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DEFINING PROCESS PERFORMANCE INDICATORS WITHIN THE INFORMATION SYSTEM OF MISDEMEANOR COURTS

ABSTRACT: This paper will examine the importance of developing and implementing management control mechanisms that enable not only efficient process management, but also the establishment of a unique quantitative framework, intended for measuring the performance of the information system used by misdemeanor courts. This system was developed for the purposes of case management in misdemeanor proceedings in the Republic of Serbia. This paper aims to define a conceptual model of generally applicable performance indicators in reference to control, monitoring, measurement, evaluation, and analysis of the courts' achieved results in misdemeanors, which reflect the principles of efficiency and effectiveness in case processing. Implementation of the model potentially results in obtaining management support during misdemeanor proceedings, improving work efficiency relative to the increased influx of cases, collection of fines and costs, as well as decision-making, in an effort to improve the quality of misdemeanor courts' work, in accordance with the law and court rules of procedure.

KEYWORDS: information system, key performance indicators, misdemeanor court, quality, process management

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1. Introduction

According to the provisions of the Law on Misdemeanors (2013), one of the basic principles of infringement procedure is the principle of economy, by which the court is obliged to carry out the procedure without delay, but in a manner that will not detriment the making of an appropriate legal decision. Consistent with the general changes and reform processes that take place today in today's judiciary, appeared the need to introduce modern management systems that ensure the improvement of planning, monitoring, controlling, and managing court proceedings. (Anthony & Govindarajan, 2014).

The accelerated development of information and communication technologies (hereinafter: ICT), along with the application of "smart solutions" that these technologies provide in various aspects and systems, including the judiciary, resulted in the Republic of Serbia adopting the *Information Society Development Strategy* (2010–2020), followed by the *National Justice Reform Strategy* (2013–2018), and the *Judiciary Development Strategy* (hereinafter: JDS), adopted from 2020 to 2025. The JDS states that despite significant progress in the field of information technology, courts still lack standardized and compatible automated case management software within the judiciary. The case management information system used in most courts is still not centralized, which prevents effective statistical and analytical monitoring of work results, and contemporary justice system management. Among other objectives, the JDS lists the improvement and development of the judiciary's IT systems as strategic priorities, with the aim of achieving modern e-justice.

Previous experiences point to an insufficiently developed implementation of specific methods that analyze the effectiveness, efficiency, and quality of case processing. Timeliness and the quality of justice are not mutually exclusive, neither in theory nor in practice. Research indicates that efficient resolution of criminal proceedings is associated with court systems in which the circumstances support effective representation. Given that effective representation is the basis of due process and equal protection of the law, it is an integral aspect of the broader concept of quality case processing. An analytical framework was developed

to show how the concept of efficiency affects the values of timeliness and quality. Timeliness is measured directly, by calculating the number of days from the indictment, or the adoption of the final decision. New procedures, ICT, innovative ways to resolve disputes, deadlines, quality management, and efficient judicial practice management are just some examples of actions that can be taken to improve the functioning of courts, which are the institutional cornerstone of the judicial system (Fabri, 2017).

However, methods that measure case processing quality are far less than accepted. According to Ostrom & Hanson (2000), the main challenge that courts face is increasing their efficiency as a means to improve the performance of the system as a whole. To form documents, procedures, and reports that enable operational and strategic plans, it is necessary to provide an adequate case management information system, as well as to implement modern performance-defining concepts, aimed towards analyzing the achieved results of processes and systems.

Research shows that most courts do not implement such performance measures, and the lack of an integrated court management information system is seen as a strategically important control and management problem, as one would enable effective process management, as well as the establishment of a unique quantitative and comprehensive system, formed for the purpose of measuring the case management system's performance indicators, specifically in misdemeanor courts.

The document *Global Measures of Court Performance* (hereinafter: *Global Measures 3*) fills this gap to a certain extent. Accompanying two previous editions (2012 and 2018), *Global Measures 3* (2020) is part of the International Framework for Court Excellence (hereinafter: IFCE).

