### Annex 3B

# Using data and technology to improve court performance and to strengthen alternative dispute resolution

## Using data to reduce court adjournments

An adjournment describes the situation in which a judge orders that court proceedings be delayed to a later point in time. There are many sensible reasons why adjournments occur—for example, the unavailability of a key witness, the need to gather further evidence, or the need to set aside time to resolve certain issues preliminary to the main dispute. However, added together, adjournments can become a substantial source of delay and wasted cost, particularly in emerging economies.<sup>1</sup>

In partnership with the Kenyan judiciary and McGill University, the World Bank team supporting Data and Evidence for Justice Reform (DE JURE) as part of Development Impact Evaluation (DIME) used the large amount of data produced by administrative courts in Kenya to promote a reduction in court adjournments, which were creating large case backlogs. The partnership team examined key performance indicators on each court to identify the top three reasons for adjournments. The team's one-page feedback reports included the performance information and conclusions. The team then studied whether this simplified, action-oriented information could reduce adjournments and improve judicial performance.

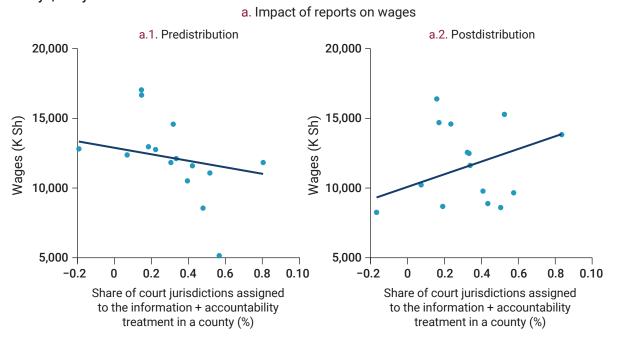
In a randomized controlled trial across all 124 court stations in Kenya, the team compared the impacts of sharing the feedback reports only with judges and supervisors and sharing the reports with court user committees as well. The latter were acting as an additional accountability mechanism. The team found that sharing the feedback reports with the court user committees lowered the number of adjournments by 17 percent over a four-month period and increased the number of cases resolved. It then concluded that the reports are more effective if both the tribunals and the court user committees receive them.

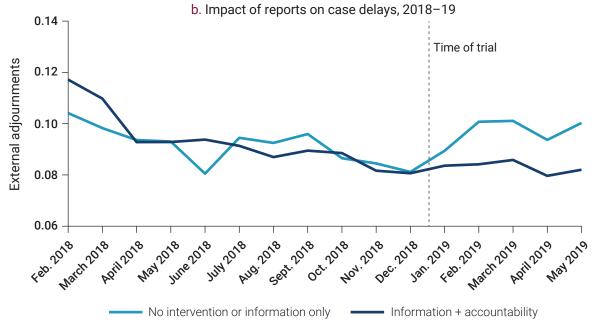
Sharing performance information with courts may be effective in improving efficiency, but it is particularly effective if the information is also shared with court stakeholders and civil society. The results were viewed as proof of the concept that the way data are utilized to provide information to judicial actors can reduce adjournments and increase the speed of judicial resolution and that this has a downstream impact on the economic outcomes among citizens and firms, including wages (figure 3B.1).

In Chile, where the COVID-19 pandemic has led to an increase in adjournments and case backlogs, the World Bank's DIME DE JURE team has been examining whether the way information is presented to courts matters. In partnership with the Department of Institutional Development of the Chilean judiciary, the team has been using the electronic Quantum platform to encourage court managers to identify ways to improve court performance. Quantum displays comprehensive indicators on court performance, such as the number of cases filed, the case clearance rate, the average duration of cases decided within one month, and the percentage of cases heard. It also allows users to compare performance across courts in a same jurisdiction. Following the launch of Quantum in 2018, take-up was limited: 20 percent of court managers never logged on, and for those who did there was an average of only 20 log-ins per court manager over 14 months. The platform was technologically well developed and rich in information, yet it was unclear what impact the platform had on the management and efficiency of courts.

During the research, the DE JURE team evaluated the impact of the new information on judges and court administrators in family courts in Chile by embedding an experiment in the Quantum platform. During the experiment, the team tested three new versions of the dashboard used to provide information in different ways to the courts: (1) one-third of the courts received the control or placebo dashboard,

Figure 3B.1 Impacts of sharing court performance feedback reports on wages and case delays, Kenya





Source: World Bank, DIME DE JURE (Development Impact Evaluation, Data and Evidence for Justice Reform) project, "Data Science for Justice: Evidence from a Randomized Judicial Reform in the Kenyan Judiciary."

Note: Panels a and b show the impact of the dissemination of the one-page feedback reports in the randomized controlled trial in Kenya. Panel a shows the impact on the wages of individuals in the Kenyan Continuous Household Survey. Panel b shows the impact on case delays in the 124 court stations measured. The trial (in January 2019) involved providing the one-page reports only to judges or to judges and court user committees (so that the judges were, in effect, accountable to others), and correlates with a reduction in the volume of external adjournments, compared to either doing nothing or only providing feedback to judges. Judge-only dissemination is labeled "information," and judge plus court user committee dissemination is labeled "information + accountability."

which shows statistics on tribunal performance, without any comparisons or data-driven pop-ups; (2) another third received access to a new, improved dashboard that summarizes the main statistics and compares individual courts with a reference group of courts; and (3) the remaining third received access to the new dashboard, but also to a pop-up that highlights three performance indicators, one of which shows the tribunal that performed the best during the previous month on each indicator (that is, revealing its main strength), while the other two indicators show which tribunals had performed the worst (that is, revealing its main weaknesses) during the previous month relative to similar courts.

