



Modernizing transcription and media management in a metropolitan court system

How Marion County, Indiana, transformed its system of recording trials and hearings and generating court transcripts.

The courts of Marion County, Indiana, serve a populace of nearly 1 million. Preserving evidence is one of the court system's most important duties.

A recent update of the courts' records management system made critical court operations more efficient and user-friendly for legal professionals and the public. Moreover, Marion County's experience during the COVID-19 pandemic illustrates the potential for cloud technologies and modern software to add new capabilities like remote trials and hearings.

The challenge: Simplifying elaborate processes

Marion County includes Indianapolis, the largest city in the state. Marion County Superior and Circuit Courts handle the county's civil and criminal cases. The courts' five-person IT team serves 82 judges, 300 staff, and 250 probation officers.

Like many of its peers throughout the U.S. justice system, Marion County has modern courtrooms with cameras and microphones to record the lawyers, witnesses, and judges who participate in court proceedings.

Operating a de facto multimedia studio — and storing and retrieving media files — creates a host of complexities for Marion County. Digital archives use a mishmash of file formats and storage media. Retrieving files often requires

considerable manual effort, along with specific hardware and software.

Unlike the scenes from TV legal dramas, few modern courts have stenographers typing testimony in real time. "There is a serious shortage of stenographic reporters around the country and Indiana is no exception. We have known for more than a decade that the challenge would need to be solved with technology and well-trained staff," says Amitav Thamba, chief technology officer for Marion Superior Court. Over the past decade, courts have shifted instead to storing testimony in databases of digital audio and video files. This adaptation has only exacerbated a shortage of court-reporting talent.

In 2015, a transcription backlog forced Thamba to find a creative answer in digital technology. As in most courts, Marion Superior Courts had tools to record testimony and store it in computers. But the courts also needed ready access to specific passages of spoken testimony. Digital media files contain no searchable text. Trying to manually find specific words in digital recordings is prohibitively time-consuming.

Transcriptionists create written records of testimony. Marion County manages the digital recordings and hires external companies for transcription and proof-reading. That's what Marion County was doing in

2015, but it needed more than a digital solution to its storage, retrieval, and transcription issues. "The objective was a more efficient operational functioning of the court," Thamba says.

Working with a company called TheRecordXchange, or TRX for short, enabled Marion County to move toward a more productive and efficient future. TRX specializes in helping courts automate complex workflows, making it easier to store and retrieve digital media and manage court transcription requests. TRX works with Amazon Web Services (AWS) to provide cloud-based archiving, playback, and the creation of automated text from the digital recordings. While these AI-based transcripts are not accurate enough to generate certified court documents, they are essential to finding words and phrases within testimony.

Thanks to TRX and AWS, Marion County had the technologies it needed when the COVID-19 pandemic hit. Remote courts became an everyday reality in the span of just a few weeks. "I really didn't think we would have remote court hearings in my lifetime," Thamba says. "We leaped at least a decade."

The solution: SaaS architecture, streaming media, cloud archives

Marion County Courts, in partnership with TRX and AWS, implemented a

robust records and transcript management solution.

"TheRecordXchange has significant experience in transcript production and overall court record management," Thamba says. "Their workflows and user interfaces were perfectly suited for what we needed to do." TRX also supplied the necessary training and support, Thamba adds.

The solution included:

SaaS architecture. TRX's software is hosted on AWS, so the county doesn't need dedicated, on-premises computers or applications. TRX and AWS keep the software current and secure. "Because the TRX solution was completely cloud-based, there was really no technical implementation," Thamba says. "Once we had a signed agreement, we were up and running in just a few days."

Cloud archives. TRX regularly transports all court recordings and related metadata to the AWS cloud, whose archives provide essentially infinite storage capacity.

User portal and streaming media. The court's customized web portal lets users request transcripts and recordings online. TRX designed a streaming application that allows anybody to listen to a recording of court proceedings on any internet-connected device. Recordings manually uploaded are processed to enable streaming of the original recording while preserving distinct characteristics of court recordings. This includes multichannel playback and the display of recording times and recess breaks. Notes taken in the courtroom are displayed with the recording and synchronized for searching and scrolling.

Learning automation. TRX's VoiceCopy application uses language-recognition algorithms to generate automated transcripts. This artificial intelligence-driven capability creates text translations that help users find any section of a media file and replay the content instantly.

Format standardization. TRX's platform is format-agnostic, allowing Marion County to process audiovisual files in multiple formats from any common courtroom digital recording vendor. During the pandemic, the courts could pull in multimedia streams from multiple providers like Zoom and Cisco WebEx.

Commerce. With digital commerce capability, Marion County allows court reporters to provide cost estimates, pay deposits, and complete transactions within the platform.

"AWS was the only cloud provider that could accommodate this combination of storage, commerce, streaming media, and learning automation," says Steve Townsend, CEO of TheRecordXchange. "We had conversations about other providers. But we stayed with AWS primarily because our developers were quite happy with the services they offer."

The results: More efficiency, fewer complications

TRX and AWS enable robust multimedia functionality that makes the Marion County court system significantly more efficient. The solution also makes life easier for lawyers and transcriptionists. "Agencies and individual attorneys who order transcript have a much better experience by moving everything online," Thamba says. "And

the court began to collect critical data that would help us with budgeting and operational planning."

The county handles some 200 to 300 digital document requests per month and has fulfilled nearly 10,000 requests since implementing the TRX system. "The simplicity and speed with which attorneys and members of the public can get audio has made the service really popular," Thamba says.

Because audio feeds have built-in speech-to-text capability, there's less pressure to produce text transcripts, which lightens the load on court personnel. Archiving in the cloud also is a major money-saver. "On-premises storage is horrendously expensive," Townsend says, because hardware must be purchased, installed, maintained, and replaced.

The county is also developing a more comprehensive solution based on TRX's Enterprise software, which digitizes and automates media storage and retrieval and makes searchable text readily available.

The goal is to move every recording into the cloud, where it gets digitized, indexed, and tagged. "TRX Enterprise will allow context-based searching," Thamba says. This means a user can simply enter a word or phrase into the application's search engine, and AI-based algorithms will help the user find exactly what they're looking for.

Finally, Marion County Courts have powerful multimedia tools to stay in business the next time disaster strikes.

"Our court-recording solution went from four channels and no video to up to 16 channels of audio, five video streams, a presentation/evidence stream, and a remote witness part-time stream," Thamba says.

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