As an integral part of the IFCE, *Global Measures 3* greatly expands the previous two editions' coverage when it comes to assumptions, general concepts, principles, ideas, and core values of performance measurement and management (hereinafter: PMM), including challenges, opportunities, and risks.

Along with the tendency to reform the judiciary, the result-oriented method has been adopted in developed countries during the past two decades, whereby effective performance measurement focuses on

results. Accordingly, the *Global Measures* define a system of eleven basic performance measures which, in addition to input measures, also include measurable indicators of effects (results). These appear in all three editions, but they have been significantly updated and expanded in the latest edition.

However, practical advice and PMM-specific guidelines for courts and court systems are very limited even today, contrary to numerous comments regarding obstacles and challenges to their implementation.

This paper studies the basic characteristics of Serbia's misdemeanor court system's process approach and process management. Furthermore, the paper provides a model for defining and evaluating the performance of characteristic processes using the Critical Success Factor method (hereinafter: CSF), which is consistent with the *Global Measures* defined within the framework of IFCE. The results of the Serbia Judicial Functional Review (2014) were used as well. The review's assessments were based on quantitative and qualitative analysis, including statistical analysis in case management, data on financial and human resources, judiciary perception survey, access to justice survey, process maps, legal analyses, existing research analysis, etc. The models presented in this paper are designed so that they can be implemented and modified, with the intention of coordinating the Serbian judiciary's performance with the performance of the European Union member states.

This paper aims to point out the importance of control, monitoring, improvement, and management of processes in the domain of misdemeanor courts, as a basis for analyzing performance, quality, and effectiveness of processes that require improvement.

This paper defines a framework of generally applicable performance indicators in accordance with laws and court rules, so as to facilitate procedural actions of misdemeanor courts in solving problems related to efficient handling of the increased case influx, effective collection of fines and costs, reducing the statute of limitations, and the judges' fulfillment of the resolved cases norm.

2. Information System for Judicial Process Management

When it comes to managing cases in courts and prosecutor's offices, the utilization of contemporary ICT, standardized software, and centralized systems is crucial in an effort to achieve the key principles of an effective judiciary: independence, impartiality, responsibility, expertise, efficiency, and transparency.

The importance of ICT is also reflected in the fact that the Digital Agenda for Europe is among the seven leading initiatives of the Europe 2020 economic strategy (European Commission, 2010). On the other hand, the Action Plan for Chapter 23, revised by Serbia's Ministry of Justice in July 2020, showed that the implementation of e-justice tools and mechanisms goes beyond improving efficiency, and represents a horizontal mechanism that pervades through some of the key principles of judicial organization and reform.

Primarily, the judicial information system enabled electronic communication between courts and authorities whose data is required in various types of court proceedings (e.g., civil registry, Republic Pension and Disability Insurance Fund, Ministry of Internal Affairs, Central Registry of Compulsory Social Insurance, Republic Geodetic Institute).

However, the fact that all courts in Serbia neither use a unique program for case management nor have the ability to interconnect, represents a significant challenge in constructing reliable statistical reports. Subsequently, this hinders the reports' analysis, which should be relied upon by the judicial sector's decision-makers when planning, and significantly complicates data collection and data processing for domestic requirements, reporting obligations towards the EU, and other organizations towards which such an obligation exists.

In the section *Efficiency of the Judiciary* within the JDS, the need for further improvement of e-services within the judiciary is particularly pointed out, as it would ensure: access to justice, an increase in the quality of proceedings and decision-making, efficient case management, statistical monitoring and reporting on the work of the judiciary, and transparency of the work of judicial bodies.

Misdemeanor courts in Serbia use a centralized software called SIP-RES, a system for managing cases in misdemeanor courts, which was

introduced on January 1, 2016. However, SIPRES does not produce all the statistical reports necessary for planning. Consequently, a large number of misdemeanor courts, including the Misdemeanor Appellate Court, still keep double records – manual (on paper) and electronic.

SIPRES is the first system in the Serbian judiciary that is connected to other bodies within the judicial bodies network, as well as the network of Administration for Joint Services of the Republic Bodies, including: Treasury Administration, Traffic Police Administration, Ministry of Internal Affairs, and the Central Registry of Compulsory Social Insurance.

