

MY TECHNOLOGY CAN...

MY TECHNOLOGY CAN... SAVE OFFICERS HOURS ON EVERY SHIFT

DRAGON SPEECH RECOGNITION TECHNOLOGY LETS OFFICERS FILE HIGHER QUALITY REPORTS, FASTER, FROM THE FIELD, GIVING THEM MORE TIME TO RESPOND TO CALLS.

★ MIKE WAGNER

In the winter of 1999-2000, I joined the Boulder County (CO) Sheriff's Office as a deputy. Even then, Boulder County SO had a reputation for keeping ahead of the technological curve.

By the early 1980s, Boulder County deputies were dictating their reports to microcassettes, which they would drop in an envelope, staple to their paperwork, and pass to a dedicated pool of typists. Our typists would transcribe the reports and our officers would review them a few days later.

As I worked my way up through the ranks, I saw the value of this approach first-hand. Before long, I could dictate the equivalent of a seven-page DUI report while driving between the jail and the post office to mail the blood kit downtown, several miles away. I could capture the information while it was fresh in my mind, and I could do it with my eyes on my surroundings in lieu of sitting in an office hand-typing the report.

Today as division chief, my responsibility isn't just to serve the public, it's to support and serve our field personnel. And as we embarked on a project to upgrade our legacy RMS, we saw an opportunity to improve our dictation and transcription processes too. With recent advances in speech recognition technology, we could automate the resource-intensive task of transcription, redeploying non-sworn employees to other records management roles. Doing so would reduce the cost of our RMS replacement project, while substantially accelerating report creation.

THE PILOT PROGRAM

We researched our options and decided that Dragon for law enforcement from Nuance was the only viable utility. Nothing else had the level of functionality and customization we needed to support the practical realities of day-to-day law enforcement.

So, we designed a pilot that would thoroughly test the technology's potential impact. We selected some officers who were great at dictation and others who were still mastering the art. We chose some for their computer literacy and others for their technophobia. We included detectives, administrators, and a range of patrol shifts to ensure we were testing Dragon in multiple locations and scenarios on multiple desktop and mobile platforms.

Every participant was issued a Nuance PowerMic—a microphone with PC-mouse capabilities—they could plug into their desktop or MDC and talk into just like any other dictation device. But now their words would be transcribed by the Dragon software as they spoke.

Type vs. Talk



Using Nuance Dragon speech recognition technology, the Boulder County (CO) Sheriff's Office saved a massive amount of labor that would have been spent on typing reports.

NEARLY UNANIMOUS FEEDBACK

Any cop will tell you, give a group of us something to vote on and we'll never vote in the same direction. But when we asked our pilot group whether we should go ahead and implement Dragon, the answer was virtually unanimous. They told us, "Yes. This is a great tool, and we need it yesterday."

Every single member of the pilot program told us that Dragon was helping them complete reports faster. The majority were saving one to two hours each shift, and in some cases, they were saving as much as three to four hours.

Field personnel said they were able to spend more time in the field. Desk-based officers said they were able to review more cases in a day. Half of all participants told us the quality of their reports had increased, and officers who used Dragon in a cruiser reported feeling safer because when they had

to run a license plate, the software let them run it without needing to look at their MDC.

TIMELY DEPLOYMENT

In January we took our pilot group's advice, deploying Dragon speech recognition technology to our most report-intensive roles. It proved a timely decision.

When Coronavirus hit, social distancing saw us running at half-staff, getting creative about who was in our office and when. If we had still been reliant on manual transcription, we simply wouldn't have been able to keep pace. With Dragon, however, our officers could dictate and submit their own reports electronically, without needing to call in at HQ. Even in these unusual and challenging times, we've been able to identify significant benefits from our implementation of Dragon. In line with our original business case for the technology, we've been able to shift two non-sworn employees from transcription to other records functions, minimizing costs within our RMS replacement project. We're also seeing more detailed, higher quality reports and faster workflows. That's because our officers can immediately check and fix the reports they've dictated, rather than having to wait to review a manual transcription.

And for dictation veterans like us, the immediacy of Dragon's transcription has another advantage. Teaching our recruits to dictate used to be slow, labor-intensive work. Now that they can see a report taking shape in real-time, our people are mastering the skill much more quickly.

CUSTOMIZATIONS

While some Dragon features—like its ability to help officers run license plates—are designed specifically for law enforcement applications, its most important asset for us has been its flexibility. One of our first customizations was to update Dragon's dictionary to recognize and accurately transcribe our local street and place names. We just exported the information from our CAD system, imported it to Dragon, and pushed the update to every user in a single shot.

A death investigator—a real power user, since his involvement in the pilot—has also created a Dragon tem-



Our officers spend less time doing paperwork and more doing what they joined up to do, protecting and serving. Mike Wagner, division chief, Boulder County SO.

plate for conducting autopsies and shared it with his colleagues. Now they can all call up the same form with a voice command and start dictating directly into it, saving everyone time and keeping reports consistent.

SHOULD YOU USE DRAGON?

As our officers get more confident with the technology, Dragon's impact on efficiency keeps on growing. These days our cops don't just dictate reports. They dictate notes, emails, and everything they can.

The case for implementing Dragon in your agency may be even more clear-cut. So far, we've used Dragon to dictate over 2.7 million words at an average of 128 words per minute.

That's 15 days spent creating reports that at an average typing speed of 40 words/minute would have taken us more than 47 days, nearly seven full weeks of officer time.

Right now, making the case for any investment can be a challenge. But in my experience, it's often easier to secure funding for new technology than for extra officers on the street. And, in effect, that's exactly what Dragon speech recognition technology gives us. Our officers spend less time doing paperwork and more doing what they like me joined up to do, protecting and serving our community. ☯

Mike Wagner is a division chief for the Boulder County (CO) Sheriff's Office.