

Collections & CREDIT RISK

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(c. 25,000)



HAL is Sounding Different These Days

As automated speech gets better and better, collectors are experimenting with new systems to improve operations. **By Jane Adler**

REMEMBER THE DIABOLIC

computer HAL in the movie *2001: A Space Odyssey*? It seemed remarkable in 1968 when the movie opened that HAL actually talked to the astronauts. Even more striking was the fact that HAL didn't speak with a mechanical-sounding voice but a regular one. His voice even packed an emotional punch as he threatened his human companions.

As it turns out, the movie did a pretty good job of predicting what computer voices would sound like one day. Though electronic voices are not nearly as perfect yet as HAL's, techno-

logical advances have greatly improved electronic speech. And with the addition of new speech recognition applications, real conversations are now possible with computers.

Not surprisingly, advances in speech technology have wide business applications, especially in the collections arena. Credit and collection departments and agencies are using new speech technologies to raise liquidation rates, cut costs and improve customer satisfaction.

"The quality of (electronic) speech has advanced rapidly," says

John B. Simpson, chief technology officer at Nationwide Credit Inc., a large collections agency in Kennesaw, Ga. The company has an automated interactive voice messaging system for outbound calls. "We are pleased with the technology," he says.

Collections operations are using the latest generation of speech technology in a number of ways. Many collectors have automated systems that contact debtors, verify their identity, and then switch the debtor to a live agent at a call center — a process that can cut labor costs. Other speech systems prompt the debtor to make the payment during the call.

At the same time, automated speech offerings have improved. Vendors now have a variety of voices. Collectors can choose from male and female voices, or select a voice with a particular accent. Voices are available in different languages as well. And some voice systems can be monitored online.

Premiere Global Services, Atlanta, for instance, has an online interface so customers can create new messages or update old ones on its Web site.

Collectors are experimenting with speech recognition, too. It allows the debtor to speak to the computer rather than responding by pushing buttons on a touch-tone phone.

Meanwhile, competition is heating up among automated voice system vendors — good news for collection departments seeking more options and lower prices. While the speech market until recently had been dominated by a few big companies, a number of smaller new vendors have entered the business — each with its own spin on the systems.

Augmenting Staff

Nationwide Credit has an automated calling system provided by SoundBite Communications Inc., Burlington, Mass. Nationwide tested systems from three different vendors before selecting SoundBite, which it has been using for about eight months.

Nationwide places about 100,000 outbound calls monthly with the system. It's hosted by SoundBite, which houses the software and hardware — a common set-up with automated voice systems today.

After making contact with a debtor, the system verifies identity by confirming the account or social security number. The call is then routed as an inbound call to Nationwide. For calls that answer with voice mail, the system leaves a personalized message.

"The model makes sense because you can substitute technology for live collectors," says Nationwide's Simpson. He can't quantify how many agents the automated system might have replaced, but he adds: "We like (the system) because it augments our staff. It gives our staff a different look and touch."

The system also acts as a safety valve when a large unexpected portfolio of new business comes in. "It takes time to hire people, and with this system I can start (collecting) right away," notes Simpson.

Nationwide's outbound message combines a real recorded voice and a synthetic or computer-generated voice. The computer-generated portion is called text-to-speech technology. The computer reads text and converts it to speech. "The integration of the recorded and computer voices is pretty good," says Nationwide's Simpson. "For the end users, it sounds like one text."

Like Nationwide's system, most automated speech dialogues for collections combine a recorded human voice and an electronic voice. The recorded human voice speaks the majority of the message. The computer then inserts personalized information into the message with text-to-speech technology. For example, a text-to-speech engine speaks the person's name, address, or other custom information. The newest systems also match the text-to-speech voice and the recorded human voice.

"It's just not practical to have (live) agents insert the account balance, or

AUTOMATED VOICE COLLECTION SYSTEMS A Sample of Resources

COMPANY	WEBSITE
PAR3 Communications	http://www.par3.com
SoundBite Communications	http://www.soundbite.com
Premiere Global Services	http://www.premiereglobal.com
Ontario Systems	http://www.ontariosystems.com
Prairie Voice Services	http://www.prairiesys.com
Adepra	http://www.adepra.com
Silverlink Communications	http://www.silverlink.com
LiveVox	http://www.liveVox.com
Nuance Communications	http://www.nuance.com

Sources: Credit & Collections World's Collections Source One and E-Marketplace

have the entire message recorded in advance," says William Meisel, a consultant who publishes a newsletter on speech technology. "The text-to-speech technology is there and it's not that expensive." Meisel has examples of text-to-speech applications that can be heard on his Web site: www.tts-update.com.

Nuance Communications Inc., of Burlington, Mass., is a major provider of the text-to-speech engine for automated collections systems. Collection companies don't typically work directly with Nuance, but one of its vendor partners.

"Our goal is to make contact centers more human," says Jeffrey J. Foley, solutions marketing manager at Nuance. To improve the human quality of the elec-

tronic voice, many hours of real voices are recorded and then broken into bits.

improved, the technology still has its doubters. Text-to-speech engines can mispronounce names. Pacing and intonation can be difficult to adjust, though the messages can be tuned and tweaked. "It's very hard to imitate the human voice," says Michael Koch, product director for contact management at Ontario Systems LLC, Muncie, Ind. "They're just beginning to understand how complicated it is."

