is met hierdie rolspelers gevoer en hulle is versoek om 'n vraelys te voltooi.

Die studie het die hoë vlak van toepaslikheid wat IKT vir die regbank bied deur die voorsiening van inligting en hulpmiddels vir interaksie met verskillende gebruikers, onthul. Die doel van IKT is om as ondersteuning te dien om howe en die administrasie se werkverrigting te verbeter met behulp van verskillende IKT stelsels.

Nogtans het hierdie navorsing ook beperkinge en foute in die huidige inligtingstelsels bloot gelê. Hierdie foute neig om die voordele wat IKT stelsels kan bring, in beperkinge om te skakel.

Hierdie studie maak verskeie voorstelle oor hoe om daardie foute te oorkom. Die belangrikste voorstel is die ontwikkeling van 'n holistiese benadering wanneer IKT projekte bedink word. Terseldertyd moet die vroeë betrokkenheid van rolspelers wat deur enige IKT inisiatief beïnvloed sal word, aangemoedig word.

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## LIST OF ACRONYMS AND ABBREVIATIONS

- **APS** Australian Public Services
- **API-** Application Program Interface
- CSJ- Corte Suprema de Justicia
- **CEJ-** Centre of Judicial Studies
- FAQs- Frequently Asked Questions
- **HRD** Human Resource Development
- **IADB-** Inter-American Development Bank
- **ICT-** Information and Communication Technology
- **IS-** Information System
- IT Information Technology
- LACs -Latin American Countries
- MECIP- Modelo Estándar de Control Interno de Instituciones Públicas
- **NPM-** New Public Management
- **PKI-** Public Key Infrastructure
- **R&D-** Research and Development
- **SMP-** Strategic Modernisation Programme
- **TQM-**Total Quality Management
- **UNDP-** United Nations Development Programme
- **USAID-** United States Agency for International Development

## **CHAPTER 1: INTRODUCTION AND PROBLEM**

## 1.1 Introduction

Recent global pressure has forced all levels of government to improve performance. In Paraguay, this has been reflected in an increase of programmes in the most diverse areas, for instance: health, education, finance and justice.

For many years, performance measurement has been applied as a tool for evaluating institutional operations in order to design programmes for allocating resources, whether technical, human or physical.

In the judiciary, the interest in measuring performance has grown enormously over the last ten years. For that reason, the judicial power, with the support of international organisations, has started a process of institutional reforms oriented towards the improvement of its management in both the administrative and the judicial area.

Without doubt, the core of any programme of judicial reform is the development of an efficient and effective electronic judicial system or 'e-justice'. This is defined as the use of Information and Communication Technology within the judicial sphere for an enhancement of the services rendered to the users (FundacionTelefónica, 2009).

This study was undertaken to investigate the role played by ICT in improving judicial performance. It has to be accepted, however, that any cultural change induced by such technologies can take longer to adopt and may not work if the key stakeholders' points of view are not considered from the start.

Judicial reforms likewise need to be carried out with consideration of local culture and traditions, not just by buying off the shelf (Malik, 2002; Heeks, 2006). Thus, an on-going tracking of performance is essential to allow learning and to correct any deviation from the intended standards. With multiple dimensions for a judicial reform in existence, this could be looked at from different perspectives.

The ICT dimension is centred on 'sharing knowledge', communication networks and a case management system. This is reflected in the quality of services provided to users, such as information provided through the Internet, online notifications and the real-time case monitoring progress (Malik, 2002).

With a view to the many benefits that ICT offers, the Supreme Court undertook the challenge of incorporating ICT into its operations. The first programme, named 'Strategic Programme of Modernisation' included ICT as one of the main strategies, this being the e-legal Service regarded as the civil initiative of e-justice.

The main purpose of this programme was the 'improvement of everyone's life quality', which was emphasised as another important strategy. The above-mentioned 'e-Legal Service' involved the role and responsibility of the judiciary for a safer and more pleasant life for all people<sup>1</sup>. The evaluation of the changes brought by ICT in judicial management constituted the objective of this research.

# 1.2 Background/Rationale

The Paraguayan Supreme Court has put increasing emphasis on policies that support ICT. In fact, the authorities have the firm conviction that ICT is an interesting initiative to increase competitiveness and to enable the public to participate according to their needs and abilities.

Hence, the judicial power, with the aim of being part of the vanguard with regard to the neighbouring countries, in 1998 requested support from international organisations such as the Inter-American Bank (IADB) and the United Nations Development Program (UNDP) in undertaking a modernisation process.

This modernisation process was divided into five strategic components, as follows: quality public service; professional and highly qualified justice system; a technologically advanced justice system; a public service oriented to people; and,

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<sup>&</sup>lt;sup>1</sup> The term judiciary will be used through this research for referring either to the judicial branch of the government.

finally, a strengthening of the international judicial dimension (Inter-American Bank, United Nations Development Program, Paraguayan Supreme Court, 2002). The purpose of this judicial reform programme involved:

- > Improvement in the quality and efficiency of the administration of justice;
- > Simplification and rationalisation of procedures;
- > Strengthening the independence of magistrates;
- > Improvement in the administration of courts;
- ➤ Improvement in legal education within judicial users expanding access to justice for poor and other disadvantage groups;
- > Prompt and inexpensive justice; and
- > Strengthening the impact of court decisions on society.

The achievement of these, according to the judicial authorities, would impact on the whole society. The expected result is higher public satisfaction, which will make the country more attractive for foreign investment.

Undeniably, 'technologically advanced justice' not only entailed a key programme component, but also involved a milestone for Paraguayan Justice, specifically in the way that the things were being done. This research was centred on the results achieved through this component, not only because it constituted the core of the reform, but also because most of the resources – human, technological and financial – were invested on it.

The objectives of the ICT component included:

- ➤ To facilitate access by the society to judicial information by improving the quality and productivity of the judicial power;<sup>2</sup>
- ➤ To strengthen the relationship between the judicial power and other public institutions such as the offices of the district attorney and the defender and others;
- ➤ To increase the efficiency and effectiveness of the administration of justice by promoting an information system, documentation and management; and

-

<sup>&</sup>lt;sup>2</sup>Quality and productivity of service shall be discussed.

➤ To favour communication among the different instances and legal operators by ensuring the interoperability of ICT systems.

In order to achieve the espoused goals, technicians from IT and Planning and Development departments in partnerships with external consultants from IADB and UNDP worked together in designing and implementing a new information system, which was initially conceived with the idea of addressing the set objectives. The overall goal of the introduction of ICT therefore was the debugging of judicial cases, which would lead to strengthening the judicial capacity of the courts to result in a procedural impulse and, finally, achieve efficiency in the use of resources.

This study was undertaken for several reasons. First of all, based on the researcher's knowledge, little progress had been made toward improved performance management within courts. This was supported by a survey of the performance of the magistrates carried out in 2009 among the main users of judiciary services. According to available sources, those users felt that the quality of service delivery had not been improved through the introduction of ICT within the Supreme Court.

In fact, this segment of society considered court reports to still be flawed and reveal shortcomings, at least during the period considered for this survey (World Bank and International Affairs Department of the Paraguayan Supreme Court, 2009). Those shortcomings made the pursuit of judicial reform complex, but also opportune and important.

The second reason for undertaking this research was to fill the knowledge gap that persists within the judiciary with regard to evaluation, and, at the same, to offer a valuable tool of reference for the planning of future ICT projects within the judiciary.

The third and final reason was to test the information systems implemented. Currently, very little objective information concerning the usefulness of the ICT systems to users is available within the judiciary.

This study attempts to help researchers, judicial authorities, decision makers and users to determine to what extent court and administrative performance is progressing,

which areas are performing better or worse, and possible strategies for addressing flaws.

## 1.3 Research Problem and Objectives

The primary question that this study attempted to answer concerned to what extent ICT implementation as part of strategic modernisation of the Paraguayan Supreme Court has strengthened judicial capacity and improved performance of the judiciary.

The research was directed at evaluating the expected and unexpected results of the ICT component of the modernisation programme in terms of addressing the stakeholders' requirements. The assumption was that, despite of the investment made towards improvement of service delivery by introducing new technologies, the previous shortcomings still prevailed.

This analysis and evaluation was considered mandatory and timely before undertaking new ICT projects. Kusek and Rist (2004:119) go further and they state that, before addressing the existence of divergences or variations between planned and the actual performance, it is time to step back and to evaluate the reasons for the divergences and to determine whether new strategies are needed. In addition, disseminating the results of the IS evaluation could be of great value to judicial decision makers in setting guidelines for future programmes by improving the management and performance of the individuals involved with such programmes.

It is equally important is to accept that, if we do not measure results, 'we cannot tell success from failures' (Kusek & Rist, 2004:11) and, even more important, learn from them. This means that it is extremely important to recognise the errors made in the past where they exist and to correct them in order to avoid committing the same in the future.

## **Objectives**

The current research aimed to find answers to the following statements:

## **General Objective**

➤ To evaluate the outcomes, whether positive or negative, of ICT in the Strategic Modernisation Programme (SMP) of the Paraguayan Supreme Court.

## **Secondary research questions**

- ➤ To explore and inform the meaning and content of strategic modernisation through a literature review and analysis of reform approaches in various countries;
- ➤ To describe the ICT framework as part of Paraguayan judicial reform and modernisation;
- ➤ To describe ICT implementation in the Paraguayan Supreme Court and the effects that this has had on the management of the organization;
- ➤ To determine through existing data analysis, individual interviews and structured interviews whether the outcomes achieved by ICT implementation have met with the expectations;
- > To explain and interpret the research findings; and
- ➤ To conclude on the extent to which ICT implementations has met with the expectations and make recommendations for improvement.

## 1.4 Focus of the Research

As was said, this research represents an attempt to evaluate the technological component of the modernisation plan. Therefore, with the aim of finding answers, this research focused on the outcomes, whether positive or negative, of the ICT projects deployed in the judiciary. This study has made an attempt to reveal those factors that could have influenced, whether directly or indirectly, the failure or success of ICT implementation. Hence, the intention of the researcher was to go beyond of the quantitative criteria of evaluation to also explore qualitative criteria such as customer satisfaction.<sup>3</sup> Likewise, the researcher attempted to determine the effectiveness of the intervention by contrasting it against the established objectives for ICT and determining its sustainability.

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<sup>&</sup>lt;sup>3</sup> Customers comprise the group in society that is affected by this modernisation plan.

## 1.5 Research Design

As discussed so far, the evaluation of outcomes achieved by ICT projects is a complex task which requires consideration of the multiple points of view of the beneficiaries of the intervention, as well as the challenges that are involved.

As a start it is considered important to define the scope of the research design. With regard to the two types of study – empirical and non-empirical – this study followed the empirical route. Empirical studies are based on experience or observation and not on theory. This empirical research was conducted by resorting to the use of hybrid data (numerical and textual). While documental and statistical data including annual reports and reports of previous evaluations comprise the secondary data, interviews and surveys constitute the primary data.

Considering the three types of evaluation cited by Morra Imas and Rist (2009), this study presents a summative evaluation. Likewise, from among the different approaches to evaluation that have been designed, this research focused on goal-based evaluation.

Following from the above, the current research was aimed at determining the achievement of the specific objectives set by the programme for ICT, as well as whether those objectives were consistent with needs, interests and capacities of the different stakeholders. The proposed model of evaluation was also used to assess whether the outcomes of ICT projects would continue beyond the end of the programme.

Morra Imas and Rist (2009) suggest the use of information from three or more theories, sources, or types of analysis to verify and substantiate an assessment. The same authors also agree that triangulation is useful in qualitative research. <sup>4</sup>Therefore, the researcher resorted to individual interviews, structured questionnaires and existing data generated since the beginning of the reform process.

<sup>&</sup>lt;sup>4</sup>Triangulation is the use of three or more data sources, theories and types of information to analyse qualitative data (Morra, Imas & Rist, 2009).

#### Limitations

The following were expected as possible limitations that had to be faced during the course of the measurement and evaluation of e-justice:

- > Lack of evaluation culture;
- ➤ Non-availability of indicators or erroneous indicators;
- > Difficulty in collecting data in the case of sensitive information;
- Time constraints or the time available to the researcher for being in the field with consideration of the beginning and end of the research;
- ➤ Inappropriate translation of the questionnaires and interviews;<sup>5</sup>
- > Inappropriate selection of the evaluation criteria;
- ➤ Low return rate of questionnaires; and
- ➤ Lack of cooperation with regard to providing information from the selected key stakeholders; insufficient information that could lead to an inaccurate evaluation.

## 1.6 Outline of chapters

This research report is divided into the following chapters:

### Chapter 1: Introduction and Statement of the Research Problem

The aim of this chapter is to provide the background and rationale for conducting the study. It also highlights the reasons that were considered to develop the investigation. In addition, this chapter provides clarification of the problem statement and the objectives that were set for this particular research and an attempt to outline the main aspects of the programme to be evaluated so that readers may acquire a better understanding of the issues of concern.

<sup>&</sup>lt;sup>5</sup>Both the questionnaires and the interviews were conducted in Spanish and the researcher translated from Spanish into English.

### **Chapter 2: Theories Informing Strategic Modernisation**

Chapter 2 provides theoretical perspectives of the reform processes carried out in developed countries such as the United Kingdom, Australia and the United States of America, as well as in developing countries such as Argentina and Chile. The objective in this chapter is to unpack the different approaches used in those programmes by contrasting it with the approach applied in Paraguay, specifically within the judiciary.

# Chapter 3: ICT Framework within Paraguayan Judicial Reform and Modernisation

The third chapter presents a review of the theoretical framework of ICT in Paraguay, with special emphasis on the main aspects of the e-government and e-justice in particular.

# Chapter 4: Framework of the Implementation of ICT within the Paraguayan Supreme Court

This chapter presents a detailed description of the main ICT projects implemented between 2000 and 2009 by conducting a critical analysis of the documentation of those projects. The intention of this is to understand the approach used during the design and the implementation of the projects and exploring the accomplishment of their espoused objectives.

This chapter furthermore includes a segment devoted to analysing the quality and productivity of the service delivery, placing special emphasis on the role played by ICT in the improvement of performance.

## **Chapter 5: Explanation and Interpretation of Research Findings**

This Chapter deals with the research problem of the study and the chosen method for the research design with regard to the data collection and analysis.

### **Chapter 6: Explanation and Interpretation of the Research Findings**

Chapter 6 presents the findings derived as a result of this study. The emphasis in this chapter is on comparing the expected outcomes with the achieved outcomes as resulting from the evaluation.

## Chapter 7: Summary, Conclusion and Recommendations

This last chapter includes a summary of the main conclusions drawn as a result of the study. It also presents recommendations based on the current evaluation for consideration towards further similar projects.

## 1.7 Summary

This chapter has provided an introduction to the research topic, accompanied by the statement of the problem and reasons for conducting the study.

In addition, a section was devoted to a discussion of the methodology for collecting data and the research design. The background and possible limitations of the study have also been provided.

Undeniably a technological advanced justice can enormously contribute toward improvement of service delivery within the judiciary but the flaws should be addressed from the beginning. This study will look at the contribution of the implementation of ICT in the improvement of service delivery.

The next chapter provides an overview of the reforms of state conducted in developed and developing countries. Approaches applied by those countries during the reform process and the challenges that had to be faced are discussed as well.

# CHAPTER 2: THEORIES INFORMING STRATEGIC MODERNISATION

### 2.1 Introduction

The theoretical framework of Chapter 2 and the following chapter was built up through literature reviews based on recent literature related to the issues developed in these chapters.

This chapter provides different perspectives on reform. In addition, a definition of reform is operationalized; various reforms in leading reform countries are explored; Latin American reform initiatives are discussed and reform as concept is compared with the modernisation concept.

The notion of the bureaucratic model and the subsequent model that came up as an alternative of bureaucracy entail the starting point of the discussion. Hence, it has been deemed necessary to conduct the research through the use of numerous articles, legal documents and reports which provided meaningful insight and background specifically with regard to the concept of reform. It also provided a theoretical background to two concepts that usually are regarded as similar, but which have different connotations: Modernisation and Reform of the State.

## 2.2 Reform from different Perspectives

Conventionally, the function of public administration is to implement the mandates of the elected representatives in an efficient and honest way. For that reason, public administration manages resources to produce goods and services. The final objective is to generate public value (Moore, 1995), in a similar way to the private sector where the aim is to generate economic value. Some scholars regard public management as a derivation of the private sector (Martin, 1989; Osborne & Gaebler, 1993), while others believe that the public sector cannot be compared with the private sector because they differ in many ways and 'forcing managers into private sector thinking

usually causes more problems than [are solved]' (Goddard & Riback, 1998 as cited in Heeks, 2006:11).

In effect, the public sector gathers certain characteristics that make it unique. For instance; objectives in the public sector are broader than those in the private sector; there is a more holistic view of 'customers'; a major demand for accountability is present; and a greater number of stakeholders are involved. However, the human and technological infrastructure is weaker in comparison to its counterpart in the private sector (Heeks & Bhatnagar, 2001 cited in Heeks, 2006:11).

## 2.3 Operationalising a Definition

Without doubt, the dichotomy between the political and the administrative is one of the basic canons of the bureaucratic model. The political lineaments emanate from the elected representatives, who, at the same time, obtain a temporal mandate from the citizens through the elections. A good public administration necessarily has to be sterilised from the political class, in order to implement public policies that lead to the generation of goods and services in an honest and efficient way, which is expected from the public sector.

A peculiarity which has arisen lately is that more senior managers are involved in the generation of public policies. This previously was the exclusive responsibility of the politicians (Lipsky, 1971). This can be observed when senior officials have to adapt rules and abstract laws into concrete programmes. In fact, in most of the cases, the influence of managers goes beyond the interpretation of a legislative mandate, and also addresses the generation of political proposals.

In addition, small groups of citizens also have the capacity to influence the design and implementation of policies. These groups are known as 'think tanks'. This refers to an 'organization that conducts research and engages in advocacy in areas such as social policy, political strategy, economy, military or technology issues' (Wikipedia, 2011a). From this, it can be seen that the public sector no longer has sole responsibility for implementation.

It is known that, through outsourcing, privatisation and service contracts, both the private sector and the nongovernmental organisations have been playing active roles in service delivery (World Bank, 1997) and the evaluation of outcomes within the public sector. All of these, along with the media, have been performing an active role with regard to making managers aware of the necessity of spreading outcomes within a fragmented society which more and more is competing with the State and other traditional role players, such as trade unions and political parties, in the setting of the public agenda.

As a result of the previous analysis, two issues arise: firstly, it is seen that the dichotomy of administration versus politics does not exist; it is more an expression of desire than a reality. Secondly, it can be seen that the public administration coexists in a political context with other role players who have to fulfil complementary or competitive roles.

Likewise, the management of goods and services is not a monopoly of the public administration. However, roles such as the planning and the spreading of public policies still fall under the public sector's umbrella. The following sections discuss the different public management philosophies used by governments starting with the bureaucracy model.

### 2.3.1 The Bureaucratic Model in Developed Countries

A signal of the success of the Bureaucratic model is its capacity to capture resources. According to the World Bank (1997), the state controlled 45% of the GDP of the developed countries in 1990. In addition to the traditional roles of the state which involved defence, justice and security, the state acquires supplementary roles such as the wellbeing of people.

After the Second World War, and at the beginning of the new age, society started to demand the legitimisation of the State, which was demonstrated through economic growth (Poggi, 1978), which was considered a public good. Based on this, some states justified their intervention through certain actions such as the nationalisation of

industries (European stream), the regulatory boom (USA) and the coordination between industry and commerce (Japan).

However, this model of public management is again undergoing a crisis (Popik,1998). In fact, with regard to public management, both roles of the State and organisation have been the subjects of criticism since the beginning of the 1980s. One of the causes of such criticism is found in the fact the state started to experience a lack of the resources that allowed it to maintain its domination and interference. In other words, it was more difficult to justify its size, considering the current circumstances.

Lipsky (1971) adds another issue: the increasing level of influence that public servants exerted – street level bureaucracy – specifically in the implementation of plans, programmes and projects whose success depended to a large extent on the officials in charge of the implementation.<sup>6</sup>

Another factor behind the crisis for the bureaucratic model in developed countries, relates to the globalisation of business and the increasing use of information technology within the private sector. This is also currently moving toward the public sector. The main reason for the introduction of this new technology was to increase productivity and efficiency in the use of resources. An effect of the new technology was reflected in the services rendered to the population, as the citizens are at the centre of reform. The simultaneous establishment of the customer service centre and work organisations meant the introduction of a new scheme of work: an organisational structure based on networks (Quinn, 1992) supporting decentralisation and replacing the bureaucratic model through which the majority of the governmental entities had been created (Osborne & Gaebler, 1993).

### 2.3.2 Forces of Governance

The previously described factors converged in generating the crisis of the bureaucratic model. As a consequence, reform of the State gained importance in the agendas of developed and lately also of developing countries. In practice, these processes were characterised by a lack of uniform criteria and insights about the manner in which the

<sup>&</sup>lt;sup>6</sup>Lipsky (1971) defines street-level bureaucrats as front-line staff in policy delivery agencies.

State had to be reformed and the issue of which approach was the most advisable, considering the unique circumstances of each government.

Those conceptions arose as a consequence of ideological and conceptual differences with regard to what the role of the State should be; different perceptions about the constraints that States were experiencing; and, finally, the best manner in which to organise the State. The objective in this subsection is to introduce the main models which have arisen as alternatives or complements to bureaucracy. Those models are: the Market-Orientated State, the Participative State, the Deregulated State and the Management Model. The section is devoted to presenting a review of each model, in order to reflect on the theoretical features of the different approaches. However, in practice, the reform of States has been characterised by a combination of different approaches. Finally, this section also presents an attempt to deal with some reform processes that countries such as Australia, the United Kingdom and the Unites States have been undergoing in recent decades.

The first model is the Market-Orientated Government. The vast majority of the economic theory applied to state reform falls into this category. This model has developed from the supposition that public managers are rational, which means that they look to maximising the public budget at the same time as looking for professional promotion (Popik, 1998). Scholars who support this model consider the origin of the problem of the state to be the monopoly and its consequences, such as asynchrony of information and lack of incentives for the improvement of performance.

Outsourcing, auctions and privatisation are some of the mechanisms comprising this model. The part of the State that is still under the control of public managers therefore necessarily has to be redesigned to simulate a market. This can be achieved through contracts that include incentives in order to boost competency among public entities. Issues such as administrative decentralisation, performance payment, and cost units are characteristics of this model, in which the overall objective is to guarantee the

efficiency of the State by means of institutional redesign in order to promote incentives which lead to expected behaviours public choice theory.<sup>7</sup>

The second model discussed in greater detail in this subsection is the Participative Model. This model is regarded as the antithesis of the previous one. The main purpose of this approach is the search for collective mechanisms of decision that lead to the improvement of democracy (Popik, 1998). It basically is a bottom-up approach (from citizen to political class). It aims for the empowerment of public servants in the sense of involving them in the decisions that could affect them. This model also recognises the effective role of bureaucracy, specifically in decision making through the implementation of plans, programmes and projects.

A more radical approach in this model goes even further. It proposes the involvement of society both in the implementation and also in the design of public policies. Supporters of the model propose concepts such as Total Quality Management (TQM), which require teamwork, which consequently leads to a reduction of hierarchy, as decentralisation is one of its axes.

Politically speaking, this model has its roots in the community movement (Etzioni, 1993 as cited in Popik, 1998); organisational humanism (Argyris, 1964 as cited in Popik, 1998); and deliberative democracy (Habermas, 1984 as cited in Popik, 1998). However, one of the criticisms of this model is based on the implementation costs that this model involves, as well as the difficulty of coordinating the tasks of the various stakeholders who are involved.

The third model comprises a search for flexibility in the government or a deregulated government (Dilulio, 1994). The main concern of this theory is to develop a framework that allows managers to manage with relative freedom of action. The main criticism that this model directs at bureaucracy concerns the rules, regulations and codes gathered under bureaucracy which, according to this approach, induce the

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<sup>&</sup>lt;sup>7</sup>Public Choice theory is the use of 'modern economic tools to study problems that traditionally fell in the field of political science. It mainly, studies the behaviour of politicians and public officials as mostly self-interested agents in the interactions with the social system, 'either as such or under alternative constitutional rules' (Wikipedia, 2011b).

inefficiency in the public sector. The Reform of States based on this model seeks to substitute bureaucracy by market-orientated mechanisms of government as a first step toward the adoption of this approach. However, considering that there are functions that exclusively are the responsibility of the state, the option is to give more freedom to public managers as they are best placed to respond the citizens' needs.

Concepts such as free enterprise, creativity and innovation are some of the features of this model. In addition, this approach also considers teamwork for specific projects and challenges and the dismantling of such teams when these activities are concluded. One of the major criticisms of this model is its lack of accountability. In fact, fewer rules and regulations mean less control and this leads to more flexible organisations giving more freedom to managers to take decisions. Finally, one of the indispensable requirements of this model is performance assessment, which is difficult to implement within the public sphere most of the time.

The fourth and final model is the New Public Management (NPM) one, which is a very complex term that arose during the 1980s, and which was adopted in the majority of developed and developing countries. This model has excited different opinions since its conception. Broadly speaking, the literature shows that this can be characterised as embracing two streams related to the NPM: the first direction is supported by countries such as New Zealand and Great Britain. The central argument shows it as more market-orientated (Lynn, 1998). The second direction of this model originated in USA and was typically associated with the notion of 're-inventing the government' (Osborne & Gaebler, 1993). Its purpose basically is to transform the bureaucracy model by adding an enterprising spirit. In contrast with the first approach which is more market-orientated, the American approach tends to be more heterodox, because it mixes different elements of the participative, deregulated and market-orientated approaches. Concepts such as 'management competition', 'customer-orientated' or 'citizen-orientated' and accountability for results are included in the terminologies addressed in the model of this approach (Barzelay & Armajani, 1992; Turban, McLean & Wetherbe, 2004). Moreover, there is a decrease

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<sup>&</sup>lt;sup>8</sup>CRM (customer relationship management): recognizes customers as the core of business and company's success depends on effectively managing relationships with them (Turban McLean & Wetherbe, 2004: 335).

in hierarchy and an involvement of the community to solve its own problems (Osborne and Gaebler, 1993). The presence of these elements encourages competition rather than monopolies. In addition, it adopts some elements that belong to the private sector, such as Total Quality Management and customer orientation.

The main criticism of this model is the continuous search for efficiency without offering alternatives and suggestions for what the state should do in order to accomplish efficiency in the use of resources, considering the complexity of public entities and the fact that not all plans or models are suited to the public sphere.

Meanwhile, the foundations of the market model are based on the supposition that managers look towards maximising the budgets of entities in a rational way. Participative and deregulated models propose that the system that surrounds public entities prevents managers acting in a proper way, because bureaucracy is bound by rules and regulations. These models agree that more freedom for acting will benefit organisations in the long run.

Nonetheless, a criticism of these models is that none of them is concerned with organisational culture and the accompanying difficulties in making changes within the public sphere; only the New Public Managers address that issue to a certain extent. All approaches consider that organizations can change if the right incentives, clear game rules or, at the last instance, the appropriate empowerment are applied.

In addition, these models do not specify the direction that state reforms should take and also the role that managers should accomplish within the organization. The question that arises is: should managers be leaders or executives or perhaps only managers or adopt all roles at the same time? (Khademian, 1998). Those contractions are far from being solved and are reflected in different attempts at reforms that were carried out in recent years, particularly in the developing countries. Things rarely develop as planned; reformers must deal with innumerable constraints, which come from different angles whether from the political arena or from the institutions themselves. Perhaps this is the reason behind the unfinished attempts at reform in most countries.

### 2.4 Some Recent Reforms

The following presents a detailed discussion of three reforms which entailed great diffusion in the way in which they were addressed: the British, the American and the Australian Reform Process<sup>9</sup>.

#### 2.4.1 British Reform Process

To start with, the British reform arose at the beginning of the 1980s with strong political support of the then Prime Minister, Margaret Thatcher, and was characterised by strong politic leadership and an accentuated emphasis on market forces.

The reform carried out within the health sector perhaps constitutes the most outstanding case of all. A strategy introduced for reforming this sector consisted in the introduction of an internal market in order to boost incentives for better allocation of resources.

It is possible to distinguish three very different stages of British reform (Osborne & Plastrick, 1997) and each point has different axes. British reform included, for example, the following issues (Popik, 1998; Richards & Smith, 2005; Osborne, 2007):

Struggle for efficiency: During the decade of the 1980s, the core axis of Britain's reform was, without doubt, the privatisation of certain functions of the State in order to share with the private sector some responsibilities that were the exclusive function of the public sector before the reform, thus forcing bureaucrats to be more efficient.

However, this privatisation was gradual. Thatcher learned from her American counterpart, Reagan, that 'full-blown' privatization could lead to failure (Osborne, 2007: 1). The objective of these reforms was to reduce the size of the state. At the same time, a process of decentralisation was formulated, so that providers had enough flexibility to respond to 'citizen-necessities' (Osborne, 2007:1). Likewise, a new mechanism of financial management and reform in the purchasing system was

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<sup>&</sup>lt;sup>9</sup> It has to be recognized the existence of other reform processes with different results, however, those cases: American, British and Australian constitute a milestone whether for the way that were developed and the challenges that meant.

implemented and it was geared to boosting competency. As a consequence of the implemented reform, public expenditure was reduced from 44% to 40.5% of GDP during that period (Popik, 1998).

