In the Modern Court, It's Not "Business" as Usual Case Study

The notion of efficient justice is a discomforting one. Unlike a business, a court's obligation is to provide a just result without having to worry about costs, shareholder value, or time pressures. In a recent article in the American Bar Association's *The Judges' Journal*, entitled "Keeping Courtrooms Open in Times of Steep Budget Cuts," Judge Lee Smalley Edmon, the presiding judge of the Superior Court of California, County of Los Angeles, points out that "… justice is not a luxury …[and] the opportunity to plead for the government to right a wrong is not to be funded through user fees." Judge Edmon further notes that the significance of the judicial branch's work is far out of proportion to its "paltry" funding level.

Doing More With Less

In the past, the courts, especially the federal courts, had some immunity from the ups and downs of the economy, but that may have changed forever. Economic constraints, federal and state revenue shortfalls, and budget concerns have forced the courts to look for new ways to reduce costs and balance budgets. At the same time, the courts face a strained climate of increased caseloads, lack of judges, and reduced court personnel. One must ask how can courts do more with less, and what suffers as a result?

Chief judges and court administrators are looking at various strategic planning scenarios to move forward in a very tough economic environment without increasing waiting periods or sacrificing just results. Despite their best efforts, however, backlogs are growing in some courts. Backlogs and the movement of cases through courts are often viewed as the bellwethers of court efficiency and both state and federal judges are very aware of this fact. The productivity of courts and judges is measured in part on the disposition of cases, including how many cases have moved through the system and have resolved each year. Although this may not be the most meaningful measure of court efficiency, it is an administrative yardstick by which many judges and courts are assessed.

Data-Driven Decisions Can Maximize Court Efficiency

We realize there can be no tradeoffs between process efficiencies and the full and deliberate pleading of a case. However, through data-driven modeling and applying lessons from years of historical data, it is possible to improve effectiveness in areas such as court dockets that do not infringe on the court's main mission.

Historically, courts have not monitored business process flows or analyzed their own docket data for business intelligence, but doing more with less starts with understanding available information. By taking an enterprise view, courts can begin to gain a line of sight to the authoritative data sources that will enable crisper, data-driven scheduling and management decisions. With the adoption of e-filing at

the federal and some state levels, data collection and analysis can become part of the solution for the judiciary. Connecting data with other mediums and tools can bring to the courts efficiency-driving insights not previously considered.

Data-Driven Tools

One way the courts can better understand their workflows and docketing systems is through data-driven models, robust scheduling algorithms, and business intelligence. Using these tools, the judiciary can create a customized solution to produce efficiencies in docketing and decision-making, and relieve court management of some of its burdens.

To begin analyzing data from courts, we need to identify the issues that impact the timely movement of cases through the system. Examples of these issues include: case complexity, lawyer experience, judge experience, high technology court requests, local and chamber rules, number of pre- and post-trial motions, complexity of evidence, and scheduling and docketing systems. Using these characteristics and two years of civil court data, The MITRE Corporation, a not-for-profit organization chartered to work in the public interest, created two data-driven models for scheduling and docketing efficiency, and simulated a smaller week-to-week variation in case load. Our study showed that docket volatility could be reduced.

We created a docket-scheduling model that makes use of algorithms leveraging the following data characteristics: case type, case time estimates, and probability of pretrial resolution. These characteristics, which are both present and discrete in all

court data, drove the model. We ran our initial simulation using judge availability in hours each week.

Results

The results of our data-driven model showed that by shifting the measure used to track docket efficiency from case type to case hours, the court would be able to work even more efficiently and free up valuable time on the court calendar that could be used for administrative matters or for additional cases. .

In our second version of the model, we are using court information to simulate dockets several months into the future and creating more robust docket scheduling algorithms. With input from judges and staff members, the model will be able to shift weekly capacity to balance caseloads. In addition, we have begun to analyze court data using a fourth characteristic – distribution of actual time. This fourth characteristic will allow the court to visually see how well estimates made prior to a trial match with reality. This example of business intelligence and analytics will allow court decision-makers to schedule cases more efficiently.

Benefits

Case Study results show that data-driven business intelligence used in modeling can translate into several benefits for the court as a whole. For example, the court could potentially be ranked higher relative to clearance rates if it scheduled more cases in those available weeks. Alternatively, those freed hours could be used for judge

administrative time. In addition, the data analysis itself can show the courts more detail related to cases. Docketing decisions can also become easier with a stable caseload. Finally, if there is a new court scheduling focus, the model itself can be easily changed to target a different constraint.

Courts are Unique

Because each court is unique, process standardization can be difficult, but courts already create and store data that is insightful to court administration in general. Information on case type, estimated case time, motions, hearings, etc. is recorded, but how can modern courts use this data to do more with less? Data optimization is one area where the courts can be like a business without compromising their mission of justice. Indeed, improving court efficiency by applying business intelligence serves these goals. As courts adapt, the best solutions will be decided by talented individuals who have access to data and can apply it in the context of their own specific situations and experiences.

Scaling Success

We have shown that court data can be modeled, data-driven modeling can maximize court efficiency, and enhancing efficiency does not require sacrificing judicial processes. Models like these can be introduced gradually, and their implementation does not require a massive system overhaul. Such an effort can promote knowledge sharing among courts to help them collectively carry out their mission. In the end this likely will not be the only solution, but it may help stem the tide

until the economy improves and funding levels get back to normal.

Case Study Participants

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