FirstCredit International Corp., a healthcare collections company in Akron, Ohio, uses a number of different automated dialogues to collect outstanding debt. Commenting on text-to-speech technology, FirstCredit CEO Timothy D. Sheeler says: "It's better than it was. But the (applications) are far from seamless." He notes a big difference between the recorded human voice and the inserted computer voice used in most messages. He adds that the text-to-speech engine "butchers ethnic names."

Aquila Inc., a utility company in Kansas City, Mo., has an automated calling system from PAR3 Communications Inc., Seattle. Aquila had previously relied on a contact center of 40 agents in Michigan to handle collections calls.

The text-to-speech technology is there and it's not that expensive.

WILLIAM MEISEL, CONSULTANT

Some Have Doubts

These bits, called phonemes, are then strung together to make speech. Words can be slowed or quickened to make the speech sound more natural. Intonations and inflections can be adjusted. That way, words end logically and the listener is prepared to hear the next word.

Though electronic speech has

When Aquila decided to centralize its operations, which would have required relocating the staff, or hiring and training new contact center agents, it decided instead to implement PAR3's interactive system which makes four different types of collections calls or dialogues.

"We've found it to be very cost effective," says Danny Gillam, business analyst at Aquila. "When you figure the time and effort it takes to train a live agent and their salary, the auto-

mated system makes perfect sense.” The automated system has a 65 percent contact rate with customers versus a 30 percent rate for live agents. Agent calls were often dropped, while the automated system makes a number of attempts.

Aquila pays an \$8,000 set-up fee for each dialogue (the script used for a particular type of call). Each call costs about 20 to 25 cents. Rates are based on the number and the length of calls, a common billing method for hosted speech.

Unlike many vendors of automated speech systems, PAR3 no longer relies on text-to-speech automated voices to personalize messages. Instead, the company now has what it calls a “Golden Voices” program. PAR3 has built a library of pre-recorded first and last names, places, dates, autos and medicine names.

“We identified a 10-point lift in right-party contacts with the use of the Golden Voices [approach],” says Pat Whelan, senior vice president of marketing and business development at PAR3.

Whelan thinks text-to-speech technology needs further improvement. It still has trouble pronouncing foreign and ethnic names. “We have a client in Hawaii who tried to use text-to-speech on Polynesian names. It just didn’t work,” he says. Whelan notes that, in collections, a

COLLECTORS ARE FINDING ELECTRONIC SPEECH USEFUL...

1. **Quality and the range of voices available have improved dramatically.**
2. **Using electronic speech systems can be cheaper and more effective than using agents on some calls. Automated systems have higher contact rates.**
3. **Automated systems can supplement live collectors during busy periods.**

BUT SOME ISSUES REMAIN

1. **Ethnic names are still a major challenge for most systems to master.**
2. **Integrating recorded message with computer-speech can be tricky.**

easier to listen to.”

Last fall, Asset Management Outsourcing Inc. (AMO), Norcross, Ga., experimented with several automated voice systems. AMO settled on a hosted IVR solution from LiveVox Inc., a San Francisco-based vendor.

LiveVox combines a recorded human voice with a text-to-speech engine that inserts the name of the debtor and amount owed. “It’s not electronic sounding,” says John J. McNamara, AMO chief operating officer. McNamara prefers a mix of calling campaigns.

Typically, the same set of people are called several times over a period of seven days. A blaster-type non-personalized automated campaign might be used

McNamara says. No set-up fee is charged for dialogues.

McNamara figures the system has reduced the number of collectors needed by about 10 percent. The LiveVox system also increased right-party connects by 20 percent. Another advantage — the system acts as a disaster recovery tool. “If we lost our dialer, we could still make outbound calls and get inbound calls through LiveVox. We could function,” McNamara says.

The AMO campaigns use an American male voice. McNamara thinks it’s too early to experiment with different voices. But he envisions a time in the near future when a voice could be selected based on a debtor’s credit score, or geographic location to increase response rates.

Say What?

Another technology that shows promise is automated speech recognition — a computer understanding a spoken human voice. Speech recognition differs from voice recognition which is the process that uses a person’s own voice for positive identification.

Currently, speech recognition is most often used to give yes or no answers to a computer as an alternative to pressing numbers on a telephone keypad.

“Speech recognition has made vast improvements in the past several years,” says Vytas Kisielius. He founded automated messaging company Adepra Inc., Norwalk, Conn., and now works as an advisor to consulting firm Bridgeforce Inc., Newark, Del.

Speech recognition is certainly good enough to be used in a collections application, Kisielius says, but the benefits when compared to phone touch tones “are not great enough yet.” He adds: “The benefit of having a real conversation is not there yet. The next step will be a computer being able to negotiate with the debtor. That’s the challenge.”

HAL would be proud and likely ready to talk to all these modern-day cousins. ■

When you figure the time and effort it takes to train a live agent and their salary, the automated system makes perfect sense. DANNY GILLAM, AQUILA

mispronounced name can have a negative impact on the success of a call.

Utility company Aquila at first used the text-to-speech automated voice, but it has since switched to all recorded voices. “We very much prefer the recorded human voice,” notes Gillam at Aquila. “It’s more interactive and

one day, for instance, followed by a live person calling the next. On the third contact, a debtor might receive a LiveVox call. “If you use the same technique over and over, the results are not good,” says McNamara.

LiveVox charges AMO about five to 10 cents a connect minute,