Thatcher also formed a team of 'trusted civil servants' called an 'efficiency unit' which, according to her, had the capacity to understand the problems that were behind public sector performance. However, the changes were not implemented at once, but were addressed step by step in a gradual manner. The reason behind this was that organisations cannot be forced to go through painful changes in already settled routine work, for the reform would be driven to the failure (Osborne, 2007).

Osborne (2007:5) proposes that the key is to 'redesign institutional arrangements in the way that organizations operate, [so] those entities come to perceive the changes as necessaries and desirable in their own interest'.<sup>10</sup>

Strengthening of Management: When the previous step did not achieve its expected objective of improving performance, a second stage known as next steps was launched. This approach turned from efficiency into effectiveness and was based on three points. The first was to separate planning functions from other functions. The second was to increase the autonomy and flexibility of public entities and the third to create performance contracts with authorities of the institution (Popik, 1998). As a consequence of this, a great number of entities became executive agencies.

Quality and Participation: In order to consolidate the search for effectiveness, the then British Prime Minister, John Major, fostered the creation of organisational charters where the expectancies of services and the rights of consumers were taken into account, in a kind of social contract.

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<sup>&</sup>lt;sup>10</sup>At the end of the eleven years that Thatcher was in the power, she had privatised 40 British State-owned enterprises, among them British Petroleum (Britoil), Jaguar, British Airways, British Telecommunication, British Steel and Rolls Royce. As a consequence, over six hundred thousand jobs passed from Public Sector to Private Sector (Osborne & Plastrick, 1997:2).

#### 2.4.2 The American Reform Process

This reform process basically started within local level government and the role accomplished by central government was to foster the initiatives taken by local-level managers.

In essence, there were four principles which America's reform laid down. The first was to cut excessive rules and regulations; the second, to prioritise customers; the third, to generate empowerment among employees, and the fourth, to get back to the basics. America's reform process basically required replicating successful practices introduced within the private sector (Khademian, 1998) with the aim of generating an enterprising public sector. In addition, this stream of reform is also supported by the adoption of market mechanisms, but not to the great extent of Britain's reform. However, the reduction of state size, which was also shared with the British reform, meant uneasiness among the public managers who started to see the reform simply as an excuse to introduce the downsizing of entities.

Furthermore, this model was aimed at adding market-orientated elements, participative and deregulated approaches without considering the contradictions that those approaches entailed. Jones and Kettl (2003) also remarked that, despite the saving in terms of amounts that this reform meant (US12.2 million in 1994), America's reform is still running. In other words, it has been not consolidated yet.

### 2.4.3 Australian Reform Process

With regard to Australia's reform, there were nine areas which were considered to be addressed (Moran *et al.*, 2010):

1. Better service for citizens: Australian Public Service Reform considered the necessity of undertaking a systematic evaluation of the services provided from a citizens' perspective in order to develop a government strategy. The blueprint proposed new technological solutions as well as the development of enhanced models for partnering with communities and the private sector. With the objective of getting a better-coordinated interface with all levels on governments, many of the existing state offices were relocated.

- 2. The creation of a more open government. This model has a similar approach to the participative model of state reform in the sense that the citizen collaborates in the design of policies and services. The strategy consisted in the undertaking of a survey in order to assess citizens' satisfaction with the services provided by government and covering all levels—local and national. Australia's reform also placed emphasis on the use of ICT tools, so citizens had the opportunity to express their views to government, building a stronger relationship between citizen and government.
- 3. The Enhancement of policy capability: This consisted in the strengthening of policy capability by undertaking rigorous research, through collecting and analysing data in order to provide evidence-based policy management. Likewise, partnership with research institutions was encouraged. In addition, an aim was to encourage policy implementation in terms of evaluating project risk and in networking between service delivery agencies and entities in charge of implementing policies.
- 4. The reinvigoration of strategic leadership: Considering that successful reforms rely greatly on strong leadership, the Australian government reform considered giving support leadership roles to some people by 'holding them more accountable for meeting their responsibilities' (Moran *et al.*, 2010: x). In addition, the talent manager concept was introduced, allowing managers to identify and nurture high performers.
- 5. The creation of a Service Commission: This commission was in charge of driving the reform within the Australian public service. Two roles were played by this commission. The first was to guide, in the sense of monitoring performance within the public entities. The second was to plan for the workforce, developing strategies for recruiting and retaining high quality employees.
- 6. The clarification and alignment of employment conditions: The reform considered it important to strengthen the framework of the Australian Service Framework in order to work in alliance with it. Therefore, the first step was to

make a review of the APS classification and work level standards. In addition, while looking at the American approach, this reform considered it important to make a review of the size and capabilities of the Australian payroll before appointing new officials.

- 7. The strengthening of workforce planning and development: As a pivotal part of the reform, support of the abilities and skills of employees was considered. The idea was that officials could obtain a wider range of career experience. Another important issue considered by this framework was the top-down and bottom-up feedback among key actors that the reform greatly encouraged.
- 8. The ensuring of agency agility, capability and effectiveness: The blueprint of APS reform proposed regular institutional effectiveness assessment. To this end, a review team was created, which was made up of external supervisors, and also comprising senior managers coming from other entities. At the same time, a 'new outcome structure' was introduced (Moran, *et al.*, 2010: x). This introduced structure had as an aim to create some kind of shared accountability in different areas which were addressed by each entity.
- 9. The improvement in agency efficiency: The reform considered as a primordial action the measure of efficiency in all segments of the government by reducing internal red tape and promoting agility in the processes developed by each agency.

Against the previous background, it is possible to see that each reform process had to face different kinds of challenges during its implementation. Perhaps the major challenge arises from the decoupling of politics from administration, particularly within the American reform model. Khademian (1998) pointed out contrasts among the three introduced models: the American, British and Australian. For instance, both the Australian and American models encourage the participation of managers in the design and implementation of changes. However, this approach also means a constraint in the dichotomy public administration and politics, issues that the British model did not face, except at the high level of management.

In addition, it was seen that managers need more flexibility to act and to take decisions which affect service delivery owing to the fact that they are closer to understanding citizens' necessities. Nevertheless, this also means a constraint in terms of accountability. Thus, the key is to find a balance between avoiding the loss of control over the activities that are developed within the entities and the flexibility that is necessary to provide to the managers.

Another lesson that arises from the reform carried out by those developed countries is that there is no unique recipe to follow, and the reform could vary both in content and implementation. However, it is important to understand what political support entails in order to put reforms into practice.

Likewise, the institutional context plays a pivotal role in the sense that it determines the model of reform that works and how each reform should be implemented. Nevertheless, those models of reform teach an important lesson: the way that public sector is being managed is changing. It is not clear if these reforms will lead to a Post-Bureaucrat model (Poggi, 1998) or just to the adjustment of the model of bureaucracy to bring it in line with the new times and challenges that public entities have to face.

## 2.5 An Unresolved Agenda: The reform of State in Latin America

For totally different reasons, the public sector in Latin America is also going through a crisis. It is well known that the public sector does not work as expected and the impact that the macro-economic adjustment brought to the region has contributed to the creation of a deep crisis within the public sphere.

This section analyses the main factors that led to the crisis in Latin American countries and, at the same time, attempts to separate two reform models: the Argentinean and Chilean. The objective of this is to provide insight into the way in which this reform was implemented in order to provide a comparison with the approach used in Paraguay with regard to the reform process.

#### 2.5.1 Overview of the reform of state in Latin America

In the first decades of the twentieth century, the role performed by the state in developing countries was characterised by great interference in all kinds of activities. In fact, the first model of governance focused strongly on social policies, particularly in countries with major incomes in the region. Meanwhile, the second model was characterised by state intervention in the economy. The common denominator was a protectionist state via policies that supported local production. States were increasing their roles and resorting to different instruments such as nationalisation of companies; internal market protection; and the support of individual initiatives through subsidiary credits. Consequently, at the end of the 1980s, the size of states increased enormously, covering a quarter of the economy of the region. This model is known as the State-Centric Model (Malloy, 1989; Richards &Smith, 2005).

This protectionism model demonstrated lack of success in various Latin American countries such as Argentina and Paraguay. The debt of these governments with international organisations that helped to promote infrastructure development under the exclusive responsibility of the state triggered the debt crisis of the 1980s, leading to the hyper-inflation that hit most of the countries in the region. During this period, the focus was on demystifying issues such as the role of the state; the isolation of the countries; the role of the private sector as a growth factor; and, finally, the role of private-foreign investment (Catteberg, 1989 as cited in Popik, 1998).

The surge in social expectancy that accompanied the return of democracy throughout the decade contributed to a new situation with which the novel democratic governments had to deal. Those governments were forced to demonstrate their capabilities to rise to the occasion, particularly in countries such as Argentina, Chile and Paraguay (Catteberg, 1989 as cited in Popik, 1998).

However, if the 1980s were marked by strong protectionism of the state, the decade of the 90s was based on neo-liberal economic models in which the trilogy of privatisation, deregulation and economic opening was the common denominator in most of the countries of the region.

On one hand, this adjustment led to the control of inflation, which generated economic stability and, consequently, the slow return of economic growth. On the other hand, a weakening of the state occurred in which the public budget was cut without distinguishing between public expenditure and investment (Tanzi, 2005; Hubber, 1995 in Popik 1998), resulting in an inefficient state. 11 Therefore, the necessity of deep institutional reforms whose effect could be perceived in the long term was starting to be considered within financial and multilateral organisations.

However, this reform only helped in reducing inflation, and the deep social problems still remained. 12 In effect, social indicators such as unemployment, the trade deficit, the currency crisis, social instability and the increase in the rate of criminality drove the reconsideration that just controlling all public services did not depict the solution to the crisis.

Nowadays, Latin American countries have to satisfy new and old requests considering a context where public expenditure is less and is under the continued scrutiny of financial and multilateral organisations.

The reality of this situation is that, while the presence of the state in the provision of all services and goods was criticised at the beginning of the 1990s, the actual consensus was to bring the state back (Naim, 1995). This was in contrast to the previous economic reforms whose pivotal axis was basically to move the state away, in order to generate economic stability and to increase efficiency in public expenditure. The new stream of reform points out the reinvention of the state as an agent with the capability of satisfying the demand for goods and services in an efficient manner.

Considering this, the foundation of a new stream of reform for Latin America is seen in the strengthening of the state through an improvement in the capabilities of the public institutions (The Economist, 1996).

<sup>&</sup>lt;sup>11</sup>Those reforms are known as the 'Washington consensus'. Its characteristics are market liberation,

deregulation and privatization' (Wikipedia, 2011a). <sup>12</sup>Oppenheimer (1993) agrees that the reform introduced in Chile, the pioneer among Latin American countries with regard to this issue, just led to a more inequity.

John Williamson, who coined the term 'Washington-Reform', agrees that all efforts of politics have to turn from supporting an over-extended state into a re-enforcement of key public institutions whose efficient work is a pre-requisite for equitable economic growth.

As discussed so far, the economic crisis was one of the triggers that promoted reform within the public sector in Latin America. However, Naim (1995) has stated that the basic needs of a population with regard to services such as health, education and justice have not been satisfied for a long time. Therefore, the question that arises is: To what extent it is possible to apply the rational-legal model? For instance, there is agreement that the administrative-political division was rarely applied in Latin American countries owing to the extreme politicisation of public administration.

Furthermore, the crisis is also linked to the systemic corruption that affects the region. In general, it is observed that when countries reach a certain level of economic stability, the demand from the population about fighting corruption increases (Inglehart, 1990). Likewise, a more independent media and more active multilateral organisations have also accompanied the process of raising awareness among population about this scourge. In fact, corruption is currently an issue of debate in the vast majority of Latin American countries, constituting therefore, one of the catalysts of the reform that these countries are experiencing.

## 2.5.2 Reform of State in Argentina and Chile<sup>13</sup>

Two models of reform the Argentinean and the Chilean models are presented in the following sections.

#### 2.5.2.1 Argentina: A commitment with citizens

Since 2000, Argentina, along with other Latin American countries, has embarked on a process of deep transformation in order to modify the rules of the games that govern

<sup>&</sup>lt;sup>13</sup>According to the United Nations (2010), in Latin America, countries such as Chile and Argentina are ranked 34<sup>th</sup> and 48<sup>th</sup> respectively with regard to e-government. These countries lead Latin America with regard to e-government.

the relationships among the three levels of the government: national, provincial and local. Following the ideas of Washington, which suggests an opening of the economy; the deregulation of markets; downsizing and, more recently, regional integration, Argentina's reform is attempting to change the image that public institutions have in society by introducing deep changes into the financial and institutional areas.

The aim of this is to present the population with a more friendly state, which is reflected in a state more committed to society, capable of rendering services of quality with efficiency, and which will therefore constitute the driving force for economic and social development. In addition, these reforms seek an attentive state especially with regard to the vulnerable sectors of the population. All of these introduced reforms are financed through an equitable tax system and with overall transparent public management.

Taking these processes, conditions and objectives into consideration, as well as the challenges that these present, the Argentinean government launched the Reform and Modernization State Plan, which was implemented step by step following a continuous process whose effects could last for many years.

The pivotal axis of the Argentinean Reform and Modernization Plan (2000) is presented in greater detail through the following:

- ➤ Orientated Result Managing Model, introducing more flexibility in the managing of public entities, all of those with more transparent and accountable management;
- ➤ Elimination of overlapping positions with the objective of the improvement of the allocation of resources;
- > Strengthening of the functions that the State cannot delegate, such as education, legislation, defence, security, justice, social security, employment and health;
- > Strengthening of the regulatory capability of the State with the aim of protecting the interest of the taxpayers; and

Strengthening of channels of dialogue through the involvement of society in the design and implementation of services, through considering the different perspectives that those in the society could have.<sup>14</sup>

The Argentinean Model also places special emphasis on a model of management that prioritises the achievement of outcomes before processes by simplifying procedures and providing public institutions with planning tools with the aim of identifying, prioritising and solving problems.

In order to achieve this, a redefinition of the working practices and organisational outlines of public institutions was considered. This was done by identifying outcomes and responsible people for each activity carried out within the public entities.

In addition, the plan for a legal framework that accompanied each step of this reform process was supported, as was the training of officials at all organisational levels with regard to the simplification of procedures. Likewise, the reform process became part of the strategic planning of all involved institutions, thus becoming a priority of the institutional agenda.

The Argentinean state reform and the modernisation of the state was accompanied by a series of measures orientated towards good performance, accountability and changes in management, with the objective being the achievement of the political projects of the government. One of the foundations of Argentina's public modernisation was the introduction of information technology to enhance the relationship between the government and its citizens, thus adding an element of credibility to the management of the public resources.

Finquelievich (2002), a researcher at the Buenos Aires University, argues that one of the criticisms of the introduction of IT within the governmental sphere was the fact that the planning was carried out for a small group of officials without previous consultation with the rest of public staff. Another debatable point in the implementation of this technology was the absence of impact studies, monitoring and

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<sup>&</sup>lt;sup>14</sup>This is known as a Commitment Letter with citizens (Carta compromiso con el ciudadano).

evaluation, which could have allowed the rectifying of errors and the optimising of technological resources.

Another important criticism concerned the lack of awareness campaigns and of the training of officials in the functionalities that ICT could provide for the tasks and activities that these officials carried out. These aspects were not considered during the implementation of ICT.

The similarity that the Argentinean reform shares with the previous reforms –British, American and Australian- is the participative approach used in its implementation in trying to involve all stakeholders from the different spheres, and sharing insight with the American and Australian models. However, the criticism with regard to the approach used to introduce and implement ICT within the governmental sphere remains, specifically within local governments.

Furthermore, the system based on outcomes managing gave more flexibility to senior managers in the managing of resources. The British Model states, 'let managers manage', which is also a view shared by the New Public Manager Model. However, giving more flexibility does not mean expecting a lack of accountability. In fact, the issue of control was introduced at all levels of government, creating units of operational control within the public entities.

## 2.5.2.2 Chile: A state in the service of citizens - Axis of Reform in the Chilean Model

Following the recommendations proposed by the so-called 'Washington Consensus', the reform and posterior modernisation of the State in Chile was conceived basically as a process whose aim was, firstly, the reduction of the size of the state and, secondly, the diminishing of the state's interference in the economy of the country in favour of a free market economy (Arenas Ramirez, 2008).

However, after having implemented the Washington model, it was realised that state reform does not only concern the reduction of size and a more open economy. Reform has to be conceived from a wider perspective, incorporating new challenges linked to the strengthening of democracy, good governance, building a full rule of law and focusing on the improvement of the social dimension orientated to achieving equity within society.

Those changes can be summarised in three pivotal axes:

- ➤ Change in the conception of State (from a producer State to a regulator State);
- > Change in the relationship with citizens (from subject to citizen); and
- ➤ Change in the paradigms of managing (outcome-orientated managing).

The Chilean state reform process addressed the three branches of government - the Judicial, Executive and Legislative, considering also the three levels of government: National, Provincial and Local, and placing special emphasis on the last one, encouraging citizen participation at all levels.

At the same time, the social sphere was considered a priority in reform, with a focus on strengthening existing social policies with the aim of addressing the vulnerable sector of the population, and also incorporating issues such as urban development and sustainable development. From there, it is seen that the Chilean State reform constituted a milestone in the region, because it considered issues which were not taken into account using other reform processes that were carried out in Latin America.

#### Axis # 1: A regulator state

It is clear that the controller or Supervisor State is not to be seen as an alternative anymore (Union Europea and Gobierno de Chile, 2009), owing to the increased incorporation of neo-liberal postulates with regard to the managing of an economy and the role that States have to accomplish. However, a new term, the Regulator State, came into use (Arenas Ramirez, 2008).

Two features characterise this approach: on the one hand the recognition of the market as an efficient mechanism of resource allocation and as an element able to make the economy more dynamic and, on the other hand, the recognition of the forces of asymmetry and distortion which exist in the market. From this, the regulator role that the State has to play is considered a priority.

Even though the market is developed according to its own criteria and autonomy, States should establish limits through regulatory policies in order to mitigate the existence of asymmetries (Marcel, 2002).

#### Axis # 2: From subject to citizen

The strengthening of governance, including the representative democracy, was necessary for re-enforcing the decision-making organisations (power of States) as well as the political institutions, and all spaces that included the encouragement of civil society participation. According to the design of the plan, this measure would lead to improving the citizens' perception of the effectiveness of public policies (Arenas Ramirez, 2008).

From there, the participation of different groups and social sectors is encouraged in order that they may express their opinions and for those opinions to be heard, specifically with regard to the decisions that affect their lives. An important variable in all this is decentralisation, which involves a redefinition of the attributions of the central government, provincial government and municipalities. The decentralisation of power is therefore seen as a means of transferring power to local level managers in order to facilitate the empowerment of communities, in the sense that these communities are able to find their own solutions to the problems that directly affect them (Morra Imas & Rist, 2009).

#### Axis # 3: From processes to results

The first stage of state reform (at the beginning of the 90s) was mainly characterised by the compliance with procedures without considering the achievement of outcomes. In fact, the focus of the first stage of reform was on the institutionalisation of procedures over the effectiveness of public managing (Arenas Ramirez, 2008). Because of this, an inter-institutional committee for the reform and modernisation of the state was created with the final aim of encouraging the new methodology of managing within the public sector to give impetus to the area neglected during the first stage, that of management.

In order to incorporate modernisation concepts within the public entities, methods and techniques for public management were designed. These favoured strategic planning; the use of managing and performance indicators; the establishment of institutional goals and objectives; and quality of management.

Likewise, the Chilean Modernization Plan encouraged the use of Information and Communication Technology tools at all levels of public institutions. In fact, egovernment was the foundation of the modernisation plan in this country. To that effect, the Unit of Technology of Information and Communication (1998) was established with the objective of designing a governmental platform (intranet) creating the Official Web State Portal <a href="www.estado.cl">www.estado.cl</a>. With the objective of support, this initiative set up the 'digital signature' in order to certify the authenticity of electronic documents which were submitted to the public institutions.

It is important to point out that this modernisation process would not have been possible without the support of the Chilean political class. In fact, the politicians approved the legal framework to carry out both the reform and the modernisation process that followed.

Likewise, an Electronic Directive (Directorio Electronico) was established. It was made up of senior managers from different public organisations, as well as different representatives from civil society. This directive acts as a consulting organ and coordinator of all projects that are developed within the public sphere, particularly those that are linked with the digital development of the country. The head of this unit is the Chief Information Officer, CIO (Coordinador Gubernamental de TICs).

The approach used during the Chilean reform and modernisation process led to an institutional and cultural structural change of the public management: the outcome-based management and the recognition of the role that civil society plays as an important part of the transformation of the state.

Furthermore, it was demonstrated that simply introducing downsizing and the open market within the public institutions could not provide an adequate response to all the demands that society makes. It was necessary to introduce new tools and management techniques, which were developed in the private sector management (Union Europea & Gobierno de Chile, 2009).

## 2.6 Conceptualising Reform and Modernisation as two different concepts

Most scholars have tackled the problem of the public sector in various Latin American countries during the 90s with the terminology of reform; however, this term basically refers to the body of laws and institutional mechanisms which guide and modify the administrative structures, and efficient public budget management (Information Unit & International IDEA, 2005).

Nevertheless, the term modernisation is associated more with good performance, which must rule within the public entities; accountability in all activities and tasks; and organisational and management changes leading to the accomplishment of objectives set for governmental plans, programmes and projects.

Furthermore, a conceptual difference between reform and modernisation is also suggested in terms of continuing versus discontinuing changes as part of the core differences (Information Unit & International IDEA, 2005). In fact, in the public management sphere, permanent adaptation processes force public organisations to fit in with the environment that surrounds them. This can be translated into the simplification of procedures and organisational improvement including infrastructure and technology, in which the change is a reflection of the application of general principles of management. This approach transcends the sphere of the mere governmental one by including technocratic elements. The designation given by Jones and Kettl (2003) is management reform because it places special emphasis on the role that public leadership plays as a catalyst in the accomplishment of efficiency in the usage of resources.

Key to understanding the previous reflection is to understand the existence of two different transformations that organisations undergo during the processes of modernisation (Information Unit & International IDEA, 2005):

- ➤ Technocratic Transformation, which involves reforms that occur in the interior of organisations concerning structures and hierarchies; and
- > Transformation that is aimed at rendering a good quality of service to citizens by simplifying the internal processes.

In fact, the modernisation process of public administration investigates introducing new logics in the manner in which public institutions perform; encouraging outcome management; emphasising the management before the processes; putting the citizen first (citizen-centred); and making public acts more transparent in order to enhance the level of credibility with regard to public management for society.

Oszlak (2000: 6) states that initiatives and projects have been launched in the name of 'Reform of State' at different times. Their nature or scope has differed substantially from one to another. Oszlac also suggests that issues such as public entities privatisation; voluntary retirement of officials; introduction of technology and information systems; and decentralisation of services has been classified under the same terminology. They have been presented as axes of the State's reform programme in different countries. At the same time, the cited author indicates that the transformation of State apparatus without doubt constitutes a prerequisite for any political project. This transformation is an inseparable part of the structural transformations that any political project attempts to carry out, considering the different plans of an organised society. Therefore, the terminology of reform or state modernisation is used – often in its more conventional sense –whether it is the technological or the cultural transformation of public management.

Waissulth (2001) defines the reform and modernisation in public sector structures as deliberate changes with the aim of getting thought processes better organised. This definition suggests attempts to propose improvements that satisfy both citizens and public employees. At the same time, it demonstrates the necessity of combining the political aspiration that needs to show quick changes with the reformer whose aspiration is long-term transformations, or the search for the sustainability.

The term 'state modernisation' therefore embraces the improvement of management, while 'state reform' involves institutional components that require specific treatment to be conducted in different spheres.

To counter the previous discussion, it can be seen that the modernisation of the state presents an immediate consequence of processes of transformation, whose objective is the setting of a new paradigm of management in society. Thus, this process means both endogenous and exogenous transformation of public entities, considering their structures and the relationship with citizens, on the basis of political the criteria of public and technical managers.

Table 2.1: Conceptual differences between reform and modernisation

Associated	Legal framework: Laws and	Good performance
with	institutional mechanisms orientated	Accountability
	to modifying administrative	Organisational changes
	structures and to make public	Management changes
	expenditure more efficient	
It results	Transformation occurring in the	Process of adaptation to the
in	public administration	environment which is translated
		into simplification; the
		improvement of the infrastructure
		and of technology;
		The application of management
		principles within public
		organizations

Source: Own elaboration based on the previous research

## 2.7 Summary

In this chapter the different perspectives of reform was addressed. This reform ranges from a bureaucratic model where the State exerted all roles including well-being of people up to a Deregulated State which mainly responds to citizens' needs. However, the reform of State is characterized by a combination of different approaches.

In this chapter the differences between the processes of reform and modernisation that most of the LACs have experienced, has been presented. While the terms seem to be similar at first glance, the analysis provided in this chapter reveals the difference between modernisation and reform.

This discussion was based on the reform processes carried out in various developed countries and the different kind of challenges that those countries had to face. Perhaps the major challenge faced by countries such as Australia, United States and United Kingdom was to deal with the issue of decoupling politics from administration. The necessity of finding a balance between providing major flexibility to managers to make decisions and accountability was also pointed out.

Two cases were developed from Latin American countries: the Chilean and Argentinean model. The Argentinean model applied a top-down approach regarding the introduction of new technologies within public entities while the approach applied by Chile was more bottom-up in trying to involve all sectors: both society and public officials. All of this contributed to the success of the modernisation plan conducted by the Chilean government, and it re-enforces the fact that Chile is leading the information society in the region.

The next chapter provides a theoretical background to the different implications of ICT in the public sector, with special emphasis on the judicial sphere.

# CHAPTER 3: ICT FRAMEWORK WITHIN PARAGUAYAN JUDICIAL REFORM AND MODERNISATION

#### 3.1 Introduction

In this chapter the theoretical framework of ICT is described as part of the Paraguayan judicial reform and modernisation. The key concepts with regard to modernisation such as e-government, information society and e-justice are also explained.

This chapter deals with the incorporation of ICT within public management, and particularly within the judiciary, which entails a redefinition of the concept of State. This new State is devoted to the continual search for innovative manners of communication within civil society, trying to fill the gap of the citizens' need for information and the accountability that must accompany all decisions taken in the public sphere, even more so those that are affecting people's lives.

Furthermore, different aspects of ICT such as the search for a more equitable, expeditious and efficient justice are also discussed in the context of judicial reform. The chapter concludes by defining the ICT framework as part of judicial reform.

## 3.2 The Relation State-Society from the Process of Modernisation

In recent years, Paraguayan Society has been experimenting with a profound change that goes beyond a change in the political regime. This change is having its impact in different areas and on different people: macroeconomic policies, stakeholders, international relations, as well as the daily lives of individuals. Some scholars find it coincidental that the intention of the state is to be a moderniser, and to be a revolutionary transformer, while at the same time having the intention to exercise a great influence over the society that was undergoing a process of transformation. In effect, the reformist ideas were not only intended to introduce changes on a governmental level, but also to lead Paraguayan society toward a neo-liberal model. These changes were introduced following a top-down approach which was aimed at

trying to create new citizens for a new state (figure 3.1). The state thus is committed to establishing a modern society. From such a situation, modernisation becomes a tool that allows the modifying of the state from inside and outside toward a relationship with citizens.

Nowadays, the word modernise implies trying to become involved through the information system (IS) for international connectivity and free trade among nations, and training individuals to enter into this new society and absorbing the knowledge.<sup>15</sup>

From the social sciences, a new definition of state arises to indicate a change from the bureaucratic state to the politic state. This encourages citizen participation, political mediation and a parties system, with the purpose of trying to apply a less top-down and a more bottom-up approach. The new state is conceived from a decisional perspective as a promoter of exchange and democratic rules and is presented in the figure 3.2.



Figure 3.1: The State exerted a strong influence on society (Nineteenth –Twentieth Century)

Source: Own elaboration based on previous research

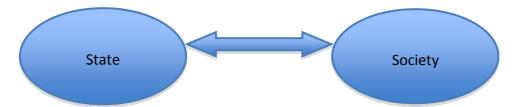


Figure 3.2: The state is currently conceived of as promoter of participation and services (Twenty-first Century)

Source: Own elaboration based on previous elaboration

<sup>15</sup>According to the document *Benchmarking E-government: a global perspective*, from the United Nations & American Society for Public Administration (2002: 4) the national governments perform four different functions with regard to the information society: to determine political and regulatory structures; to deliver programmes and services provided by government; to resort to information infrastructure to improve administrative practices; and to interface with citizens in the democratic

process of the government.

Likewise, it is possible to state that ICT has facilitated a world revolution with the installation of new instruments, languages, relationships, articulations and new social contracts. However, in the governmental sphere, the use and application of ICT has been fundamentally oriented toward the technical-administrative area. In effect, since the outset, the Information Society has configured a new public sphere: cyberspace. This new interactive scenario has its own developing rules, practices and protagonists, at the same time that governments and democracy are seen as new virtual entities.

#### 3.3 From Globalisation to an Information Society

Without doubt, one of the issues that require more debate within the politic sciences is the lack of agreement with regard to the use of uniform terminology, as this leads to imprecision and ambiguity in certain cases. The result of those misunderstandings is obvious: to the extent that definitions are ambiguous, the names are not archetypes of the things but rather originate from an abstraction process. Therefore, the connotation of the concept rests basically on the subjectivity of whoever is in charge of the construction of terminology and on the level of relevance that this person assigns to the different elements that compound the term (Criado Grande, Ramilo Araujo & Serna, 2002).

