



Conference Summary

PAYMENT CARDS CENTER

Published by the Payment Cards Center, providing meaningful insights into developments in the payment card industry.

INNOVATION AT THE POINT OF SALE

A conference organized by

The Payment Cards Center of the
Federal Reserve Bank of Philadelphia

February 27, 2003

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Conference presentations and discussions focused on current and prospective payments innovations and their implications for payments providers, merchants, and consumers. The need for alignment among these three parties as an essential condition for the success of payments innovation was emphasized throughout the conference discussion. This event benefited from the inclusion of merchants' perspectives, which are sometimes seen to be at odds with the goals of payment networks and institutional providers.

Although the conference did not resolve the inherent conflict between organizations that drive payments innovation and merchants, it initiated a useful dialogue between industry sectors with divergent views and provided policymakers with a clearer understanding of the interrelationships inherent in retail payments systems.

For more on the Payment Cards Center, please visit our web site at www.phil.frb.org/pcc.

*The views expressed here are not necessarily those of the Federal Reserve Bank of Philadelphia or the Federal Reserve System.

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Introduction

On February 27, 2003, the Payment Cards Center of the Federal Reserve Bank of Philadelphia sponsored a conference to examine a variety of new payments options available to consumers paying for goods and services at the point of sale. The conference included diverse representation from the payments industry and Federal Reserve staff. The list of speakers and panelists is included at the end of this report.

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Highlights from the session follow.

The Role of Merchant Processors in Payments Innovation

T. Jack Williams, Senior Vice President, National Processing Company

The conference received input and organizational assistance from Jack Williams, senior vice president of the National Processing Company (NPC). Williams opened the session with an overview of the role of merchant acquirers, described several new payment innovations currently under development by his firm and partner clients, and ended with a discussion of possible future developments.

Role of the Acquirer

One of the less understood participants in the payment process is the "acquirer," an organization that acts as a liaison between merchants and issuers (typically financial institutions that issue payment cards) for authorizing and settling card-based payments. The services provided by acquirers, Williams noted, enable merchants to "get paid," but the creative role of acquirers is to work with their client-merchants to develop more efficient and strategically distinctive payment options.

From an operational point of view, acquirers provide two critical services for their Client-merchants:

□ Authorization Function

Authorization refers to the process of obtaining electronic approval (or denial) of a transaction from the cardholder's issuing bank. The acquirer typically routes an electronic message from a terminal to a card issuer or an issuer's processor. The authorization may be based on real-time information or on positive or negative databases. In some environments, the acquirer may stand in on behalf of an issuer to provide authorization.

Merchants today are increasingly concerned about “authorization traffic.” The issue gains importance as they convert from basic dial connectivity to faster options, including IP frame traffic over satellite connections to increase tendering speed and customer throughput. Also, as Williams noted, Visa’s new DirectExchange (DEX) is enabling merchants to use a single router to manage all authorization traffic, reducing the workload to manage multiple telecommunications lines. DEX technology is also available now from Visa.

□ **Settlement Function**

Settlement refers to the electronic exchange and aggregation of financial data, resulting in debits and credits to appropriate accounts.

The primary role of an acquirer in the settlement function is to aggregate “sales slips” to one point for payment to the accepting merchant.

NPC’s Role as an Acquirer

By way of background, Williams explained that NPC began business as an acquirer 35 years ago, processing “MasterCharge” purchases for Texaco. In 2001, NPC ranked second among the approximately 60 major acquirers in the U.S., based on Visa and MasterCard sales volume. Williams asserted that NPC’s prominence among acquirers has emerged because it understands that the “fulcrum of innovation is the merchant agenda, not the issuer agenda,” and that the success of any new payment method is directly linked to its ability to meet the merchant agenda, which includes:

- Incremental sales
- Infrastructure compatibility among all constituents
- Low cost method of transaction processing

What Lies Ahead

After discussing the broad role of merchant acquirers, Williams turned to more current issues. Acceptance costs are a key issue for merchants. They feel squeezed by continually increasing costs and the perceived need to accept all payment options with limited competitive ability to pass on increases in costs to customers. Williams cited the petroleum industry, in which acceptance costs are second only to labor. In his view, merchant adoption, support, and promotion of future payment options will depend to a great extent on acceptance costs.

