Criminal Justice Policy Review I-16 © 2016 SAGE Publications Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/0887403416628603 cjp.sagepub.com



Improving Judicial Administration Through Implementation of an Automated Sentencing Guidelines System

Danielle P. Fox¹, Hisashi Yamagata¹, Stacy S. Najaka², and David A. Soulé²

Abstract

To ensure public trust and confidence, courts must routinely examine the management of their operations and continuously explore improvement opportunities. Although technology can be a catalyst for improving judicial administration, without the requisite planning, organizational capital (e.g., people, process, and system alignment), and evaluation it is unlikely that such initiatives will be sustained let alone succeed. In 2012, a local circuit court in Maryland implemented the Maryland Automated Guidelines System (MAGS) developed by the Maryland State Commission on Criminal Sentencing Policy to electronically initiate, complete, and submit sentencing guidelines worksheets. This study discusses the evaluation of MAGS implementation, highlighting the value of technology and monitoring as a means to enhance judicial administration.

Keywords

courts, judicial administration, sentencing policy, program evaluation

The Judicial branch is responsible for its own operational efficiency and effectiveness (Conference of State Court Administrators, 2001). If the Judiciary fails to own this responsibility, not only will public trust and confidence likely diminish, so will the judicial branch's ability to direct, manage, and effect change. Recognizing the need to

Corresponding Author:

Danielle P. Fox, Montgomery County Circuit Court, 50 Maryland Avenue, Rockville, MD 20850, USA. Email: dfox@mcccourt.com

¹Montgomery County Circuit Court, Rockville, MD, USA ²Maryland State Commission on Criminal Sentencing Policy, College Park, USA

be an engaged partner in the innovations and changes taking place in the way government and courts do business, in 2012, a Maryland circuit court became the first in the state to pilot a system aimed at transitioning from a paper-driven business process of completing sentencing guidelines worksheets to an automated, primarily paperless process. The pilot initiative required strong leadership and collaboration among court employees across multiple departments, as well as across partner agencies. Participation in the pilot evaluation, which ultimately led to statewide implementation of the practice,¹ provided the pilot court with an opportunity to shape future versions of this automated system and generated lessons learned for jurisdictions in which the program would later be deployed. Furthermore, it offered the pilot court a chance to revisit its management of a long-standing process and determine if modifications were needed.

Pursuant to statute,² Maryland circuit courts are to consider the sentencing guidelines in deciding the proper sentence. State regulations³ also require that the judge shall review the sentencing guidelines worksheets for completeness and accuracy. There are two purposes for the sentencing guidelines worksheet. First, the worksheet is used to inform the judge of the guidelines at sentencing. Second, the worksheet is used to document sentencing information so that the Maryland State Commission on Criminal Sentencing Policy (hereafter, the Sentencing Commission) can assess the data to determine whether future changes to the guidelines are warranted. Worksheets are generally initiated by the local state's attorney or parole and probation agent. The sentencing judge or his or her designee enters all appropriate sentencing information on the worksheet during or after the sentencing hearing. After the judge signs the worksheet, copies are distributed to various entities required to receive a copy, while the original copy is retained on file with the court. The Sentencing Commission receives approximately 12,000 hard copies of the guidelines worksheets annually.

The current paper-driven data flow of manual calculation of the guidelines and manual data entry of the criminal sentencing data has historically worked satisfactorily. However, this process is prone to human error and is slowed by paper routing of the guidelines worksheets through various local and state agencies whose offices are dispersed throughout Maryland. Circuit courts also sometimes delay their mailing of worksheets until a large enough bundle has been filed with the court, further affecting the timeliness with which information from the guidelines worksheets is entered into the Sentencing Commission's database. Sentencing Commission personnel spend a substantial portion of work time collecting, organizing, entering, and analyzing the data contained on the sentencing guidelines worksheets. In order for the guidelines worksheet to be an effective tool in judges' sentencing decisions and a viable repository of information to inform statewide sentencing policy, collaboration and coordination must exist among not only the Sentencing Commission and the judiciary but also a host of other justice system partners involved in the sentencing process.

To improve the collection and accuracy of sentencing guidelines worksheet data, the Sentencing Commission developed the Maryland Automated Guidelines System (MAGS),⁴ a web-based application that allows court and criminal justice personnel to complete and submit sentencing guidelines worksheets electronically. For the Sentencing Commission, a main objective of MAGS is to "fully automate sentencing guidelines calculation" (Maryland State Commission on Criminal Sentencing Policy, 2011, p. 16). Automation of the guidelines worksheet calculation and submission processes improves accuracy and completeness of sentencing data and ensures more timely submission of guidelines worksheets. Improved collection of data along with the reduction of calculation errors can translate into more precise assessments and the development of improved sentencing policies and practices in Maryland.