The definitions and concepts that were chosen for the current research are not separate from the previous characterisation. The vast majority of the concepts used arise from two sources: conclusions of concrete cases of the application of ICT in the governmental area and the theoretical agreement of the people who are in charge of its study. However, this issue does not negate the fact that the terminologies can be the subject of controversies, depending on the country and the culture where these are applied.

The studies on the impact of ICT in Public Administration science are relatively new in the literature of the politic sciences. It is obvious that public administration areas have not been reluctant to use technology. In fact, since the decade of the 1960s, public administrations have been assiduous users, but in a limited fashion (Criado Grande *et al.*, 2002). In Paraguay, this issue started to be discussed, at least

theoretically, at the end of the decade of the 90s, when the idea of an information society started to take some shape manifesting in the most diverse manners, depending on the culture and the organisation. The new social structure is associated with the emergence of a new development model, which, at the same time, is historically associated with the restructuring of capitalism at the end of the twentieth century.

In this new social model 'Internet' constitutes the technological base of the web society, which is the means that allows the development of a series of new ways of social relationships. These do not have their origin precisely in the Internet itself, but rather are the fruit of a series of historic changes that could not have developed without the Internet. From this new social and economic structure, a new kind of society known as Information Society has developed.

Considering the highly abstract concept that the Information Society symbolises, a short definition can lead to a completely different interpretation with regard to one of the central dimensions of the terminology, which is knowledge. The following single definition is therefore selected from among hundreds that could be applied to the Information Society:

A new type of society in which humanity has the opportunity to lead a new way of life, to have a higher standard of living, accomplish better work, and to play a better role in society thanks to the global use of information and telecommunication technologies. (Karvalics, 2007: 10)

When we refer to ICT, we are talking about the group of technological advances that enables communication, as well as 'the electronic capturing, processing and transmission of information' (Molony, 2006: 1). This includes radio, television, telecommunication, print media and audio visual technology, Internet and virtual reality. These technologies basically provide information, tools for their processes and channels of communication.

From this, ICT has the tools which produce the transformation that society is currently experiencing, both within the public and the private sphere. This concerns

commercial exchange and organisational change in the former and the creating of new communication and participation channels, as well as new management models in the latter. These new technologies go beyond the group of mechanisms and logic processes based on hardware. Instead, the key of those technologies is the value that is added to the captured data, allowing, at the same time, the communication and transformation of these in outputs and services.

#### **Conceptualising e-Governments**

The term 'e-government' is relatively new. It was first used by the then Vice-President of USA, Al Gore, which instructed that the 'top 500 forms used by citizens should be placed online' (Wikipedia, 2010). This brought as consequence the automation of the offices by building the capacities of public offices in order to provide better services to citizens and to improve governance through the introduction of ICT.

Heeks, (2006: 4) defines e-government as 'the use of IT by public sector organizations'. This definition involves the three levels of government: National, Provincial and Local and the use of IT is in order to accomplish the re-engineering of the objective of reinventing the state. In other words, it leads to efficiency in the usage of resources; the clarification of procedures; and an improvement in the relationship between government and citizens, in the sense of providing the latter with tools that make participation in and control of public resources easier.

From this definition, it can be seen that e-government is not just about the Internet, it is also about the 'creation of new processes and new relationships between the governed and the governor[s]' (World Bank, 2002: 5). This exists in order to achieve the elements of representative democracy and public administration, which converge in a true republic, as well as the reinvention of the state based on the simplification of procedures through technology, thus adding something which is valuable to society.

The objective of e-government goes further than only satisfying efficiency and productivity standards, but also is the search for the enhancement of relations whether public or private. The objective is to strengthen citizens in the sense that benefits the

legitimation of democracy and State and to provide indispensable elements of good governance (The new role of the State and the Information Society is, therefore, to create a more open, horizontal and diverse society).

Another definition of e-government, as provided by Gartner Group, is 'the continuous optimization of service delivery, constituency participation, and governance by transforming internal and external relationships through technology, the Internet, and new media' (Gartner Group, 2000 as cited in Seifert, 2003: 5). This constitutes an attempt at highlighting the fact that the mere application of ICT *per se* does not produce the transformations for which the public sector is looking; it rather it has to be accompanied by an organisational change and the articulation of consensus among the critical role players to allow for the design and the implementation of any ICT project.

Electronic management or digital management is the application of the Internet and ICT in the diverse areas of the State to address both activities and processes. This category involves interstate activities, including the three branches of the State mentioned above.

In line with the previous statements, Esther Kaufman (2000 as cited in Finquelievich, 2002) states that electronic governments are reflections of the real governments. Whatever is wrong within an organisation will also be wrong in the virtual sphere. To put it simply: a good government could have a good or bad e-government, but a bad government could never have a good e-government. Thus, the basic platform of a good government should gather the elements of ICT along with the re-engineering of procedure and changes in the organisational culture and structure in order to facilitate access of the whole society to services provided by the government, specifically those that are considered as a prerequisite in the day-to-day life of citizens.

Though this research will be analysed, e-government will be considered using a second meaning. In other words: one that is specifically related to management within the judiciary, considering a particular programme.

### 3.4 Overview of the Judicial Reform

In the last decade, scholars and policy circles have increasingly given attention to the role that public organisations play in the issue of economic development.

This renewed interest focused on public institutions (including the above-mentioned branches of state) has led to the necessity of analysing the role that legal institutions play or should play in the promotion of material improvements for the more vulnerable communities.

Scholars as well as policy analysts have been involved in the search for understanding of the relationship between the two elements: judicial institutions and economic performance. Judicial reform therefore has been promoted by different governments and has been supported by international financial institutions and nongovernmental organisations. These reforms range from timid efforts to improve court administration to ambitious projects and programmes that encourage judicial independence in an attempt to eliminate judicial corruption and to build a more equitable and 'market-friendly' legal system (Stephenson, 2006: 1).

Owing to the diversity and complexity of debates which have been carried out so far with regard to judicial reforms, it is impossible to cover all issues in just a few lines. A whole thesis has to be devoted to that effect in order to offer a comprehensive overview of the field. Therefore, the intention of the researcher is more modest: it is to try to unpack the roles of the different role players involved in the process of judicial reform, namely civil society organisations, multilateral development organisations and judicial authorities, as well as the strategies applied in recent years for the implementation of plans, programmes and projects within the judiciary sphere.

Three different approaches were applied by the Development Bank during the implementation of programmes for justice modernisation (Acuña & Alonso, 2001):

- > First: the involvement of civil society in order to increase transparency and accountability in the projects;
- > Second: the strengthening ensuring political support in order to guarantee the sustainability of the implemented programmes; and

Third: the modification of themes related to public management, as well as the continuation of the strengthening of the institutional capacity of the government as a whole, in ensuring good governance.<sup>16</sup>

The foundations of the new streams of support therefore were based on the building of consensus which, despite its complexity owing to the myriad role players involved, is indispensable in ensuring the long-term sustainability of the changes that are expected to be implemented.

The objective of this section of the chapter is to analyse the impact that these new mandates had in the process of design and the implementation of plans and programmes in the judiciary. Issues such as to what extent these reforms promote public participation and the influence that the participative-exclusion approach has in the success and failures of those programmes are developed in this section.

#### 3.4.1 The Impetus for a Judicial Reform

The impetus for a more market-orientated economy has made judicial reform a priority in modernisation programmes which were implemented with the support of multilateral development organisations. In fact, the vision for a more equitable, expeditious and transparent justice system capable of enforcing the rule of law, of being independent and adequate in size, while at the same time being dignified and efficient, was considered a corollary to the lines of action for the different programmes.

The achievement of these purposes of judicial reform infers the independence of judges to rule according to the law, considering the impact that the resolutions enacted from them could have in society at large; the enhancement of the court's administration; the balancing of the cost of justice in order to make it accessible to more vulnerable sector of population; the upgrading of the court facilities; and the

<sup>&</sup>lt;sup>16</sup>Good Governance is a style of interaction between the government and the society that it governs (World Bank, 1994 as cited in Cloete, 2005: 1). In addition, is conceived as the achievement by a democratic government of the most appropriate developmental policy objectives to sustainably develop its society (*Ibid*).

training of users of the judicial system as well as officials in the legal system. All these elements are intimately related and need special attention over the medium and long term.

Against this background, Latin American judiciaries are fighting to rise to the challenges presented by the new circumstances. Indicators of inefficiency accompany the court in diverse countries. For instance, the need for balancing demand with supply is a feature of Chilean judicial power; others need expansion of the court services, as is the case in El Salvador. Meanwhile, there also is lack of efficiency, transparency, independence, citizen participation and other issues related to modernisation which accompany courts in Paraguay and Venezuela (Malik, 2002).

However, more than criticism, these constraints have to be perceived as challenges which offer opportunities for improvement and which pursue initiatives that might benefit the population at large, thus strengthening the democracies and rules of law that have to govern the countries. Studies indicate that the Latin American countries (LACs) are taking these challenges very seriously, designing and implementing programmes that attempt to target the aforementioned deficiencies. Likewise, the 'ingredients of judicial reforms are multi-dimensional and inter-related' (Malik, 2002: 4), involving different perspectives – legal, organisational, physical, human resources, economic, financial and technological –, each pursuing different and contradictory purposes. Nevertheless, the common denominator that these perspectives share is their search for efficiency, equity and fairness.

The focus on judicial reform in LACs covers three aspects: procedural, organisational and technological. Unfortunately, the lack of readiness within the LACs prevents the completion of such reforms. Several of these countries, in fact, have started to implement reforms without considering the physical and ICT adjustments that need to be made, leading to problems that, in most cases, compromise implementation or delay it. In the end, this results in a reduction in the trust that the population has in the projects that are being implemented in the governmental sphere. As an example; the introduction of oral court procedures requires hearing rooms where people can observe the court processes. While those oral procedures would help in the reduction of corruption and would enhance the credibility of the system, this remains

meaningless when the physical facilities are lacking.

The following section is devoted to showing how technological advances could assist in improving institutional judicial reforms and in reinforcing their impact. In fact, various examples of this exist in both Europe and America. They demonstrate the strategy of using information and communication technology in order to enhance access to justice, which leads to efficient utilisation of resources, good planning and monitoring of activities and the overall creation of a transparent system.

#### 3.4.2 ICT in Justice Management

The emphasis placed on ICT in the judicial sphere basically has been geared towards the development of the technical-administrative area to allow information to spread through the organisation and be transformed into knowledge.

As with the use of mechanisation in the first age of the industrial revolution, the use of technology has been applied with the goal of speeding up the process through using fewer resources, which at the same time has led to the reduction of costs.

It is important to point out that technological changes affect management and public management in particular. The evolution of information and technology in Latin American countries has been gradual, with innovation that ranges from the introduction of computing programs in the administrative functions of the different organisations of the State during the decade of the 90s to the publishing of government information online starting with rules, regulations, documents and forms. Thus, the influence of ICT within judiciary management is related to the actions which are orientated to the reformulation, redesign (whether gradual or radical) of the procedures — in this case both administrative and judicial — with the objective of introducing improvements in the service at all levels in the organisation.

Several criteria should be addressed at the point of the introduction of ICT aimed at enhancing performance in an organisation. Heeks (2006: 5-7) refers to these criteria as ITPOSMO (information, technology, processes, objectives and values, staff and

skills, management systems and structures, and other resources, like time and money). The understanding of these areas within the judicial context is discussed below:

**Management of Judicial Institutions:** The administration of the judiciary varies from country to country. In some countries, the High Courts are in charge of administrative issues, while this task is carried out by the Ministries of Justice or by Judicial Councils in others.

However, there are basic functions that could be supported by IT. These include: planning, budgeting, payroll, audit and inventory management, human resources, tendering and purchasing, and official websites, including those that interface with users of the judicial system. Several programs that belong in the private sector and whose underlying purpose is the improvement of management resources, planning, monitoring and the evaluation of performance are available in the market. They are aimed at achieving effectiveness and efficiency and could easily be adapted from the private sector use to public sector use.

Likewise, in order to enhance interconnectivity, these systems could be installed in line with ministries and other executive agencies which require being online with the court to enforce court decisions (prosecuting agency, public defenders, police, etc.) in the sense of technological interoperability.<sup>17</sup> When designing strategies for the improvement of technological systems, all of these factors need to be considered by policy makers.

**Operating system for Courts:** The internal management of the courts, including case filing on line, case distribution, record keeping, statistical records, the court fee system, court reporting and, of late, judges who are to take part in a trial are chosen by means of a computing draw. The idea of all improvements is to try to make more transparent the judicial management and to avoid any kind of speculation with regard

<sup>&</sup>lt;sup>17</sup>Since the year 2008, the judicial power in Paraguay interoperates (24/7) with the police, justice minister, public prosecuting agency, minister of public defender and custom office. For this research, interoperability means the 'ability of distinct systems to communicate and share semantically compatible information, perform compatible transactions, and interact in ways that support compatible business processes to enable their users to perform desired tasks' (RAND, 2008 cited in Henning & Yein, 2009: 30).

to the ruling taken by the judges. These case management systems have been implemented in various Latin American countries (Argentina, Brazil, Paraguay, Chile, Colombia and El Salvador) and in the different areas – civil, criminal, and electoral – along with their different manuals of operation and training. <sup>18</sup>These systems, in the majority of cases, require a reorganization of structures and the re-engineering of procedures.

Operation system for key users: judges and lawyers: Considering that the main function of the justice system is to provide independent and impartial decisions, the role played by judges is pivotal. In fact, 'judges could be considered as the most important resource within a court system' (Malik, 2002:6). This could be the reason behind the fact that many systems have been developed around the world to help them in improving their judicial performance. This may include databases where judges can have access to court decisions, including local and foreign decisions, national and international laws, and information on human rights. However, not only judges, but also other legal professionals, and any interested citizen, can have access to this technology to enhance their legal work.

One of the main advantages presented by ICT is the capacity of knowledge sharing in terms of exchanging 'implicit and explicit knowledge in order to create new knowledge'. The interconnectivity influences both the ability and the willingness to share knowledge in a positive manner (Van den Hoff, Elving, Meeuwsen & Dumoulin, 2002: 3, 4), which, when applied to the judicial sphere, is reflected in an exchange of knowledge among internal and external role players.

**Systems that promote user access**: Among the diverse functionalities that could be supported by ICT is the delivery of information and services to citizens in encouraging public awareness and participation, critical ingredients for the promotion of the rule of law.

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<sup>&</sup>lt;sup>18</sup>In 1999, the Paraguayan Supreme Court, with the support of the United Nations Development Program and the Inter-American Bank, implemented a computing system that is able to manage judicial cases within the civil sphere. In 2005, the criminal sphere was also included as part of the project.

These systems could facilitate access to court information in the form of KIOSKS.<sup>19</sup> In addition, as this interactive service involves two-way communication, court authorities could receive feedback from users about the resolutions that are being taken, without compromising the independence of criteria that this power has to exert. In this case, the received information acts as a barometer able to measure judicial performance and could also be used for the improvement of services. In addition, certain court systems could be implemented via the Internet in order to improve the society's access to justice; the electronic filing of cases, for instance, enables a reduction in the use of paper, which at the same time leads to reduced costs.

**Technical features and training plans**: Considering that technology is an issue prone to frequent change and which needs to be constantly updated, capital investment plans need to be considered when policy makers design resource allocation for ICT projects. The areas which should be part of this diagnosis are the technology standards, obsolescence, security, servers, and providers of connectivity of Internet, as well as an assessment of emerging trends.

Likewise, internal capacity assessment with emphasis on IT departments should be carried out, particularly including technicians, systems analysts and software developers. This evaluation should be orientated toward demarcating which services are to be developed in-house and which services need to be outsourced. This assessment is critically important for the success of ICT project implementation.

Before implementing any kind of new technology, two kinds of diagnosis are therefore needed– firstly of infrastructure capability and, secondly, of in-house technical resources.

## 3.5 Legal Framework for Implementing ICT within the Judiciary

It has to be accepted that, in a highly-regulated sphere such as the judiciary, the way in which organisations operate cannot simply be changed overnight. It requires to be

<sup>&</sup>lt;sup>19</sup>Internet KIOSKS: interactive computer terminals where it is possible to access information provided by the government. These terminals are typically set up in places such as hotels, airports, libraries (UNESCO and National Information Centre Department of Information Technology Ministry of Communication and IT, Government of India, 2005).

upheld by a normative legal basis. Therefore, it is impossible even to consider the implementation of ICT without relevant legislation to accompany the processes of reform and modernisation.

In this sense, the implementation of new technology is highly dependent upon the support of authorities who, at the end of the day, have the last word with regard to the approval of any initiative that attempts to introduce changes in the manner in which things are being done.

Finally, any ICT initiative must be well integrated into judicial reform priorities and the attention should be focused on the stakeholders in the sense that they have to be willing to join the game that modernisation involves.

Malik (2002:8-11) suggests some strategies that could encourage a willingness of stakeholders to support ICT initiatives. Those include: training, open communication and the offering of clear incentives.

Furthermore, it is advisable to develop a 'citizen-centric model' which allows the involvement of those who are considered key stakeholders, either inside or outside of the justice sphere (lawyers, officials, judges, prosecutors, defenders, litigants, trade association, academics, NGOs). In fact, without considering their input, any ICT project is unlikely to succeed, because 'citizens will not use a system that does not respond to their needs' (World Bank, 2002: 5).

Judicial reform needs to be developed in keeping with 'local culture' and traditions. In effect, the phrase 'one size fits all' (World Bank, 2002: 5) cannot be applied to any ICT initiative, especially in a highly complex context such as that of the judiciary system.

To conclude this section: it is important to point out that any change that is attempted in an established culture requires constant effort and that any sustainability is jeopardised unless stakeholders show a willingness, both in behaviour and in attitude, to accept change, reform and modernisation.

### 3.6 Summary

In this chapter the discussion was about the necessity for information to flow both vertically and horizontally along the channels of the organisation. Yet, in order for this information to be useful, a series of requirements are necessary. First of all, the information must be relevant to the user. Furthermore, decisions and actions taken should consider the rationale of the information. Finally, bearing in mind that the information system within the judiciary is designed for a specific audience, it is important to consider the feedback provided by direct and indirect users and to respond to their requirements.

Likewise, it was pointed out that ICT *per se* does not produce the changes that are expected within the public institutions. In fact, all changes have to be accompanied by an organization's change and the participation of critical stakeholders when any ICT initiative is designed.

The meaning of judicial reform has been explained, as well as, the various approaches and results of judicial modernisation conducted in LACs. The advantages with regard to effective and efficient management that ICT could introduce within the judicial sphere have also been introduced.

As the primary objective for this research is to evaluate whether the judicial performance and capacity have been improved after implementing ICT, an overview of current and future ICT projects will be provided in next chapter.

# CHAPTER 4: FRAMEWORK FOR THE IMPLEMENTATION OF ICT WITHIN THE PARAGUAYAN SUPREME COURT

#### 4.1 Introduction

The experience that is tackled in this chapter is the implementation of ICT in certain procedures, which are being carried out in the Paraguayan Supreme Court. It also refers to the term computerisation of services, which alludes to the introduction of new technologies, including computer science, for modernising the workings of the judiciary system.

In considering the concept of responsible administration within the public sector, it is understood to refer to organisations that provide a quick and positive answer to popular demands. A responsible administration is not required to respond to citizens' demand for better service delivery only, but also and above all to be sensitive to public needs in proposing solutions and taking part in the definition of problems.

Such organisations are continually looking for new markets in an attempt to satisfy a public that makes new demands and feels new necessities. Following this concept, prompt and effective justice is the popular demand of Paraguayan society; a justice that is able to interact with the diverse actors and provide solutions to the different constraints with which this society has to cope on a daily basis.

In addition, in this research paper the terms e-government and e-justice are used as synonymous, from the understanding that the discussion concerns the government in the judicial sphere.

This chapter starts out by discussing the Modernisation Plan of the Justice in Paraguay, then presents an assessment of the e-justice process within the Paraguayan Supreme Court and concludes providing an overview of the two more relevant ICT projects carried out during the SMP.

## **4.2 Plan of Modernization of the Justice Sector toward a Digital Justice System in Paraguay**

Public marketing can be conceived of as the group of activities that have the objective of designing, implementing and controlling of programmes oriented to satisfying the needs of the users of the services rendered by the public sector. In other words, it recognises the citizen as central. In translating the same concept to the projects where technology plays a fundamental role, the design of the system needs to match the needs of the users.

This section is based on a compilation of various publications, official documents, reports and information available on the website of the judiciary, and on the websites of international organisations. Official documents were accessed with the special permission of the Judicial Council.

The process of reform and later modernisation started from the restructuring of the administrative and judicial area. A multidisciplinary team (technical-judicial) was established for this purpose. It included a representative from each affected area. In the case of the administrative area, the General Manager of the judiciary, Roberto Torres, was appointed and two judges were selected for the judicial area —one for the civil and one for the criminal area. They worked closely with the technical group, playing the role of advisors with regard to civil, labour, criminal and commercial matters.

This multidisciplinary group was tasked with the coordination of activities with regard to the design, development and implementation of the programme. The technical team was to devise a holistic approach aimed at integrating technologies in the litigation process. This was expected to be useful, not only for key users in the legal community, but also for all interested members of the public. From there, the word transformation was taken to mean the changing of the old procedures and the introduction of new ones including information and communication technologies.

In addition, this team had to conduct any activities related to the coordination of tasks and responsibilities among the different role players, as well as provide information about the project's progress, monitoring and final evaluation.

In 2001, the Paraguayan Government was rocked by the challenges presented by the information society offering a new way of doing things. This brought about the ICT Master Plan Paraguay 2020 (República del Paraguay, 2002). This plan considered ten main initiatives with twenty-three programmes of action, which included the e-legal system as the e-justice initiative of e-government.

As a consequence of this, the Paraguayan Supreme Court contemplated the necessity of transforming its existing approach toward service delivery to all citizens by carrying out substantive reforms addressing all aspects, whether infrastructure or human resources. This was done by drafting policies and standardising procedures with the aim of introducing the elements of ICT and the Internet in order to permanently provide information online.

With the objective of reducing errors, the implementation of the new technologies was considered in stages. Firstly, the automation of certain procedures within the civil area was considered. Secondly, based on the experience gained during the first stage, a second stage included the criminal area, and also embraced processes within the civil court, such as online notification, and consultation of cases online through the website: <a href="http://www.csj.gov.py:8080/portal">http://www.csj.gov.py:8080/portal</a> was contemplated.



Figure 4.1: Case Management System

Source: Corte Suprema de Justicia, 2011a

The development of new functionalities demanded the design of more than one single ICT system, thereby increasing the likelihood of addressing the range of features that was needed. It was therefore envisioned that numerous ICT systems would work together.

The implementation of the e-justice approach took place step by step, with every court at the time embracing the different stages which were conceived for e-government.

## 4.3 The e-justice Process within the Paraguayan Supreme Court

The e-government phases including: publication, interaction, transaction and transformation (Gartner, 2000 as cited in United Nations Educational, Scientific and Cultural Organization (UNESCO) and National Informatics Center (NIC), 2005: 5) were also applied to the justice sector as discussed and assessed below.

#### 4.3.1 Phase I- Publication

In the first phase, the information was published and approved by the public. It also entails integration and standardisation of procedures in order to expand access to government information that is important for individuals and for business (UNESCO

& NIC, 2005: 13). The first phase therefore is aimed at the speedy dissemination of government information to an unrestricted audience.

Comparing this situation with the Paraguayan judicial system, the first stage in reality meant the development of a Portal Web <a href="www.pj.gov.py">www.pj.gov.py</a> which included information of a general nature that could be meaningful to users. It did not include any interactive capacity, but only provided basically passive information similar to an electronic brochure.

#### **4.3.2** Phase II-Interaction (Services and forms are online)

This phase addressed an active exchange of information which included the possibility of getting online reports and a process of customising information and databases. In addition, active interaction between the public and public institutions is promoted during this stage. In order to stimulate efficiency, the submitting of queries and complaints through e-mail, the checking of the status of those complaints and the voicing of users' opinions to help in policy formulation concerned with the services provided are highly encouraged.

This was aimed at raising the level of citizens' trust in public institutions through saving time while providing a permanent service, and thereby eliminating the conventional restrictions of space and time. The Paraguayan Supreme Court has begun to publish its decisions online for the public's benefit. In addition, attorneys may also keep track of their cases online, through the use of a key.

With the objective of interacting with citizens, the judiciary furthermore incorporated a list of frequently asked questions (FAQs) with regard to the services provided for each department, whether within the administrative or the judicial area.

#### **4.3.3 Phase III- Transaction (Vertical Integration)**

A competitive exchange of goods and services was encouraged during this stage and online productivity as well as a major integration of services increased. In contrast with the previous stage, during which, even though the citizen is able to access and exchange information online, he/she actually needs to go back to the conventional means to conduct a transaction, this phase represents an attempt at amending this

situation. In fact, through the establishment of websites, users are allowed to conduct transactions online (UNESCO & NIC, 2005: 13). The fundamental components of this phase constitute online monetary transactions and payments, which make it possible for citizens to carry out their transactions without moving from their homes.

With regard to the Paraguayan judicial system, it is possible to state that the beginning of phase III has occurred. In effect, the signing of an agreement between the Paraguayan Supreme Court and the Korean Government in December 2010 signified advancement towards an electronic case filing system for lawyers and attorneys and will facilitate the electronic submission of their litigation documents and petitions. The judiciary likewise is currently immersed in the effective implementation of the digital signature (Public Key Infrastructure-PKI), an indispensable requirement for the true application of digital procedures.

#### **4.3.4 Phase IV-Transformation (Horizontal Integration)**

This phase is characterised by changes in the economy and social relationships, by changing job structures and value chains (Schapper, 2003:6). Only when the government has gone through full transformation, and all services are available online is it possible to recognise the arrival of phase IV. However, it also requires a deep organisational change by aligning organisational setups with the new capacities (UNESCO & NIC, 2005: 13) and full integration of services for the government to be effectively known as a digital state.

The necessity of a continuous process has to be accepted and this requires thorough transformation aimed at the total assimilation of new technologies for each individual and organisation that has to use them. Even though much effort has been made, we are still far from this stage with regard to the reality of the judicial system.

### 4.4 Design-Reality Gaps

Without doubt, much effort has gone into initiating, developing and sustaining ejustice. Due to diverse factors, however, some of the projected objectives are far from becoming a reality. Figure 4.2 entails the Gap between the judicial reality and projects design into judicial sphere.



Figure 4.2: Design-Reality Gaps

Source: Heeks, 2006

Whatever had been implicitly or explicitly understood as the purpose of judicial modernisation, it has to be accepted that this transcends mere technological innovation. In fact, this technological transformation has employed most of the resources assigned to the modernisation of the judicial system.

The performance of these ICT projects has been undermined for a variety of reasons which range from the difficulty of defining the process conducted within the judiciary and the lack of political will to failing to include imponderable issues at the moment of designing the projects. While numerous articles dealing with unsuccessful ICT projects carried out in the most diverse spheres of the government are available, very little literature deals with the failure of e-justice projects. In fact, owing to the lack of evidence of expected results attained or unattained, most of the evaluation is based on the subjective perceptions of direct or indirect users, in other words those who have to deal with the system on a daily basis.

Dada (2006:2), however, states that it is more than the application of e-government which fails; it is the information system in general which fails.

Heeks (2003: 4) argues that the origin of the problem with ICT projects is the mismatch between the current system and future systems. In fact, the same author suggests the existence of a large gap with regard to the physical, cultural and economic contexts evolving at the place where the software is planned and the place where this is expected to be implemented. It is felt that this could affect the delayed performance of projects.

Three examples can be cited as the archetypes where the gap in design-reality may be found. These are summarised below (Heeks, 2002; Heeks, 2003; Heeks, 2006; Dada, 2006). The posterior assessment was based on this idea of gaps.

#### 4.4.1 Hard-Soft Gap

Those projects where soft human issues are not taken into account from the beginning (at the moment of design) inevitably lead to failure. With regard to the same issue (UNESCO & NIC, 2005: 3); the importance of active participation of key stakeholders is necessary from the onset of the ICT project. This should lead to truly effective empowerment which will influence the later success of the project.

From the previous information, it can be seen that the success of any ICT project depends on providing information which users need and this can be obtained only by working closely with the community that the system is expected to serve and thus creating a sense of ownership.

Likewise, in order to put a system into operation, knowledge and skills are required. Users therefore need to cope with those competencies, otherwise it is unlikely that the introduction of the new technologies will succeed.

The issue of organisational change (including the realignment of processes and the simplification of procedures) also embraces the hard-soft gaps. Furthermore, the fact has to be accepted that any e-government initiative will be embedded in a high-level political milieu. This affects the development of technological innovations. The political issue can be problematic, owing to a reluctance to share information which can mean a reduction of power on the part of authorities. Moreover, the support of political stakeholders is guided by the desire to obtain personal outcomes. This resistance could have its origin in a high level of corruption, and lack of accountability and transparency in the procedures that the judiciary has to face. ICT project designers should consider these problems at the point of drawing up the project.

#### 4.4.2 Private-Public Gap

The next archetype indicated by Heeks (2003: 5) entails private-public gaps. Heeks resorted to the metaphor of 'square pegs and round holes' in an attempt to depict the situation of fitting IS designed by the private sector into the public sector. The problem behind this is the fundamental difference between the public and the private sector, and solutions defined by one rarely can be applied to the other. In effect, the public sector reality is unique. Heeks (2006: 221) suggests that the key words be 'customized' not 'off-the-shelf'; and he stresses the need to 'adapt' not just 'adopt'.

