

Spending more time on patrol and less at the desk.

Chatham-Kent Police Service revolutionizes report process with 80% reduction in report time using Nuance's voice recognition technology.

Challenge

- Time-consuming transcription process resulted in backlog
- Insufficient technology slowed report-submission procedures
- Filing of certain reports required up to 12 hours to complete

Solution

- Rolled out Nuance voice recognition technology to more than 120 frontline officers
- Incorporated MPA Dictation, an enterprise dictation product for Blackberry devices that utilizes Dragon, to dictate reports in the field
- Combined with Voice Report, an enterprise digital workflow solution, powered by Dragon, to edit reports in field

Results

- Ability to file and edit occurrence reports anytime, anywhere for greater flexibility
- Increased overall quality and thoroughness of reports
- Reduced time spent completing common reports by 80%

Background

The Chatham-Kent Police Service (CKPS) in Ontario, Canada – serving a population of approximately 100,000 – discovered it had an inefficient report-submission process, resulting in significant backlog of reports, delays in the overall progression of cases, and persistent problems with the quality of the reports being filed.



“With the ability to file and edit occurrence reports from wherever I need to, I can spend more time focusing on the issues that matter to the people in the neighborhoods I patrol”

Constable Mark Vandergriendt
Chatham-Kent Police

The challenge

It was clear to CKPS that changes needed to be made to its strategy for submitting reports. An officer would dictate a report into the CKPS server system, which then sent the audio file to a Civilian Data Entry (CDE) member, who would type out each report, word-for-word.

The transcription process was time-consuming – some reports took over 12 hours to file – and resulted not only in a significant backlog of reports, but also in issues with the quality of the reports. Officers were being asked to provide clarity on details from cases that were initially opened several weeks prior, and were having difficulty recalling the information that was needed.

The solution

At the heart of CKPS' inefficient report-submission process was ineffective technology. Recognizing that a key part of the transition of the reports from the frontline officers to the CDEs centered on the dictation into the server system, CKPS' IT department led an initiative to find a more effective and affordable solution.

CKPS first piloted Nuance's Dragon speech recognition technology in 2010, by embedding it into its servers for audio transcription. The partnership expanded shortly after, when CKPS experimented with MPA Dictation – an Enterprise dictation product for Blackberry devices that utilizes Dragon – and, after a pilot program proved successful, adopted the technology into its report-submission process.

Through the new partnership, CKPS began utilizing MPA Dictation and Voice Report. Voice Report is an Enterprise digital workflow solution for mobile field services, powered by Dragon. CKPS paired Voice Report with MPA Dictation to help officers take ownership of their reports and significantly reduce the time the CDEs would need to file reports. In addition to having the improved technology on its Blackberry devices, CKPS

also updated the infrastructure of its central server to accommodate the change.

Officers could now dictate their reports and a case occurrence number using MPA Dictation. Voice Report takes that audio file, transcribes it through CKPS' revamped server, and delivers a text transcript back to the officer's Blackberry device. From there, the officer can edit the report text and make corrections before sending it on to the CDEs.

Before long, more than 120 of CKPS' 170 officers were using MPA Dictation and Voice Report, and the early results demonstrated immediate improvements in the report-submission process.

The results

The incorporation of MPA Dictation and Voice Report affords frontline officers greater flexibility and convenience when it comes time to submit a report. By being able to use their Blackberry devices and Dragon, frontline officers can file their reports while out in the field, advance cases along and quickly respond to other incoming calls. As a result, officers are better equipped to serve and protect the community.

“With the ability to file and edit occurrence reports from wherever I need to, I can spend more time focusing on the issues that matter to the people in the neighborhoods I patrol,” says Constable Mark Vandergriendt.

Additionally, CKPS noticed an increase in the quality of the reports being submitted. Rather than having to wait weeks to review a case and note any changes to a report, frontline officers use Voice Report to review and edit their reports the same day that they submit them. More thorough reports from frontline officers are noticed and appreciated, not just within the Department, but when they reach the Court system as well. The Crown Attorney responsible for reviewing CKPS' case file

reports used to seek clarifications often. However, Since Dragon was initiated; those requests have been reduced to nearly zero.

“Counsel wants professional, detailed, clean reports to present to Court,” said Staff Sergeant Barry Childs. “We have realized quicker resolutions of case files, saving us a tremendous amount of time compared to how we used to do our reports.”

The report-filing process for the CDEs has essentially been revolutionized. By utilizing MPA Dictation and Voice Report, keyed entry for the CDEs is virtually eliminated. When they receive a text document from frontline officers, rather than an audio file, the CDEs simply cut and paste the report into the Records Management System.

A typical two-page report used to take the CDEs over 10 minutes to type out and submit into the system. Now, because of Dragon, it takes the CDEs less than two minutes to copy, paste and submit the case reports and occurrence numbers, resulting in an 85% reduction in time spent on common reports.

“Our previous method of data entry was keying reports dictated by officers, which was time consuming, inefficient and strenuous,” says CDE Michael Cox. “The three most important things about data entry are accuracy, speed and consistency. Using Nuance’s technology, I have improved in all three aspects. By adding new words and phrases specific to policing and to our Service in particular, I am able to complete reports quicker, reducing the need for spell checks, while at the same time producing consistent, accurate results.”

Backlogs of three to four weeks were drastically reduced, and reports are now submitted and organized daily, with backlog reduced to zero.

“At one point our CDEs were three to four weeks behind in adding reports,” says Childs. “That queue is now finished daily and completely up-to-date. On average, there are no more than 20 reports at any given time and they are often done by noon, so our CDE resources are able to be reallocated to other tasks with the extra time they have once they finish their reports.”

The incorporation of MPA Dictation and Voice Report into CKPS’ report-filing process would not have been successful without the enthusiasm of Chatham-Kent’s Chief of Police, Dennis Poole. Chief Poole was a firm believer in the advantages the technology would afford his officers, and his initial support for the solutions had a trickle-down effect on the Service as a whole.

“Dragon saves our officers and our support staff significant amounts of time in the reporting process, which has increased our efficiency and is helping us meet the ever-increasing challenges of modern policing and the demands of the justice system,” says Chief Poole.

Overall, CKPS has found that it has seen the greatest returns on its investment through greater flexibility and convenience for officers, reduced workloads and occupational injuries for CDEs and higher quality reports for the Crown Attorney, resulting in faster resolution rates in Court.

Future plans

CKPS plans to continue using Dragon in the future, with the hope of expanding to license plate dictation and other areas. By utilizing advancing text-to-speech technology, frontline officers will save time by avoiding keyed entry in favor of speaking a license plate’s alphanumeric code into their devices and having all of the important vehicle information displayed on their screens.

Additionally, the Service is seeking to expand the role of voice technology in its report-filing process. A new pilot program is dedicated to enhancing the ways that officers can use voice to complete the headers of their reports, thus further reducing the workload of the CDEs.

Says Childs: “The refining and restructuring of our business practices, human resources and internal processes, along with the use of Dragon as a document input management tool, has enabled this organization to increase productivity and save time, effort and budgetary dollars.”

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