In May 2012, MAGS was implemented for a 6-month pilot period at a Maryland circuit court.⁵ The pilot site is considered to be a large circuit court by the Maryland Judiciary due in part to the number of presiding judges and the number of cases processed annually, which averaged slightly under 40,000 between FY2010 and FY2014. Court personnel and judicial partners utilized the automated system to initiate, complete, and submit sentencing guidelines worksheets.⁶ While other local criminal justice agencies such as the Office of the State's Attorney and the Department of Parole and Probation were involved in the pilot, this study primarily focuses on the implementation and utilization of MAGS by the court.

Method

For the pilot evaluation, the Sentencing Commission was primarily interested in assessing the following anticipated benefits of MAGS:

- Increased accuracy in calculating the guidelines;
- More timely and accurate assessment of sentencing policy and practice;
- Increased data field completion; and
- Cost savings.

To assess the impact of automation on these aspects of the sentencing guidelines worksheet process, sentencing guidelines data provided by the Sentencing Commission was analyzed for the evaluation period (May-November 2012) and for a comparable 6-month period prior to MAGS implementation (May-November 2011). Table 1 summarizes the anticipated benefits and metrics used to measure the MAGS's impact.

Results

Increased Accuracy in Calculating the Guidelines

According to the Sentencing Commission, MAGS is expected to virtually eliminate errors that may result from manual calculation of the sentencing guidelines. During the 6-month pre-MAGS period (see Table 2), the pilot court submitted 186 guidelines worksheets to the Sentencing Commission, and guidelines calculation errors were found in 27 of the 186 worksheets (14.5%). The most common types of errors on the worksheets include selecting the incorrect guidelines cell (n = 11, 40.7%), not calculating the guidelines range (n = 5, 18.5%), choosing the wrong seriousness category

Expected benefits	Evaluation metrics	
Increased accuracy in calculating the guidelines	The number and percent of sentencing guidelines errors identified on guidelines worksheets. Note that MAGS has built-in functionality that eliminates such errors	
More timely and accurate assessment of sentencing policy and practice	 Timeliness: The average time (in days) measured a follows: I. From the sentencing (held) date to the date the guidelines worksheet is entered into the Sentencing Commission's sentencing database; ar 2. From receipt of the guidelines worksheet by the Sentencing Commission to the date of entry into the Sentencing Commission's sentencing database Accuracy: Based on an analysis of the data from the first expected benefit (increased accuracy in calculating the guidelines) and information gained from discussions with court personnel 	
Increased data field completion	Number and percent of <i>worksheets</i> with (a) at least one victim-related item completed (among cases involving a person or property offense where it is reasonable to expect that the case may have included a victim) and (b) all victim-related items completed (among worksheets where the victim field is marked "yes")	
Cost savings	Anecdotal information provided by the Sentencing Commission (as a formal cost-benefit analysis is beyond the scope of this evaluation)	

 Table 1. Metrics for Measuring the Expected Benefits From the Maryland Automated Guidelines System (MAGS).

(n = 4, 14.8%), and adding ranges incorrectly (n = 4, 14.8%). These errors were all prevented in MAGS because of its automatic calculation functionality.

More Timely and Accurate Assessment of Sentencing Policy and Practice

In addition to eliminating the need for manual calculation of the guidelines range, automating guidelines calculation saves users time in their completion and submission of the sentencing worksheets. Accurate calculation of the guidelines range also ensures that judges have the appropriate sentencing recommendation to inform their decisions. By making the completion of certain worksheet data fields required, MAGS has standardized the worksheet preparation process and established explicit preparation procedures, which are particularly useful for courts with multiple or rotating judges presiding over sentencing hearings.

It takes 5 months on average following a defendant's sentencing hearing for the Sentencing Commission to enter the information on the paper guidelines worksheet

	Number of worksheets with guidelines calculation error(s)	
Number of sentencing guidelines worksheets submitted to the Sentencing Commission	n	%
186	27	14.5
Type of errors	n	%
Wrong guidelines cell selected	11	40.7
Never calculated range	5	18.5
Wrong seriousness category	4	14.8
Added ranges wrong	4	14.8
Ignored statutory minimum or maximum	3	11.1
Added offender or offense score wrong	2	7.4
Scored drug offense as person offense	I	3.7
Total	30	

 Table 2.
 Number and Percentage of Sentencing Guidelines Worksheets With Errors, and

 Breakdown of Errors by Type, Pre-Pilot Implementation (May-November 2011).

into their sentencing database. Electronic submission of worksheet data via MAGS was expected to substantially reduce the time it takes for the Sentencing Commission to access and analyze sentencing guidelines information. Among the 178 paper sentencing guidelines worksheets submitted to the Sentencing Commission during the pre-MAGS period, it took on average close to 7 months (203 days) from the sentencing date to the date when the guidelines information was entered into the Commission's sentencing database. Over 90% (185 days) of the processing time was spent at the Sentencing Commission awaiting data verification and entry.