Another difference between the sectors is suggested by Ciborra and Nevarra (2005) as cited in Dada (2006: 5-6). It refers to the uncompetitive rates of salaries perceived within the public sector. This situation is reflected in the lack of qualified IT personnel interested in working in public institutions.

One strategy for dealing with this situation could be to put emphasis on the advantages of working for public institutions: for instance, the issue of job security provided by the public sector in contrast with the private sector. Another strategy for facing this situation could be the recruitment of officials from inside the organisation and training them in IT/IS skills. However, the time required to achieve the expected level of knowledge could be a constraint that may need to be considered.

In addition, it has to be accepted that ICT projects within the public sector cannot be developed with own institutional funds, but that their success depends to a large extent on international assistance in the sense of providing funds for carrying out such projects. The problem behind this is that most of the e-governments run into difficulty when the external aid ceases, and this affects the sustainability and continuity of the project. By contrast, the private sector project is not under financial constraints because specific money is allocated to the investment and the design of the project from the beginning.

In order to face constraints in the financial situation, the incremental model suggested by Heeks (2006: 222-223) could be applied. One technique indicates the possibility of limiting the extent of change at any given time. With regard to Modularity and

Incrementalism, both approaches basically indicate that, instead of addressing all changes at once, which is likely to lead to failure, it is preferable to rather divide the intervention into manageable subprojects.

#### 4.4.3 Country-Context Gap

This depicts the final archetype defined by Heeks (2003). It refers to the fact of adopting technologies which have been successful in developed countries, and which could not be a success in developing countries. In effect, the gap between design and reality is enlarged for many reasons: among them, infrastructure, working culture and the access of the population to technology.

It has to be recognised that e-government has to be developed into an Internet platform, which is still inaccessible to the vast majority of the population. This situation is particularly true in Paraguay, which, according to the United Nations and American Society for Public Administration (2002) falls into the category of minimal e-government capacity, ranking fourth behind Armenia, Brunei and South Africa. Owing to the lack of infrastructure that affects developing countries, the possible benefits of e-government are nullified.

## 4.5 ICT Projects carried out within the Judiciary

Since 2001, more than 15 projects have been sponsored and financed by diverse financial institutions such the World Bank, the Inter-American Development Bank (IADB) and, in the last five years, the United States Agency for International Development (USAID).

This strengthening of the judiciary capabilities has led to a more accessible, effective and trustworthy justice system, which has become the flagship of these interventions. Typically, judicial reform projects are implemented over three to five years (and in some cases more) of promoting institutional development, technical assistance and innovation.

This section examines two of the most relevant projects conducted within the judiciary system, considering two aspects: achieved objectives and the approaches considered at the moment of implementing them.

To start with, an ICT project aims at developing and/or introducing an ICT system. Unpacking the definition development, it can be understood as the 'specification, procurement and internal/external construction or modification of the system. Introduction means the technical as well as the organizational implementation (Leydesdorff & Wijsman, 2008:3).

Lately, the potential benefits that any e-government and, in this case, e-justice, can bring have been amply recognised. For that reason, the Paraguayan Supreme Court, in close partnership with international organisations and in an effort to be at the forefront by using new technologies, has started to develop a series of new ICT projects. These are focused mainly on the improvement of service delivery to citizens. The 'empowerment of citizens through access to knowledge and information that is accessible from the judicial website, makes the working of the government more efficient and effective', finally achieving cost reductions and transparency (Bhatnagar, n.d.: 1)

However, the transition from traditional methods to the automation of procedures has not been easy. One of the main constraints that IT initiatives within the judiciary system had to overcome was with regard to the users of the computing system. These users within the judiciary can be divided into three groups. On one extreme, there are the computers illiterate, a group that, according to Heeks (2006: 21), is made up of people who feel threatened by ICT, which means that they specifically possess a fear of the unknown. On the other extreme there are the computer literate: those who are pursuing their own agenda without considering the coordination of IT activities and are jeopardising the implementation of projects. In the middle of these is the semi-literate group or those who believe that they know everything. However, the reality is that they know little about IT and, more importantly, about information systems and they constantly delay any IT initiatives.

# 4.6 Pillars of Judicial Modernisation

Judicial modernisation aims to create a more effective, accessible and credible judicial system for encouraging trust and confidence in the citizens and leading to the equal application of law within society. The Paraguayan judicial reform and recent modernisation focuses on three principal pillars, which are thoroughly discussed below.

#### 4.6.1 Pillar 1: Transparency and the fight against corruption

The efforts of the judiciary are directed towards providing transparency with regard to judicial management. In effect, the implementation of Virtual Desks (Corte Suprema de Justicia, 2008) is being developed currently. This system ensures that both attorneys and prosecutors are able to submit their cases by accessing a website whose objective is to avoid the intermediation and speculation which might occur when distributing the cases. It is carried out in a transparent manner.

Similarly, the Electronic Case Filing System is being developed, with the purpose of speeding the judicial process and providing transparency of the process at the same time. Such a system is also expected to reduce the required time and effort of both the court and relevant legal entities. As a result, it is expected to improve the efficiency of judicial services to the citizens, adding the possibility of receiving notifications on line as a bonus.

### 4.6.2 Pillar 2: Modernisation and quality of public management

The Electronic Case Filing System is based on the premise of the optimisation of the different processes by simplifying them and in a sense avoiding the necessity to modernise the bureaucracy. This new system is highly dependent on the combined and coordinated operation of the different parts of the judicial system, specifically in the effective implementation of unique electronic case management, which is issued for all key judicial actors: prosecutors, attorneys and defenders. Without doubt, this condition is an indispensable requirement for the success of the modernisation process of the judicial system.

In addition, the recording of audiences by using video conferencing and the recording of witnesses' testimonies by using the Electronic Management System is considered a primary aspect which finally will result in the efficient use of resources.

Likewise, the application of a court fee system through the website signifies a meaningful improvement with regard to the services rendered by the institution. Furthermore, the transferral of the judicial case from paper to a digital format and its subsequent availability for consultation has resulted in many advantages, mainly in allowing the information to be available at all times for all users.

#### 4.6.3 Pillar 3: Decentralisation and the independence of the judiciary

This area is focused on providing comprehensive social communication in order to publicise legal information to external users, at the same time improving internal communication within the organisation.

The establishing of information centres in the different judicial districts, as well as the implementation of services such the payment of fees through the website is also expected, and the advantages that the Intranet will provide in making possible the flow of information within the different levels of the organisation likewise has been considered.

Furthermore, with the objective of addressing the constraints of the digital divide, a judicial branch-training programme is under development with the assistance of the department of training, to provide judges and officials with computing tools for responding to the changes in the management of courts.

# 4.7 Core ICT Projects within the Judiciary

In March 2002, a strategy for creating conditions for the intelligent use of technology with the objective of confronting judicial congestion was announced by a commission specially created for that purpose. This strategy was aimed at the reduction of the cost

of legal procedures and the simplification of transactions through making them userfriendly.

In the first stage, this involved the automation of procedures which were previously executed manually by transferring them into computerized operations. This allowed for sharing, storing and, finally, retrieving information. One of the functionalities that the ICT system provides is interconnectivity with other databases. In effect, the judiciary signed an agreement with the Police Department in order to validate parties' data (identity number and address) by comparison with the data stored in the police database.

#### 4.7.1 Development

Once the objectives of the intervention were defined, it was necessary to decide which jurisdiction to choose and what kind of procedures to include. The starting point was the taking of an inventory of the judicial files and the record of cases online, and analysing them. As a result, judges were able to obtain a global view of the procedural situation of whole cases managed within a particular court, allowing for the tracking of such cases at any time. Parties consequently were able to access information that was stored but could not be exchanged or changed, so the new system did not allow the inter-operability among parties.

This tool was developed with the idea of providing support in civil, commercial, labour and criminal jurisdictions. However, the civil court was chosen as a pilot area, and once this branch works successfully after having been tested and evaluated, other courts can be added. This approach was based on the theory of a bigger and bolder egovernment and took into consideration a major risk of failure (Heeks, 2006:222). Because of this risk, an extensive survey was conducted with the objective of identifying the baseline challenges.

The pilot court approach was directed at improvement in the quality of service and access in three strategic areas:

- Case management and recording procedures;
- > Upgraded court design and facilities; and
- Automation of procedures by using ICT technologies.

Some of the advantages that are expected to be achieved through these technologies are discussed in detail in the sections that follow.

#### 4.7.2 Reduction of court visits by attorneys

A great amount of time and great cost is required of litigants and attorneys in preparing a lawsuit, preparing hardcopy litigation documents, submitting the litigation documents and actual visits to the court in relation to the relevant trial. The introduction of new ICT technologies can sort out these shortcomings by allowing for accessing forms and submitting of lawsuits through the website of the judiciary (http://www.csj.gov.py/igdj/). In addition, legal professionals are able to conduct real-time monitoring of the progress of litigation information.

#### 4.7.3 Electronic preparation and submission of litigation documents

The blank-box-fill-in method provided to the user will allow the use of input data submitted as petitions, allowing the editing of certain items. The originality and integrity of documents will be possible by means of a digital signature using the user's authentication certificate to confirm submission time and to prevent the falsification or damage of the submitted data. This is viewed as a positive quality of the system.

#### 4.7.4 Case progress information search

Two functionalities were considered as a prerequisite for the system: the monitoring of basic information about a case and the possibility of viewing and printing electronically submitted petitioning documents.

#### 4.7.5 Electronic payment system development

In order to reduce queues and intermediation the possibility of developing a system that enabled the electronic payment function for a stamp fee, delivery fee and other fees relevant of a civil case was considered. For electronic payment of the litigation-related fees, a link with the electronic payment agent will be made and encoded payment information will be exchanged, using the electronic payment Application Program Interface API.<sup>20</sup>

### 4.7.6 Electronic reception system development

This was considered as a third stage of the programme, in which a major interaction between the judicial organisation and users was encouraged. It was thought that the electronic case filing system would minimise the time and effort required of judicial staff in receiving petitions through the automatic case reception system. This would affect petitions submitted via the electronic civil litigation website. Case numbers would be given to the submitted petition documents, and an e-mail notification service would immediately notify the litigant or attorney via e-mail of the result. Any submitted petition documents can be printed. Electronically paid litigation fees can be monitored by judicial staff in real-time, and can immediately be applied to the case process.

#### 4.7.7 Electronic document management system development

The primary objective will be the establishment of a foundation for electronic document management, the managing of electronic documents and index information, and supporting various search methods.

Furthermore, making use of the digital signature application will ensure the security and completeness of electronic documents. This could lead to the establishment of a basis for future courts which could allow 100% electronic document management for

<sup>&</sup>lt;sup>20</sup>It is important to highlight that the Paraguayan Supreme Court and two banking institutions (Itau Bank and Continental Bank) signed an agreement with the objective of becoming true to online payment. This will make it possible that attorneys and notaries do not need to attend the court proceedings as they will be able to make the respective payments throughout the website (http://www.pj.gov.py/ingresos\_judiciales.asp).

all litigation documents such as the judgment notification, report and the status of decisions.

This technology will also allow the introduction of electronic document management systems for integrating saving and managing of regular and irregular e-documents of the courts through the standard API. In addition, this interface is being designed to link judicial tasks with the related systems.

# 4.8 Disciplinary System

Without doubt, one of the main referents in the effective fight against corruption is the Judiciary. However, this fight has been harmed by internal constraints that the judiciary has had to face, which have affected the quality and effectiveness of the service rendered by the judiciary.

A shortcoming that has been noticed during the last ten years occurs in the form of lack of qualified human resources and the existence of a rudimentary internal disciplinary control system. Likewise, judicial default, excessive red tape, influence peddling and a lack of partiality in resolutions are further problems that contribute to a lack of trust in the Paraguayan justice system among citizens.

The Paraguayan Supreme Court has received technical assistance from the USAID within the framework of the implementation of the *Threshold Country Program* for Paraguay with the aim of facing this critical situation. This has been seen in the establishment of new disciplinary and control systems applied to judicial and administrative staff (República del Paraguay, 2008). ICT technicians of the Paraguayan Supreme Court and USAID consultants have joined forces in working on the design, development and implementation of the new disciplinary system in order to achieve effective implementation.

#### Objectives pursued by the disciplinary system

Two main objectives were set by this system: Firstly, to lessen the number of disciplinary actions and, secondly, to reduce the time that it takes to process them.

To achieve these objectives, the court facilities and operations were updated with the support of the Threshold Program, providing the institutions with necessary infrastructure to implement the new system. This system was aimed at reducing the existing corruption within the judiciary by accelerating trials and administrative process submitted against judicial staff, magistrates and officials (Corte Suprema de Justicia, 2008).

With the new computing system, the time spent from the beginning of a disciplinary case up to the end was reduced from ten to four months. Moreover, a reduction in cases overturned owing to failure whether administrative or procedural, was visible from the moment of the implementation.<sup>21</sup>

The new system provides users of the judicial services with a means of submitting complaints and charges against court staff through the judiciary website: <a href="http://www.pj.gov.py/quejas\_y\_denuncias/quejas\_denuncias.asp">http://www.pj.gov.py/quejas\_y\_denuncias/quejas\_denuncias.asp</a>.



Figure 4.3: Complaint system

Source: Corte Suprema de Justicia, 2011b

This system was designed with the aim of achieving transparency and encouraging the coordination of activities carried out within the involved departments. In other words,

<sup>21</sup>The baseline considered at the moment of the intervention indicated an average of 58.7% of cases overturned. This figure has dropped to 0%. (Corte Suprema de Justicia, 2010a (Memoria Año 2010)).

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the strengthening of the capability of the disciplinary system of the judiciary was pursued (Casal & Associates, 2009: 9).

In addition, it was expected that the new ICT technologies would bring an improvement in the interconnection and exchange of key information among three entities: the judicial power, the Judicial Judgment System (*Jurado de Enjuiciamiento de Magistrados*) and the Attorney General's Office (*MinisterioPublico*). The Judicial Performance Unit (*Superintendencia General de Justicia*) and the Internal Management Auditing unit were two of the departments that received more support from the USAID. Consequently, both departments were fully equipped with physical, human and technological resources in order to accomplish the multiple objectives that were set.

# 4.9 Status of Affairs of ICT Projects within the Paraguayan Supreme Court

This last section is an attempt to explain the current reality of ICT projects within the judiciary system. Even though the evaluation of attained objectives will be presented in subsequent chapters, the researcher considered it important to discuss the status of affairs of technology at the time of the research.

The project started in 2003 and was completed over a period of six years. As a part of the computerisation process, the judiciary tried to create a payment system to enable attorneys, notaries and litigants to conduct the payment of fees through the Internet.

According to the documents accessed at the time of the research, a system was developed to allow for the exchange of information among the relevant parties up to a certain level. On this electronic platform, lawyers, prosecutors and defenders are able to check a specific case and read resolutions ruled by judges, which are linked to the case. Thus, a lawyer can control all resolutions enacted for a proceeding from his/her office. In order to gain access, involved parties have to be registered (Corte Suprema de Justicia, 2010a).

The system was first implemented in the civil courts and then, after three years, in criminal (pre-trial and enforcement) courts, as well as in labour jurisdiction. The improvement of judicial performance and reduction in the backlog and in the workloads in both courts (civil and criminal) were priorities to be addressed by the project. Moreover, the system aided case management by automatically setting a specific date and sending an early warning to both judges and attorneys before a case expired. This allowed judges more control and resulted in more efficient case management. The following figures illustrate the list of pending cases for a specific court (figure 4.4) and a list of finished cases for a specific within a specific period of time (figure 4.5).

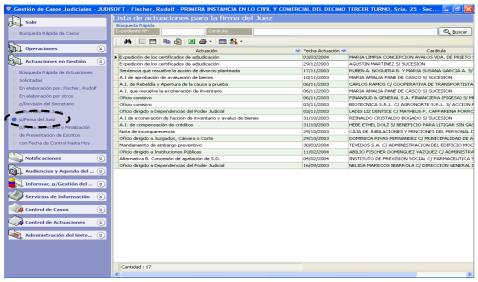


Figure 4.4: Display of pending cases for a specific judge and court

Source: CSJ & IADB & UNDP, 2009

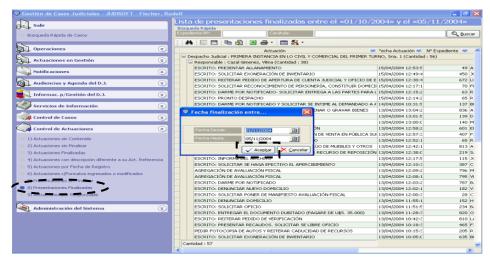


Figure 4.5: List of cases finished within a specific period of time

Source: CSJ & IADB & UNDP, 2009

However, despite all efforts, the conditions that led to the intervention remain. Paraguayan justice is still characterised by its inefficiency and ineffectiveness. This includes a long list of pending cases and limited access to justice. With regard to efficiency and effectiveness and the reduction of pending cases, the intervention seems not to have achieved its expected results.

The last Management Report published by the NGO Judicial Studies Centre(Centro de Estudios Judiciales, 2010) makes reference to the previous finding by mentioning the fact that the reduction of pending cases did not achieve the expected figure (in 2010 it was 1.14 versus 1.41 in 2009).<sup>22</sup>

With regard to the accessibility of judicial information, there was a significant increase. In effect, the project targeted those regions with a high population and a large number of pending cases. In order to achieve this, the intervention programme highly supported the decentralisation of the justice system, by reallocating resources, whether human or technological. This was implemented in five judicial districts.

However, one obstacle to overcome was to decide what information should be disseminated and what should not be disseminated. This pertained specifically to any information which could affect interested and affected parties. The argument put forward by judicial authorities focused on the risk of disclosing information at particular stages of a case.

Likewise, in order to develop and make transparency and accountability visible to citizens, the Complaint System was launched as from 2008, first in the capital and then, in the second phase of the project, throughout the country.

Both systems have been developed and are currently working. However, electronic case filing will only be developed at the end of 2011 and implemented in 2012. This system will involve a paradigm shift and will include both the uploading of documents and the uploading of information, including pleas, affidavits and other documents generated in the course of a litigation case.

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<sup>&</sup>lt;sup>22</sup> The rate of pendency is obtained by dividing entry cases into resolved cases

As discussed, this system is aimed at minimising the movement of people who are forced to attend the court daily, as well as eliminating the paper trails within the different courts. However, until this system can be tested and launched, litigants, attorneys and other parties have to continue waiting in the hope of being served by a clerk who will hand over the documents before the deadline is imminent.

## **4.10 Summary**

This chapter recorded the main initiatives of ICT projects developed in the judiciary system, and a summary of objectives, features and functionalities. It also presents a discussion of the state of affairs, contrasting the planned against the achieved. In addition, a whole section was devoted to a discussion of different factors identified as 'gaps' that could determine the success or failure of ICT projects.

The e-government or e-justice phases that the judiciary underwent have been fully described, as has the foundations of the modernisation programme within the judiciary. In addition, the primary reason for the intervention was identified and discussed.

Reference was also made to the basic infrastructure that has to support the implementation of this system. This infrastructure includes not only the technological requirements, but also the skills that are necessary for the users who are to operate the system.

The next chapter presents the manner in which data for this research were gathered and analysed, the method and approach used for the analysis and the reasons that informed the choice of methods.

## **CHAPTER 5: RESEARCH DESIGN AND METHODOLOGY**

#### 5.1 Introduction

Rossi, Lipsey and Freeman (as cited in Burger, 2011a) refer to programme evaluation as the 'use of social research methods to investigate the effectiveness of an intervention'. Put succinctly: an evaluation research is conducted with the goal of answering evaluation questions, which, in turn, lead to determining whether the intended outcomes have been attained or not. For that reason and in order to reach a reliable conclusion, it is necessary to collect data from different sources: primary and secondary.

This chapter deals with the methodology and research design used for the study, bearing in mind the set of objectives cited in Chapter 1 as the core of the investigation.

# **5.2 Methodology**

The current research has as its framework responding to the question of whether the technological component of the SMP has achieved its main objectives. These were to increase productivity by reducing the backlog of pending cases, to thereby strengthen the judicial capacity and to improve the performance of the judiciary.

In order to answer this question, the phenomena as found in reality were analysed. In other words, an existing situation was observed and this situation was not intentionally manipulated, therefore the variables were beyond the control of the researcher. Thus, considering the two types of study, this became an empirical study.

Mouton (2009) suggests that empirical research depends on the use of hybrid data (numeric and textual). Therefore, even though this research was conducted within the framework of qualitative research, statistical data from annual management reports, monthly reports and records of evaluations carried out by NGOs were also analysed. These were used to support or rule out the conclusions.

The term evaluation can have a variety of meanings. Morra Imas and Rist (2009: 8) suggest that it depends on the emphasis or purpose of the evaluation. Therefore, several definitions of evaluation exist. In this study, evaluation is referred to as 'a collection of methods, skills and sensitivities necessary to determine whether a human service is needed and likely to be used, whether it is conducted as planned, and whether the human service actually does help people'(Baca Urbina, 2006: 3). This definition not only touches on the most important aspects of evaluation but also encompasses the three main types of evaluation: formative, summative and prospective.

The focus in remainder of the research was focused on the second type of the evaluation: summative. The reasons were, firstly, that the plan of modernisation had already been implemented, therefore it was possible to measure the outcomes achieved and, secondly, it was expected to provide answers to questions which arose at the beginning of this study. Another reason is that a summative evaluation provides summary judgment to an external audience about the performance of an intervention (Rossi *et al.*,2004 as mentioned in Rabie, 2011).

In addition, several approaches to evaluation can be employed, and the choice of which one to adopt depends on the context. However, these approaches are not mutually exclusive. This study was based on goal-based evaluation. Goal-based evaluation measures the extent to which a programme or project intervention attains its goals —in this case, the established objectives of this component.

It must be recognised that goal-based evaluation has limitations. Morra Imas and Rist (2009:185) mention three criticisms of this type of evaluation: it only focuses on economic and technical aspects instead of social and human aspects; such evaluation concentrates on stated goals so that the attainment of other goals which are not included as formal objectives are not considered valuable; and thirdly, that goal-based evaluation does not look at unintended consequences, whether positive or negative. Therefore, in order to address the cited constraints, the evaluation examined both: anticipated and unanticipated consequences following the outset of the design.

To achieve this, an adjusted ITPOSMO model as defined by Heeks (2006) was used with the aim of determining success or assessing which areas need to be addressed or corrected so as to increase the likelihood of success. It is worth stating that the same approach was applied in different evaluation contexts where ICT was introduced with the aim of improving public sector organisations in both developed and developing countries (Heeks, 2003).

This evaluation was used to determine the success or failure of the Modernization Program, following the three categories suggested by Heeks (2002: 101-102): total failure, partial failure and success. Total failure refers to an initiative that was never implemented or a system which *was implemented* but immediately abandoned. The second category indicated by Heeks is partial failure, in which the major goal was not achieved or the number of undesirable outcomes exceeded those which were expected. The third and final category reflects the success of a project, which is characterised by the lack of undesirable outcomes and one in which the majority of stakeholders attained their goals.

One constraint that any evaluation of outcomes has to overcome concerns the level of subjectivity. Heeks (2002) refers to this issue, arguing that the evaluation of success or failure can be measured from different perspectives; in fact, what is success for one person may be considered as failure by another person, Analysing qualitative data which basically reflect the perceptions of users therefore requires the use of quantitative data in order to validate the results.

# 5.3 Unit of Analysis

Welman, Kruger and Mitchell (2010: 53) refer to the unit of analysis as the members or elements of the population: groups, humans, organisations or institutions, human products or outputs, events. Hence, key users of the technology implemented through the Strategic Modernisation Programme of the Court comprise the unit of analysis which constitutes this research.

As discussed in Chapter 4, the strategic programme for the modernisation of the court is part of Paraguay's ICT Master Plan with 23 action programmes, which make up the

'e-legal Service' –the Civil Service initiative of the e-government. Figure 5.1 illustrates the e-Legal Service as one of 23 Action Programs.

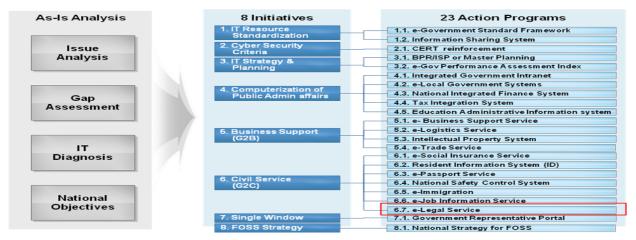


Figure 5.1: ICT Master Plan Initiative

Source: República del Paraguay, 2002

This ICT Master Plan has taken into account the long-term vision 'Paraguay para Todos y Todas' which is aimed at more integrated government development that embraces not only the ICT sphere, but also general growth. The improvement of 'everyone's quality of life' formed the core axis of this plan, and an effective and efficient justice system was seen as one strategic axis. Therefore, a well-organised management system was seen as essential for the justice system to be able to perform this role successfully.

In line with the ICT Master Plan, three primary goals were considered: the reduction of process backlogs, the expedition of justice and finally, major transparency, receiving the support of international organisations such UNDP, IADB, USAID.

# 5.4 Sampling Design and Method

Users of the judicial system and court staff constituted the target population of this study. It was obviously impracticable to interview the whole population, owing to the target population being made up of around ten thousand people who attend court daily. These include, among others, court personnel, judges, litigants and attorneys. This study therefore made use of the non-random sampling technique. From this, the purposeful sample is deemed suitable for this type of research. In a purposeful sample, units are selected following predetermined criteria and these, according to the

evaluator's criteria, will provide the data required by the study (Morra Imas & Rist, 2009).

It is worth stating that all ICT projects conducted within the judiciary system –the design, implementation and overseeing – are the responsibility of the Unit of Planning and Development and the IT unit. This unit works closely with the international organisations already cited.

As the researcher has been part of this unit from the onset of the Strategic Programme of Modernisation, she was able to verify and validate most of the information that developed as a result of the research from this strategic position. Therefore, the information that could be gathered from both units is not only meaningful, but also useful because of the knowledge of all ICT projects in the judiciary.

In addition, the department of Planning and Development, as well as the IT unit, could provide insight about the state of affairs, the challenges the projects have had to face, and the way that these have been overcome.

The staffs of both units comprise 45 people. However, the sample contacted for this research was made up of officials in managerial positions. An explanation of how this sample, along with the other unit of analysis, was selected will be presented below.

In addition, the technological component of the Strategic Modernisation Plan focused on 32 courts of both jurisdictions: criminal and civil. A total of 318 officials make up the staff of both courts. This includes those who are in managerial positions such as judges and court secretaries, as well as lower-level officials. Out of the total of 318, 160 were gathered to meet the requirements demanded for this study, and from those 160 employees, a sample of 68 was selected for this survey. However, it was not feasible to make contact with all, therefore, the sample was chosen using the criteria presented below.

Against the mentioned background, the key role players were selected on the following basis:<sup>23</sup>

- > Judges whose careers spanned five to ten years;
- ➤ Members of the lawyers' guild with more than ten years of practice in the profession;
- ➤ Officials from the IT department with more than eight years in a senior position who have participated in or are still involved in the reform process;
- ➤ Officials from the Planning and Development Department with more than eight years in a senior position;
- ➤ Managers from the General Secretary of the Supreme Court;
- Court Officials with between five and ten years in a senior position; and
- ➤ Officials from the Communication Department and Auditing Department with more than five years of seniority;

#### 5.5 Data Collection

In an attempt to address the objectives stated above, a wide range of people were consulted. It is important to point out that the researcher used the following tools to collect data in the following order: firstly, a desk review was conducted of existing documents, reports, assessments and reports generated by the different projects conducted in the judiciary, both in Paraguay and in other countries (looking for similarities to the local intervention); secondly: interviews were used to pre-test those being questioned, with the aim of a fair portrayal of the e-justice situation within the judicial power and of avoiding the existence of possible bias in responses, and finally, a self-administered electronic survey was used. Data obtained from these investigations were separated into two categories: primary data and secondary data.

Interviews and surveys were designed around the seven dimensions of ITPOSMO defined by Heeks (2006). When Heeks (2006) refers to this issue, he suggests that if the *gap* between design and need is large, the likelihood of failure increases. Intervention should be considered by reducing the gap between design and reality.

<sup>&</sup>lt;sup>23</sup> As this strategic modernisation plan was started in 1999, it was considered worthwhile to include court personnel who were involved from the beginning of the modernisation process in the sample.

Developing countries are often characterised by wide gaps, as discussed in detail in Chapter 4, where the archetypes of design-reality gaps were described.

Heeks (2006:5) argues that the e-government system has seven layers, namely information, technology, process, objective, staff, management and other resources. These are interdependent and the success or failure of any intervention depends to a great extent on the disparity between what was planned and the current reality.

To collect primary data, seven semi structured interviews were conducted with judicial personnel who were in a position to do so and willing to respond to the questions. They also possessed knowledge regarding the researched topic (Burger, 2011a) and therefore were able to estimate the reality gaps, bearing in mind the current reality. In this case, the evaluation of expected and unexpected outcomes will be useful to contrast the current reality against the situation which the intervention was expected to attain.

### **5.5.1 Primary Data Principles and Process**

Statements or questions for both surveys and interviews should be concise and unambiguous, and should consider the following principles (Burger, 2011b):

- > Avoidance of biased terms and items:
- > Avoidance of loaded questions and items;
- > Avoidance of leading questions;
- Avoidance of ambiguous questions and items; and
- Avoidance of double-negative questions.

