

Optimized Payments Consulting, Inc.

How Accepting ATM Cards Can Improve Merchant Profitability

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The use of ATM or PIN-based debit cards in the U.S. has been rising faster than signature debit cards and credit cards over the past decade. Merchant sales volume for PIN transactions has been growing 21% annually since 2000, slightly ahead of signature debit and significantly ahead of credit cards. And, according to a recent study by Star electronic funds transfer (EFT) network, consumers preferred PIN debit over signature debit, with 54% opting for PIN and 38% for signature. This trend is great for both consumers and merchants.

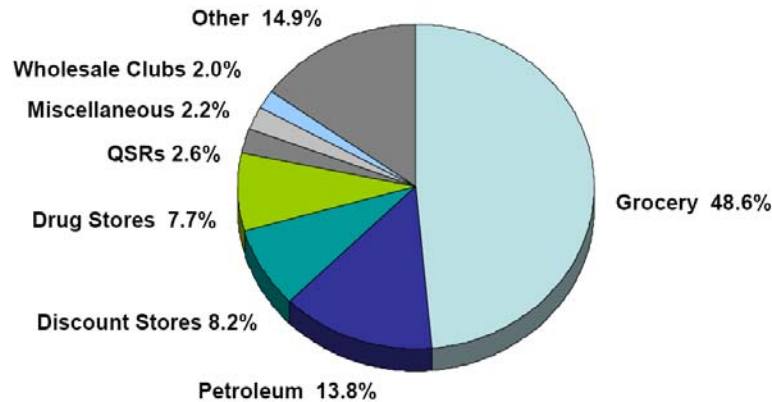
PIN debit transactions, facilitated by ATM cards, require the use of a personal identification number (PIN). Once the card has been swiped through the point of sale (POS) terminal, a cardholder will be prompted to enter his PIN prior to completing the transaction. The transaction is then routed through the appropriate regional or national EFT network for validation, including the availability of funds, and processing of the payment. No signature is required and the funds are deducted or placed on hold immediately and transferred to the merchant overnight. The leading reason consumers prefer PINs is their perception that PINs offer greater security. Understandably, a lost or stolen ATM card is useless without its PIN. Many consumers also find PIN debit easier to use and manage. For instance, when a PIN debit card is used at a coffee shop, the funds are immediately debited from a consumer's account. The consumer can immediately balance his checkbook and he sees PIN debit transactions being the same as cash. Another reason consumers like using ATM cards is they can get cash back at many retail establishments, like grocery stores and discount stores. Cash back at the point of sale accounted for 8.5% of the total transaction value of PIN debit purchases in 2006, according to the Federal Reserve System's Electronic Payments Study.

By contrast, signature debit transactions are processed using the Visa or MasterCard networks and are subject to higher interchange fees associated with these networks. Availability of funds is not verified for signature debit transactions. As the name suggests, signature debit transactions require that the cardholder sign a receipt. The purchase amount is deducted from the cardholder's checking account and is reflected on the cardholder's account statement from his bank. According ATM & Debit News, there are approximately 312 million debit cards in the market that have the functionality of both signature debit (branded with Visa or MasterCard logo in front of the card) and PIN debit (branded with one or more debit network logos on the back of the card like Interlink, Star, Pulse, etc.). There are an additional 86 million cards that are PIN-only, driving POS transactions exclusively to the PIN networks. So, in total, there are about 400 million debit cards in the U.S. that can access a consumer or business savings or checking account. Although the cardholder decides whether to sign or use PIN, a merchant can influence that decision with Bank Identification Number (BIN) file management. It's perfectly within payment regulations to guide a consumer to a preferred method of payment (in this case, PIN debit). What merchants cannot do is prevent consumers from selecting and using signature debit (or credit, for that matter).

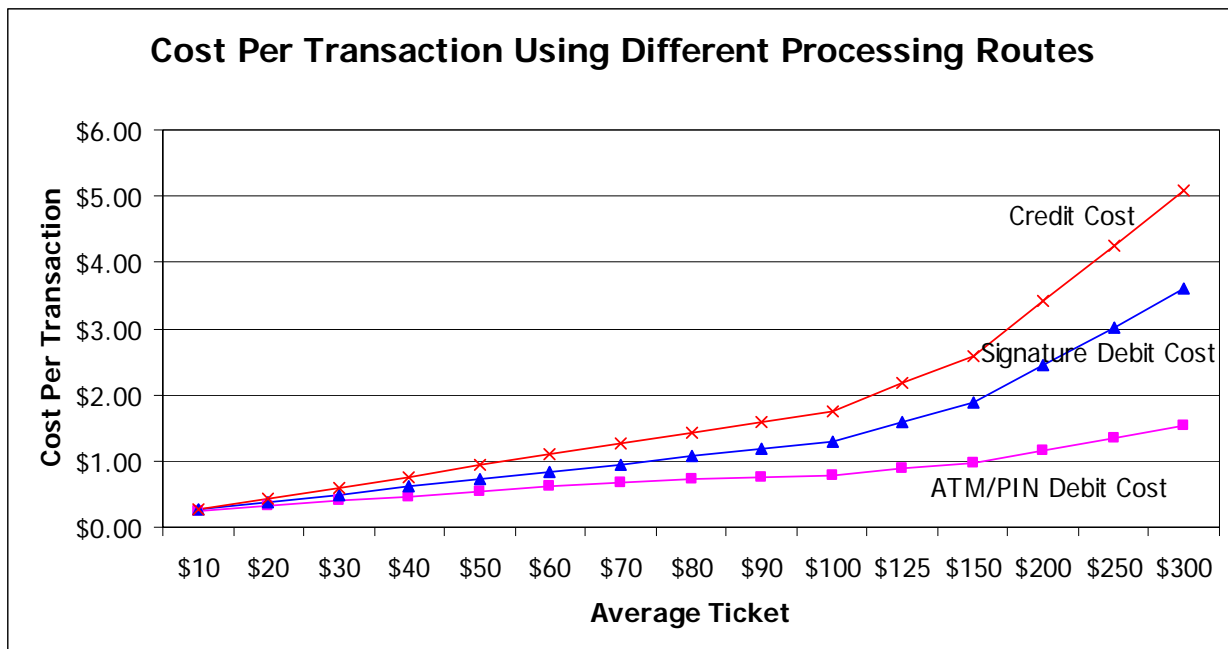
Given that majority of consumers have at least one debit card with PIN functionality, merchants need to recognize this fact and take advantage its benefits – lower acceptance costs, greater security, faster funding, and typically faster checkout. Moreover, merchants see reduced fraud and chargebacks with PIN debit transactions. Since only the card holder knows the PIN, it is less likely to be stolen and used fraudulently like credit and signature debit cards. And PIN-based debits are not subject to the same chargeback rules as their counterparts, although some of this is changing in the industry. One of the biggest benefits of PIN-based cards for merchants is that they cost up to 60% less than credit and signature debit cards.