Even with electronic data submission of guidelines worksheets, the length of time between the sentence date and the guidelines worksheet submission date is not instantaneous. During the pilot, judges' designees often could not or did not submit the guidelines worksheet during or immediately after the sentencing hearing because either the necessary guidelines information had not been entered into MAGS prior to the hearing or the volume of cases on the judges' docket was too high to complete the worksheets during the hearing. Using the date when the guidelines worksheet was filed with the court as a surrogate for the date when the guidelines worksheet was submitted to the Sentencing Commission, the average length of time between sentencing and the worksheet receipt by the Sentencing Commission under MAGS (372 cases) was 11 days. The observed 11-day lag between the sentencing date and the worksheet data entry at the Sentencing Commission is much shorter than the 203 days it took pre-MAGS for sentencing data to be available to the Sentencing Commission. This reduction in processing time was achieved because of not only the successful implementation of a technology solution but also the willingness of justice entities to modify their business processes around this alternate solution.

Increased Data Field Completion

In 2001, the Sentencing Commission added a list of questions to the sentencing guidelines worksheet regarding the rights of victims at sentencing. In June 2012, the Sentencing Commission discussed the retention of the victim-related questions because of the low response rate. Discussion took place about whether automation would make it easier for users to answer those questions. As such, an additional analysis was performed that focused on the completion of the victim-related questions on the sentencing guidelines worksheets both prior to and during the MAGS pilot. The analysis was limited to worksheets involving a person or property offense where it is reasonable to expect that the case may have included a victim. Worksheets involving only a drug offense(s) were excluded, as drug crimes typically do not involve an identifiable victim. The number of such worksheets submitted to the Sentencing Commission was 137 during the pre-MAGS period and 283 during the MAGS pilot period. The percentage of worksheets where at least one victim-related item was completed (including victim involvement) increased from 66% (91) to 85% (240). Of the worksheets that clearly indicated that offenses involved a victim (79 pre-MAGS worksheets and 211 MAGS worksheets), two thirds (66%, 140) of worksheets submitted during the MAGS pilot period, compared with 8% of the 79 worksheets submitted during the pre-MAGS period included complete data on all of the victim-related questions.

Cost Savings

As MAGS is a web-based application, it does not require the purchase of any software for its users. Electronic data submission saves the Sentencing Commission time and costs associated with the printing of paper guidelines worksheets and delivering them to the courts. MAGS eliminates most of the costs that courts incur when mailing paper worksheets back to the Sentencing Commission. Automating the sentencing guidelines calculation reduces the amount of time spent by those who prepare the worksheets, as well as by the Sentencing Commission in its review of the calculations contained on submitted worksheets. The electronic transfer of worksheet data is also cost-effective for the Sentencing Commission in that it allows the Commission staff to reallocate time previously spent on data entry to other tasks such as user training, data analysis, and the review of judicial compliance with the sentencing guidelines.

Discussion

The positive impact of MAGS is evident in the elimination of errors by the automated calculation of the sentencing guidelines and in the efficiencies gained by the electronic transmission of the guidelines worksheet data. The Sentencing Commission envisions that these two benefits will improve sentencing policies and practices in Maryland. More accurate sentencing information is likely to enhance the court's ability to inform its sentencing practices. Automation of the sentencing guidelines worksheet completion

and submission processes reduces the amount of resources that the Sentencing Commission needs to spend on printing worksheets and entering worksheet information into its sentencing database. The implementation of MAGS also improved completion of victim-related information. While the reasons behind the increased completion of victim-related information are unclear, the organization of worksheet information on screens in MAGS, as well as increased attention during the pilot on the importance of fully completing the worksheet data elements, may have been contributing factors.

Automation Facilitating Organizational Change

Technology has and continues to revolutionize the work of courts as exhibited by hosting virtual court events, electronic filing of petitions and other court documents, and parties' monitoring of case activity online (Conference of State Court Administrators, 2005). Although technology is a valuable tool for improving court operations, it does not guarantee that improvement. Equally important is the governance policies and business practices developed to guide the purchase, implementation, and maintenance of technology. During and following MAGS implementation, the pilot court began to take a more strategic approach in the management of its sentencing guidelines worksheets. Planning for and implementation of the automated system was the impetus behind the court's actions.