The interviews were conducted in accordance with the following seven-step process (Burger, 2011b):

- > Step one: formalise or clarify the purpose and concepts of the interview;
- > Step two: lay out how the researcher expects to accomplish his/her objectives;
- > Step three: carry out the interview;
- > Step four: transcribe notes and documents;
- > Step five: analyse data collected and compare it against that which was indicated as objectives;

- > Step six: check reliability and validity; and
- > Seventh and final step: report.

Once data are collected and the validity is verified, such data need to be analysed according to certain criteria, which comprise the topic of the next section.

#### **5.5.2** Interviews

In order to explore and understand judicial issues in depth, one-to-one semi structured interviews were conducted with key respondents from inside and outside the organisation. The goal was to elicit information that could be applied to the research issues introduced at the beginning of the proposal. All interviewees were assured that their identities would not be revealed and that their opinions would be held in confidence, especially with regard to judges and court secretaries.

The questionnaire that was used for the interviews is attached as Appendix A.

#### 5.5.3 Surveys

An important tool for collecting data was the self-administered questionnaire, which was distributed by e-mail (work e-mail) to court personnel. To be eligible for this study, the officials needed to meet the requirements mentioned previously. They were requested to answer the same questions and a range of response choices were provided. The survey contained a number of questions and statements about the perceptions of respondents regarding the implemented Information Systems. Respondents had to mark their choices on the questionnaire by indicating a value that matched their level of agreement or satisfaction.

The Survey Questions are attached as Appendices B and C. Appendix D contains the model used for analysing frequency.

#### **5.5.4 Secondary Data Content Analysis**

In combination with the cited data collection techniques, a thorough analysis of statistical data and annual reports was used. This was expected to provide insight and

reinforce the qualitative data. Likewise, it would provide a useful tool for giving evidence and reconstructing baseline conditions of the project and the target population prior to the implementation of this reform.

## **5.6 Data Analysis**

This stage consisted of making sense of data collected in the previous stages, 'providing interpretations of those and in terms of literature and personal views make it possible to predict failure or success of the reality gaps of the IPMOSMO framework'(Eteokleous & Ierodiakonou, 2007: 7).

Data analysis is the process in which data that have been gathered are ordered and organised for the extraction of useful information. The different methods of data analysis include charts, graphs and write-ups. These methods are conceived with the idea of refining data so that readers and any interested people are able to collect useful information and achieve meaningful conclusions without needing to search through all data.

The identification of themes is one of most important tasks in analysing qualitative data (Ryan &Bernard (n.d.), as cited by Welman, Kruger &Mitchell, 2010). In effect, the same writers refer to themes as an 'umbrella' construction which is identified by the researcher during the stages of data collection.

However, it is important to review the data captured in the field and this was analysed by categorising it according to themes. The main objective of this analysis was to try to understand the key individuals' points of view from his/her own experience and expectations, as well as his/her opinions of the modernisation process and its positive or negative outcomes. Even though the analysis was basically made by hand, the researcher also made use of available and valuable tools, specifically Word and Excel programs. In addition, a colour code was assigned to each theme that was going to be measured; this, at the same time, was to be related to each outcome. In addition, responses to the interviews and questionnaires were allocated the same colours, depending on the related theme. An inductive analysis of the patterns, trends and recurrent themes was used to find an answer the research problem.

#### **5.6.1 Tabulating Survey**

Table 5.1 illustrates the assigned value for the survey and its corresponding description.

Table 5.1: Tabulation of Survey

Value	Description
1	Not at all Satisfied/Agree
2	Dissatisfied/Disagree
3	Acceptable
4	Satisfied/Agree
5	Very Satisfied/ Strongly Agree
6	Cannot evaluate

Source: USAID, 2007: 87

If a question/sentence receives no response, the value is 0.

#### 5.6.2 Steps to be followed for analysing each question/statement

- ➤ The first step in the analysis consists of defining the number of occurrences of an answer according to the values determined in the previous table;
- The second step comprises dividing each frequency into the number of received answers. This result must be expressed as a percentage (%);
- ➤ The third step is the multiplication of the percentage determined in the previous step by the value assigned to each range on the scale of assessment, in order to find a partial value for each;
- ➤ The fourth step consists of adding the partial value for the scope of the assertion. This procedure should be repeated for as many statements/questions as are contained in the survey; and
- > Step five involves determining the General Value, which is obtained by adding each obtained score for each statement and dividing them into the total number of statements.

#### **5.6.3** Interpretation of results

Results were interpreted according to the ranking and criteria presented in Table 5.2.

Table 5.2: Interpretation of results

Rank	Criteria
Between 0,0 and 2,0	Inadequate
Between 2,1 and 3,0	Deficient
Between 3,1 and 4,0	Appropriate
Between 4,1 and 5	Satisfactory

Source: USAID, 2007: 89

For each of the ranks, a specific criterion that entailed a qualitative assertion of the general assertion was defined. Based on this assertion, the obtained results were interpreted and corrective measures could then be taken.

# **5.7 Summary**

In this Chapter, the design and methodology applied in this study have been described in detail. The same criteria were considered for designing interviews and surveys, as well as for the parameters contemplated for selecting the sample. The methodology for analysing gathered data and interpreting results was also explained.

Chapter 6 presents the development of the data analysis and the interpretation of results, focusing on the frequency method for the survey and on inductive analysis of the patterns, trends and recurrent themes of the interviews.

# CHAPTER 6: EXPLANATION AND INTERPRETATION OF THE RESEARCH FINDINGS

#### 6.1 Introduction

Data analysis is an important part of the evaluation process. The weaknesses and strengths of different options for analysing data should be taken into account at the time of carrying out the assessment.

This chapter offers a critical discussion of these findings by contrasting them with the outcomes set by the Strategic Modernisation Programme with regard to the ICT component. Those outcomes are assessed, considering the users' points of view about the success or failure of an implemented IS. Thus, the intention of the researcher goes further than restricting the evaluation to those established outcomes, by looking also at the values and interests of the main people affected by this Strategic Modernization Program.

The findings produced through this research demonstrate that a great deal of effort was applied by judicial authorities in supporting the ICT initiative. However, there is much that can be done to improve judicial performance.

As discussed in Chapter 4, the best manner of closing the gap between reality and organisational needs should be considered when dealing with technology. To this end, Heeks (2006) implies that, depending on the size of the gap, it can be rated as low, medium or high, contrasted against the ITPOSMO layers namely: Information, Technology, Processes, Objectives and values, Staff and skills, Management systems and structures, and Other resources.

Therefore, the model applied in this research is based on determining whether the ICT Projects implemented as a result of the Modernisation Programme have realised their expected objectives of reducing the gap known as the *design-actuality gap* (Heeks, 2002: 104)

However, the high degree of stakeholder subjectivity with regard to what an ICT system should be and what the ICT system currently is has to be accepted. Heeks (2002) implies that every stakeholder who will be affected or who is affected by IS has his own version of actuality according to his values, perceptions and historical experiences. For those key stakeholders or interested parties to become supporters, the project objectives must be aligned with their individual objectives and values. In fact, the reform initiatives should provide solutions to their problems instead of creating new ones. All in all, they are looking for a positive answer to the question of what the project has to offer them. They may even be thinking: 'Why should I: what's in it for me?' and wondering what benefits they could get from the ICT project (Heeks, 2006:225).

# **6.2 Strategy Applied for the Analysis**

The analysis of the existing situation was conducted using official documents, reports, memoranda and minutes of meetings, which were expected to provide a holistic view of the ICT projects implemented as result of the Court Modernization Program.

Likewise, trying to learn from the experience before launching any new initiative in which technology plays a pivotal role, was considered fundamental in the evaluation of successful projects and in finding reasons behind failures that may have existed.

This section is divided into two parts. Part I comprises a desk scrutiny of the main documents enacted by the Supreme Court as a result of the introduction of ICT into the judiciary. These documents also included reports submitted at the beginning and end of the implementation by the International Development Organizations to the General Secretary of the Supreme Court and to the Development and Planning Department. Corollary issues pertaining to the implementation and functionalities of ICT systems are fully described.

When assessing statistical reports about the performance of magistrates' courts, it is important to understand and identify what backlog of court caseloads exists in the system, by determining whether such a backlog has increased or decreased due to the intervention.

Part II deals with the analysis of the primary data obtained through interviews and surveys. The information gained from this is contrasted with the secondary data.

# 6.3 Analysis of policies, guidelines and documents

This section comprises the analysis of reports from the UNBP and IAB with regard to the modernisation programme and the support rendered through USAID.

# 6.3.1 Analysis of reports submitted by the UNDP and IADB regarding to the Strategic Modernisation Programme (2002)

The objectives of the SMP were aimed at cutting case delays, improving access to justice by encouraging professional development and considering gender equity and the overall performance of the justice system (IADB & UNDP & CSJ, 2002). Therefore, by introducing the elements of effectiveness and efficiency in the operations, the expected result of the intervention was the improvement of the judicial management system.

#### > Base line considered for the intervention

In order to establish a fair portrayal of the situation of the judiciary at the moment of the intervention, it was considered important to discuss the findings of the assessment carried out by sponsors along with the Department of Planning and Development during 2002/2003, prior to the intervention.

The assessment was able to identify three problems in particular:

## > Strengthening of the Judicial System

The first related to the strengthening of the judicial system. A survey carried out in Paraguayan society by the Latino barometro demonstrated a low level of trust in public institutions, and specifically in judicial power. <sup>24</sup> According to that report, judicial management was characterised by its slowness, excessive backlogs and limited access to justice by citizens. Moreover, the lack of independence and

<sup>&</sup>lt;sup>24</sup>According to this survey in 2002, only 20% of the citizens believed in the judicial system: They believed that Paraguayan justice punishes the guilty whoever He/She is (UNDP, IADB and CSJ, 2002)

predictability of resolutions provided evidence of this. Those elements are considered pivotal factors in protecting human rights and the rule of law in the country.

#### **Lack of statistical information**

The analysis of judicial performance was limited, owing to incomplete statistical reports which undermined the possibility of carrying out assessments by comparing performance from one year with performance in another year. This was therefore identified as a key reform measure to be addressed through the intervention. The statistical information was partially available only for those circumstances where JUDISOFT information technology had been implemented.

However, even though the information could not be validated, the figures presented in Table 6.1depict the performance of the courts during 2002/2003. This was used as the baseline for intervention.

Table 6.1: Admitted Cases vs Cases Passed

	Year 2002		Year 2003	
	Admitted Cases	Resolutions Passed	Admitted Cases	Resolutions Passed
Court of Appeal and Magistrate's Court	157193	78819	155120	83761

Source: Corte Suprema de Justicia, 2010b<sup>25</sup>

The figures show that, in 2003 (the second year of the intervention), there was a slight improvement in performance in comparison with the previous year (2002) with regard to passed resolutions versus admitted cases. However, the improvement was still insufficient. In fact, in 2002, 157 193 cases were admitted and 78 819 resolutions were passed, which shows a productivity of around 50% in contrast to 2003, where 155 120 cases were admitted and 83 761 resolutions were announced (54%) as indicated in Table 6.1.

At the time of the intervention, the judiciary was made up of 591 judges (104 judges belonged to the Court of Appeal and 487 judges belonged to the Magistrates' Court).

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<sup>&</sup>lt;sup>25</sup>This data belongs to the civil area only.

According to the information provided, each judge of the Court of Appeal received 104 cases per year or 8.65 new cases per month, therefore, considering the previous table (6.1), the rate of delay was 76%.

A Magistrate of the First Instance received 24 new cases per month and these judges were able to rule on 163 sentences. Therefore, the rate of delay was around 41%.

#### **Lack of accessibility to the judicial system**

The intervention uncovered meaningful restrictions in access to justice for citizens. This situation was even more marked in rural and vulnerable areas, therefore the intervention tried to assist the most vulnerable sector of the population —those who were far away from the legal system — and it attempted to provide peaceful resolution of legal disputes on the one hand, and increase access to services on the other hand.

One of the strategies suggested was the split of jurisdictions. In 2002, seven judicial districts existed: Asuncion (the Capital and head of the Supreme Court), Encarnación, Alto Parana, Villarrica, Pedro Juan Caballero, Concepcion and Coronel Oviedo. At the end of the intervention, seven more districts were added namely: Saltos del Guairá, Paraguarí, Caacupe, Caazapá, Pilar, Misiones, Central (Paraguay, Corte Suprema de Justicia, 2008). The reason behind this procedure was to target those regions where caseloads were predicted and to try to reach more sectors of the population, specifically those far from the main cities. For that reason, the necessity for each district to have its own database was identified. This was to be managed by local ICT technicians. A partial decentralisation approach for managing e-justice was considered and the implementation of the same ICT system that was already operating in the capital was suggested, but with some adjustments.

The initial diagnosis highlighted lack of a tradition concerning the disclosure of information and language barriers which had to be overcome. Laws and resolutions are published in Spanish; however, 45% of the population in the countryside speaks the Paraguayan native language. The consequence of this is that a large number of people remain unaware of their legal rights.

#### **>** Achievements

The same report indicated the following as the main achievements of the intervention: As result of the subcomponent of the SMP, institutional strengthening was conceived as the strategic plan for institutional development of the Paraguayan Supreme Court. This allowed an improvement of 20% in the speed of procedural time and, consequently, a decrease in case overload in the different courts.<sup>26</sup>

Likewise, an ICT system – JUDISOFT – was established within the courts:. Its objective was to modernise the administrative management of those courts. The new system favoured the reorganisation of the juristic offices and provided a new approach to management. At the same time, this system allowed interconnection among local and remote databases.

Among the functionalities that the Case Management System (JUDISOFT) brought to the judiciary system, was the integration of diverse methodologies, procedures and a computing platform around a legal case. In addition, this system allowed the articulation of actions of diverse actors involved in judicial activities (lawyers, prosecutors, defenders, parties, officials and judges) aimed at the search for efficiency and effectiveness.

JUDISOFT is made up of four modules, which are also integrated with the Administrative Management System and Strategic Management System, providing those systems with meaningful information regarding the use of resources and allowing the possibility of carrying out estimations. This is elaborated in Table 6.2.

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<sup>&</sup>lt;sup>26</sup>The Strategic Plan included the identification of priority areas for improvement within juristic and administrative management: accessibility to the justice system, infrastructure, and the rationalisation of administrative resources, including the budget.

Table 6.2: Modules of JUDISOFT

# **Operative Modules of JUDISOFT MODULE OBJECTIVE** 1- Information Module for analysing Improvement in effectiveness of solving cases (Civil and Criminal Code, cases Criminal Report, Body of Law ) and consultation system for supporting judges. 2- Module which supports case Improvement in efficiency management by introducing a new concept of the juristic office. 3- Module of reports: this module allows Juristic Office management early warning (before a case expires), encouraging juristic actors to be proactive. 4- Module for providing Public **Customer Service or Citizen Service Information**

Source: IADB & UNDP & CSJ, 2002

As a result of the program, 42% of the courts for the whole country have operated with the help of the Case Management System, which included 136 secretaries out of 320 courts. The final outcome was expected to cover 70% of the offices.

In 2003,153 228 cases were processed through JUDISOFT. In addition, 22% of the total cases were debugged, according to the inventory conducted for each court. Furthermore, 421 officials received training in IT tools in order to implement the system in the courts, making it possible to split duties and responsibilities such as administrative management from the juristic tasks. A strategy of procedural simplification was applied for both civil and criminal jurisdiction and this was put into effect in 2005.

#### 6.3.2 USAID (2008)

The support from USAID was focused on three primary areas: supporting Alternative Dispute Resolution Mechanisms; strengthening court administration and management by focusing on the Disciplinary Management System; and, finally, improving the accessibility to the justice. More specifically, the aim behind this intervention was to consolidate the fight against corruption by providing transparency in the whole processes.

The programme was divided into two phases. The first started in 2007 and ended in October of 2009, and the second phase started in December 2009 and was expected to finish in October 2011. As a part of the first phase, a complaint system was developed for managing complaint cases from the initial phase until the final resolution is enacted by the Members of the Superintendence Council. The support from USAID also included improvement in infrastructure through the provision of computers, networks, trained staff, function manuals, standardisation and the simplification of procedures. According to the analysed report, the programme helped in reducing the procedural time for processing complaints against officials and judges. The system was expected to operate throughout the country, so that the different districts would be able to manage their own complaint cases. Mechanisms of control likewise were enhanced by placing special emphasis on the development of a new ICT system for auditing the management of cases during the second phase. <sup>27</sup>

In addition, the administrative courts were improved in all senses: through infrastructure and specialised human resources, and by allowing interconnectivity with the judiciary network. All of these were reflected in a decrease in the administrative burden and loopholes and the unification and simplification of procedures within the different chambers of the administrative courts. In fact, the system that is currently under development will take the first steps towards electronic case filing.

<sup>&</sup>lt;sup>27</sup>This Auditing Case management had already finished been on October of 2011; however, the administration of the system is still the responsibility of external consultants.

Furthermore, an ICT system that was introduced allows random appointment of judges to deal with a specific case. This procedure contributed to the transparency of the process by balancing the caseload of the different courts. However, this system is still being criticised by judges and some lawyers of the administrative court. The reason for criticism is that the previous mechanism allowed magistrates from the administrative court to choose only the cases that they wanted to deal with, which is not possible with the current ICT system. In fact, the preceding method allowed lawyers to also choose the courtroom that they wanted. Under the present system, each member has an equal opportunity of being assigned a particular case because the draw supposedly cannot be manipulated.

# 6.4 Data of Paraguayan Justice

The NGO Centre of Judicial Studies (CEJ<sup>28</sup>) conducted an evaluation of the current situation within the judiciary. This assessment took different criteria which were divided into the following four areas as parameter: Socio economic, effectiveness, technology, and perception and trust. The report submitted to the Supreme Court by this organisation (2010) is the basis on which this section is devoted to analysing the criteria of effectiveness and technology. This assessment is aimed at determining whether the last objective, which is to provide justice with equity and transparency by solving juristic disputes, has been attained.

Figures for two years (2009/2010) were taken into consideration for the analysis. Those figures were contrasted with own elaborated data and data from the Office of Statistics of the judiciary, the IT unit and the Department of Patrimony of the Supreme Court. The indicators used for the assessment of the criteria of effectiveness in the judiciary are discussed below.

#### **6.4.1 Effectiveness Parameter**

The indicators used for the assessment of the civil and criminal jurisdictions are presented separately and are presented in Tables 6.3 and 6.4.

<sup>&</sup>lt;sup>28</sup>The abbreviation is in Spanish (Centro de Estudios Judiciales).

#### 6.4.1.1 Civil Jurisdiction

Table 6.3 shows the superior productivity of the Capital with regard to passed resolution.

Table 6.3: Sentences passed under Civil Jurisdiction.

District	Year 2009	Year 2010	Difference
Capital	20011	23203	3192
Other Districts	20584	20123	- 461

Source: Corte Suprema de Justicia, 2010b

Analysis shows that the Capital enhanced the productivity of resolutions by 15% from one year to the next. However, the number of enacted resolutions in the rest of the country decreased by 0.9% when figures for 2009 and 2010 are compared.

#### 6.4.1.2 Criminal Jurisdiction

With regard to criminal jurisdictions, it was found that the capital district decreased its productivity by 78 points, while the rest of the country increased its productivity by 599 points. The figures are presented in Table 6.4.

Table 6.4: Productivity of Criminal Jurisdiction

District	Year 2009	Year 2010	Difference
Capital	1522	1444	-78
Other Districts	2806	3405	599

Source: Corte Suprema de Justicia, 2010c

It is necessary to highlight that the JUDISOFT system has been fully implemented in the capital since 2005.

A comparison of admitted cases and enacted resolutions for the whole country during 2009/2010 for both the Civil and the Criminal Jurisdictions are presented in Table 6.5.

Table 6.5: Admitted Cases versus Resolutions Passed (2009-2010)

	Year 2009	Year 2010
Admitted Cases	140629	148090
Resolutions Passed	262048	277635

Source: Corte Suprema de Justicia, 2010a

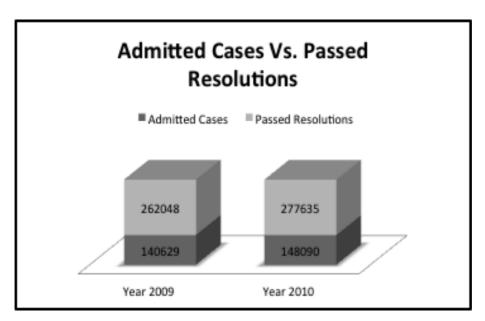


Figure 6.1: Comparative of Admitted Proceedings vs Enacted Resolutions

Table 6.5 and Figure 6.1show a growth of about 5% per year with regard to admitted cases in the whole country (7461 new cases). Productivity also accompanied this growth. In fact, by comparing 2009 with 2010, we see that the rate of productivity also increased by 5%; however, this is still a low rate. It has to be considered that the graph above depicts figures from both jurisdictions: the criminal and the civil area. In 2010, the programme of modernisation had reached 72% of the courts in the country.

#### **6.4.1.3 High Court**

The Paraguayan Supreme Court is the highest court of the country and the last place where a case can be appealed. This court is divided into three different chambers: Civil, Criminal and Constitutional. Each chamber is made up of three members named Ministers.

With the objective of fostering transparency in justice management, the Ministerial members of the Supreme Court approved the use of ICT systems within the different rooms that comprise the highest court. Technicians in the IT department have been developing systems that can bring support to the work of the members of the Supreme Court since 2005. Considering that the Supreme Court is the last instance of a litigation process, it is clear that the development of this system has contributed to equity and balance in case management for the whole judicial system.

The first step in the operation of the system consists of receiving a proceeding, after which the case is automatically assigned to a Minister. The assigned Minister is the first member to express his/her opinion with regard to that specific matter. After that, the rest of the members can either support or turn down that opinion. The majority vote prevails.

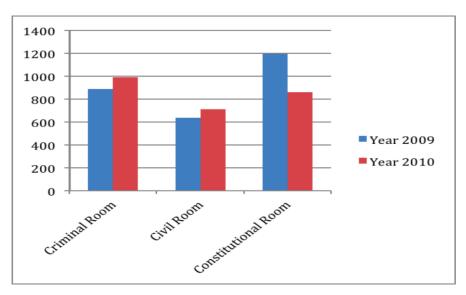


Figure 6.2: Comparison of enacted resolutions of the three Chambers of the Supreme Court

By comparing 2009 with 2010 (Figure 6.2), it can be seen that there was an increase in productivity of around 11% in both the Criminal and the Civil rooms. By contrast, the Constitutional chamber revealed a decrease in its rate of productivity by 72%.

The above data were obtained through the Computer System (Supreme Court Management System), because the Statistics Office does not keep the registration of

the cases submitted before the Supreme Court, therefore, these data cannot be contrasted.

### 6.4.2 Technology

The opportunities that ICTs offer within the justice sphere and the government in general are enormous. The new technologies can deal with true situations, which was unthinkable before. It has become possible, in fact, to spread information about the achievements of the government via the Internet. Different judicial decisions have thus been published over the last four or five years, thereby fostering transparency and encouraging credibility among citizens towards justice and, at the same time, strengthening the position of judges.

The new technologies have not only encouraged the strengthening of the internal operability of the justice system, but they have also started to reinforce its credibility wherever the technology is applied to improving the interface with the public. The website offers basic and useful information about the services rendered, which, in the past, would have remained unattainable to the majority of the population.

This research was directed at investigating the positive impact of ICT, in the sense of assessing the contribution of ICTs to speeding up legal processes. This contribution has been facilitated by removing constraints in accessing information re justice for both lawyers and interested parties. It was also important to find indicators able to measure the use of technology. This would allow for measuring the impact of the use of technology in case management and affects the diverse secretaries, courts and the justice system in general. This next section of the research report deals with seven well-defined criteria with regard to the availability of technology.

## 6.4.2.1 Analysis of technology within the judiciary

The availability of technology can be determined by the number of computers distributed through the fourteen districts, the number of computers per official, the number of e-mail accounts, the number of officials with Internet accessibility, the number of officials with intranet accessibility, the number of users of JUDISOFT and

Disciplinary Systems, and the number of people who have access to the judicial Website: <a href="https://www.pj,gov.py">www.pj,gov.py</a>

## 1-Number of computers distributed in the fourteen districts

The quantity and quality of the computing equipment allow for an enhancement in judiciary management. For that reason, it is indispensable to maintain a constant measurement of this element.

Table 6.6 presents information with regard to Computers available within the judicial power. According to this information, 3 608 computers were distributed in the juristic and administrative area for three districts: Capital, Central and Cordillera. Comparison between 2009 and 2010 shows that this represents an increase of 4% for those districts. The rest of the country registered 1 842 computers, which means 5 450 computers in total for all districts.

Table 6.6: Equipment –Computers available within the judicial power

Item	Capital, Central and Cordillera	Rest of the Districts
Computer Equipment	3 608	1 842
UPS	2 645	1 574

Source: Corte Suprema de Justicia, 2010d

Previous data similarly demonstrate the lack of infrastructure in the rest of the districts compared with the Capital, Central and Cordillera.

### 2-Number of computers per official

This data was obtained by dividing the number of court employees into the total of number of computers. The result is 1.4 computers per officials. In 2007 the result was 0.2 computers per employee.

## 3-Number of officials with work e-mail accounts

The e-mail account is a web benefit that allows employees to send and receive messages and digital documents in an easy manner. Another benefit is that it provides the opportunity to receive information at any time.

Table 6.7: E-mail accounts

	Year 2009	Year 2010
E-mail Accounts	644	587

Source: Corte Suprema de Justicia, 2011c

According to data provided, there has been a decrease in the number of work e-mail accounts.

#### 4-Number of officials with Intranet access

The Intranet is a platform that uses Internet Protocol Technology for sharing organisational information with users who belong to the organisation. According to data provided, there was a decrease in the number of users in 2010 (Table 6.8).

Table 6.8: Intranet

	Year 2009	Year 2010
Intranet	4198	2941

Source: Corte Suprema de Justicia, 2011d

The reason for this decrease is that in 2010, the IT department executed the task of removing accounts in order to leave only those accounts that counted and which had written permission for accessibility.

## 5-Number of users of JUDISOFT and Disciplinary System

The JUDISOFT SYSTEM was devised for offering support in court management through recording proceedings in real time, analysing cases, offering public information and at the same time, providing early warning about particular case to be heard. This system makes a significant contribution to the progress of a case and to court management, because it facilitates knowing the state of a case, as well as the ability to block those cases that have not experienced procedural initiatives within a specific period of time. By the end of 2010, this system had been implemented in thirteen of the fourteen districts.

Table 6.9: Number of Case Management System users

District	Year 2009	Year 2010
Asuncion	1 700	1 900
Alto Parana	461	489
Guairá	290	316
Pedro Juan Caballero	288	300
Misiones	205	360
Paraguarí	196	229
Coronel Oviedo	270	323
Other Districts	69	157
Total	3 479	4 074

Source: Corte Suprema de Justicia, 2011e

According to Table 6.10 JUDISOFT currently is used by 4 074 employees. Asuncion alone has recorded 200 new users, which means an increase of 11%. An analysis of the rest of districts reveals an increase amounting to 2 174 new users, which presents a 22% rise in users.

## **Disciplinary System**

Since its development and launch in 2008, the disciplinary system has experienced an increase in the number of people who operate the system to 175 users. These users are distributed among six areas: Superintendence of Justice, Council of Superintendence, Office of Complaints, Internal Control Office, Juristic Advisor Office and Inspectorate of Justice. The system enables interconnectivity among offices which previously worked in isolation. Use of this system makes it possible to reduce the time needed for processing a complaint, by introducing standardised and reduced procedures. Ministerial members of the Council of Superintendence furthermore are able to monitor a particular case, and can retrieve reports to see the type of complaints made and the time spent on processing a complaint.

However, the present the system does not allow for the retrieval of statistics and consolidated reports which include information for Asuncion and for the rest of the districts. Despite this, the programme can be seen as an indicator of the success of the

implementation of the complaint system in other districts. In reality, there is a disturbing lack of interconnectivity among the different databases, which makes it impossible to obtain consolidated reports.

## 6-Number of people accessing the Website of the Judiciary: www.pj.gov.py

A website constitutes an important tool of institutional communication for both internal and external users, also enabling transparency of court management. In the same way, it increases access to judicial information, by exercising positive pressure in favour of citizens looking at improving the performance of the organisation.

The Justice Power in Paraguay considers that access to information is a fundamental right of citizens; thus, the judiciary (with the support of USAID) designed a system of accessing judicial information through a web site in 2005. The maintenance and updating of this system is the responsibility of the Department of Communication, the IT Department, and the Office of Information.

This website is the most important means that the judiciary possesses for publishing useful information for lawyers, researchers, litigants and citizens and it includes, for instance, online publication of court decisions. Equally importantly, the website also provides curricula vitae of Ministers, Judges and Heads of Departments.

In addition, the Department of Communication distributes a weekly newsletter through the work e-mail. This summarizes the most relevant information about the justice management. In order to become a useful tool for citizens, it is of paramount importance that information is continually updated.

Two variables were applied for measuring this indicator: the number of people accessing the judicial website and the amount of published news. The tables that follow show the number of people who have accessed the judicial website during the period 2009/2010.

