



THE MACHINE AGE

AUTOMATED TELLER MACHINES CAN PROVIDE THE CASH PAYMENT THAT SCRAPYARD CUSTOMERS PREFER WITH MORE SECURITY, LESS ERROR, AND BETTER TRANSACTION DATA THAN YOU'LL GET USING A HUMAN CASHIER. HERE'S WHAT TO KNOW BEFORE YOU INVEST IN THIS TECHNOLOGY.

BY CHELAN DAVID

On an average day, Tri-State Iron & Metal Co. might buy scrap from hundreds of retail customers at its Texarkana, Ark., yard, says Howard Glick, the company's president. Transactions range from "a housewife with a bag of cans," which have a scrap value of a few dollars, to a van full of construction odds and ends that could be worth several thousand dollars.

In the past, these customers would get a receipt from the scale house and take that to a cashier, who would open the cash drawer, count out the payment, and hand it over. The potential risks of such transactions are clear, however. First, the cashier and the customers are vulnerable to robbery.

Human error can result in improper payout amounts; and internal fraud and theft are always a concern. That's why Tri-State and other scrapyards have switched to automated teller machines for their cash payments.

The owners and managers of these yards say ATMs provide the best of both worlds: The customers receive cash, which is the form of payment many of them prefer, and the scrapyards increase security, transaction speed, accounting accuracy, and transaction monitoring, which can prevent fraud and help catch those who try to sell stolen material. That said, ATMs come with their own expenses and concerns. Here's a look at their benefits and potential costs.

ATM ADVANTAGES

Many scrapyards managers say they switched from a human cashier to an ATM for security reasons. As scrap business volumes and values have grown over the years, "we were uncomfortable handling that much cash from a security standpoint," Glick says. With the installation of the yard's two ATMs, "we never touch cash anymore," he says. Tri-State uses an armored car service to load the machines three times a week.

At PK Metals (Coram, N.Y.), "before the ATM, customers would comment about how much money the girl behind the [cashier] window must have, or I would hear them ask her, 'How much money do you have back there?'" says

Bill Rouse, director of operations. "Now I rarely hear any comments." The assumption is that the ATM will have a sufficient supply of money, and there's no longer a need for structures or personnel to protect the cashier.

Rouse also appreciates the ATM's accuracy, which he calls "unbelievable." In three years, he says, "anything we've lost was due to human error" from filling the trays improperly. (Like Tri-State, PK gets a cash delivery via armored car, but its workers fill the ATM trays themselves from within a locked vault.)

Better cash accounting—and fewer paperwork hassles—have one West Coast Chapter ISRI member considering the installation of an ATM machine at his nonferrous yard. The company is now making four or five cash withdrawals from the bank each week, each around \$10,000, he explains. Any withdrawal above \$10,000 triggers certain IRS paperwork that he or the other company principal must complete in person at the bank, and frequent withdrawals just below that limit have led the IRS to accuse the company of "structuring" its withdrawals to avoid the reporting requirements, he says. With an ATM, he reasons, he could use an armored car service to make fewer but significantly larger cash withdrawals to fill the machine, reducing the paperwork hassle significantly.

Those with ATMs also point out how the machines and their security systems record a variety of transaction data that can help identify potential fraud and theft. At Tri-State, "we photograph every customer getting paid" at the ATM, Glick says. Arkansas' materials theft legislation is very strict, he notes, and the documentation can help prosecute crimes if someone tries to sell the company stolen material. The photos also protect the company if a customer claims he or she was never paid.

ATMS IN ACTION

One of The David J. Joseph Co. (Cincinnati) scrapyards first approached Transact Payment Systems (St. Petersburg, Fla.) with the idea of automating

CASH IS KING, BUT FOR HOW LONG?

The vast majority of scrapyards pay their retail customers cash for their scrap. "I think most people prefer cash," says **Howard Glick** of Tri-State Iron & Metal Co. (Texarkana, Ark.). "A lot of our [customers] don't have a checking account or a banking relationship, so to go to a bank is an inconvenience." In their efforts to address materials theft, however, lawmakers in some states have placed restrictions on when and how scrapyards can pay cash for scrap. Some mandate a waiting period between sale and payment; others forbid cash payments above a certain value.

Federal legislation could impose such restrictions nationwide. A bill introduced in the U.S. Senate last year would mandate payment by check for any scrap purchase of \$75 or more, says **Billy Johnson**, ISRI's director of political and public affairs. Though the bill is a long way from passage, Johnson warns that the issue is unlikely to go away. Further attempts to pass national legislation addressing materials theft are likely in the 112th Congress, he says, and lawmakers seem firm about the \$75 limit, despite the industry's assertion that that level is unreasonably low and would affect millions of business transactions each day.