Looking forward, Williams noted several payment options that may hold potential for merchants:

- **Electronic Check Conversion.** Check conversion at the point of sale may be the most important new payment product on the horizon. Williams believes that by 2006, check conversion at the point of sale will be as standard as Visa and MasterCard acceptance today. And check conversion will be accepted by merchants of all sizes. His sense is that it will be particularly powerful in the grocery segment, which currently processes three times as many checks as Visa/MasterCard payments.
- **Smart Cards.** Williams believes that the second most important payment trend will be a national launch of smart cards. For issuers, smart cards offer the potential for fraud reduction

(skimming) and less portfolio churn. For merchants, smart cards offer opportunities for equity marketing (to drive consumer behavior), including capabilities such as:

- Electronic couponing with electronic redemption
- A variety of loyalty schemes, offering multiple levels of rewards
- Deeper knowledge of customers

At the same time, Williams suggests there is unlikely to be a mass conversion by merchants to terminals equipped with smart-card readers. Rather, smart-card terminals will be phased in as existing terminals reach the end of their useful life.

Potential complications related to the transition to smart cards include:

- **Smart card real estate.** “Who will own the real estate on the card?” The answer to this question is critical because of its implications for loyalty programs. Visa and MasterCard smart cards allow up to 36 loyalty programs on an individual card, which could create egress issues for merchants.
- **Privacy.** The privacy provisions of the Gramm-Leach-Bliley Act require protection of consumer data, effectively prohibiting information sharing without a consumer “opt-in” agreement.
- **Prepaid Debit.** Williams expects prepaid debit to continue to grow for many applications, simply because certain consumer sectors like it. Merchants also like prepaid debit as a proactive marketing tool but are faced with operational concerns, including accepting cards from minors (teen-oriented programs), split tenders, and ongoing employee/clerk training.
- **Unbanked Banking.** The unbanked have embraced payment cards for the delivery of government benefits and, in some cases, pay (prepaid payroll cards). The cards are viewed as safe and reliable and have the trust of cardholders. A federal smart-card program may one day address requirements for national acceptance.
- **Card-Not-Present Transactions.** Internet purchasing will continue to grow, although the rate of growth may be affected by newly imposed sales tax assessments. The payments industry also must solve the authentication problem in this virtual card-not-present environment.

The Cutting Edge

Williams briefly addressed several emerging payment innovations being explored by acquirers and their clients:

- **Radio Frequency Identification (RFID).** For example, the ExxonMobil Speedpass concept is being tested in supermarket applications.
- **Iris Scan.** Potentially an effective authentication mechanism but not likely to be accepted for everyday card use at merchant locations.
- **Fingerprint Technology.** Initial tests have been unsuccessful. The high cost of merchant implementation will likely deter participation.

- **Tollway Passes.** Testing is under way to determine if technology used for toll lanes is adaptable for drive-through merchants and other venues where contactless card payments are applicable. Several test studies that appear to support these applications are currently under way.

Future Success

Williams concluded that merchants will not move to “bleeding-edge” technology without a strong business case based on incremental sales. Investing in infrastructure to accept higher cost payment transactions has not proven to increase sales. If the only feature of payment innovation is magnetic stripe replacement, there will be little interest among merchants to incur higher costs.

To be successful, Williams argued, future innovation must address what current payment systems lack: “What’s in it for the merchant?” All planning should and must start with the merchant, who is closest to the consumer. Merchants are willing to invest in new technology *if* it is clear that adoption meets the acid test of driving incremental sales. Acquirers will work closely with merchants to look for new ways to meet merchant criteria.

Check Electronification at the Point of Sale

Moderator: Peter Burns, Vice President, Federal Reserve Bank of Philadelphia, and Director, Payment Cards Center

Teri Hoehn, Director, NACHA – The Electronic Payments Association

Dante Terrana, Director of Business Development, Visa U.S.A. Inc.

Ronald Congemi, President, Star Systems, Inc.

Peter Burns opened the session by suggesting that the “electronic check” was the most significant check-related innovation since MICR and leads to something akin to a disposable debit card at the point of sale. While some argue that the electronic check is an interim, evolutionary step toward pure debit transactions, the reality is that checks continue to be the payment vehicle of choice for many consumers at the point of sale. In fact, the Federal Reserve retail payments research project revealed that 14 percent of all consumer checks (around 6 billion items) are written at the point of sale.¹

Background

Check electronification, also called check conversion, is a relatively new payment process. The merchant uses a terminal that reads the MICR encoding on consumer checks presented at the point of sale and instantly converts them into electronic payment messages. The resulting “converted checks” travel through an electronic payments system as debits, totally eliminating paper handling. At the conclusion of the tender, the merchant returns the voided check to the consumer.