Table 6.10: Access to the Judicial Website

Month	Year 2009	Year 2010
January	19 414	27 876
February	21 913	32 950
March	25 848	38 240
April	27 535	40 322
May	28 238	42 321
June	33 083	41 175
July	26 672	38 727
August	26 631	44 312
September	35 198	46 545
October	39 502	49 239
November	35 105	51 653
December	30 756	39 803
Average	29 158	41 097

Source: Corte Suprema de Justicia, 2011f

Table 6.10 above provides a monthly breakdown of the number of people accessing the judicial website. An increase of 41% was measured when comparing the year 2009 to the year 2010. In both years, October and November were the months which the highest rates of access were recorded, and January was the month in which the least use was made of the available accessibility.

## 7- Published News through the Website: www.pj.gov.py

Published news constitutes an indicator that demonstrates the dynamism of a portal, specifically because users of the Website generate the content themselves.

Table 6.11: Published news

Published News	2009	2010
Per Year	1236	1 603
Per Month	103	134

Source: Corte Suprema de Justicia, 2011g

Table 6.11 indicates an increase in 29% with regard to the quantity of published news when 2009 is compared with 2010. If one allows for 20 working days per month, the daily average for articles published for providing information is five in 2009 and seven in 2010.

## 6.5 Interview Results

The questionnaire for the interviews comprised 14 questions. The questions and the results obtained from each are discussed individually.

## Question 1: How does the judiciary conceptualise e-justice?

Interviewers defined e-justice as the result of the new possibilities offered by Information and Communication Technologies to ensure an efficient and effective justice system that serves all citizens.

Question 2: Does the judiciary have any policy related to ICT projects? Could you please explain them?

Answers to these questions 1 and 2 are summarised below:

## > Rules for ICT within the judiciary

In an attempt to support the implementation of ICT within the judiciary, the Paraguayan Supreme Court enacted Resolution 473 of 2007, which is a regulation policy that provides guidelines regarding the use of information systems. According to this resolution, all proceedings have to be registered in the computing system developed for that purpose. In this case, the system is known as JUDISOFT.

These guidelines are discussed in greater detail in a section that follows:

## ➤ Obligatory use of the implementation of JUDISOFT within the different magistrates' criminal courts

The criminal records statistics office has to submit a monthly report to the General Superintendent of Justice (*Superintendencia General de Justicia*). This report must make mention of all irregularities with regard to the input or the lack of input of data, in order to assist with imposing sanctions.

## > Inter-operability of Databases

The same resolution also regulates the operation of the Criminal Records Office in establishing the inter-operability of the databases of the different jurisdictions. As a result of this change, judges, prosecutors, attorneys and individuals are able to obtain a consolidated criminal report, because data is stored in a unique database.

Users of judicial information previously had to request the information for any specific case in each jurisdiction and the information retrieved was valid only for that jurisdiction.

## > Standardisation of procedures

Procedures conducted in the whole country were unified and standardised. The objective was to have a unique and standardised instrument that could be applied to the Criminal Statistics Office and the Criminal Records Office.

#### **➤** Auditing control and accessing mechanisms

In order to safeguard the information contained in the different databases, the system has to have an auditing access mechanism. This mechanism allows for individual responsibilities for those users who have to operate the system.

## > Random appointment of judges for dealing with cases

Resolution 370 of 2005 of the Paraguayan Supreme Court approved the regulation of the Centralised Admitted Desk of Cases. This establishes that the distribution of proceedings is carried out by random selection, taking into consideration the number of magistrates and using the computing system named JUDISOF. Lawyers, attorneys, prosecutors, defenders and litigants have to submit two exact hard copies of their pleadings and other documents prepared on behalf of their clients. One is for them to

keep and the other is for the respective court in order to initiate a judicial case. It is clear that the judicial process starts long before a case is sent to court.

A series of steps precedes this action. First, the official must carry out formal controls concerning the plea that is being submitted; second, the same official must register this event in the system; afterwards, the system automatically assigns a judge; finally, a receipt is provided. A triple receipt in which specified details about the case, such as the name of the case, the date and place of submission, the name(s) of the litigant(s), the allocated court and secretary must be provided for each litigant. One receipt has to remain in the office where the plea is submitted; another is for the interested party and the third is for the respective court. This forms the starting point of a case (At the time of this research, this procedure was undergoing some changes).

#### > Resolution 593 of December 2009

In order to introduce more transparency to the random assignment of magistrates for each judicial case, a new computing platform was developed by technicians in the IT department. This was an exclusive initiative of the Supreme Court and its aim is to improve the methodology applied previously. A key feature of this methodology was interoperability with the JUDISOFT system and the search for similarities in a previous case. In that sense, the preceding system did not control the submissions of proceedings; in cases where a lawyer disagreed with the assigned judge and secretary, he or she used to make a new submission. Validation according to the typology of cases and involved parties is now among the functionalities that this system has introduced. This means that, when a lawyer tries to submit a new request, the system automatically sends the case to the court allocated originally.

However, full identification of the parties through the use of an ID number is highly desired in order to comply with the contrasting of previous entry cases. Thus, at the moment of registering data, the system is capable of interfacing with databases of other institutions in order to validate data. In the case of an incorrect ID number, the proceeding must be returned immediately to the presenter to informing him/her of the inaccuracy of data.

Question 3: How many ICT projects have been deployed within the judiciary? Question 4: From the previous ICT projects, which of those do you consider successful and which not? Why?

It is known that the strengthening of the Justice Sector started in 1999 and comprised a sub-programme of the Modernisation Plan of the State in Paraguay. The Inter-American Development Bank (IADB), the World Bank and the United Nations Development Program (UNDP) sponsored this programme. The pivotal goal was the strengthening of judicial management, including the Supreme Court and General Prosecutor's Office. In addition, the programme took into account the need to increase the speed of the judicial process by also providing transparency to whole processes. Similarly, the intervention helped in the redefinition of judicial policies aimed at supporting the effective implementation of the programme. These judicial policies provided a base for developing a pilot programme whose final aim was to enhance the judicial infrastructure. This included the use of new technologies of information and communication in both the juristic and the administrative areas.

Two projects were considered as critical building blocks for achieving the previously cited goal of the strategic modernisation programme. These projects were mainly reflected in the development of two ICT systems: one for the improvement of the administrative offices and one for the juristic management of the courts.

The system developed for the administrative area replaced the previous ICT system, which was characterised by a lack of interconnectivity among the different offices that integrate the administrative area. Simplification, standardisation and automation of procedures were the characteristics of this ICT system named SIGAF (System for the Administrative and Financial Management).<sup>29</sup>It addressed all the administrative processes including tendering, procurement supply chain, inventory monitoring and control, financial aspects, and the budgetary process from its design until the monitoring and evaluation of expenditure.

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<sup>&</sup>lt;sup>29</sup>The abbreviation is in Spanish

The SIGAF, provides a comprehensive basis of financial performance information. Likewise, medium- and senior-level managers can monitor individual performance when a proceeding is being delayed.

After the identification of the most relevant ICT projects carried out in the judicial sphere, the interviewers also made mention of the Human Resource System Management as one of the most significant ICT projects. This system was developed with the aim of supporting the management of personnel for both the juristic and the administrative areas. The intervention took as its first step the updating of the data of personnel. To this end, it was requested that officials fill in a card with their individual data including: name and surname, telephone numbers, e-mail addresses, details of studies, date of birth, previous jobs, and licences granted, among other details. All of this was entered into the computer system.

This system, which was supplemental to the SIGAF, was one of the critical blocks of the ICT systems developed for supporting the management of the judiciary. The interviewers offered a range of answers at the moment of responding as to whether the interviewees considered those projects as successes, partial failures or failures. However, on average, the majority agreed that those ICT projects could be considered as partial successes instead of partial failures. Taking into account the definition offered by Heeks (2002) with regard to projects regarded as a *partial failure*, it is possible to state that there was partial attainment of the main goal set for those ICT projects. Standardisation and simplification of procedures were achieved. In fact, thanks to the technology, the time needed for processing administrative proceedings was reduced. However, the unification of procedures was not attained.

In fact, the capital was selected as pilot case and then the ICT system was spread to other districts. However, the reality in other districts differed from the capital, Asuncion, with regard to taking into considering infrastructure, staff and knowledge about administrative procedures, therefore, the objective of the unification of procedures was not attained fully. In effect, each district applied its own knowledge and criteria at the moment of recording transactions in the system.

Another aspect cited by one interviewee referred to the lack of compatibility of this ICT system with the Financial Department. This Department depends on the Executive Power and is responsible for the budget management of all public institutions. The reason behind the lack of compatibility was that the Financial Department system was developed with a totally different structure of the SIGAF. The aspect of database compatibility was not taken into account when the new system was designed. As a consequence, users were forced to duplicate their efforts in the sense that they had to input data in more than one system, otherwise those officials were subjected to punishment.

For all the above reasons, the majority of the interviewees ranked the implementation of ICT into the administrative sphere as partially successful rather than as a partial failure.

Next in the list of ICT projects developed in the judiciary, is the already mentioned JUDISOF. This is the system designed with the objective of supporting court management. Previously, all records of procedural data were recorded by hand, and this system was followed for the different steps that a demand process had to go through from the moment that a lawyer submitted a case in the Admitted Case Desk until the final resolution was passed by the judge. This ICT system was implemented for the civil, labour and criminal jurisdictions. However, the childhood and adolescence jurisdiction was not considered as part of the project. As this platform allows for the publication of resolutions passed online, lawyers, attorneys and litigants are able to check resolutions from home.

Some of the interviewers agreed that one of the most significant achievements that this ICT system brought was the modernisation of courts and the roles of secretaries. The old typewriter was replaced by a word processor. As result of the programme of modernisation, court secretaries were furnished with computers, scanners and printers. Likewise, court staff were trained in the use of new technologies. Furthermore, even though the vast majority of the interviewers highlighted the benefits of the JUDISOFT, the disadvantages were mentioned too.

First of all, the automation of an office requires constant maintenance of computer equipment, bearing in mind that some of this soon becomes obsolete and needs to be replaced by new equipment. Lawyers have stated that the clerks sometimes refuse to receive their resolutions, giving the failure either of the system or of the computer as an excuse. The obsolescence of computer equipment is even worse in other districts, because each district manages its own budget and the budget allocated for buying new computer equipment is less than in the capital, as was verified in Table 6.6 by the contrast in infrastructure between Asuncion and the rest of the districts.

Another constraint indicated by lawyers is the constant interruptions in the system, owing to 'maintenance' or 'networking problems'. In order to confirm or rule out this excuse, the same question was put to the ICT personnel. They said that the interruption of the service was a constant at the beginning of the implementation; however, after introducing some corrections in the original design, this constraint was 90% overcome, specifically in the capital. Nonetheless, the disruption is still an outstanding issue in some districts, for instance in Coronel Oviedo, Concepcion, and Saltos del Guaira, owing to the broadband connection.

It was mentioned that an internal policy of the IT Department establishes that the maintenance of databases be carried out in the afternoons or during weekends in order to minimise collateral effects.

Interestingly, the majority of interviewers were in agreement about stressing the effort made by judicial authorities in introducing new policies which regulate and support the implementation of ICT in the different courts. In addition, the JUDISOFT system can be considered as the first step toward the electronic case filing. This ICT project as well as the administrative system were classified as partially successful, instead of *partially failed*, because respondents opted for considering it from a positive point of view.

#### > Failures

Another strategy proposed by the sponsors was increasing the access of information in the Penitentiary Centres. The objective was to address the most vulnerable sector of the population. This strategy was considered for the second phase of the programme, when the criminal area was included. It was deemed worthwhile to conduct a survey in order to know the number of inmates and to distinguish between those who had been sentenced and those who had not. The idea was that each inmate would be able to exercise control over her/his own case from her/his own detention centre, knowing who is her/his assigned defender was, as well as the dates on which inmates needed to appear before a judge.

Technicians in the IT department developed a computing system that was able to interact with the JUDISOFT and criminal database, concerning retrieving information about each individual whose data formed part of the penal system. Coordination with the Department of Justice was required, in as far as officials of this institution were responsible for updating the data of the inmates. Therefore, in this project, each of the involved institutions played a specific role: the Supreme Court was responsible for the development and the launch of the computing tool, the programme was responsible for improving facilities (connectivity) and providing equipment (computers) and the Department of Justice was responsible for updating inmates' files.

However, up until the present, this outcome has not been achieved, owing to two well-identified factors. First of all, there has been a lack of political will towards supporting the project —specifically on the side of the Justice Department. Even though the Supreme Court invested effort and time in developing the computing system, the project was put aside owing to the inmates' files not having been updated. Secondly, financial resources devoted to the improvement of the Penitentiary Centres' facilities, which were the responsibility of the external organisations, were lacking. This system, however, remains ready to be used once the constraints are overcome.

Finally, lawyers expressed their dissatisfaction with the approach applied by the Supreme Court for implementing ICT projects. These lawyers cited the example the last resolution of December 2009, which introduced modifications with regard to the submission of cases. The resolution establishes the full identification of involved parties as an indispensable requirement for the submission of a case. Even though lawyers have agreed on the importance of identifying involved parties, they at the same time indicated that compliance with this resolution is impossible with certain cases. The explanation given by those litigants was that the nature of the cases

themselves and refusal by some of the parties to give their ID numbers, for instance, made it impossible for eviction proceedings to be executed. For these reasons, attorneys stressed the importance of being consulted before decisions which affect their jobs are taken.

Question 5: Do you think that the introduction of technology into the judiciary has brought benefits? Can you motivate your answer?

Question 6: From your point of view, what contribution do you consider the use of technology has made to service delivery?

The majority of responses concurred that one of the benefits introduced by ICT is the capability of reaching the population on a large scale. There is no doubt that the Internet is a powerful means of communication in allowing judicial authorities to express their particular opinions about certain issues. At the same time, as was stated by members of the Department of Communication, Ministers of the Supreme Court are able to debate negative news which appears in the media, so enabling citizens to formulate their own opinions.

In addition, users of the judicial system are enabled to submit complaints about a specific official or office with regard to the service received through the website of the judiciary. As the website announces the dates for conducting oral trials and the possible time that these are expected to take, prosecutors, judges, and defenders are allowed time to make arrangements in advance.

The possibility of carrying out transactions online (payment of court fees) is invaluable. In fact, the *fee payers or citizens*, who in some way are customers of the services rendered by the judiciary, are the major and direct beneficiaries of this service. The online payment of fees reduces the intermediation that means hiring somebody to whom the fees have to be paid. The cost of reducing queues and this intermediation cannot be measure in monetary terms.

Judges also agreed on the advantages of sharing information through the organisation. Resolutions, decisions and regulations enacted by the Supreme Court are published on the website: www.pj.gov.py. According to the responses, those resolutions and

decisions constitute judicial precedents that must be taken into account in lower courts.

Moreover, court secretaries and judges indicated that the automation of offices allowed a reduction of the time for processing a case, in the sense that all resolutions pronounced for a specific case could be displayed easily. Just by introducing a range of dates, the system allows judges to have a view of all pending cases and their status. Likewise, lawyers pointed out the possibility of keeping up with the development of their cases from their offices, so that the same attorneys could act as external controllers of the judiciary, warning judges and court staff when a case was being delayed or was about to expire. In addition, one benefit that was highly appreciated by lawyers was the possibility of receiving e-mail notifications.

When judicial authorities were consulted with regard to the contribution of the new technology to the delivery of services, they stated that the speeding up of proceedings was one of the major contributions of the ICT systems developed as a result of the modernisation programme. Judicial authorities stressed that access to services that enable justice for citizens was improved through the modernisation programme. In addition, the programme incorporated management tools for strategic decision making which could assist in taking decisions.

Interviewers furthermore highlighted the fact that the introduction of technology not only aided in modernising the work of court secretaries and administrative offices, but also contributed to court *re-mapping* in the sense of rationalising human and physical resources, which, in the end, is reflected in an improvement in the quality of services.

Interviewers from the IT department and the Planning and Development Department agreed that the development and implementation of ICT projects facilitated the citizen's access to justice by making transparent processes, and thereby favouring the re-establishment of trust in the justice system.

Question 7: From your point of view, has the accessibility of justice improved as a consequence of the programme of modernisation? If so, can you please give examples of this?

This question received different responses, and those responses can be divided according to the type of users: internal users comprising court staff and external users comprising lawyers, attorneys, prosecutors, defenders and citizens.

The majority of the respondents agreed that one of the benefits brought about by the modernisation programme had been the improvement in the access to justice. Interviewed judges, specifically from the criminal area, stated that the possibility of accessing the police database enabled data provided by an individual to be contrasted with the actual data stored in the police's database.

In addition, judges acting in the criminal sphere indicated the importance of obtaining consolidated judicial-criminal reports, which became possible due to the unification of the databases of the different districts in a centralised database.

Nonetheless, external users stated that accessibility remains an ongoing issue for the judiciary. They mentioned that the ICT system for case management could be considered as obsolete at present, because it does not allow online submission of proceedings. The opinion of one respondent was expressed as '...the JUDISOFT is an inert system; it needs to be updated or changed [for] a new one'.

Representatives of the lawyers' bar pointed out that another constraint regarding accessibility is the impossibility for people with disabilities to access the website. Examples were cited of countries such as Singapore, Spain and Australia where websites are designed to allow access by people with certain disabilities. Blind people, for instance, can access information and can also receive notification on their mobile phones.

When this question was posed to the technicians in the IT departments, they indicated that currently it is possible to receive notifications on a mobile telephone, therefore lawyers and litigants just need to update their own data. At the moment when a judge

passes a resolution, this can be transferred automatically to registered e-mail accounts and mobile phones.

## Question 8: Can you quantify the benefits of e-justice? How?

This question received conflicting answers. In fact, some of the respondents thought the question referred to economic aspects. However, the aim of this question was beyond the issue of monetary terms. Six respondents agreed about the difficulty of measuring something that is intangible, as well as the various elements that compose ICT projects, where the issue of subjectivity plays a pivotal role. Four of those six responses were considered for analysis, because they go beyond the financial aspect.

There was agreement among respondents in terms of the possibility of carrying out transactions such as payments from home at any time and seeing this as invaluable in economic terms.

It is impossible to measure the saved time that means avoiding the hiring of somebody else (*gestor*) to process payments before submitting proceedings. Officials from the Department of Planning and Development responded to this question by asking other questions:

How can we measure the possibility of attracting foreign investment? How can we measure regaining the trust of citizens for public institutions?

Others went further in suggesting that, if reliable data were available about the amount paid in terms of bribery for each stage of the process, this could be used to determine how much is saved in monetary terms.

Question 9: What kind of challenges does the ICT project face? How can these challenges be overcome?

Answers to this question are summarised according to recurrent themes:

## > Cultural resistance to change

At the beginning of the implementation of the modernisation programme, a lack of interest was observed in the case of the main users —in this case judges, prosecutors and officials who were doubtful of the changes that the programme involved. This meant a delay in the effective implementation of the programme.

In order to overcome this constraint, awareness campaigns were conducted before starting the reform process. During these campaigns, the boundaries of the programme were explained, such as the implications of the reform, the role of ICT in management and the desired objectives.

The engagement of a wider range of key internal stakeholders, specifically Judges and Senior Officials in the administrative area, was considered with the objective of achieving success. These persons were involved in the analysis and design of the system.

Finally, interviewers agreed on mentioning that institutional resistance to change remained a barrier that needed to be negotiated with regard to further ICT projects.

## > Human Resources and Skills

Substantial problems with regard to ICT tool skills and literacy were encountered at the time of implementing the project. In fact, court staff were characterised by a low rate of literacy in the application of ICT tools. This lack of knowledge was evidenced not only in low-level personnel, but also within the ranks of medium- and senior-level managers.

Training courses were organised in partner institutions through the Department of Training in order to close this skills gap. These courses were aimed at achieving competence and confidence in using ICT systems.

However, senior managers and judges were trained separately to avoid exposing them in front of their subordinates. Technicians from the IT department were responsible for this task. One-to-one training was chosen as a strategy in dealing with this constraint.

#### > Technical Issues

Poor infrastructure within the judiciary constituted one of the biggest challenges which the deployment of ICT systems had to face.

The transition from manual to automated procedures required a supporting plan. Such a plan not only had to provide the institution with improved facilities, but also with state-of-the-art technology. Interviewers from the IT department indicated that the facilities of the IT department, specifically the server area were improved by means of the modernisation programme; new servers for the administrative and juristic areas were acquired.

## > Location and IT Department reorganisation

Moreover, following recommendations by external consultants, a centralised IT unit location was suggested. This unit was subdivided into subunits to cover different specialist aspects such as networking and communication, system development, a database management area and the end-user relationship.

One of the benefits obtained through the court modernisation programme was the continuous training of ICT managers and analysts. This was considered a determining factor for the successful implementation of ICT projects, and for keeping managers and ICT staff up to date with regard to the latest developments in hardware and software.

### > Interoperability

In a mature stage of the implementation, another technical issue that had to be addressed was the interoperability that could be present among the different databases of the judiciary. Before the intervention, the judicial power had various isolated systems that worked independently, without connecting to one another. No databases were connected and each office managed its own data without sharing. Districts worked independently without considering any transference of data.

The programme of modernisation stressed the necessity of working in a coordinated way by designing all systems according to a similar structure and logic and using a common computer language. Delphi was recommended.

In addition to the above-mentioned factors, the modernisation programme encouraged each district to become able to manage its own database. However, in terms of security, all databases had to be replicated in Asuncion to protect data. A project for carrying out online replication of the judiciary databases in an external public institution such as the General Procurator's Office is being studied at the present time.

## Policy Issues

One of the main constraints mentioned with regard to adopting ICT within the judiciary was the nonexistence of policy guidelines governing ICT implementation within the different areas of the organisation. Without doubt, the judiciary is one of the most complex institutions of the State and it operates in a sea of laws, regulations and resolutions. Despite this, the judiciary was characterised by the lack of policy regarding the application of technology, including data security, automation procedures, accessibilities, data management and records. Drawing up of ICT policies therefore had to be started from scratch.

## Question 10: What kind of future do you predict for e-justice?

Answers to this question can be split into three categories: immediate, medium-term and long-term, when considering the projects for which that the judiciary has already signed and those that are being studied for their approval.

With regard to the **immediate term**, the judiciary, as part of the modernisation project, plans to include all districts, specifically those like Caacupe and San Pedro that were put aside during phase II of the programme. Those districts should be provided with an infrastructure that can support the use of new technology. Such infrastructure does not involve building more houses of justice and furnishing offices with new equipment and computers that work only, but also refers to offering tools for internal and external connectivity, and to train officials who are able to operate IS. At present, all districts, including the capital, are struggling to find a better way to provide high quality service and to meet users' expectations and objectives, Very few court staff are able to the rise to the occasion, and the fact has to be accepted that, if a

high rate of illiteracy in the use of computer tools is present in the capital, this rate is even higher in the countryside.

Judges in the civil and criminal area, as well as lawyers, agreed that the **medium-term goal** of e-justice is organising the electronic filing. The basic principles for implementing this project have been determined and the programme is expected to be launched in 2012. However, the first steps toward electronic filing will be taken at the end of 2011. According to the planning, web applications are already being developed for granting full access to files, not only for conducting online consultations but also for submitting electronic files. This means that the civil area will be starting point for implementation. The JUDISOFT system is expected to replace a system developed on a web platform, and is scheduled to start operating at the end of 2012.

The **long-term future** of e-justice centres on an ambitious project, which was approved in October 2010. This project comprises the construction of the judiciary Data Centre which, according to the draft of the project, will be one of the most modern data centres in Latin American. The projected cost of this project is around 5million dollars, which will be financed with funds provided by the Inter-American Development Bank. This ambitious project will allow the centralisation of information in a single repository which can be either virtual or physical. In order to prevent problems, the online replication of the database in an external place such as the General Prosecutor's Office is foreseen.

To conclude, when discussing the future of e-justice, the common denominator of all answers was a consensus that a great deal has been achieved in the field of ICT. All interviewers shared the view of a promising future for e-justice. Whenever the judicial authorities support ICT projects, all future projects are guaranteed.

However, ICT managers argue that the new approach of e-justice is not only about providing a public service where the core is the user. The new tendency is to engage users offering innovation and high quality services. In fact, e-justice is a forceful driver that leads to the standardisation procedures and the rationalisation of resources, through rethinking organisational structures, responsibilities and tasks.

## Question 11: What role has the Department of Planning and Development played in this strategic modernisation plan?

Without doubt, the success of a programme depends to a great extent on the managers of the project. In that sense, technicians from Planning and Development play an important role. The responsibility of those managers is enormous in the sense that they are considered the nexus between public entities and international organisations. Those managers in the same way play the role of advisors because they are more involved in institutional culture, considering that the vast majority of the consultants are foreign. Likewise, these managers are responsible for the safeguarding of institutional interests and the offering of external guidance to consultants in the establishment of realistic objectives and aims.

Another role played by technicians of this department is to ensure that the new system is compatible with institutional practices, a factor which leads to success. The role of project manager is a responsibility that was accomplished by technicians of the Department of Planning and Department. However, when objectives and strategies were determined, the opinion of very few of those technicians was considered.

## Question 12: Have ICT technicians been involved during the design phase of any ICT projects?

# Question 13: Has the project considered the transferral of technology in terms of providing sustainability?

In order to ensure the availability and operability of IS throughout its lifetime, the transferral of technology must be considered from the beginning and it must form part of the design of the project. A project can be considered successful not only when the set objectives are attained but also when it has the capability of operating even though the external financial and technical support has ended. Therefore, the involvement of ICT technicians from the beginning is a positive issue that must be taken into account. Interviewers from the IT unit indicated that, at the beginning the program, involvement of system developers of the IT unit was almost non-existent. In fact, to understand the logical design of the JUDISOFT, SIAF, and Human Resource Systems is something which all system developers from judiciary try to avoid. Those

technicians stressed the rigidity of the systems that were developed as a result of the modernisation programme. They indicated that it would be easier to develop a new system than to try to modify the existing one. In fact, it was found that the consultants who developed the case management system have to be hired to carry out maintenance of the system, even though the external support has ended.

Nevertheless, it was necessary for the success of the ICT projects and for ensuring their sustainability to designate staff from the IT unit to work closely with the consultants from the beginning, in order to be aware of all the modifications to the system. Those system developers accompanied the whole process from the feasibility phase up until the implementation phase.

In addition, it was expected that the knowledge or technical transfer should be viewed as part of the design of the project. This transfer includes knowledge for using, operating and modifying the system (where necessary).

The issue of political support was not included as a question in the interviews, but respondents did allude to it. They stressed the importance of the role that judicial authorities bring to any ICT project initiative. In effect, some interviewers stated that ICT projects are deployed or not depending on the 'mood' of authorities.

One constraint that is a serious threat to the sustainability of ICT projects that was mentioned to interviewers is the shortage of ICT specialists within the judiciary. Mention was made of the fact that the IT department is made up for only five ICT system developers. Only three of those are senior system developers and the rest are junior developers. Such a situation entails a risk for any ICT project.

## 6.6 Survey Results

As mentioned in Chapter 5, an adjusted design *gap-reality* approach (Heeks, 2006) was applied as a framework for this part of the research. It is important to bear in mind the nonexistence of guidelines for measuring this *gap-reality*. Therefore, the

questions were constructed while relying on the researcher's subjectivity and understanding of the judiciary reality with regard to the analysed subcomponent: ICT.

Sixty-eight questionnaires were sent to 16 departments in both areas: juristic and administrative. These e-mailed questionnaires were constructed using the *ITPOSMO* dimensions cited by Heeks (2006) as a base, and the previously conducted interviews. The criteria taken into consideration for selecting the sample was ample as discussed in Chapter 5 (p.78). The ethical commitment withholds the researcher from disclosing the names of respondents; however, the area to which those respondents belong can be mentioned.

Thirty-five out of 68 mailed questionnaires were returned in the first round. One week later, eight more questionnaires were received. Consequently the sample consisted of 43 analysed questionnaires, which represents a response rate of 63% as is indicated in Table 6.12 and Figure 6.3.

Table 6.12: Summary of the response pattern

Department/Court	<b>Questionnaire</b> send	Responses received	Response rate
Civil	16	10	62,50%
Criminal	16	9	56,25%
Administrative	11	8	73%
Lawyer Guild	9	5	56%
IT Department	5	5	100%
and Communication			
Department			
<b>General Secretary</b>	5	2	40%
<b>Auditing Department</b>	6	4	67%

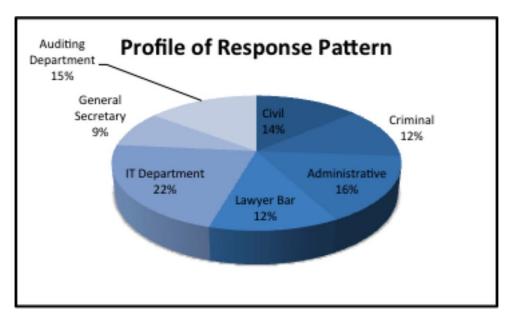


Figure 6.3: Profile of Responses received

Questions for the survey were oriented towards measuring the layers defined by Heeks (2006), namely Information, Technology, Process, Objectives, Staff/Skills and Management.

The questions were distributed across these layers in the following order:

Questions 1 to 4 relate to the first layer: Information;

Questions 5 to 8 deal with the Technology;

Question 9 deals with the Process layer;

Questions 10 to 11 deal with Objectives/Values;

Question 12 is related to the issue of Staff/Skills; and

Questions 13 to 14 measure Management.

### 6.6.1. Dimension: Information

As discussed in previous chapters, information is an organisation-wide resource. Inside and outside users depend heavily on this intangible resource for making and taking decisions. Nevertheless, if this information is to be appreciated, it has to be disseminated through the organisation in good time.