Prior to MAGS implementation, there was no formal mechanism in place to track the completion and submission of sentencing guidelines worksheets. That is, worksheet completion and submission by the court was largely driven by whether or not the prosecuting attorney or parole and probation agent initiated the worksheet. Although statutes require the court to consider the guidelines worksheets in its sentencing decisions and review those worksheets for completeness and accuracy, there is no requirement on the court to identify all guidelines-eligible cases and to ensure all sentencing guidelines worksheets are initiated for those cases. If the court places value on compliance with identified statutory requirements, then that value must be demonstrated in tangible ways such as through monitoring and reporting. Quality sentencing policy requires sentencing data of a sufficient quantity and quality.

Implementation of MAGS afforded the pilot court an opportunity to consider the coherence of the guidelines worksheet process and reflect on the ways it might be incorporated into business practices. Very few, if any, administrative initiatives in the judiciary can be effectively implemented by a single department or individual. The management of all aspects of the sentencing guidelines worksheet process including preparation, completion, and submission of the worksheet requires a level of organizational competency by the judiciary. That is, disparate groups within the organization, namely, judges, administration, and clerk personnel must respect role independence while acknowledging the need for collaboration as a necessary means to ensure operational success. Within those disparate groups, there needs to be certain assets present. For example, there needs to be staff with technical and analytic skills who are able to identify opportunities within operational initiatives to demonstrate the court's values and leaders who support the need for continued innovation and improvement in operations.⁷

Ideally, courts' values are expressed in ways that reflect court leaders' understanding of the fundamental purposes and responsibilities of courts, and not solely on the basis of a request or mandate made by another branch of government. The activities undertaken by the pilot court during and following implementation of MAGS revealed the value that the pilot court placed on the project and ownership of the automated sentencing guidelines worksheet process. As a result, the court agreed to not only evaluate system implementation and the impact on court processes but also develop new functionality within its case management system to support new practices. The pilot court modified its case management system to identify MAGS-eligible cases and began tracking guidelines worksheet completion.⁸

The pilot court's main objectives in developing its internal business processes for MAGS implementation included (a) identifying guidelines-eligible cases for court personnel, (b) developing a data sharing protocol between the court's case management system and MAGS to better track the submission of sentencing guidelines worksheets, and (c) improving the court's overall business processes related to the initiation, completion, and submission of sentencing guidelines worksheets. To accomplish these objectives, the court made a number of enhancements to its case management system and implemented procedures to improve and track the completion of guidelines worksheets. To identify eligible cases, the court's case management system was helpful in displaying an indicator of MAGS-eligibility for events with a disposition scheduled (e.g., sentencing, plea, pre-indictment plea, reconsideration, etc.). This indicator provides the information needed to enable the judge or his or her designee to inquire about the status of the worksheet in the guidelines system.

The pilot site also developed a database of sentencing guidelines-eligible cases that is updated weekly to keep track of the completion of sentencing guidelines worksheets. Using these data, the court compiles a file of all guidelines-eligible cases that have a disposition date in a specified month and provides the file to the Sentencing Commission. The file is then merged by the Sentencing Commission with data elements collected via MAGS such as worksheet submission status and whether the case with a worksheet initiated or submitted was originally contained in the universe of guidelines-eligible cases provided to the Sentencing Commission by the court. The merged data are then returned to the court where additional information is added to allow the court to develop tracking reports that are then emailed to select recipients (see Figure 1).

These reports, which are developed in a database outside the court's case management system, contain a list of eligible cases for a specific month, their status in MAGS (i.e., initiated or submitted), their status in the court's case management system (i.e., filed or not filed), and suggested next steps.⁹ The judge or his or her designee is expected to address all outstanding sentencing guidelines worksheets within 2 weeks of receiving the tracking report. The development and automation of the monthly status reports has reduced the amount of time and effort spent by court staff tracking the completion of sentencing guidelines worksheets.

MAGS Worksheet Status for Aug 2014: Judge A

Data as of: 9/16/2014

Summary Statistics:

of Dispositions requiring Worksheets: 3
of Worksheets Filed with Court: 2 (67%)
of Worksheets Submitted thru MAGS: 2 (67%)
of Worksheets Submitted thru MAGS and Filed with Court: 1 (33%)

MAGS Submitted; Worksheet Not Filed with Court

CaseID

C121###

Suggested Steps: If you have not saved a copy of the submitted guidelines worksheet, please contact the Maryland State Commission on Criminal Sentencing Policy to obtain a copy of the worksheet. Once obtained, have the judge sign the worksheet and file it with the Criminal Department.

