How Digital Justice Is Transforming the Justice System

Justice systems around the world are moving away from legacy IT systems and paper-based procedures to embrace digital technologies. This transition to so-called digital justice is redefining the ways in which justice is delivered. Unburdened by the old processes and procedures, the justice system of tomorrow promises to be more efficient, fairer, and less expensive.

Legal systems around the world

Microsoft has made every attempt in this article to respect the various legal systems practiced around the world, including common, civil, religious, and tribal law. Furthermore, Microsoft has defined "justice" and the "judiciary" as being comprised of the Prosecution Service and Court Service. In the case of the Court Service, we respect the existence of lower or magistrate's courts, family and juvenile courts, high or county courts, supreme and arbitration courts, and international courts of appeal, such as the European Union.

Why digital justice?

Today's courts are turning to digital justice to help them overcome an array of challenges facing the legal system. Among the most serious of these challenges are the following:

Limited resources. Court systems are strained to the breaking point as they take on more cases with fewer prosecutors, clerks, judges, and employees. At the same time, they must operate under conditions of increasingly tight austerity. The result has been a huge backlog of cases. For example, the US immigration court system's workload has increased **146 percent** over the last 10 years, so that now the average pending time per case is 627 days. Moreover, while criminal cases in developed countries can take weeks or months to conclude, the situation may be even worse in other areas of the world, where the accused can remain in custody for a year or more, guilty or not, before going to trial.

Overuse of paper. The vast majority of court systems are still paper-based. For example, judicial systems in the United Kingdom generated a million pages of documents a day—365 million pages a year—before moving recently to a digital justice platform.

There are huge costs and inefficiencies in producing, transporting, and storing such quantities of paper. Preparing a bundle of documents for trial, and then making copies of the bundle, requires significant staff time. It's also difficult to move pages and add new material if additional evidence comes to light.

Furthermore, a reliance on paper can impede the administration of justice. In some countries, for instance, court documents must be reprinted multiple times, resulting in hundreds of pages. A single missing or unreadable page can lead to cases being adjourned for lack of evidence.

Transparency. In many jurisdictions, paper-based procedures create opportunities for corruption. Charge sheets and other documents may be tampered with, or simply go missing. Missing documents may result in cases being thrown out before the guilt or innocence of the defendant is determined.

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Other digital justice innovations

Besides the outcomes mentioned above, digital justice is redefining the future of the court system in other ways. Here are some examples:

Remote working and real-time collaboration. Using digital technology, attorneys and judges can access information remotely, including online legal documents, case bundles, case libraries, and up-to-date schedules of hearings, as well as communicate and collaborate in real time. This kind of remote interaction between judges and attorneys is happening already in places such as Israel and the Netherlands.

Electronic scheduling. Automation tools contained in Microsoft Office or Office 365, such as Outlook and Skype for Business, enable court staff to perform a range of scheduling functions, including: booking court rooms, reserving audio equipment, reserving cells, ordering refreshments, and alerting prison officials to transport offenders. Moreover, these tools are also used to schedule judges, jury members, court clerks, police, witnesses, and legal

teams for upcoming court dates, and to send reminders of appointments. Easier scheduling and automated reminders means fewer court adjournments due to scheduling conflicts.

Better sentencing. Digital justice can help judges make more appropriate sentencing choices when sentencing defendants with similar profiles. For example, perhaps data reveals that 95 percent of people in a specific income bracket won't pay a fine. For these defendants, community service might be a more effective sentence. Digital tools also allow judges to see a historical record of sentences for similar crimes, helping ensure that their sentencing is in line. Backed by data, not intuition, judges can more confidently apply the correct penalties.

Online dispute resolution (ODR). ODR offers a new way to resolve civil claims and disputes. By using an online platform outside the traditional court system, ODR avoids burdening courtrooms with expensive trials. Rather, a judge or mediator and the two parties resolve the case remotely, using, for example, Skype for Business.

ODR is already supported in some Nordic countries, where it operates through the same online portal that citizens use to pay taxes, make social security requests, and interact with the government in other ways. Expansion to other regions is anticipated in the years ahead. While ODR typically involves civil claims under $10,000 or so, over time these alternative courts could see cases involving larger amounts.