Some check electronification schemes offer a variety of service levels to merchants. Merchants may, at their option and depending on the service levels supported by drawee (account holding) financial institutions, choose to participate in services ranging from simple conversion with no assurance of payment to a maximum risk management level of guaranteed payment.

¹ August 2002 *Federal Reserve Bulletin* article, “The Use of Check and Other Noncash Payment Instruments in the United States.”

General benefits of check electronification schemes *may* include:

□ **For Merchants' Financial Institutions and Acquirers**

- Cuts costs of check processing and handling
- Improves funds availability
- Speeds returns on bounced payments
- Builds incremental electronic transaction volume
- Creates new revenue opportunities
- Strengthens merchant relationships

□ **For Consumers' Financial Institutions**

- Cuts costs of check handling
- Shifts liability to originating financial institution

□ **For Consumers**

- Offers faster checkout
- Limits exposure of personal data included on checks
- Provides Regulation E protections

□ **For Merchants**

Achieves cost savings based on:

- Reducing risk exposure
- Automatically concentrating/centralizing all consumer check payments
- Speeding funds availability by reducing float
- Streamlining end-of-day close process
- Receiving returned payments (e.g., NSF and closed account) several days sooner

NACHA took the lead in electronic check conversion innovation and established standards. Its rules covering check conversion using the ACH network became effective in September 2000. Other organizations have begun introducing their own check electronification services. These services use EFT or bankcard technology platforms to support check electronification and provide the added benefit of online authorization. At the same time, the services also rely on the ubiquitous participation of financial institutions in the ACH network to process checks drawn on financial institutions that do not participate in their particular commercial service. (The ACH network acts, in effect, as the “router of last resort” for these converted checks.) The backup provided by the ACH network is critical for these services because it enables merchants to accept all consumer checks without verifying that they are drawn on a participating financial institution.

Introduction of Panelists

Burns introduced “Check Electronification at the Point of Sale” panelists, each representing an organization at the forefront of check electronification development.

Electronic Checks: New Opportunities for the ACH Network

Teri Hoehn, Director, NACHA – The Electronic Payments Association

NACHA—The Electronic Payments Association is responsible for developing and enforcing the rules for the automated clearinghouse (ACH) network. It also serves as the national ACH trade association, develops new ACH services, and operates councils that develop rules, standards, and business practices in the areas of Internet commerce, electronic bill and invoice presentation and payment (EBPP and EIPP), e-checks, financial electronic data interchange (EDI), international payments, and electronic benefits transfer (EBT).

For the past eight years, NACHA's Electronic Check Council (ECC) has led the development of electronic check applications and operating rules.

Check Truncation vs. Check Electronification

It is important to establish the difference between check truncation and check electronification. Both initiatives reduce paper, but there are significant differences.

- **Check Truncation.** A check begins as a paper check and is negotiated, but processing of the paper item is stopped at some point and the payment is processed electronically. *The payment remains under check law.*
- **Check Electronification.** A check is provided as a source document for consumer banking information, but it is never negotiated as a paper item. The payment is processed electronically. *The payment is subject to electronic banking regulations rather than check law. Converted checks using the ACH network also are covered by NACHA's operating rules.*

NACHA's Electronic Check Applications²

E-check services now extend beyond conversion at the point of sale to include all of the following:

- **Point-of-Purchase Check Conversion (POP) at the Cash Register.** Paper checks presented by consumers are "converted" to electronic payments at the point of sale.
 - **2002 volume:** 167 million
- **Re-presented Check (RCK) in the Back Office.** NSF consumer checks under \$2,500 and not more than 180 days old may be electronically re-presented. Although RCK entries are covered by NACHA's operating rules, these payments remain covered by check law (because the original item was negotiated as a check).
 - **2002 volume:** 26 million
- **Accounts Receivable Conversion (ARC) Through the Mail.** Consumer payments by mail are converted into electronic payments by receiving merchants or their processors.

² Volumes have been updated from the conference and were obtained from the NACHA web site. The statistics include 'on-us' items. www.nacha.org/news/Stats/stats.html

- **2002 volume:** 24 million

- **Internet-Initiated ACH Entries (WEB).** Authorization for single or recurring entry with financial institution information obtained over the Internet (consumer payments only). Introduced March 2001.

- **2002 volume:** 233 million

- **Telephone-Initiated ACH Entries (TEL).** Enables consumers to provide verbal authorization for single-entry ACH debits.