MAGS Initiated but Not Submitted; Worksheet Filed with Court

CaseID C121##

Suggested Steps: Determine whether the filed copy of the worksheet is complete. If the filed worksheet is complete, access MAGS, determine if information on the (electronic) worksheet needs to be completed, then submit it through MAGS. If the filed worksheet is not complete, access MAGS and complete all of the pertinent sentencing-related information. Then, submit the worksheet and file an amended version with the Criminal Department per the MAGS Quick Tips instructions.

MAGS Submitted; Worksheet Filed with Court CaseID C120###

No additional steps required.

Figure I. Emailed report of sentencing guidelines worksheet status that displays summary statistics related to the completion of sentencing guidelines worksheets for eligible criminal cases within the designated month. Detailed information is provided to the recipient about the cases requiring attention and the suggested next steps. *Note.* MAGS = Maryland Automated Guidelines System.

To clarify the court's role in the sentencing guidelines worksheet process and with MAGS, more broadly, the court documented its internal business process (see Figure 2).

The internal business flow chart was used to inform the development of training documents and to communicate the roles and responsibilities of judicial and non-judicial personnel. Documenting the court's business process as it relates to the management of sentencing guidelines resulted in greater clarity, which promotes transparency and accountability.

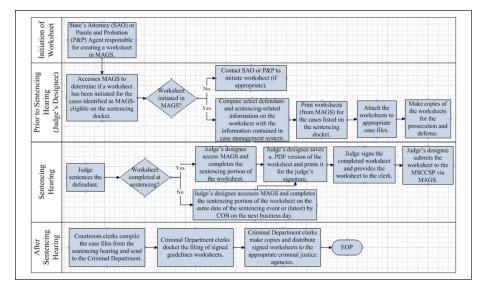


Figure 2. Court automated sentencing guidelines business process flow chart. Note. MAGS = Maryland Automated Guidelines System; MSCCSP = Maryland State Commission on Criminal Sentencing Policy; COB = close of business; EOP = end of process.

Several positive outcomes resulted from the development of these procedures. For instance, the judge's designee now plays an active role in the worksheet preparation process. By knowing what cases are guidelines-eligible and contacting the prosecutor or probation and parole agent when the worksheet has not been initiated prior to the sentencing event, the court limits the number of instances where the guidelines worksheet is not available at the sentencing hearing. Judges have also demonstrated their ownership of the process by scheduling a status hearing on occasion to find out why a guidelines worksheet for an eligible case has not been initiated after repeated requests to prepare it. While the level of ownership varies between judicial and non-judicial personnel, the court has supported the continued management and evaluation of this effort and has witnessed an increase in its completion of guidelines worksheets. In particular, the percentage of guidelines-eligible cases with a completed sentencing guidelines worksheet increased from 77% in 2012 (987 guidelines-eligible cases) to 95% in 2013 (1,100 guidelines-eligible cases). The percentage slightly declined in 2014 to 90% (1,073 guidelines-eligible cases); however, the 2014 worksheet completion percentage is a 13 percentage point improvement over the percentage obtained in 2012. ¹⁰ There are a number of factors that likely affected this change in completion, not the least of which was the role of automation and evaluation, which created opportunities for the pilot court to examine its sentencing guidelines worksheet process. The new process also provided an effective tool to assist the court in its administration of operations. The impact of the automated process would have been somewhat mitigated, if the judges and the court's leadership team had not been open to a different

way of doing business. Furthermore, embracing a performance management approach to the administration of justice helped ensure the successful implementation and maintenance of the automated guidelines system.

Lessons Learned

The implementation of the automated guidelines system provided the pilot court with an opportunity to re-examine, evaluate, and re-engineer some of its business operations. More importantly, through implementing this initiative, the pilot court began to actively manage part of its business process and build reporting procedures around it that monitor progress. Several key factors were identified to facilitate this change initiative at the pilot court:

- Documentation of the current and the revised business flow related to the sentencing guidelines worksheet process;
- Identification of a court employee/s to serve as the main point of contact for MAGS implementation at the court and to work closely with external justice partners;
- Identification by court leadership of who is to have access to the automated system, including but not limited to circuit court judges, law clerks, judges' administrative assistants/secretaries, and court clerks;
- Determination by the county administrative judge of the judges' designees (law clerks and/or administrative assistants/secretaries) who will have worksheet submission capabilities;
- Review of MAGS user manual and training videos prior to implementation of MAGS, as well as participation in an on-site orientation provided by Sentencing Commission staff;
- Notification by the county administrative judge to the state's attorney's office and community supervision investigators that all guidelines worksheets for the respective circuit court should be initiated and submitted via MAGS effective the selected start date; and
- Identification of internal technical support for the identification of guidelineseligible cases and the tracking of worksheet status among all guidelines-eligible cases.