SIPRES also includes the Register of Unpaid Fines and Other Monetary Amounts. Connecting with the Ministry of Internal Affairs enabled the electronic delivery of tens of thousands of misdemeanor orders to the courts. Since the implementation of the law, the Traffic Police Administration, as an integral part of the Ministry of Internal Affairs, has issued more than a million search warrants. Moreover, the voluntary payment of fines has reached a record level of 74%, which is more than double compared to the 30% which was the voluntary payment percentage of imposed fines in accordance with the previous law (OzonPress, 2016).

SIPRES is an active system that includes various functions. Every procedural action in the court is implemented in the system, and every employee submits a part of their report directly into the program. SIPRES contains functions such as the complete electronic management of the case registry, decisions, judges, case resolutions, expeditions and archives, as well as functions meant for creating calendars and reminders that alert users to important upcoming activities.

In order to determine the qualitative results of the SIPRES software implementation, this paper presents an approach to quality and effectiveness modeling, from the aspect of defined criteria, related to inputs and their transformation into outputs.

For the purposes of defining the effectiveness and quality model, this paper references the results of designing a conceptual information system model, on the example of the Misdemeanor Court in Valjevo, respecting all phases of the system development life cycle (Bocij et al., 2019; Avison & Fitzgerald, 2010).

Besides the city of Valjevo, the Misdemeanor Court in Valjevo was established for the municipal territories of Lajkovac, Ljig, Mionica, Osečina, Ub, with divisions in Lajkovac, Ljig, Mionica, Osečina, and Ub. It started operating on January 1, 2010, per the Law on the Seats and Territorial Jurisdictions of Courts and Public Prosecutor's Offices (2013) and the Law on Organization of Courts (2008–2022).

Complying with the process approach (Becker, 2011), from the aspect of management support at operational, tactical, and strategic levels, the research focused on the following: defining the performance of key process characteristics, recording data important for the monitoring of key process characteristics (time, deviations, quality), identifying a quantitative variable, adding new quantitative attributes (important for control and management), identifying the standard deviation of quantitative variable characteristics, and changing the system's configuration in regards to the changes of key processes (adding, deleting and/or changing the activity structure and the order of activity execution), i.e., changing roles and responsibilities of system users.

Within the process-oriented information architecture of the previously mentioned information system model, the following process management methods were used as a basis for continuous improvement of the system's key processes: Management by Objectives, Planning, Implementation, Control, Improvement (PDCA – Plan-Do-Check-Act), Statistical Process Control, and Six Sigma. Among other things, the model enables the definition of management activities at the level of business processes.

3. Quality and Effectiveness Model of the Process Management System of Misdemeanor Courts

Standard requirements for process quality within the information system of misdemeanor courts are defined based on key processes, user requirements at all levels of decision-making, distribution of management responsibilities, CSFs, and case management. In a quality management system, the application of the Business Process Management methodology and the process approach is one of the most important factors in the successful management of procedural actions (Jeston &

Nelis, 2013), as it enables: defining the key process objectives in respect to CSFs; analysis, definition, and fulfillment of user requests; process implementation control; continuous monitoring and measurement of performance results and process effectiveness; iterative improvement of the process based on acceptable measurable indicators.

In addition to CSFs that are focused on areas which ensure the achievement of the defined objectives, in order to effectively manage processes, Key Performance Indicators are defined as a means of measuring vital processes and activities (CSFs), as basic indicators of process quality, case management system quality, as well as performance, in terms of meeting strategic and operational objectives (Neely et al., 2005). Key Performance Indicators provide essential information, information flows, and generated financial reports to the misdemeanor courts' management, all of which are necessary to monitor, control, measure, and improve the case management information system, as per strategic objectives (Kronz, 2006).

The analyzed structure of performance indicators represents the basis for measuring the performance of the strategy implementation and the fulfillment of the judicial process' objectives, consistent with the strategic decision-making pyramid. This paper references the results of the management information system model research, on the example of the Misdemeanor Court in Valjevo.