In July 2009, ISRI shared its concerns about this and other aspects of the proposed bill at a hearing of the Subcommittee on Crime and Drugs of the U.S. Senate Judiciary Committee. "Scrap recyclers engage daily in a tremendous number of small-scale transactions with peddlers," testified **Mark Lewon**, vice president for operations at Utah Metal Works (Salt Lake City), on ISRI's behalf. "The overwhelming majority of these transactions are with legitimate sellers of scrap metals. ... Requiring scrap recyclers to write checks in lieu of paying cash is burdensome, very costly, and unnecessary." He testified that in Minnesota, a state that has banned cash payments for scrap, one scrapyard reports paying an average of \$84,000 a year in bank transaction fees. Further, "a requirement for payment by check may also drive thieves into an underground market for stolen scrap materials," Lewon said.

In written comments accompanying Lewon's testimony, ISRI recommends that the Senate eliminate the check-writing provision or increase the cash limit to \$500. The written comments also note the value of automated teller machines in documenting scrap sale transactions, thus ISRI asks that the law include language allowing the use of ATMs in lieu of check payments. Further, any national materials theft prevention legislation should pre-empt all state and local laws, ISRI says, to "create a uniform standard that does not unduly burden recyclers or harm their business while also punishing thieves in a consistent manner."

cash payments via self-service banking equipment and processes in 1996, says Ken Gruber, Transact's founder and president. Working with NCR (Duluth, Ga.), a company known for its cash registers, self-service kiosks, and barcode scanners, Transact created a scrap industry-specific ATM called EZcash. The EZcash system typifies how ATMs fit into scrapyard sales transactions. The scale operator calculates the weight and value of a particular scrap purchase and tags the sale as "payment via ATM." The system encrypts the amount and transaction number and prints it as a bar code on the payment receipt. (Other scrapyard management

systems put the data on refillable ATM cards or keychain tags.) The customer brings the receipt to the ATM, which scans the bar code, authorizes payment, and disburses the cash. The system records the transaction data and takes a still photo and/or video recording of the customer receiving his or her money.

There's no limit to the number of transactions an ATM can handle each day, says Everett Duty, CEO of Buy-BackPro (Woodland, Calif.), though each machine has a maximum bill capacity. A typical limit is \$200,000, says George Kane, co-founder of 21st Century Programming (Long Beach,

Calif.). “Usually one load will last multiple days,” Duty says, “but of course the system can be loaded more often if needed.” Alternatively, a recycler that has a large volume of transactions each day could install more than one ATM. “If the number of transactions is consistently exceeding 400 per day, the facility should certainly consider using two terminals,” Gruber says. A second machine is also helpful to ensure customers can still get paid if one machine breaks down, Kane points out.

These machines can disburse multiple bill denominations, and some vendors offer optional coin dispensers, allowing exact payments down to the penny. Some yards, such as Tri-State Iron & Metal, choose not to use coins, instead rounding payments up or down to the nearest dollar. (Such rounding is not universally legal or practical, Gruber notes. California mandates exact payment, for example, and in Canada, where the smallest bill is five dollars, a coin dispenser is essential.) PK Metals uses a coin machine attachment, Rouse says. The decision to add it “was more about programming than cost,” he says. “The cost of the coin machine was maybe \$800 with software.” The automated teller machine itself comes in a range of prices and options. NCR offers models that run from \$13,000 to \$38,000, for example. Tri-State purchased refurbished ATMs with a full warranty, spending about \$10,000 for each machine, Glick says.

INSTALLATION AND MAINTENANCE

Installation needs and costs will vary depending on where the scrapyard places the ATM, Gruber says. Installation of an indoor, lobby-style ATM might involve anchoring it to the floor and connecting it to the electrical supply and the local area network. Exterior installation might require cutting a hole through a building wall. Some yards build special rooms or buildings to give users shelter from the elements or privacy, or they construct vaults to protect those filling the machine. Additional physical installation costs can include alarms triggered by vibration, heat, and door switches, Gruber

says, and cameras, which can run from \$350 to \$2,500.

The West Coast Chapter scrapyard owner is considering where he might install one or more ATMs in his yard. Installing them in the office is probably easiest and most pleasant for customers, he explains, but it won’t help the flow of traffic through the yard. An outdoor installation a short distance

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away from the office would help in that respect, but here’s his concern: “In any scrapyard, you have all the equipment you would ever need to take that sucker out” when the yard is closed, he points out. If he moves ahead with an outdoor installation, he says, “I’ll make sure my own equipment can’t get close to [the ATM] to take it out.”

Programming is one more installation expense. The machine must operate according to the yard’s specifications, and it must interact with the yard’s management system. Depending on the ATM provider, those expenses might be included in the installation or billed separately.

For ongoing maintenance, Gruber divides expenses into two categories: First-line maintenance covers routine issues such as cash or paper stuck in the machine; second-line maintenance is for more serious issues, such as hardware failure. Yards can expect to spend about \$1,200 per year for first-line maintenance and between \$1,500 and \$2,500 annually for second-line maintenance, he says. Cash replenishment via armored car costs about \$75 per drop, he adds.