The court found that as a result of participation in this pilot evaluation, collaboration with justice system partners such as the Sentencing Commission further improved judicial administration. For example, the Sentencing Commission's willingness to expand the scope of its initial project to include a component of interest to the pilot court shifted the court's view of this change initiative from one of imposition to one of partnership. The pilot court's continued engagement in providing feedback for subsequent versions of the automated system underscored its commitment and ownership of initiatives aimed at improving operations. Even though the impetus to change was initially driven by an external justice partner, it provided the court an opportunity to embrace a technology solution aimed at enhancing the information used to inform sentencing decisions.

Through this pilot initiative, the court identified opportunities to improve data exchanges among criminal justice partners. Ideally, and to the extent appropriate, data exchanges between the Sentencing Commission and Maryland courts will be automated and the data management systems interoperable. The Maryland Judiciary is in the midst of implementing a statewide case management system. Given that current data exchanges between the pilot court and the Sentencing Commission include several manual steps, automating these exchanges would improve the efficiency and effectiveness of the information management process. Future directions should support real-time notification to the court when a guidelines-eligible case did not have a worksheet submitted following the sentencing date.

Conclusion

Effective court governance requires ownership of policies and practices by individuals at all levels within the organization. Strong leadership and preemptive management are necessary ingredients for a court to excel (Reinkensmeyer & Gomez, 2003); however, such competencies may not be sufficient when attempting to improve the court, as an organization. A broader, system-oriented perspective that encompasses personnel at all levels of the court as well as justice system partners is needed to deliver quality services essential to fulfilling their critical roles and functions (International Consortium for Court Excellence, 2013; Van Duizend, 2010). In this perspective, court personnel at customer counters or in courtrooms have a sense of how their work supports the identified organizational values. A clear line of sight in which employees connect their work tasks with the strategic goals of the organization is an important aspect of optimal organizational performance (Washington & VanDeVeer, 2013). As courts engage collaboratively with justice system partners to develop and implement operational solutions that improve functioning, judiciary independence must be maintained. Maintaining independence among justice system partners is achieved through an understanding of each other's roles and responsibilities often obtained through effective communication. The working relationship between the pilot court and the Sentencing Commission benefited from both entities having an appreciation of the use of technology and information as a means to improve organizational performance.

The National Center for State Courts' (NCSC) High Performance Court Framework provides courts with a tool to achieve organizational success. The Framework places value on court capital. Capital embodies the court's organizational structure, technology, information, and human resources (Ostrom & Hanson, 2010). When applied to courts, the term capital connotes a core capability of the court whose value is realized in its ability to support the practical application of its mission. It is through sufficient organizational capital and the interplay with technology, information, and human resources, that the work of judges and staff can be arranged in the most efficient and effective way to achieve the defined goals (Ostrom & Hanson, 2010). For example, the pilot court's leadership developed the organizational capacity needed to engage and

succeed in technology-driven change initiatives. Over time, technical, programming, quality assurance, and analytic personnel were hired as the court transitioned to a more performance- and evidence-based organization. This shift in organizational structure and focus gave way to a more strategic and technical approach to management. A more strategic approach to court governance in which people, functions, and systems are aligned to a court's objectives and goals have been successful (Washington & VanDeVeer, 2013).

In order for courts to manage successfully, there needs to be a focus on establishing organizational capital. To establish a sufficient level of organizational capital around this automated initiative, the pilot court needed to align its personnel, processes, and technology (National Association for Court Management, 2014). Analytic staff within the pilot court worked closely with information technology staff to create documentation and define requirements to support the completion and monitoring of sentencing guidelines worksheets. As noted by Ostrom, Ostrom, Hanson, and Kleiman (2007), "Success of automated applications depends on whether people are willing to modify their behavior" (p. 87). To the extent that courts do not have performance- and technically oriented resources available or the ability to engage and align personnel toward a new way of doing business, the success of such initiatives may be diminished and short-lived. Leadership's support, whether explicitly or implicitly communicated, cannot be undervalued. For the pilot court, leadership agreed to participate in the MAGS pilot, evaluate its success, and support the tracking of worksheet completion. Furthermore, due to an understood value in performance measurement and management as well as effective collaboration with a partner agency, analytic and programming staff at the pilot court expanded the initial scope of the project to develop monthly worksheet completion reports.