3.1. Identifying Key Process Characteristics

The basic role of the courts' management structure is to make effective decisions. Consequently, the quality and effectiveness of the objectives improve the decision-making process and enable more effective monitoring of the processes related to case management. Establishing the objectives helps to define the parameters for evaluating the quality and the results of the process, and enables the management structure to evaluate and improve the critical activities of the judicial process.

In order to analyze the effective structuring and designing of the process, key processes, as well as monitoring and control processes were mapped by way of identifying and establishing relationships between the said processes. Additionally, a process map was defined with

an emphasis on control, monitoring, measurement, and improvement processes. Monitoring the process quality implies monitoring the effectiveness and efficiency of the process based on process results, while process effectiveness represents the ability of the process to achieve the anticipated results.

By identifying key processes, basic functions and processes (the current functional areas of the SIPRES system) are defined as a logical unit of a group of activities which influence the achievement of the system's objectives, namely:

Petition Processing: includes all procedural actions when receiving a request in court, i.e., entering the necessary general information in accordance with the law and court rules, so that the petition is filed in respect to the legal qualification of the request, etc.,

Case Formation: includes all procedural actions necessary to form the case in accordance with the law and court rules, classification of the case according to the law, as well as the processing of all participants and the legal qualifications of the proceeding, in order to form the case as a whole,

Case Processing: includes all procedural actions necessary to enter a final decision in the case, according to which the enforcement would be continued later. It includes case formation, judge selection, case resolution, the adoption of a final decision, case disposition, and determining the sanctions for convicted individuals,

Enforcement: includes all procedural actions after a final decision has been entered, in order to close and archive the case. It includes fine enforcement, enforcement of other sanctions and measures, such as penalty points, security measures banning the driving of a motor vehicle, or any other protective measures, and archiving the case.

Based on key objectives, impact on system quality, and stakeholder satisfaction, the objectives of characteristic processes and performance measures were defined. Hence, an analysis was performed at the process level and at the activity level.

Process objectives, characteristics, and criteria for measuring process quality were defined for identified processes, which are vital when it comes to measuring the quality and effectiveness of the system, in addition to the previously analyzed aspects of case management pro-

cesses (process-related responsibilities, process inputs and outputs, connections between processes, required resources). As the fulfillment of system objectives depends on the implementation of key processes, the basic characteristics of process quality are defined. These characteristics relate to: (1) effective planning and processing of petitions, (2) volume and comprehensiveness of received and resolved cases, (3) standards for case formation, (4) definition of decisions, (5) enforcement of sanctions, (6) complete, timely, reliable, comparable, relevant and consistent reporting in compliance with applicable standards, laws, and regulations.

Table 1. Case Formation Process Effectiveness Analysis

PROCESS OBJECTIVES	PROCESS	ACTIVITY
Efficient case formation	Case Formation	P 2.1. – Applicants processing
Efficient processing of the participants		P 2.2. – Defendants processing
Equal workload distribution by case complexity		P 2.3. – Witness processing
		P 2.4. – Defense attorney processing
		P 2.5. – Expert witness processing
Critical Success Factors (CSI)	Defining the principle of filing cases and assigning them to judges; equal workload distribution by number and classification type (weight of the case); timely appointing the time range of resolving cases, to balance the users' workload for undertaking action.	
Process result	Defining the data filing procedure for the accused, including all necessary general information; efficient use of previously acquired petition processing data.	
Process quality characteristics	The ratio of the number of filed cases to the number of processed petitions (%).	
Effects achieved by objective accomplishment	Ensuring compliance of processed petitions and filed cases; a unique process of case formation planning; preparation of initial limitations; effective management of court proceedings; control of case processing.	

The basis for analyzing the quality and effectiveness of the SIPRES information system and identifying the processes that need to be improved include: defining the responsibilities and ownership of the processes, identifying key success factors, and establishing an adequate system for measuring the quality and effectiveness of the process. By identifying key success factors and defining the objectives for each process, the performance of this analysis aims to define process results, the corresponding indicators of process quality, and the effects achieved by a certain process. An example of process analysis, *Case Formation*, is presented in Table 1. Effectiveness target standards are formulated for each process and each activity, i.e., process performance requirements are defined.