PK Metals probably spent \$50,000 to purchase and install its ATM machine, Rouse says. The company bought the machine directly from Diebold (North Canton, Ohio), another major ATM

manufacturer, with a maintenance contract that guarantees service within an hour, seven days a week. The company installed a new software system at the same time, thus it folded the ATM programming costs into the overall software installation. It was easy to justify the expense of an ATM compared with the alternative, Rouse says. “You could pay an employee \$40,000” in salary each year to serve as a cashier, he says, and that one person could not handle the same volume of customers as an ATM—at least not as quickly and for as many hours a day.

Tri-State purchased its ATMs from a local vendor because “we wanted to be sure, if one broke down, that we’d have a quick response time,” Glick says. Its maintenance contract guarantees service within two hours on the six days a week the yard operates. The company’s scrapyard management software provider, 21st Century Programming, connected the ATMs to its system.

SELECTION CRITERIA

Reliability is the most important factor to look for in an ATM, Transact’s Gruber says. “A downed ATM in a scrapyard is not a pretty sight,” he points out. “You can’t go to the ATM down the street,” so it’s essential to have a backup plan. Along those lines, Kane of 21st Century Programming suggests ensuring the ATM vendor has a local support network and guarantees a swift response to a downed ATM. A two-hour service guarantee is reasonable, he says, as is requiring cash delivery on Saturdays.

When selecting an ATM vendor, make sure it can meet your requirements, BuyBackPro’s Duty says. Do you need a machine that dispenses both bills and coins? Does the machine use at least four cassettes for different denominations of bills? How easy is it to change the denomination on the cassette? How extensive are the machine’s reporting capabilities? And does the company have its own software interface to the ATM, or does it use third-party programming? The latter creates additional expenses, he says. Above all, get references from providers with

experience in the scrap industry.

Some companies pair a cash dispenser—a machine designed to count out bills and coins for a cashier—with a computer, monitor, bar-code reader, and receipt printer “to emulate an ATM-type solution,” Gruber says. He contrasts that with an actual ATM, “a self-service device designed to banking standards.” ATMs come in two categories, he explains: financial and retail. “The financial ATMs are considered industrial and can be installed with an exterior exposure,” he says. Make sure you buy what you need, he cautions. “I have seen customers purchase a cash dispenser only to find out they have [just] half of the solution.”

Gruber suggests one more question: Can the provider program the ATM to meet current and potential regulations that might govern cash payment for scrap? “We are constantly updating the [EZcash] software to stay current with changing regulations across the country,” Gruber says, such as those that mandate a three-day hold on payments. (For more on how materials theft laws might affect cash payment for scrap, see “Cash Is King, but for How Long?” on page 82.)

Vendors also make a few recommendations for ensuring good long-term ATM performance. Kane advises recyclers to continue the ATM maintenance and support agreement with the manufacturer after the warranty expires. For Gruber, the secret to ATM success is “good cash, good maintenance, and most important, a good steward.” Good cash because folded or tattered bills could jam the dispenser, he explains, and a good steward is “someone at the facility who is responsible for the

ATM. Our most successful installations are ones where someone [in the yard] takes active ownership of the device and manages local hardware support.”

THE NEXT GENERATION

The technology for automated cash payments continues to improve, ATM vendors say. Today’s ATMs “have easier-to-use operation systems than those of 10 years ago,” Kane asserts. “In addition, newer technologies to dispense bills have come into play.

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For example, today cash is delivered via conveyor belts; in the past, suction cups used to pick up the cash, and the cups would not last long.”

Some firms are promoting an alternative to ATMs: reusable, reloadable debit cards, such as BuyBackPro’s Pay By Visa system. These systems load the transaction data onto a debit card the customer can use at any retail location or public ATM that accepts that type of card. For regular customers, “you can issue a reloadable card that can be used over and over,” Duty says. “The customer doesn’t even have to have the card with [him] to get it funded.” Transact is looking at offering a similar technology that will provide bank-

branded debit cards, Gruber says.

Such cards might offer a few advantages. First, if they reduce cash payments, that could increase security and cut down on cash delivery costs. Also, such cards work well in jurisdictions that mandate delayed payments, Duty says. His company’s system can trigger the payment to the debit card after the required delay, and “the customer does not need to come back in [to the scrapyard] to get paid.”

Though Duty expects debit card payments eventually will become more popular than cash-dispensing ATMs, Gruber expects some resistance to debit cards from customers. “If you can get customers to use this card for retail purchases, this model works,” he says, but “cash is king, and peddlers are skeptical about leaving the yards with a card.” They might not trust that the card will work or that it contains the proper account balance, for example.

Then there’s the issue of transaction fees. Bank charges for issuing and loading money onto debit cards could add up to more than the cost of operating a private ATM, Gruber says. Further, a customer who uses the debit card to withdraw cash from a public ATM machine might have to pay several dollars in fees to get the cash. For a small transaction, those fees could outweigh the value of the scrap. “A cost-effective debit card solution needs to include an all-cash payout option without fees,” Gruber says. “Peddler skepticism is hard to overcome, but not taking anything away from them will help.” ■

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