Measurement plays a critical role in determining which operational practices are most efficient and effective. It ensures that the judiciary's administrative actions are based on evidence as opposed to outdated methods, anecdotes, or impulses. The High Performance Court Framework argues that performance builds upon established approaches to court administration by encouraging creative and innovative strategies to solve problems of importance to the court (Ostrom, Kleiman, & Hanson, 2011). Recent publications (Clarke & Jones, 2013; Cornell, 2014; Durham & Becker, 2011; Fazari & Holandez, 2014; McQueen, 2013; Washington & VanDeVeer, 2013) further underscore the relevance of measurement in informing and improving judicial administration. Effective judicial administration supports the legal and the operational (Tobin, 1999), and it is able to mobilize the organization in a way that translates the conceptual mission and vision into a practical reality. Criminal justice systems with leaders who value innovation as well as performance measurement and management approaches create opportunities to shift organizational culture. Of course, those opportunities are only capitalized on if critical resources are in place within the organization. Through the implementation and evaluation of the Sentencing Commission's automated guidelines system, the pilot court was able to gain a greater level of ownership in project implementation, and leadership was able to mobilize its resources in a way to improve upon the administration of justice.

Acknowledgments

The authors thank the Maryland Judiciary for supporting efforts to improve systems and processes through technology and research.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

- 1. Complete, statewide deployment is expected by April 2020.
- 2. Criminal Procedure Article, §6-216, Annotated Code of Maryland.
- 3. Code of Maryland Regulations 14.22.01.03F(4).
- 4. Additional information about the Maryland Automated Guidelines System (MAGS) is available online at http://www.msccsp.org/about_mags/
- Maryland circuit courts handle the state's more serious civil matters and criminal cases, as well as family and juvenile cases (Maryland Judiciary, 2015). More detailed information about Maryland's judicial system is available online at http://mdcourts.gov/publications/ pdfs/mdjudicialsystem.pdf
- An example of a sentencing guidelines worksheet is available from the Sentencing Commission in its MAGS User Manual 4.0, which is available online at http://msccsp.org/ Files/MAGS/MAGS_User_Manual.pdf
- 7. Identifying external funding sources to support technical assistance or consultative services when such technical and analytic resources are not available internally may be a viable alternative.
- 8. The accuracy of the worksheet information is also of critical importance; however, the technical aspects of guidelines range calculations and the capturing of all worksheet data elements are primarily the foci of the Sentencing Commission and beyond the scope of the court's role in this process.
- 9. The reports do not track judge compliance with sentencing guidelines ranges.
- 10. The analysis focuses solely on original dispositions of guidelines-eligible cases in a defined calendar year. Also, for purposes of this analysis, a completed worksheet is one that is either filed with the court or submitted to the Sentencing Commission.

References

- Clarke, T., & Jones, T. (2013). Practical time standards: Compliance based on business processes. In *Trends in state courts* (pp. 44-50). Williamsburg, VA: National Center for State Courts. Retrieved from http://ncsc.contentdm.oclc.org/cdm/ref/collection/ctadmin/id/1999
- Conference of State Court Administrators. (2001). Position paper on effective judicial governance and accountability. Retrieved from http://cosca.ncsc.org/~/media/Microsites/Files/ COSCA/Policy%20Papers/judgovwhitepapr.ashx
- Conference of State Court Administrators. (2005). Position paper on the emergence of e-everything. Retrieved from http://cosca.ncsc.org/~/media/Microsites/Files/COSCA/ Policy%20Papers/E-EverythingPositionPaperApprovedDec05.ashx