3.2. Performance Indicators Analysis and Success Factors Evaluation Model

Bearing in mind the functioning of misdemeanor courts' case information system — which includes planning, providing resources for plan implementation, plan implementation, inspecting the effectiveness and efficiency of plan implementation, and introducing improvements in the next cycle — the processes of management, monitoring, measuring, their interactions, as well as the system's control and improvement processes, necessary for the quality management system, are defined by identifying criteria for measuring process performance (Poister et al., 2015).

Table 2. Case Management System Performance Indicators

SYSTEM PERFORMANCE INDICATORS	
	The ratio of petitions filed to petitions processed (%). Evaluated dimensions: The difference between the number of filed petitions and the number of processed petitions.
	The ratio of petitions processed to petitions classified. Evaluated dimensions: The difference between the number of processed petitions and the number of classified petitions.
	The ratio of petitions processed to cases filed (%). Evaluated dimensions: The difference between the number of processed petitions and the number of filed cases.
	The ratio of cases filed to cases resolved (%). Evaluated dimensions: The difference between the number of cases filed during the year and the number of resolved cases (initiated procedures).
	The ratio of decisions confirmed to cases resolved – quality. Evaluated dimensions: The difference between the number of confirmed decisions and the number of appealed cases.
	The ratio of fines imposed to fines collected. Evaluated dimensions: The difference between the number of imposed fines and the number of collected fines.

The defined key performance indicators, i.e., indicators of the case management system's performance (Table 2), represent integrated performance ratings of a certain group of indicators.

This part uses the basic syntax of the Six Sigma methodology, which entails *defining, measuring, analyzing, process control, and improvement*. The main purpose of the Six Sigma model within metrics is to measure process variability, which serves to further measure the level of quality. It represents a standard that indicates the level of control over any process in the system (5). By applying this methodology based on Statistical

Process Control, it is possible to locate and remove the process variation causes and develop alternatives that will lead to a variation reduction (Goetsch & Davis, 2013).

Table 3. Petition Processing Process Performance (Success) Indicators Analysis

PETITION PROCESSING	
Process objectives	<ul style="list-style-type: none"> – Efficient petition processing. – Petition processing in accordance with the court rules of procedure. – Equal workload distribution according to the complexity of the petition. – Efficient petition classification.
CSI	<ul style="list-style-type: none"> – Ensuring timely and proper petition processing, in accordance with the legal frameworks and court rules of procedure. – Defining the dynamics of reception and filing according to petition influx. – Defining the system of correct classification of petitions, in the purpose of evenly distributing the weight of the proceeding.
Process implementation results	<ul style="list-style-type: none"> – Book of filed petitions. – Filed petitions registry. – Petition classifications registry.
Effects achieved by objective accomplishment	<ul style="list-style-type: none"> – Effectiveness of the system's ability to record an influx of petitions. – The system's ability to classify the petition in relation an influx of processed petitions.
Process performance indicators: reference values	Indicator 1, Indicator 2: < 1% - Completely satisfactory 1-5 % - Satisfactory 5-10% - Partially satisfactory >10% - Not satisfactory

Defining, the first phase of the Six Sigma methodology (McCarty, 2005) involves mapping, i.e., key process identification, whose effectiveness and efficiency are monitored. In addition, defined key process factors will be measured, analyzed, controlled, and improved. Measuring implies a quantified deviation from performance indicators by defining performance criteria, i.e., quality. A standard value is defined for each criterion, so as to establish the deviation per the defined process objectives.

Standards are determined based on the adopted measurement system (indicators, measurement methodology, etc.). Identification of input variables that can affect output quality and quantity (depending on performance measures) occurs in the analysis phase. Certain assumptions about factors that are critical to the result are examined and tested by applying statistical methods. Process control implies process monitoring through a defined measurement control system of performance indicators.