For participants, the appeal of the ODR platform is that it's not necessary to hire an expensive attorney or spend weeks or months in a courtroom trial. As long as one can get online, ODR provides speedy, low-cost access to justice.

Automated archiving and retrieval. A significant amount of time is spent by prosecutors, legal teams, court clerks, magistrates and judges searching for, analyzing, and storing legal documents. With technologies such as SharePoint, Dynamics CRM, SQL Server and Power BI, these processes can be automated and accelerated, resulting in faster and more informed decision-making. In addition, companies such as ZyLab, a Microsoft Partner, are creating digital knowledge

platforms for both law firms and government entities which make it easy to obtain, view and use information.

Online, interactive citizen service portals. Online portals are giving citizens new and better ways to interact with the justice system. Through a portal, for example, court staff can provide information and advice, a means for paying fines and fees, and a list of opening hours, while citizens can make appointments for hearings for minor offenses.

Portals with these capabilities are already in use in the UK, the Netherlands, and across the Nordic region. In Argentina, the Supreme Court of Buenos Aires worked with a local Microsoft development partner to create a portal called the Augusta System. Based on the Azure cloud platform, the Augusta System allows users to upload or download legal documents, with digital signatures verified by Windows Server and Azure Active Directory. Moreover, users can search for files using Azure Media Services and download or stream videos related to their case. Launched in 2016, the Augusta System already serves 200,000 users a month and promises to improve court efficiency dramatically in the years to come.

Automated back office and shared services. Back office and shared services can benefit from cloud and on-premises solutions built on Microsoft's Dynamics CRM and ERP platforms. Such services include financial and accounting systems as well as human resource management, procurement, training, and recruitment functions.

Physical and cyber court security. Court IT systems and legal records need to be protected from cyber attack, while court buildings, staff, attorneys, case participants and visitors need physical protection. Digital justice makes this protection available, thanks to surveillance cameras, fingerprint and facial identification systems, x-ray machines, tracking devices, the labelling of documents, cyber security policies, and other solutions.

Virtual courts. Does a police officer really need to take hours off work to give five-minutes' worth of testimony? Should an expert witness have to fly across the country for only a brief appearance on the stand? These are the kinds of questions driving the rise of the virtual courtroom. While remote testimony has been possible in some cases—for example, in a situation where being in the courtroom would be too upsetting for the witness—digital justice has the potential to make remote testimony routine.

The impact of the virtual courtroom would be felt in several areas. For example, the pace and quality of justice would improve. Thousands of court cases are adjourned today because police officers weren't available to give testimony. With a virtual courtroom, securing this testimony would be much easier, and more trials could proceed to their conclusion.

Court systems would also save money by not having to transport as many prisoners to various hearings and trials. In the UK, for example, prisoner transportation is an astonishing 10 percent of the annual Ministry of Justice budget, so the potential for savings is significant.

With the rise of virtual courts, the courthouse itself could become a source of savings. Many of these buildings are old and expensive to operate. By reducing the need for in-person court visits, virtual courts can make it possible for governments to sell or repurpose courthouses.

What's holding back the growth of digital justice?

Although there is tremendous momentum behind it, digital justice still faces hurdles. In some countries, the rule of law is an impediment. For example, certain digital technologies may not be allowed in the courtroom, meaning that only film photography would be accepted as evidence.

A court system's infrastructure matters as well: without good Internet connectivity and Wi-Fi, many digital tools simply won't be available.

How well a court's legacy technologies can integrate with 21st-century systems also plays a role in a successful transition to digital justice. It's worth noting that commercial courts in countries such as Dubai and Qatar, which built a modern digital infrastructure from scratch, are in a stronger IT position than courts in places that are saddled with legacy systems.

Finally, it can be a challenge getting judges and other court staff trained in the use of digital technologies. If the training is underfunded and the transition poorly managed, the adoption of digital justice may be delayed.

Conclusion

The rise of digital justice offers courts the ability to serve justice with greater efficiency and transparency, at lower cost, while making justice more accessible to all. For the courts themselves, for attorneys, plaintiffs, defendants, and other participants in legal cases, and for a society dependent on a stable, well-functioning legal system, digital justice promises to be a welcome transformation indeed.

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