- Cornell, J. G. (2014). Court performance measures: What you count counts! *Court Manager*, 29(1), 12-19.
- Durham, C. M., & Becker, D. J. (2011). A case for court governance principles. Paper produced as part of the Executive Sessions for State Court Leaders in the 21st Century (2008-2011). Retrieved from http://www.hks.harvard.edu/index.php/content/download/67486/1242754/ version/1/file/ES-StateCourts-GovernancePrinciples.pdf
- Fazari, G. M., & Holandez, P. J. (2014). Reassessing the wheel: Outcomes of a BPR initiative on civil case management. *Court Manager*, 29(1), 5-11.
- International Consortium for Court Excellence. (2013). *International framework for court excellence*. Williamsburg, VA: National Center for State Courts. Retrieved from http://www.courtexcellence.com/~/media/Microsites/Files/ICCE/The%20International%20 Framework%202E%202014%20V3.ashx
- Maryland Judiciary. (2015). *Maryland's judicial system*. Retrieved from http://www.courts. state.md.us/publications/pdfs/mdjudicialsystem.pdf
- Maryland State Commission on Criminal Sentencing Policy. (2011). Annual report 2011. Retrieved from http://msccsp.org/Reports
- McQueen, M. C. (2013). Governance: The final frontier. Paper produced as part of the Executive Sessions for State Court Leaders in the 21st Century (2008-2011). Retrieved from http://www.ncsc.org/~/media/Files/PDF/Services%20and%20Experts/Harvard%20 Executive%20Session/NCSC-Harvard-009-McQueen-Final-Frontier-v001.ashx
- National Association for Court Management. (2014). A guide to technology planning for court managers. Williamsburg, VA: National Center for State Courts. Retrieved from https:// nacmnet.org/sites/default/files/Resources/2014TechGuide_WithCover.pdf
- Ostrom, B. J., & Hanson, R. (2010). Achieving high performance: A framework for courts. Williamsburg, VA: National Center for State Courts. Retrieved from http://ncsc.contentdm. oclc.org/cgi-bin/showfile.exe?CISOROOT=/ctadmin&CISOPTR=1874
- Ostrom, B. J., Kleiman, M., & Hanson, R. (2011). The high performance court framework. *Future Trends in State Courts*. (pp. 140-144.). Williamsburg, VA: National Center for State Courts. Retrieved from http://www.ncsc.org/~/media/Microsites/Files/Future%20Trends/ Author%20PDFs/Ostrom%20Kleiman%20and%20Hanson.ashx
- Ostrom, B. J., Ostrom, C. W., Hanson, R., & Kleiman, M. (2007). *Trial courts as organizations*. Philadelphia, PA: Temple University Press.
- Reinkensmeyer, M. W., & Gomez, L. J. (Eds.). (2003). Core competency curriculum guidelines: What court leaders need to know and be able to do. *Court Manager*, *18*(2), 5-63.
- Tobin, R. W. (1999). *Creating the judicial branch: The unfinished reform.* Williamsburg, VA: National Center for State Courts. Retrieved from http://cdm16501.contentdm.oclc.org/ cdm/ref/collection/ctadmin/id/1249
- Van Duizend, R. (2010). The international framework for court excellence. *Future Trends in State Courts* (pp. 186-190.). Williamsburg, VA: National Center for State Courts. Retrieved from http://www.ndcrc.org/sites/default/files/future_trends_2010.pdf
- Washington, E. T., & Van DeVeer, L. R. (2013). Sustainable court governance: The critical role of strategic management. Paper produced as part of the Executive Sessions for State Court Leaders in the 21st Century (2008-2011). Retrieved from http://www.ncsc. org/~/media/Files/PDF/Services%20and%20Experts/Harvard%20Executive%20Session/ Sustainable-Court-Governance.ashx

Author Biographies

Danielle P. Fox is the Coordinator of Research and Performance at Montgomery County Circuit Court in Rockville, Maryland. She assists in the implementation of court-wide initiatives,

informs the research agenda for the court, and performs a variety of analyses to inform judicial administration. She received a PhD in Criminology and Criminal Justice from the University of Maryland, College Park.

Hisashi Yamagata is a Senior Court Researcher with the Montgomery County Circuit Court in Rockville, Maryland. He examines the court's case processing performance and evaluates various court activities and programs. He received a PhD in Public Policy and Management from Carnegie Mellon University and obtained his postdoctoral training in Demography from the University of California, Berkeley.

Stacy S. Najaka is the Research Director of the Maryland State Commission on Criminal Sentencing Policy (MSCCSP) where she is responsible for oversight of the research activities of the Commission. She received a PhD in Criminology and Criminal Justice from the University of Maryland, College Park. Prior to joining the MSCCSP, Dr. Najaka served as a Research Associate at the University of Maryland where she directed a statewide evaluation of prevention and intervention strategies throughout Maryland, managed a randomized study of the Baltimore City Drug Treatment Court, and assisted Maryland's Division of Parole and Probation in improving the design and use of its data systems to enhance the supervision of offenders.

David A. Soulé has been the Executive Director of the Maryland State Commission on Criminal Sentencing Policy (MSCCSP) since 2004. Previously, he served as a research associate with the University of Maryland where he was a co-principal investigator and program manager for a statewide evaluation examining the influence of after school programming on juvenile delinquency and victimization. Dr. Soulé has served as principal author or co-author for published articles in a variety of academic journals including most recently in *Federal Sentencing Reporter, Justice Quarterly, Journal of Research in Crime and Delinquency, Criminology and Public Policy, and Columbia Law Review.*