According to the above, the model for measuring the misdemeanor courts' case management system's performance is defined based on the characteristics that have a decisive role in ensuring the effectiveness and the quality of the developed information system's management, from the aspect of CSFs, key process quality indicators, objective effectiveness and expected results indicators, along with process implementation effects. As an example, the analysis of performance indicators for the *Petition Processing* process (Table 3) and the *Case Processing* process (Table 4) is presented.

Table 4. Case Processing Process Performance (Success) Indicators Analysis

CASE PROCESSING	
Process objectives	<ul style="list-style-type: none"> - Effective records - case filing. - Clearly defining the rules for norm fulfillment. - Reduced statute of limitations. - Efficient resolving of cases. - Effective case disposition.
CSI	<ul style="list-style-type: none"> - Defining the automatic case number assignment system and the automatic assignment of a judicial panel according to the subject. - Determining a uniform penal policy in accordance with legal frameworks and norms, as well as uniform procedural actions in certain time frames.
Process implementation results	<ul style="list-style-type: none"> - Case registry. - Classification of decisions by cases. - Decision registry.
Achieved effect by objective accomplishment	<ul style="list-style-type: none"> - Efficient use of data from previous petitions. - Efficient presentation of evidence in the proceedings. - Effective handling and controlled disposition of cases.
Process performance indicators: reference values	Indicator 4: < 10% - Completely satisfactory 10-20 % - Satisfactory 20-30% - Partially satisfactory >30% - Not satisfactory

3.3. Performance Measurement Results and Process Improvement Requirements

Data samples were collected and organized by using descriptive statistics, which enables the analysis of the current state of the process, as well as the identification of opportunities for improvement. Inferential statistics were used to support conclusions about future trends in the most important parameters of the process.

Mathematical methods of standard deviation and variance were used to measure and evaluate performance. So as to analyze research results, three departments of the Misdemeanor Court in Valjevo, namely Mionica, Lajkovac, and Ljig, were selected as samples for a period of three consecutive years (2017–2019). Indicators 1. (Table 5) and 4. (Table 6) were used to measure and evaluate the system's performance. Further statistical processing, indicator analysis, and obtained results can indicate the quality and effectiveness of the SIPRES information system's key processes, in relation to its current state.

Table 5. Performance Evaluation of the Number of Filed Petitions to the Number of Processed Petitions

Misdemeanor Court in Valjevo — Mionica Department			
Year	2017	2018	2019
Number of filed petitions	1258	1413	1322
Number of processed petitions	1247	1409	1314
Difference	9 (<1%)	5 (<1%)	8 (<1%)
Score	4		
Misdemeanor Court in Valjevo — Lajkovac Department			
Year	2017	2018	2019
Number of filed petitions	1478	1889	1642
Number of processed petitions	1471	1878	1634
Difference	7 (<1%)	11 (<1%)	8 (<1%)
Score	4		
Misdemeanor Court in Valjevo — Ljig Department			
Year	2017	2018	2019
Number of filed petitions	2896	3155	2754
Number of processed petitions	2881	3139	2750
Difference	15 (<1%)	16 (<1%)	4 (<1%)
Score	4		

Source: Misdemeanor Court in Valjevo

Table 6. Performance Evaluation of the Number of Filed Cases to the Number of Resolved Cases

Misdemeanor Court in Valjevo — Mionica Department			
Year	2017	2018	2019
Number of filed cases	1245	1408	1313
Number of resolved cases	1007	1125	1122
Difference	238 (10–20%)	238 (10–20%)	191 (10–20%)
Score	3		
Misdemeanor Court in Valjevo — Lajkovac Department			
Year	2017	2018	2019
Number of filed cases	1468	1876	1633
Number of resolved cases	1180	1515	1359
Difference	288 (10–20%)	361 (10–20%)	274 (10–20%)
Score	3		
Misdemeanor Court in Valjevo — Ljig Department			
Year	2017	2018	2019
Number of filed cases	2879	3135	2747
Number of resolved cases	2308	2607	2207
Difference	571 (10–20%)	528 (10–20%)	540 (10–20%)
Score	3		

Source: Misdemeanor Court in Valjevo

Based on the analysis shown in Table 5, it is determined that the total difference between filed and processed petitions is less than 1%, in all three departments of the Misdemeanor Court in Valjevo (Mionica, Lajkovac, and Ljig), during the period of three years (2017, 2018 and 2019). It is concluded that the performance rating for this indicator is four (4), which is also the highest rating for the defined performance indicators.