To assess the information dimension, four questions/statements were given put respondents. These centred on:

- > The extent of agreement/satisfaction with the information displayed through the judicial portal;
- ➤ The extent of agreement/satisfaction with the reports generated by the IS in the sense of being understandable to users;
- ➤ The extent of agreement/satisfaction with the possibility of getting statistical reports about judicial management/performance through the IS:<sup>30</sup> and
- ➤ The extent of agreement/satisfaction about the possibility of getting useful, accurate, timely information with regard to decisions taken.

Respondents were asked to respond according to a scale of 1: Not at all Satisfied/Agree to 5: Very Satisfied/Strongly Agree. The option: Cannot Evaluate was available to respondents who were unable to make a choice from the previous scale. The same criteria were followed for all questions/statements which appeared in the questionnaire.

Table 6.13 Information Dimension

		Information	Variable 2:	Compiling	Variable 3	3: Statistic	Variable ·	4: Useful,
	Displayed t	through the	Reports	Clearly	Reports ab	out judicial	Accurate a	nd Timeous
	WEB			d by Users		mance	Inforn	nation
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Cannot Evaluate	5	11,63%	6	13,95%	5	11,63%	4	9,30%
		11,03 /6		13,9376		11,03 /6		9,30 /6
Not at all Satisfied/A	5		8		9		10	
gree		11,63%		18,60%		20,93%		23,26%
Dissatisfie	8		9		12		10	
d/Disagree		18,60%		20,93%		27,91%		23,26%
Acceptable	9	20,93%	7	16,28%	6	13,95%	6	13,95%
Satisfied/A	10		7		5		Ω	
gree	10	23,26%	<b>'</b>	16,28%	3	11,63%	٥	18,60%
Very								
Satisfied/	6		6		6		_	
Strongly	0		6		0		3	
Agree		13,95%		13,95%		13,95%		11,63%

Table 6.13 and Figure 6.4 reflect the general opinion among respondents with regard to the Information dimension. In fact, the majority of the sample is mostly satisfied with the information provided by the judiciary.

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<sup>&</sup>lt;sup>30</sup>It has to be stressed that, during the interview, users indicated this as a shortcoming of the IS.

However, by analysing each statement individually, it can be noticed that the major rate of dissatisfaction is represented by Variable 3 (impossibility of getting statistical reports through the System (49%), followed by Variable 4 (the provision of Useful, Accurate and Timeous Information (44%) versus Variable 1(Information displayed through the Website (13%). Both outsiders and insiders with regard to judicial information stressed this situation. The variable that measures the information displayed by means of the portal entails the greater rate of satisfaction. In other words, the majority of respondents indicated that the Information made available through the website met their expectations.

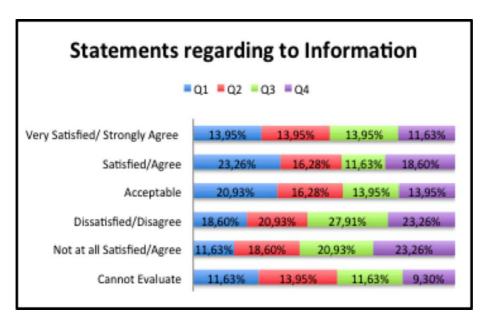


Figure 6.4: Statements concerning Information

According to the method used for analysing the frequency (refer to page 87, Chapter 5, for details regarding the methodology), the general assessment for the information dimension is 2,49 which means Deficient (Appendix E).

## **6.6.2 Dimension: Technology**

The issue of technology concerns thinking of different ways to meet users' needs with regard to information and selecting the best choices. Technology goes further in developing a new IS. It involves both software and hardware. In addition, permanent accessibility and availability of information the improvement of facilities, and, which

is more important, the relevance of IS for developing a specific task are factors to be considered with regard to Technology.

The Technology dimension was measured considering four variables:

- To what extent ICT systems are relevant for the user's job;
- > To what extent IS has contributed to increasing the accessibility of judicial services;
- To what extent the Court Modernisation Programme has contributed towards upgrading courtroom equipment, infrastructure, and providing a new IS; and
- > To what extent the information is available for users at any time.

Table 6.14: Statements regarding Technology

Variat	ole 1··			I			
		  Variable 2:A	Accessibility			   Variable 4:	Availability
			•			ı	•
Frequency	Percentage	Frequency	Percentage			Frequency	Percentage
3	6,98%	3	6,98%	4	9,30%	4	9,30%
5		4		10		8	
	11,63%		9,30%		23,26%		18,60%
5		5		10		6	
							13,95%
12	27,91%	10	23,26%	8	18,60%	12	27,91%
10	23,26%	14	32,56%	6	13,95%	8	18,60%
8	19 609/	7	16 200/	5	11 620/	5	11,63%
	Relevance user' Frequency 3 5	3 6,98% 5 11,63% 5 11,63% 12 27,91%	Relevance of ICT for user's job         Variable 2:A of Judicia           Frequency         Percentage         Frequency           3         6,98%         3           5         11,63%         4           5         11,63%         5           12         27,91%         10           10         23,26%         14           8         7	Relevance of ICT for user's job         Variable 2:Accessibility of Judicial Services           Frequency         Percentage         Frequency         Percentage           3         6,98%         3         6,98%           5         11,63%         9,30%           5         11,63%         11,63%           12         27,91%         10         23,26%           10         23,26%         14         32,56%           8         7	Variable 1: :         Relevance of ICT for user's job         Variable 2:Accessibility of Judicial Services         Of cour equip infrastruction inf	Relevance of ICT for user's job         Variable 2:Accessibility of Judicial Services         equipment, infrastructure, and IS           Frequency         Percentage         Frequency         Percentage         Frequency         Percentage           3         6,98%         3         6,98%         4         9,30%           5         11,63%         9,30%         23,26%           5         11,63%         11,63%         23,26%           12         27,91%         10         23,26%         8         18,60%           10         23,26%         14         32,56%         6         13,95%           8         7         5         5         13,95%	Variable 1: : Relevance of ICT for user's job         Variable 2:Accessibility of Judicial Services         of courtroom equipment, infrastructure, and IS         Variable 4: of Information of Information of Information of Information (Infrastructure)           Frequency         Percentage         Frequency         Percentage         Frequency         Percentage         Frequency         Frequency         Percentage         Frequency         Frequency         Frequency         Percentage         Frequency         Percentage         Frequency         Frequency         Percentage         Percentage         Frequency         Percentage         Percentage         Percentage         Percentage         Percentage         Percentage         Percentage         Percentage         Percenta

The above Table 6.14 and Figure 6.5 show that the majority of respondents rated the issue of technology as acceptable. Nevertheless, in breaking down each statement, we see variable 3 (upgrading of courtroom and equipment) achieving the lowest rate (46%) with regard to the rate of dissatisfaction. Likewise, there was agreement among respondents about the relevance of ICT for users' jobs (69.77%). This statement notes the high rate of penetration of computer tools among users in the judiciary (both externally and internally).

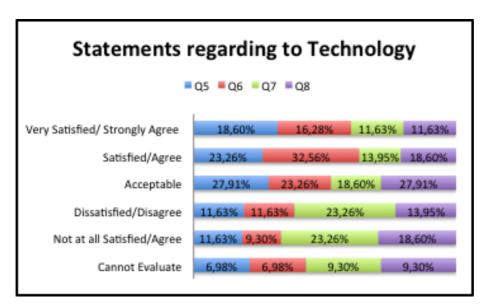


Figure 6.5: Statements regarding the Technology Dimension

Resorting to the methodology applied for analysing the survey and considering each statement individually, it can be seen that the first two Statements were rated as Acceptable and the last two Statements as Deficient, which is reflected in Figure 6.5. The general assessment according to the applied methodology is 2.79, which is recorded as Deficient (Appendix F).

### 6.6.3 Dimension: Process

The issue of process entails choosing the best option for meeting stated organisation objectives. There is no doubt that what is viewed as an intervention changes the *status quo* or the way in which things are done in an organisation when looking for excellence. In this case, excellence is related to the simplification of procedures, and the standardisation and unification of criteria. The end aim therefore was to provide a better service to the citizens.

To measure the dimension Process, one question/statement was chosen:

➤ The extent to which the Strategic Modernisation Programme has favoured the introduction of the simplification/reduction of procedures: e.g. a reduction in the steps for submitting a proceeding

Table 6.15: Simplification/Reduction of Procedures

Variable1:		
Simplification/Reduction of		
procedures		
Options	Frequency	Percentage
Cannot Evaluate	8	18,60%
Not at all Satisfied/Agree	4	9,30%
Dissatisfied/Disagree	6	13,95%
Acceptable	7	16,28%
Satisfied/Agree	12	27,91%
Very Satisfied/ Strongly Agree	6	13,95%

With regard to the issue of Process, one variable was chosen to measure the perceptions of users. Of the respondents, the majority feel that procedures or steps were reduced (58%) as a result of the modernisation programme, as is depicted in Table 6.15 and Figure 6.6.

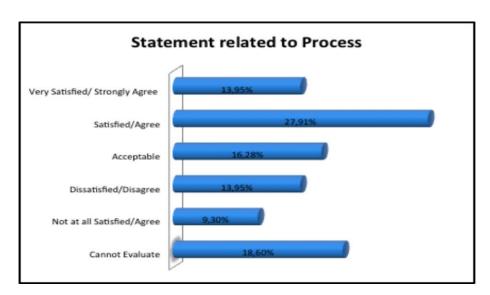


Figure 6.6: Statement related to Process

However, by applying the same methodology for analysing the survey, the issue of process rates 2.67 in the general assessment, which means deficient (Appendix G). It could be supposed that this distortion is due to the high number of respondents who opted for the option Cannot Evaluate (18.60%).

## 6.6.4 Dimension: Objectives/Values

The Objective/Values dimension entails one of the most important issues at the time of evaluating e-government. The spectrum of objectives covers organisational strategies and stakeholders' interests. In addition, values are depicted as part of the organisational culture.

As discussed in Chapter 4, most ICT projects fail when main users feel their interests are not being considered. They then refuse to support any new initiative. Bearing in mind the previous statements, the objective of the judiciary must be to provide prompt and fair justice, which is an indispensable requirement for a Rule of Law. The questions/statements for measuring the Objective/Value dimension were focussed on:

- The extent to which the improvement in the performance of courts (prompt and fair justice, the reduction of caseloads) could be directly linked, among other aspects, to the technological tools; and
- The extent to which the Complaint System provides answers to community and interested groups.

The previous question was included owing to the fact that some respondents during interviews stated that they felt there were problems with the Complaints System. This system meant that the crux of the modernisation programme conducted by USAID (2008-2009) lay in providing transparent and participative rules for the Court's management.

Table 6.16: Objective/Value Dimension

	and Equival	of case-load	Com Systeml Answer Commun	2:Judicial plaint Provides rs to the ity and to d Groups
	Frequency	Percentage	Frequency	Percentage
Cannot Evaluate	3	6,98%	8	18,60%
Not at all Satisfied/A gree	8	18,60%	2	4,65%
Dissatisfie d/Disagree	10	23,26%	6	13,95%
Acceptable Satisfied/A	8	18,60%	9	20,93%
gree	8	18,60%	9	20,93%
Very Satisfied/ Strongly Agree	6	13,95%	9	20,93%

Nearly 50% of respondents recorded Agreed/Satisfied to Strongly Agree/Satisfied with regard to the achievement of the objective/value of the intervention.

However, by analysing variable 1 per area, a high rate of dissatisfaction among respondents from the civil area is noted. In fact, the majority of the negative comments came from this area and the majority of the positive ones came from the criminal area. Some respondents from the civil area even went further in the sense of indicating that, after applying ICT, they felt that the time for processing a case was increased.

Twenty-seven out 43 respondents considered that the judicial complaint system provides a way for controlling judicial performance. However, breaking down each statement, the high rate of people who could not evaluate the judicial complaint system (18.60%) is noted, as indicated in Table 6.16 and Figure 6.7.

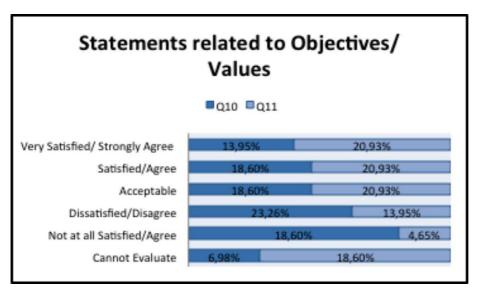


Figure 6.7: Statements related to Objectives/Values

By applying the methodology applied for analysing the survey, the Objective dimension was rated 2.7, which is near to the acceptable level (Appendix H).

#### 6.6.5 Dimension: Staff/Skills

This dimension includes people who are involved in any e-government system, as well as the competencies and skills for managing computer tools that those persons possess. It is arguably important that institutions provide training to users for the application of ICT. This training must be aimed at reducing the literacy gap which used to exist among the staff of public entities. Trained staff assist in overcoming the resistance to change entailed in the implementation of ICT.

One question was chosen for measuring the Staff dimension—it focused on:

The extent of satisfaction/dissatisfaction with the training courses provided by the judiciary in the use of technology tools.

Table 6.17: Training Courses provided by the Judiciary

Variable1: Training Courses in		
the use of Technology Tools		
provided by the Judiciary		
Options	Frequency	Percentage
Cannot Evaluate	3	6,98%
Not at all Satisfied/Agree	5	11,63%
Dissatisfied/Disagree	5	11,63%
Acceptable	10	23,26%
Satisfied/Agree	9	20,93%
Very Satisfied/ Strongly Agree	11	25,58%

With regard to training courses provided by the judiciary, the majority of the sample expressed satisfaction (69% of respondents). In fact, the general perception exists that the judiciary is concerned about offering courses for applying new technologies (Table 6.17 and Figure 6.8).

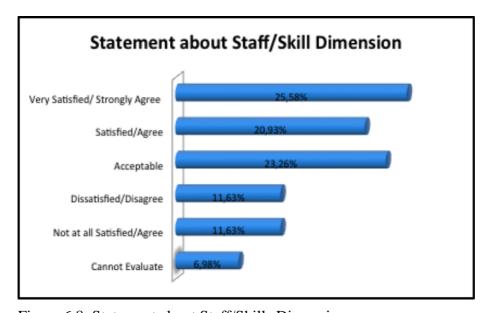


Figure 6.8: Statement about Staff/Skills Dimension

The methodology applied for analysing survey statements/questions indicated a general assessment of 3.12 (Appendix I) which is equivalent to an Acceptable rate. So far, this was the highest rate allocated among the analysed dimensions.

## 6.6.6 Dimension: Management

The way that stakeholders are organised both internally and externally constitutes the management of IS. New management approaches emphasise both the hard and the soft components of projects. According to this approach, the rational and quantitative elements are more related to a hard approach, and the qualitative and human elements are linked to a soft approach.

Heeks (2006) emphasises that the success of any IT project lies in the use of a hybrid approach, or a mixture of both hard and soft approaches: the socio-technical approach.

Two questions/statements were considered for measuring this dimension: firstly, the question of strengthening institutional capacity, court administration and management, which depict the core axis of the modernisation programme, and, secondly, the possibility of tracking the court's performance through the IS.

Table 6.18: Management Dimension

	Variable 1: Strengthen		Variable 2: ICT allows		
	Institutional Capacity,		tracking court		
	Court Administration		performance		
	and Management				
Options	Frequency	%		Frequency	%
Cannot Evaluate	5	11,63		5	11,63
Not at all	6	13,95		8	18,60
Satisfied/Agree					
Dissatisfied/Disagree	8	18,60		8	18,60
Acceptable	8	18,60		8	18,60
Satisfied/Agree	12	27,91		9	20,93
Very Satisfied/	4	9,30		5	11,63
Strongly Agree					

Table 6.18 and Figure 6.9 illustrate that the majority of the sample recorded that judicial capacity had been strengthened as result of the modernisation programme (56%). Nevertheless, only 50% of respondents agreed about the possibility of tracking

performance through IS. In fact, nearly 38% of those surveyed stated that monitoring the courts' performance through the implemented system is impossible.

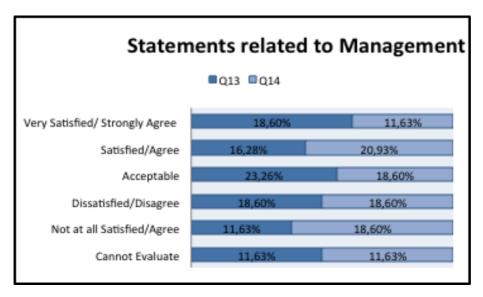


Figure 6.9: Statements related to Management

The general assessment of the Management dimension recorded at 2.53, which, according to the assessment, is equivalent to deficient (Appendix J).

## 6.7 Summary of Findings

Taken as a starting point, the medium-term analysis conducted for the Paraguayan Supreme Court, along with UNDP (2006) and USAID (2008), with regard to the implementation of ICT systems, as well as the interviews and surveys conducted, the following presents a summary of the most important findings.

Considering the ITPOSMO model proposed by Heeks (2002), Heeks (2003) and Heeks (2006) a preliminary analysis of the current situation regarding ICT projects in the judicial power is provided below:

#### > Information

The information obtained from a system must be presented in a way which can be regarded as useful to the final users, otherwise staff are not motivated to care about the quality of data and developed information which have to be provided.

#### **Statistical Reports**

This was a constraint that the complaints system and the court management system have to overcome. At present, it is impossible to receive consolidated reports because districts rely on different databases and these are not integrated. To elaborate: judicial authorities constantly request information about the time allocated to solving a case, the quantity of complaints spread over a period of time, and types of complaints, but it is not possible to access this information from the system.

Interviewers likewise mention the impossibility of obtaining statistical reports, either about individual performance or of units, by means of the IS. The system is unable to display information about court activities, either graphically or numerically. This information can be critically important in the drawing up of a plan to control the efficient use of court resources such as personnel, time and equipment.

#### Information displayed by means of the judicial website

External users expressed their satisfaction with the information displayed by the judicial portal, as well as the possibility of tracking their cases. This situation is confirmed in Table 6.11, where an increase in access to judicial portal is displayed by comparing this occurrence over the last two years. Note was taken of the fact that web contains diverse juristic material, including technical reports, journals and a summary of future projects.

Officials in addition stated their satisfaction with the information offered on the website. Court staff in mentioning the service that the judiciary offers made specific mention of the opportunity of obtaining details of their salary per month, including discounts.

#### > Technology

The lack of inter-operability of the network was cited as constraint to be overcome. According to respondents, the Intranet is overloaded most of the time owing to the number of internal users. According to data provided by the IT department at the time of this research, 1200 officials who are entitled to be regarded as users are distributed over the nine districts.

#### Interconnectivity

Administrative personnel stressed the lack of interconnectivity with databases belonging to other agencies, the Department of Finance specifically. In that regard, they expressed their dissatisfaction with the duplication of work which means that the input and processing of computer data is duplicated in different systems. This is time-consuming for officials who have to gather, maintain and update data about the same transaction in two different locations. However, judges and court officials reported the benefits of the possibility of accessing the police database in order to validate personal data such: ID numbers and criminal records. Emphasis was placed on the possibility of obtaining consolidated criminal-judicial records as result of the inter-operability of district databases. There was agreement on the improvement inaccessibility of judicial services in the sense that lawyers indicated their satisfaction with receiving online notifications.

#### **Automation of Offices**

The automation of offices was stressed as one positive point that followed the intervention. In that sense, lawyers recognized the advantages that come with the use of technology in the courts. Old court books used for keeping track of cases, for instance, were replaced by computer databases which allow quick reference to a specific case and its current status, without having to physically read the case file. The necessity of renewing equipment and computers for secretaries was stressed; lack of infrastructure affects the quality of the service provided and the operability of IS.

#### > Processes

The lack of knowledge on the part of court staff with regard to procedures was apparent. While lawyers know the different stages that a proceeding has to follow, the reality within the judiciary is that there is a lack of professional staff. More often there are lawyer-students or practitioners who are not familiar with procedures. Because of this, the benefits that ICT could offer to court management at the end become constraints. Although, it was recognised that ICT systems have contributed in reducing the amount of time needed to accomplish a given task, this reduction is still not enough.

#### Lack of uniform criteria among the different courts with regard to the new rules

It was noticed that that different courts sometimes give different and even contrary interpretations to enacted resolutions. The lack of standardised criteria and interpretation makes it even more difficult to track performance and to monitor cases. Therefore, in contrast to resolution 370/2003 which establishes the obligatory rule of inputting data in the IS, it still occurs that registers are not well kept in some magistrates' courts. This causes a distortion in information, which affects the quality of public data.

#### Objectives

One of the objectives pursued by this innovative implemented system was the reduction in the time needed to attend court daily instead of managing the whole case from one's own office, and visiting court only for certain cases. At the time of the research, this, however, was a good dream that could only become reality at the end of 2012.

Furthermore, it was recognised that there is an overload of cases in the different courts. Even though the Annual Report indicated an increase in court productivity of about 15% for the civil area, where most of the admitted cases are concentrated and the heaviest over load is experienced, the rate of productivity decreases to 5% when the whole country considered.

#### > Staffing and Skills

Courts have to deal with constant turnover in personnel, which affects the operability of the system. When the system was implemented the system, officials were trained in the new technological tools. However, some of those officials have since been transferred and others have been promoted, taking knowledge about the operation of the system with them and time passes before the newly appointed official is ready to operate the system.

A high rate of illiteracy with regard to the use of computer tools was also apparent. This situation is especially serious in rural areas, where there is no internal policy to regulate training in the use of technology. Despite the fact that training people may be costly and time-consuming, it is cheaper to train people than to pay for the mistakes

that could be made. It was stressed, however, that training should not be restricted merely to ICT systems; it should be orientated to wider areas such as management, public relationships and legal procedures.

#### **➤** Management System/Structure

The system was designed for an organisation that was supposed to have an adequate infrastructure for the new technologies to be implemented; such a structure does not exist in the judiciary however (CEJ, 2010). In addition, users of the system are generally excluded from decision making and their participation in tactical decisions which inform the operability of the system is not considered. A top-down approach is applied in the designing of an ICT project.

Without doubt, one of the innovations facilitated by the introduction of ICT into the judicial sphere is the wider geographic spread of the organisation. In fact, the result of the modernisation programme is that each district now has its own database and IT department. These are responsible for taking decisions that affect the internal management to a certain extent. Nevertheless, the capital remains the head office of the organisation, and this is where the policies, resolutions and guidelines are enacted.

The effort made by judges and court personnel also deserves recognition. Despite the constraints which they have to face daily, such as the use of obsolete computer equipment; the interruption of service; the slowness of IS; and the lack of basic supplies – ink for printers, for instance –, court personnel have attempted to overcome these situations and are now waiting for a new challenge: electronic case filing.

# CHAPTER 7: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS OF ICT IMPLEMENTATIONS WITHIN THE PARAGUAYAN SUPREME COURT

## 7.1 Summary of the Study

The summary comprises a review of the main points of each developed chapter, starting with an analysis of the literature, following with the theoretical framework of ICT in Paraguay and ending with the main findings.

#### 7.1.1 Introduction

Globalisation, international pressure and social trends demand that the judiciary performs in an effective, transparent and accessible manner. Paraguay is not the exception in this new trend. For that reason, a process of modernisation was started ten years ago in order to bring Paraguay on par with neighbouring countries. While it must be acknowledged that a great deal of effort has gone into it up to now, there still are obstacles to be overcome.

The aim of this study was to critically evaluate Information Communication Technology within the Strategic Modernisation Programme of the Paraguayan Supreme Court by describing changes, whether positive or negative, in the judicial capacity and performance of the judiciary. The research thus far has indicated the impact on and the extent to which this new technology has affected judicial management in providing benefits and solutions to the many problems with which the judicial sphere has had to deal.

#### 7.1.2 Theoretical framework

Chapter 2 provided theoretical perspectives of the State Reform Process which was carried out in both developed and developing countries, by looking at similarities and differences. This chapter focused on unpacking the challenges faced during the

process of implementation. One of the biggest challenges mentioned was to separate politics from administration.

The diverse roles played by public managers were discussed broadly. These roles ranged from passive to active participation in decision making, stressing the importance of strong leadership as a key factor in reform. Two reform processes carried out in Latin American were discussed: Argentinean and Chilean Reform. Even though each reform applied a different approach, the common denominator was a continuous search for excellence in the public service. In fact, issues such accountability, good performance and the achievement of outcomes before processes were some of the similarities shared in these reform processes.

The foundation of the reform processes undertaken by these countries was the introduction of Information Technology at all levels in government. This was seen as a pivotal element for improvement in the relationship between government and its citizens. In fact, Argentina and Chile have become leaders in e-Government in the region by applying this approach.

Chapter 3 and Chapter 4 dealt with the theoretical framework of ICT in Paraguay, placing special emphasis on the main aspects of e-justice and discussing the different applications that technology can introduce to justice. In addition, Chapter 4 provided a review of the main projects implemented during the period in which the modernisation programme was introduced, and an overview of the new challenges that e-justice has ahead of it was provided. This included the electronic filing of cases. A section of the chapter was devoted to a discussion of the different stages that e-justice has to go through, from developing a web portal aimed at providing information to an unrestricted audience right up to the possibility of carrying out all transactions online.

Furthermore, the necessity of assessing the gap between current institutional reality and design assumptions and the requirements for a new e-justice system were indicated. Correct addressing of this gap leads to successful ICT projects. This assessment is based on experience and involves a high level of subjectivity. Hence, there is not a unique formula to apply.

The ITPOSMO Checklist described by Heeks (2006: 5) was applied to aid in the understanding and evaluating ICT. In fact, questions used during the survey and the semi structured interviews were centred on those dimensions.

#### 7.1.3 Data gathering and analysis

Chapter 5 dealt with the research problem of this study and the chosen method for conducting the research. The two methods for collecting primary and secondary data were fully explained. While primary data were gathered through interviews and surveys, secondary data included statistical reports, policies, and resolutions. Features which comprise the unit of analysis were also explained, as was the sampling methodology.

#### 7.1.4 Research findings

Findings looked at existing ICT projects undertaken as part of the modernisation programme. Some of these projects were undertaken with the aid of international sponsors and others were developed by the Institution itself.

The criteria described by Heeks (2002) were applied when considering the level of achievement of established objectives in order to classify an ICT project as successful, a failure or a partial failure. Interviews conducted among key users provided an accurate overview of the current state of ICT projects within the judicial sphere. Surveys and quantitative data were applied when contrasting prior statements. The overall feeling of key users was found to be positive to a certain degree. Future challenges to be faced were also uncovered and a map of e-justice in terms of its immediate, medium- and long-term future was drawn up.

## 7.2 Summary of Findings

Chapter 1 set general and secondary research questions that were to be achieved.

#### 7.2.1 Objectives of the research

The main objective was to conduct an evaluation of outcomes, whether positive or negative, of ICT in the Strategic Modernisation Plan of the Paraguayan Supreme Court. In order to make the main objective more manageable, it was split into six specific objectives. The first looked at determining whether the accessibility and quality of information provided has been enhanced by the introduction ICT within the judiciary.

Chapter 3 and Chapter 4 report the search for answers in providing an overview of the many applications of ICT in the judicial sphere. The underlying purposes of these applications was found to be diverse and ranged from applying ICT in order to improve access to justice by citizens to providing tools for strategic management. Strategic management that can be supported by ICT includes resource utilisation and rationalisation, looking especially at efficiency in court management. In addition, improvement of the relationship with external organisations can be achieved by installing IS in line with other agencies such the General Prosecutor's Office, Public Defenders, the Police and Law Ministries.

The strengthening of the relationship between the judicial power and other public institutions such the district attorney's office, office of the defender and others was one of the main objectives of the Strategic Modernisation Programme. In that regard, the close partnership of the Police Department, the General Prosecutor's Office and the judiciary is noteworthy. In fact, as a result of this partnership, the interconnectivity of judicial databases with the police and prosecutor's office databases was indicated. This interface enables an exchange of information, and the ability to work together in order to combat certain crimes, such as family violence, by determining the rate of criminality per area in order to allocate both physical and technological resources.

The diverse information services offered by the judiciary were also mentioned. These information services aim to reach the population on a large scale, all the while considering the ample benefits offered by the Internet.

The possibility of carrying out transactions online (payment of court fees) was highlighted as one of the most meaningful achievements gained through the modernisation programme. In addition, external users indicated their satisfaction with the case tracking process service offered by the judiciary. This service allows monitoring and at the same time, controls court performance.

However, even though significant advances were made in modernising the justice sector, some areas still deserve attention. One of the areas needing improvement relates to the impossibility of getting statistical information and consolidated reports, specifically about the performance of the High Courts and Magistrate's Courts. In fact, a lack of analytic tools for tracking performance with the aim of getting specific results was discovered as result of this evaluation. This lack of information has made it impossible to compare data. Due to this situation, most of the statistical reports were constructed using the cases admitted per month and resolutions passed monthly of each magistrates' court as a database, rather than using data provided from the IS itself.

Therefore, owing to the lack of scientific evidence, the empirically obtained data provide the only parameter for measuring performance.

As discussed so far, it appears that the judiciary has taken initiatives towards improving accessibility, but that progress is not fast enough, taking all aspects into account. This is regarded as a risk in the modern information society. However, the electronic infrastructure is having an impact on all management levels, whether juristic, administrative or geographical. In fact, the use of ICT makes the exchange of information among interested parties, other public agencies and courts easier, regardless of their location.