Preliminary results show that the new dashboard with or without the pop-up for comparison improved court performance according to key efficiency indicators, such as the rate of the timely resolution of cases and the case clearance rate. The pop-up that compared the top and bottom areas of a tribunal's performance relative to the performance of other courts was associated with improvements that were similar to the improvements generated through the new dashboard, although it was also associated with a reduction in log-ins into the platform. The team concluded that this reduction in log-ins indicated that tribunals prefer that they not be compared with other tribunals, especially on indicators showing areas in which they underperform. Overall, the experiment proved that the new, redesigned dashboard improved the efficiency of family courts in Chile. It also demonstrated that the way performance information is displayed and shared with courts can directly influence the timely resolution of disputes among parties.

## Using technology to improve court-annexed mediation

Court-annexed mediation (mediation provided by courts as part of court proceedings) promises to speed up the resolution of disputes, reduce the cost of access to judicial institutions, and provide space for parties to find creative solutions to their grievances. However, there is limited research on the potential of technological innovations to enhance the efficiency and productivity of mediators and the downstream impact on the resolution of disputes between parties.

In partnership with the Kenyan court-annexed mediation team, the World Bank's DIME DE JURE team is testing Cadaster, an open-source, web-based data management and analytics platform that aims to support the decision-making process in court-annexed mediation. In addition to an Excel-like user interface for data structure definition and entry, Cadaster contains a dashboard for real-time performance monitoring that is able to issue alerts if metrics cross preset thresholds. The platform allows any mediation team to monitor mediator performance across the country. The data it produces can guide management decisions on mediator accreditation and the assignment of disputes to mediators.

In many mediation systems, mediators are assigned to cases randomly by managers or administrators. Mediator performance in case resolution is not tracked in any consistent, systematic manner. However, if a mediator is observed to be particularly successful in certain types of cases, machine learning has the potential to be more accurate in assigning such cases to the mediator. Cadaster includes this innovative feature. Using historical information on each mediator and their past performance across different types of cases, the Cadaster algorithm can determine which mediator would be better suited to take on a particular case. By relying on technology and machine learning, Cadaster can thus improve the capacity of parties to reach reasonable agreements and the timely resolution of disputes.

In partnership with the Ministry of Justice and Human Rights of Peru, the DE JURE team has been testing the impact of another web-based, data-driven platform, the Conciliator App, which is aimed at enhancing the efficiency of individual mediators and the mediator process in Peru. The Conciliator App provides easy-to-use, in-depth visual and textual analysis of the legal services offered by mediation centers and informs mediators about their performance. Users of the app, who include mediators and supervisors, can view key metrics on the performance of individual mediators, mediation centers, or

the entire network of mediation services through dashboards. Mediators can also use the app to share questions and strategies with their colleagues on how to handle a particular type of case. Providing mediators with rolling performance reviews can increase the significance of outlier characteristics, such as unusually lengthy average resolution times relative to those of colleagues. The reviews are an effort to raise the awareness of mediators of their own abilities, making them better self-managers who can proactively address shortcomings, disseminate effective strategies, and prioritize casework that optimizes their limited time. Furnishing managers with real-life, granular data on employee performance can enable efficient allocation of resources and assignment of tasks.

Through randomized controlled trials, the DE JURE team is examining the impact of these apps on the efficiency and quality of mediation. These innovations have the potential to improve the performance of mediators and the success of alternative dispute resolution mechanisms throughout the world. Courts and mediation agencies could use the technology to reduce the number of cases that are backlogged in courts, improve the efficiency with which such cases are resolved, and raise the satisfaction and economic outcomes of the parties involved in disputes. These opportunities are particularly promising because of the increased availability of administrative data, which make them feasible in many countries.

#### Note

1. Laws (2016).

# Reference

Laws, Edward. 2016. "Addressing Case Delays Caused by Multiple Adjournments." GSDRC, Australia. https:// assets.publishing.service.gov.uk/media/57a9c983e 5274a0f6c000006/HDQ1374.pdf.

#### **Notes**

- 1. FSB (2011).
- See UNCITRAL (2021); World Bank (2021). The UNCITRAL document is a draft, and the final is expected soon. See UNIS (2021).

# References

- FSB (Financial Stability Board). 2011. "Insolvency and Creditor Rights Standard." FSB, Basel, Switzerland. https://www.fsb.org/2011/01/cos\_051201/.
- UNCITRAL (United Nations Commission on International Trade Law). 2021. "Draft Text on a Simplified Insolvency Regime: Note by the Secretariat." Document A/CN.9/WG.V/WP.172, United Nations General Assembly, New York. https://undocs.org/en/A/CN.9/WG.V/WP.172.
- UNIS (United Nations Information Service). 2021. "UNCITRAL Adopts the Legislative Recommendations on Insolvency of Micro and Small Enterprises." Press Release UNIS/L/317, July 22, 2021. https://unis.unvienna.org/unis/en/pressrels/2021/unis/317.html.
- World Bank. 2021. "Principles for Effective Insolvency and Creditor/Debtor Regimes." World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986 /35506.