Based on the analysis shown in Table 6, it is determined that the total difference between filed and processed petitions is between 10% and 20%, in all three departments of the Misdemeanor Court in Valjevo (Mionica, Lajkovac, and Ljig), during the period of three years (2017,

2018 and 2019). It is concluded that the performance rating for this indicator is three (3), which means that it is not completely satisfactory, and that it requires defining the measures and undertaking certain activities to improve the case processing process, which is also one of the most significant key processes of the misdemeanor courts' case management system.

The procedure of identifying opportunities to improve the key processes of the misdemeanor courts' case management system included an analysis of business processes performance, as well as a description of problems that occur in certain time cycles (past or future). The ranking of potential key process improvements is determined based on the ability of the process to achieve the desired output (quality) through changes in its execution.

The last phase of the Six Sigma method, process improvement, has a substantial role. In this phase, key variables are confirmed, while the variable effects concerning the results, i.e., output quality, are quantified. Solutions that eliminate deviations are located in the improvement phase, and corrective measures are implemented based on the non-conformities obtained from the analysis of performance indicators. Corrective measures include identifying the problem, taking corrective action, and monitoring the corrective action effects. For example, if the analysis of the obtained performance establishes inconsistencies between filed and resolved cases, as is the case in the given example, it is necessary to implement corrective measures by introducing medium-term planning, and forecasting based on the results (effects), in order to improve both process and system performance as a whole. Subsequently, misdemeanor courts' work quality is ensured in all priority areas.

Improvement includes all changes, from small ones to complete reengineering of business processes. Firstly, it involves *establishing baselines* (internal and external), which generally include an overview of process flows, measures and results obtained, constraints, organizational structure that supports improved business processes, roles and responsibilities of management. Secondly, it involves *designing and mapping* new processes that include business process reengineering, in order to meet initial values and improve identified key processes.

4. Conclusion

Requirements for information, as well as measurements of quality and effectiveness are dominant issues in the field of court case management, for the purpose of achieving continuous process improvement by focusing on objectives, processes, and user requirements. Honoring tendencies and trends that exist in the European Union and other world countries, in addition to the need to develop and implement an integrated system for managing cases in misdemeanor courts (SIPRES), there is also the need to introduce a system of quality, effectiveness, monitoring, control and measurement of key processes by defining a performance model consistent with the developed methodology.

Examples of an integral approach can be found in American, Dutch, and Finnish courts, which successfully apply quality system models. An appropriate information system for court management must be implemented for the collection of both efficiency and court work data, as well as for other aspects of quality (Albers, 2009).

This paper presents the results of quality and effectiveness research, aimed at managing processes, measuring objective implementation, controlling process results, monitoring necessary standards, and providing the basis for continuous improvement, including forming, filing, resolving, and controlling cases within misdemeanor courts in the Republic of Serbia, on the sample of three departments of the Misdemeanor Court in Valjevo.

The performance model and the results of its application are defined as management support in diagnosing the complexity of cases, solving problems related to the efficient resolution of the increased influx of cases, effective collection of fines and costs, as well as effective decision-making in order to improve the misdemeanor courts' work quality, in accordance with the law and court rules. Monitoring and evaluation instruments were developed by establishing a unique quantitative and comprehensive system for measuring performance indicators of the misdemeanor courts' case management system. Thus, the application of standard regulations and court procedures is ensured, in accordance with international norms of quality, effectiveness, efficiency, transparency, and responsibility in the field of case processing management and

case resolution in misdemeanor courts. It is concluded that the data presented in this paper could be of importance to the misdemeanor justice system in the Republic of Serbia as a whole.

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