The second and third objectives are related to each other. While the second specific objective was to explore whether ICT has led to more effective management of the courts, the third is a consequence of effective management: the improvement of service delivery. One of the reasons for undertaking this research concerned the slowness of progress towards debugging judicial caseloads and processing times. In

fact, a recent customer appraisal has shown that the quality of judiciary success is the same as before the intervention.

However, it has to be acknowledges that the caseload has been added to by an influx of new juristic cases due to the most diverse reasons, including economic recession, bankruptcies, work dismissals, and the high level of insecurity – all of these are issues which have intensified since 2003. This means that reducing the time needed for processing cases and debugging judicial caseloads is becoming of pivotal importance, because these issues have repercussions for court management and judicial performance. The lack of improvement regarding both time and caseloads undermines any effort toward searching for efficiency.

In spite of the previous findings, the criminal justice area has reported a slight improvement with regard to caseloads and processing time due to ICT. The perception in the civil area, however, is that there is no improvement. The general perception is that the time required for judicial procedures has been improved, but it is impossible to link this improvement exclusively to ICT. The recruitment of new personnel to keep pace with the increase in demand, other than a renewed Supreme Court, could also be a determining factor that has contributed to this improvement. Therefore, it is not certain that there is a relationship between the improvement of facilities, the use of IS and the reduction of delays. Other reasons could be behind this issue.

The most diverse strategies for improving court operations have been designed. In fact, efforts have been centred on automating procedures by applying information systems. The interoperability of the different systems developed and implemented during the last ten years has contributed to this improvement. As result, institutional capacity for meeting public demands has been positively affected to some extent.

With one of the most important issues of management being the possibility of tracking performance, performance measurement systems make it possible to determine whether an organisation is on the right track or not in the setting of goals. Pressure to perform effectively and efficiently it is not an issue that exclusively pertains to private organisations; public entities are also affected. There is a

movement away from traditional and conservative methods of management toward a management style more focused on results. However, the possibility of tracking performance remains one of the goals of the implemented electronic systems. The day-to-day management module it is not appropriate for doing this.

The implemented systems do not provide elements for tracking court performance with regard to outcomes. In fact, the original design and successive modifications which the information systems have undergone have not considered this issue. The culture of a lack of accountability is natural in the judicial sphere. Both court staff and administrative staff are reluctant to be held accountable for their actions. The complaints system appears to be a palliative measure to compensate for this lack of appropriate tools for monitoring performance. In fact, the complaints system was introduced with the aim of providing answers to the community and interested parties affected by inappropriate behaviour and actions on the part of court and administrative staff. Thereby, it became possible to judge judges and officials on the grounds of sanctions when they failed to perform according to standards.

One issue by which the effectiveness of the intervention can be measured is the simplification and standardisation of procedures; standardisation of procedures is an indispensable element of judicial quality. In fact, the lack of uniformity of criteria is a barrier to transparency and accountability. The judicial power still scored relatively low in this area: it was seen as deficient according to the general assessment.

#### 7.2.2 Benefits, limitations and obstacles of e-justice

As mentioned, one of the obstacles faced by ICT was a lack of change in culture. This lack of change in culture was reflected in a certain degree of apathy on the part of those who could be the main supporters of ICT.

This lack of culture change influenced the compliance with set schedules of ICT projects, causing delays in the implementation of these.

The lack of computer tool literacy was another challenge for ICT projects. This gap in literacy, which introduced a constraint at the beginning of the implementation, was evident not only among low-level staff but also among senior managers. Diverse strategies were applied for updating ICT skills as part of the modernisation programme. These strategies ranged from training senior managers individually to sending officials to prestigious organisations to receive training.

Without doubt, one the biggest challenges to address was the lack of infrastructure for the deployment of ICT projects within the judiciary. The automation of offices required technological development to support the new technology. The programme assisted in the enhancement of court facilities and operations. The intervention made updating of both institutional and organisational capacity possible. In addition, several approaches were approved by authorities in order to provide legal support for the new technological policies, regulations and guidelines for ICT management of projects,. These were aimed at the standardisation and simplification of procedures. Here, it is necessary to highlight the necessity of including ICT as part of the strategic plan of the Supreme Court. Moreover, through ICT projects, the operative decentralisation of judicial management was encouraged, with the Capital as the seat of the head office.

#### 7.2.3 Benefits brought by ICT

This study has revealed the increasing awareness among authorities and users with regard to the potential benefits that ICT provides for an organisation. To start with, the participation issue was tackled. In that sense, the main aim of ICT projects was seen to be to promote internal and external participation, trying to reach a wider audience. Citizen participation aspect is considered one of the most valuable benefits that ICT projects bring.

The Internet enables judicial authorities to express their opinions and points of view about the most diverse issues that surface daily, by debating negative news and enabling citizens to form their own opinions. The judicial portal also provides useful information for lawyers, litigants, prosecutors and officials. For instance, the date for carrying out an oral trial, as well as the expected duration of a case, is displayed on

the website. This allows all involved parties, including those judges who institute the jury to schedule their activities in advance.

Another benefit provided by ICT is the possibility of submitting electronic complaints about the performance of judicial courts. This innovative system gives external users a voice and is favoured not only by citizens but also by court authorities, because they are the ones who need to be aware of the existence of flaws in the system. The possibility of tracking cases enables litigants to be aware of any movement in their proceedings and this was mentioned as a benefit gained through ICT projects.

Among the diverse potential benefits introduced through ICT is the opportunity to share knowledge within and outside an organisation. This is one of the most meaningful benefits.

Knowledge of management implies providing users with data they need in an accurate and timely manner. Such data can be tailored to suit users' needs, thus turning raw data into information. Internal users of information such as judges and court secretaries apply this information in the taking of decisions. Therefore, resolutions passed become a kind of blog to which magistrates' courts can refer before pronouncing any resolutions.

ICT has encouraged court secretaries to benefit by modernisation by providing them with computing architecture and an organisational structure that enables technology and court management to exist side by side.

#### 7.2.4 Possible future of e-justice

The research report has alluded to some of the possible applications of ICT within the judiciary. These applications are diverse and will pose challenges that will have to be faced. However, findings showed that the Paraguayan Justice system is on the right track in the digital era.

The most immediate future benefit lies in the improvement of court facilities in the different districts. It is expected that diverse databases will become interconnected through this improvement, thus allowing the monitoring of daily activities which are carried out in the districts.

Lawyers and interested parties could gain the same benefits as those who live in the capital in the sense of taking cases and managing online payments.

The medium-term future of the judiciary depends on the Electronic Filing System (EFS), which is expected to be launched at the end of 2012. However, the first steps toward the integration of technology with the litigation process have begun already. In fact, ICT technicians and consultants are working on the design of the platform that will support the system. Through an integrated web portal, litigants and lawyers will be able to submit proceedings online without having to attend courts. In addition, this system will allow for interaction with other public agencies such as the prosecutors' office.

The long-term future of ICT projects lies in the construction of a judiciary Data Center. Without doubt, ICT operations are becoming the core of any organisation and one of the main concerns is the continual operation. Any disruption in the operation can have an enormous impact in the whole organisation. The possibility of carrying out online transactions and litigations will mean that all services must be available permanently—without any interruption.

Therefore, the construction of this Data Centre becomes fundamental in ensuring prior services and business continuity. This Data Centre facility will allow the housing of computer systems, communications, backups and connections, all in order to minimise any disruption. The realization of this Data Centre will mean the end of phase III (transaction) and the beginning of the phase IV (transformation) of e-justice.

#### 7.2.5 Sustainability and Technology Transferral

It has to be accepted that it is highly probable that an ICT project will undergo changes through its lifespan. These changes can be related to the organisation, to stakeholders' needs, to financial aspects, to new technology, and to both the legislative and the political milieu. Given the range of changes, the question remains whether these ICT projects are likely to survive. To put it another way, the possibility of these projects being sustainable needs to be taken into account. Considering the ITPOSMO dimension, the issue of sustainability can be split into three axes.

#### > Political Sustainability

One of the most important factors for implementing ICT projects depends on political desire or the political support given by politicians. In fact, this is considered a fundamental factor in the sustainability of projects, including those which are related to technology. Transferring this to judicial reality, the position of Head of the judiciary is subject to a continuous rotation among the nine members who make up the Supreme Court, due to internal management policy. In fact, those judicial authorities cannot retain the position for more than one year in. Therefore, this is a constraint that has to be faced every year. Any new Court comes with different conceptions and ideas about what the priorities should be. Consequently, in order to ensure continuous political support, ICT projects should be part of a strategic plan (even more so than individual initiatives).

#### **Competencies**

The issue of competencies was related to the readiness of internal staff to carry out maintenance or modifications that are required by IS.

The importance of the transferral of technology has been highlighted. In fact, to achieve good assimilation of ICT projects, the transferral of technology should be part of the project from the design stage. The engagement of internal technicians for the design of the system is a major step toward sustainable ICT projects. However, this was indicated as an issue to be addressed in future projects.

Some of the IS developed as result of the modernisation process exists without the possibility of being maintained by internal staff. Therefore, the judiciary constantly has to resort to external consultants, those who were responsible for the design and development of the systems, in order to introduce any modification to information systems.

The assessment uncovered a shortage of IT specialists within the judiciary. This shortage undermines the success and sustainability of ICT projects. The scarcity of skilled staff is due to diverse causes that range from constant IT personnel turnover to lack of interest of IT specialists to work in the public sector.

#### > Money

The financial factor is related to the continuity of the project after the financial support ends. It is known that any ICT project must be aligned with organisational infrastructure in order to be sustainable. In other words, it must have an infrastructure which supports it. This infrastructure refers to equipment such as computers, networking and other communication tools. The modernisation programme greatly supported the upgrading of court facilities, providing financial resources for acquiring new equipment such as computers and encouraging the interconnectivity of these offices. However, this study has revealed the necessity of replacing these computers because the majority of them have come to the end of their lifespan. If there is no replacement, the sustainability of ICT projects can be jeopardized.

#### 7.3 Conclusion and Lessons Learned

ICT has transformed the nature of doing business both for private and for public entities, in a short period of time. This transformation is conceived of as the most farreaching paradigm affecting management and organisational culture. Judicial institutions are not the exceptions. They have also been affected by the trend of globalisation and the attempts to link technology and communication advances with legal operations. The opportunities for judicial policymakers offered by these new technologies are valuable beyond question. They render a more accessible, transparent and effective justice system.

The judiciary cannot lag behind the so-called 'fourth revolution' or the ICT revolution. It must respond positively to the new competitive demands of society and ICT projects should be considered from a strategic point of view in order to improve judicial performance and to satisfy public demands. The Paraguayan Supreme Court has been deploying ICT projects for ten years. Those projects have been aimed at producing meaningful changes within the judicial organisation.

In this study, the researcher has attempted to conduct an evaluation of ICT in the Strategic Modernisation Programme of the Paraguayan Supreme Court. However, this debate goes beyond the established outcomes defined by the SMP for ICT. It places the focus on the satisfaction of users, quality of services and the effective and efficient management of and transparency in the system.

However, it is not possible to state that these changes are directly linked with the implementation of ICT within the judiciary. As was highlighted during this study, it is extremely important that the judiciary promotes and encourages efforts to guarantee unrestricted access to judicial information to the population at large.

Another debatable point discussed in this research was that the single automation of offices *per se* will not mean either an improvement in the quality of service or an increase in productivity. The issue of quality should be addressed from different perspectives including training for reducing the computer literacy gap and the participation of all stakeholders, not only insiders but also those outsiders who are affected by ICT projects. In that sense, it was seen that both internal staff and external users are affected by ICT projects and each group has its own view of the problem. While a lack of infrastructure, obsolete computers, illiteracy in the use of computer tools and heavy workload are the common complaints among internal staff, they rarely are aware of issues such as inefficiency, a lack of productivity and low quality of service.

Moreover, an issue that appears repetitively is the standardisation and unification of procedures. Future ICT projects should be redesigned around this criterion. This condition is closely related to organisational development. Standardisation is not just about computerising what is currently being carried out. The objective must be to

introduce efficiency and effectiveness in the process. The standardisation and unification of processes should constitute the basis on which ICT applications rest.

Likewise, the success of any ICT project initiative is linked to the availability of resources, whether they are the physical and organisational infrastructure, skilled IT staff, effective management or ICT training and support.

Even though it sounds repetitive to keep using the tired phrase 'to reinvent justice', this reinvention will only become reality when new technology is introduced. This will also change the inherent logic behind the service that the judiciary renders and the relationship of this institution with its citizens.

In order to take advantage of the multiple benefits that ICT can bring to public management, much should be arranged around the needs of the citizens. In fact, during this transformation process, users must become the centre of reform.

The advance of e-justice is considered not only as a technical issue, but also as a political issue. ICT projects can be a bridge which joins reality with organisational necessities whenever strong political leadership exists for leading organisational transformation and procedures.

What is the modernisation roadmap? What is the reason for modernising the judiciary? Without doubt, the core answer to these questions is to bring justice to the citizens. In fact, what is expected to be attained as result of the modernisation process is a justice system that works close to citizens. With the likely increase in ICT projects within the Paraguayan Supreme Court, these issues should remain on the agendas of the judicial policymakers.

#### 7.4 Recommendations

The improvement of judicial services should continue. The introduction of analytic tools for measuring court performance must be encouraged. In that sense, ICT could be a fundamental support tool in the monitoring, analysing and reporting of data. The information received from this mechanism could be applied in the shaping and directing of future projects.

It is particularly important to carry out improvements to the current Information Systems applied within the judiciary. Discussions should be orientated towards the improvement in tracking court performance and other functions which could support measuring the accomplishment of targets.

#### > Applying a Hybrid Management Approach

ICT systems are surrounded by a political milieu which highly influences the success or failure of any project. In fact, ICT projects are far more about people and politics than about technology (Heeks, 2006). Therefore, to ensure a successful project, it is necessary that the IT manager has the ability to mix socio-technical aspects, including rational behaviour and implementing logical criteria for achieving results, and the human aspects within an organisation, including bargaining with those decision makers.

This approach should also be applied when realistic goals are set with regard to what it is possible to achieve through ICT projects and to know when the right time for doing it is.

#### > Staff/Skills

The ICT systems are subject to rapid technological changes, which affect both users of the system and developers. Emphasis must be placed on the continuous training of staff in the use of computer tools. This training should be orientated not only to court staff but also to ICT system developers. An amended set of skills is necessary for each upgrade. Such upgrades can refer to minor amendments for maintaining existing systems or to the development of new ICT systems.

#### Recruitment/Retention

In order to attract and retain IT specialists for the judiciary, IT managers should apply techniques such as those suggested by Heeks (2006):

- > Career progress into ICT management;
- > Flexibility of work schedules;
- > Payment for accomplished objectives;
- ➤ Providing training opportunities in recognised institutions;
- > Payment of training fees;
- Cutting down on the bureaucracy existing within the judiciary for recruiting ICT specialists;
- Emphasising the advantages of working in the public sector, e.g. job security, reduced work schedules compared with the private sector; and
- > Short-time assignments.

#### **Documentation**

One of the key aspects for ensuring the sustainability of ICT projects is a good documentation system. This documentation should include technical records about information systems, including design information; structure of the modules; data storage and retrieval; as well as a list of tables and codes used. This information will be useful for those who are responsible for its maintenance.

#### > Stakeholder participation in ICT projects

One of the strategies for ensuring sustainability is the broad participation of all stakeholders during the design and implementation of any ICT projects. Therefore, the first step toward counteracting resistance to any e-justice initiatives is to identify all project stakeholders in order to ensure the buy-in of those who will be directly and indirectly influenced by the outputs of new information systems. In other words, the needs of the customers of the ICT information systems should be considered and satisfied.

#### > ICT and the Institutional Strategic Plan

Following examples of developed countries such as Australia and the USA, where ICT is aligned with institutional strategic plans, and to ensure sustainability and high

performance of ICT projects, the judiciary should consider redesigning its strategic plan in order to include ICT goals for medium- and long-term development. To ensure the attainment of these goals, it is necessary to reach consensus among policy makers, judicial authorities and IT managers.

These ICT strategies should be aimed at enhancing accessibility to judicial information, court and administration management, and performance for citizens.

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#### **APPENDICES**

## **APPENDIX A: Interview Questions**

- 1. How does the judiciary conceptualize e-justice?
- 2. Does the judiciary have any policy related to ICT projects? Could you please explain them?
- 3. How many ICT projects have been deployed within the judiciary?
- 4. From the previous ICT projects, which of those do you consider successful and which do you not? Why?
- 5. Do you think that the introduction of technology into the judiciary has brought benefits? Can you motivate your answer?
- 6. From your point of view, what contribution do you consider the use of technology has made to service delivery?
- 7. From your point of view, has the accessibility of justice improved as a consequence of the program of modernization? If so, can you please give examples of this?
- 8. Can you quantify the benefits of e-justice? How?
- 9. What kind of challenges does ICT project face? How can these challenges be overcome?
- 10. What kind of future do you predict for e-justice?
- 11. What role has the Department of Planning and Development played in this Strategic Modernization Plan?

- 12. Have ICT technicians been involved during the phase of design of any ICT projects?
- 13. Has the project considered the transferral of technology in terms of providing sustainability?

## **APPENDIX B: Survey**

#### **Information**

1- Overall, to what extent, if at all, are you satisfied with the information displayed by the judiciary through the website?

	Dissatisfied	Acceptable	Satisfied		I cannot
satisfied				satisfied	evaluate
1	2	3	4	5	6

2- The Information system provides reports (statistics about judicial management/performance) which are adjusted to suit users' needs.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

3- Through the Information System, it is possible to acquire useful, accurate, timeous information with regard to decisions taken.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

4- The information generated by the computing system permits the compiling of reports that are clearly understood by judges, attorneys, staff management and any interested members of the public.

Not agree		Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

#### **Technology**

5- Overall, to what extent, if at all, are the ICT systems relevant in your work?

Not at all relevant	Irrelevant	Acceptable	Relevant	Very relevant	I cannot evaluate
1	2	3	4	5	6

6- Information Systems have contributed to increasing the accessibility of judicial services.

Not at all Agree	Disagree	Acceptable	Agree	Strongly Agree	Cannot evaluate
1	2	3	4	5	6

7- The Court Modernization Program has provided an upgrading with regard to Courtroom equipment, infrastructure, and new IS

Not agree at all	Disagr ee	Accept able	Agree	Strongly agree	Cannot evaluate
1	2	3	4	5	6

8- The information is available for users and interested parties at any time.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

#### **Process**

9- The Strategic Modernization Program has favoured the introduction of a simplification/reduction of procedures: e.g. a reduction in the steps for submitting a proceeding.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

#### **Objective/Values**

10- An improvement in the performance of courts (prompt and equivalent justice, reduction of caseloads) can be directly linked, among other aspects, to the technological tools.

Not agree at all	Disagree	Acceptab le	Agree	Strongly agree	Cannot evaluate
1	2	3	4	5	6

11- The Judicial Complaint System provides answers to the community and to interested groups.

Not agree at all	Disagr ee	Accept able	Agree	Strongly agree	Cannot evaluate
1	2	3	4	5	6

#### Staff/Skills

12- The judiciary provides training courses in the use of technology tools.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

#### Management

13- The new Information Systems implemented within the judiciary have provided tools to strengthen institutional capacity, court administration and management.

Not agree	Disagr	Accept	Agree	Strongly	Cannot
at all	ee	able		agree	evaluate
1	2	3	4	5	6

14- The information provided by the IS implemented within the judiciary generates a system for tracking performance.

Not agree	Disagree	Acceptabl	Agree	Strongly	Cannot
at all		e		agree	evaluate
1	2	3	4	5	6

## APPENDIX C: Survey (Spanish) Encuesta de percepcion acerca del Programa Estrategico de Modernizacion del Poder Judicial

#### Componente: Tecnologia

Por favor marque cada pregunta/afirmacion de acuerdo a su percepcion

Valor	
0	No responde
1	No esta satisfecho/acuerdo para nada
2	Insatisfecho/Desacuerdo
3	Acceptable
4	Satisfecho/Acuerdo
5	Muy Satisfecho/Muy de acuerdo
6	No puede evaluar
7	Nunca escucho acerca del servicio

#### Elija una sola opcion

Afirmacion/Pregunta	Valor
En general, que tan de acuerdo o no, esta usted con la informacion desplegada por el poder judicial a traves de su pagina web?	
En general , que tan relevante considera los sistemas de informacion para su trabajo.?	
El Poder Judicial provee cursos de entrenamiento para el uso de herramientas informaticas	
A traves de los sistemas de informacion se ha incrementado la accesibilidad a los sistemas de informacion	
Los nuevos sistemas de informacion implementados dentro del PJ ha provedio herramientas para fortalecer la capacidad institucionalidad en el manejo administrativo y judicial	
Las herramientas informaticas han contribuido a que PJ mejore su desempenho	
Es posible hacer un monitoreo del desempenho a traves de los sistemas de informacion	
Los sistemas de informacion proveen reportes, compilacion de datos que son necesarios y utiles para los jueces, abogados y funcionarios	
A traves de los SI se ha favorecido una simplificacion/reduccion de procedimientos: por ejemplo reduccion de pasos para presentar escritos	
El programa de modernizacion de la CSJ ha proveido una mejora en infraestructura asi como nuevos sistemas de informacion	
El Sistema de Quejas y Denuncias proporciona respuestas a la comunidad y grupos de interes con respecto a la transparencia y rendcion de cuentas	
A travez de los sistemas de informacion es posible acceder a estadisticas de gestion del PJ	
Los sistemas de informacion proporcionan una informacion, util, oportuna y confiable	
Los sistemas de informacion estan dispobles para el usuario o grupos de interes 24/7 Comentario	

## **APPENDIX D: Model for analysing frequency**

Institution

MODELO ESTÁNDAR DE CONTROL INTERNO - MECIP-

COMPONENTE CORPORATIVO DE CONTROL DE GESTIÓN

COMPONENTE:

ESTÁNDAR: Sistemas de Informacion

FORMATO: Valoración Encuesta Sistemas de Informacion Macroproceso/Proceso

N°: 12

(1)	MACROPROCESO:										
(1)	PROCESO:										
	DEPENDENCIA:										
(2)N° de Pregunta	(3) % de Participación	(4) Resultados de Valoración           0         1         2         3         4         5         Total									
	Frecuencia	-	<del>  '</del> -	-		+		TOTAL			
1	%		1			<del>                                     </del>					
'	Parcial										
	Frecuencia					<del>                                     </del>	$\vdash$				
2	%										
_	Parcial										
	Frecuencia		<u> </u>								
3	%										
J	Parcial										
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4	%										
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6	%										
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	Frecuencia										
7	%										
	Parcial										
	Frecuencia										
8	%										
	Parcial										
	Frecuencia										
9	%										
	Parcial										
	Frecuencia										
10	%										
	Parcial										
	Frecuencia										
11	%										
	Parcial										
	Frecuencia										
12	%										
	Parcial										
	Frecuencia										
13	%										
	Parcial										
(6) VALORACI	ÓN GENERAL MACROPROCES	O/PRO	CESO:								
7) INTERPRET	ACIÓN:										

## **APPENDIX E: Survey Analysis: Information**

## ITPOSMO Assessment

COMPONENT:	INFORMATION								
(2)Question Number	(3) % Participation	(4)	Assess	ment Re	sult				(5) Score
		0	1	2	3	4	5	Total	
1	Frequency	5	5	8	9	10	6	43	
	%	11,6 2790 698	11,6 2790 698	18,60 4651 16	20,93 0232 56	23,2 5581 395	13,9 5348 837		
	Partial	0	0,11 6279 07	0,372 0930 23	0,627 9069 77	0,93 0232 558	0,69 7674 419	2,744186047	
2	Frequency	6	8	9	7	7	6	43	
	%	0	0,18 6046 512	0,209 3023 26	0,162 7906 98	0,16 2790 698	0,13 9534 884		
	Partial	0	0,18 6046 512	0,418 6046 51	0,488 3720 93	0,65 1162 791	0,69 7674 419	2,441860465	
3	Frequency	5	9	12	6	5	6	43	
	%	11,6 2790 698	20,9 3023 256	27,90 6976 74	13,95 3488 37	11,6 2790 698	13,9 5348 837		

	Partial	0	0,20	0,558	0,418	0,46	0,69	2,348837209	
			9302	1395	6046	5116	7674		
			326	35	51	279	419		
4	Frequency	4	10	10	6	8	5	43	2,494186047
	%	9,30	23,2	23,25	13,95	18,6	11,6		
		2325	5581	5813	3488	0465	2790		
		581	395	95	37	116	698		
	Partial	0	0,23	0,465	0,418	0,74	0,58	2,441860465	
			2558	1162	6046	4186	1395		
			14	79	51	047	349		
(6) GENERAL ASSESSME	MPONI	ENT: 2,4	9						
(7) INTERPRETATION: DEFICIENT									
(7) 2 2 2 2 2 2 2									

## **APPENDIX F: Survey Analysis: Technology**

## ITPOSMO Assessment

**COMPONENT: Technology** (2)Question Number (3) % Participation (4) Assessment Result (5) Score Total Frequency % 6,97 11,6 11,62 27,90 23,2 18,6 0,837 Partial 0,11 0,232 0,93 0,93 3,046511628 Frequency % 6.97 9,30 11,62 23,25 32,5 16,2 0,232 0.697 Partial 0,09 1,30 0,81 3,139534884 Frequency 9,30 23,2 23,25 18,60 13,9 11,6 Partial 0,23 0,465 0,558 0,55 0,58 2,395348837 

4	Frequency	4	8	6	12	8	5	0	2,802325581
	%	9,30	18,6	13,95	27,90	18,6	11,6		
		2325	0465	3488	6976	0465	2790		
		581	116	37	74	116	698		
	Partial	0	0,18	0,279	0,837	0,74	0,58	2,627906977	
			6046	0697	2093	4186	1395		
			512	67	02	047	349		
(6) GENERAL ASSESSME	MPONE	NT: 2,79	)						
(7) INTERPRETATION: I									

## **APPENDIX G: Survey Analysis: Process**

ITPOSMO Assessment COMPONENTE:	Process								
(2)Question Number	(3) % Participation	(4)	Assess	ment Re	sult				(5) Score
		0	1	2	3	4	5	Total	
9	Frequency	8	4	6	7	12	6	43	2,67
	%	18,6 0465 116	9,30 2325 581	13,95 3488 37	16,27 9069 77	27,9 0697 674	13,9 5348 837		
	Partial	0	0,09 3023 256	0,27 9069 767	0,488 3720 93	1,11 6279 07	0,69 7674 419	2,674418605	
(6) GENERAL ASSESSME	ENT OF THE PROCESS COMPO	NENT: 2	,67						
(7) INTERPRETACIÓN: I	 Deficient								

## **APPENDIX H: Survey Analysis: Objective/Values**

	OSMO ssment								
COMPONENT:	OBJECTIVE								
(2)Question Number	(3) % Participation	(4)	Assess Resul			(5)Score			
		0	1	2	3	4	5	Total	
1	Frequency	8	2	6	9	9	9	43	
	%	18,6 05	4,65	13,95 3	20,93	20,93	20,93		
	Partial	0	0,05	0,279	0,6279	0,8372	1,0465	2,837209 3	
2	Frequency	3	8	10	8	8	6	43	2,74418 6
	%	6,97 67	18,6	23,25	18,605	18,605	13,953		
	Partial	0	0,19	0,465 1	0,5581	0,7442	0,6977	2,651162 8	
(6) GENERAL	ASSESSMENT OF	THE O	BJECT	IVE COM	IPONENT	: 2,74			

## **APPENDIX I: Survey Analysis: Staff/Value**

## ITPOSMO Assessment

COMPONENT: STAFF/SKILLS

	011111/0111220								
(2)Question Number	(3) % Participation	(4)	Assess	ment Re	esult				(5) Score
		0	1	2	3	4	5	Total	
12	Frequency	3	5	5	10	9	11	43	3,16
	%	6,97	11,6	11,62	23,25	20,9	25,5		
		6744	2790	7906	5813	3023	8139		
		186	698	98	95	256	535		
	Partial	0	0,11	0,232	0,697	0,83	1,27	3,162	
			6279	5581	6744	7209	9069	7906	
			07	4	19	302	767	98	
(6) GENERAL ASSESSMENT	OF THE STAFF/SKILLS C	OMPON	IENT: 3	,16					
(7) INTERPRETATION: Acce	eptable								

## **APPENDIX J: Survey Analysis: Management-ITPOSMO Assessment**

Analysed Component:	Management								
(2)Question Number	(3) % de Participation	(4)	Assess	ment Re	sult				(5) Score
		0	1	2	3	4	5	Total	
13	Frequency	5	6	8	8	12	4	43	
	%	11,6 2790 698	13,9 5348 837	18,60 4651 16	18,60 4651 16	27,9 0697 674	9,30 2325 581		
	Partial	0	0,13 9534 884	0,372 0930 23	0,558 1395 35	1,11 6279 07	0,46 5116 279	2,651162791	
14	Frequency	5	8	8	8	9	5	43	2,593023256
	%	11,6 2790 698	18,6 0465 116	18,60 4651 16	18,60 4651 16	20,9 3023 256	11,6 2790 698		
	Partial	0	0,18 6046 512	0,372 0930 23	0,558 1395 35	0,83 7209 302	0,58 1395 349	2,534883721	
(6) GENERAL ASSESSMENT O	F THE MANAGEMENT COMP	ONENT: 2	2,53						
(7) INTERPRETACION:	Deficient								