The following chart notes the industries where PIN-based transactions are prevalent. The average size of a PIN-debit transaction in the U.S. is approximately \$43. There are two main reasons that the average ticket for a PIN transaction tends to be lower than for its counterparts. First, consumers prefer to pay larger ticket items with credit cards (and to some degree with signature debit cards) where they can earn rewards points and have chargeback protection. Secondly, the majority of banks place daily debit limits on their customers, so if a merchant has a high average ticket size (more than \$300), PIN debit may not be a good option.

POS Activity by Retail Industry



The following chart highlights the cost differential between the three dominant payment methods depending on average ticket size. A merchant’s actual cost of processing a PIN transaction will depend on the specific ATM network (Interlink, Star, Pulse, NYCE, etc.) used to process the sale and the mark-up added by the payment processor. Using a weighted average cost based on market share of the ATM debit networks in the U.S., a \$50 sales transaction will cost about 54 cents with PIN-debit, versus 73 cents for signature debit, and 93 cents for credit.¹



From a merchant’s perspective, accepting PIN debit becomes more attractive as the average ticket grows, but this product is not competitive if the average ticket is below \$25. As the following table shows, the fixed per-item and switch fees do not make PIN transactions cost-effective for smaller ticket transactions. For average tickets above \$25, a merchant can save 25%-61% over signature debit, and 39%-73% over credit transactions.

Table 1: Debit Network Pricing for Standard Retail Transactions

LARGEST POS DEBIT NETWORKS	Rate %	Rate Per Item	Cap	Switch Fee	Market Share
Interlink	0.75%	\$0.1500	No Cap	\$0.0350	40.5%
Star	0.75%	\$0.1500	\$0.6500	\$0.0425	28.7%
Pulse	0.65%	\$0.1000	No Cap	\$0.0700	11.6%
NYCE	0.65%	\$0.1000	\$0.6500	\$0.0375	9.8%

The four largest POS debit networks (Interlink, Star, Pulse, and NYCE) process 91% of all ATM POS transactions. Although each of these networks has increased its interchange pricing over the past few years (with Interlink and Pulse eliminating their maximum transaction caps), they are still less expensive than signature debit and credit transactions.

The only expense to start accepting PIN debit cards is that a merchant has to purchase encrypted PIN pads from his payment processor. The price of new PIN pads has come down over the years, with most PIN pads now costing from \$75 to \$175 per unit. Beyond just having the ability to accept ATM cards, merchants really need to have marketing collateral and sales training to promote acceptance of these cards.

Maximizing the acceptance of PIN debit cards involves prompting the consumer for his PIN when a debit card is swiped. Merchant POS software can be programmed to automatically ask the consumer for his PIN by using a BIN (Bank Identification Number) file. A BIN file lists all debit card BINs that are PIN-debit eligible. Payment processors should easily be able to provide their merchants with that file, as well as provide regular updates as banks are added and deleted.

The benefit is clear – for every transaction that migrates to PIN, the merchant save anywhere from 25% to 73% over signature debit and credit sales depending on the average ticket and the debit network used. And when those savings are multiplied by thousands, or hundreds of thousands of transactions per year, the bottom-line benefit is easy to see.

¹ATM debit cost includes Interchange and switch fees for a standard retail transaction. The 54 cents cost is calculated by using the market share data of the 12 ATM networks listed in the 2008 Edition of the EFT Data Book by ATM & Debit News, and pricing information published by each of the debit networks. Signature debit and credit cost includes weighted average of Visa and MasterCard Interchange and assessment fees. None of cost figures include a mark-up from the payment processor.

Anand Goel is an expert in the payments industry and founder of Optimized Payments Consulting. Optimized Payments helps companies increase their profitability by reducing credit card processing costs on a risk-free basis.