- **2002 volume:** 68 million

Check Electronification Issues

Check electronification via the ACH network offers tremendous potential as another option for reducing paper in the payments system. However, as Hoehn noted, there are issues that require additional attention as check electronification matures, gains increased consumer and merchant acceptance, and extends to tendering situations beyond the point of sale.

These issues include:

- Potential for check fraud to enter into ACH network
- Eligible items (Currently only consumer checks may be converted, and merchants have difficulty distinguishing between consumer and some business checks.)

Visa POS Check Service

Dante Terrana, Director of Business Development, Visa U.S.A.

Visa U.S.A. is applying its experience in electronifying credit card processing to the check environment. The association, jointly owned by more than 14,000 financial institutions, recognizes that a segment of consumers continues to prefer checks at the point of sale. Visa's goal is to support this consumer choice at the point of sale, using its established infrastructure to streamline costs and increase efficiencies for financial institutions and merchants.

Visa POS Check Service

The Visa POS Check Service enables merchants to convert paper checks at the point of sale into electronic messages that pass through the system, resulting in debits to customers' checking accounts.

Dante Terrana emphasized the product's risk management features in describing the service. To address merchants' varying needs for risk management, the Visa POS Check Service offers three levels of service. In all levels of service, the check is converted at the point of sale.

- **Conversion Only.** The drawee financial institution or third-party authorizer determines if a check is eligible for conversion. *The merchant retains the risk of loss.*

- **Verification with Conversion.** This level provides access to demand deposit accounts (DDAs) and/or third-party risk management databases to determine the probability of check payment. (Determines if the account is open and if funds are currently available.) *The merchant retains risk of loss.*
- **Guarantee with Conversion.** The guarantor accepts the liability for the check for the merchant. It makes an online accept/decline decision based on access to DDAs and/or third-party risk management negative database. *The guarantor bears the risk of loss.*

The merchant may choose the level of service at the transaction level and may establish parameters. For example, a merchant may choose to use “conversion only” for checks under \$50, “verification with conversion” for checks between \$50 and \$150, and “guarantee with conversion” for checks \$150 or more.

Hybrid Service to Accommodate All Presented Checks

Merchants that participate in the Visa POS Check Service may accept *all* consumer checks for electronification by using VisaNet for “participating transactions” and the ACH network for “nonparticipating” transactions. VisaNet manages the routing of the transaction, making check acceptance a seamless process for the merchant.

- **Participating Transaction.** If the consumer’s financial institution participates in the Visa POS Check Service, processing the converted check stays entirely within the Visa system.
 - Process provides real-time authorization of a check transaction against the consumer’s DDA.
 - Transaction is settled on the VisaNet settlement system.
 - 15 percent of Visa POS Check Service volume follows this pathway.
 - Currently, 22 million DDAs are connected via Visa POS.
- **Nonparticipating Transaction.** If, however, a consumer presents a check drawn on a financial institution that does not participate in the Visa POS Check Service, Visa ensures that the electronic check is routed to the consumer’s financial institution through the ACH network.
 - Authorization and settlement take place through the ACH network.
 - 85 percent of Visa POS Check Service volume currently follows this pathway.

Benefits

By participating in the Visa POS Check Service, drawee financial institutions may achieve the following benefits, according to Terrana:

- Fee income for each converted check
- Simplified back-office processing compared with paper check processing
- Avoidance of ACH transaction expenses and reduction in paper check processing costs
- Potential to reduce fatal returned check dollar volume

Merchant Benefits

Also according to Terrana, the Visa POS Check Service offers merchants cost saving opportunities by:

- Reducing risk exposure through online authorizations
- Providing the choice of three risk options
- Automatically concentrating all check payments at one location, rather than through multiple financial institution sites
- Reducing float by speeding funds availability
- Streamlining end-of-day close process

What's Next for the Visa POS Check Service

Currently, five of the top 10 acquirers and Visa drawee financial institutions representing 15 percent of consumer DDAs participate in the Visa POS Check Service.

Visa is actively working to increase the number of acquirers that support the Visa POS Check Service. This will enable more merchants and drawee financial institutions to participate in the service, expanding the number of converted checks based on online real-time DDA access and contributing to reduced check losses for merchants and financial institutions.

In April 2003, Visa will add support for key-entered Internet and other e-commerce transactions, as well as mail and telephone

Applying Real-Time Online Debit to Check Truncation

Ronald Congemi, President, Star Systems®, a Concord EFS, Inc. Company

Concord EFS is an electronic commerce processor with three primary businesses: payment, network, and risk management services. It is the country's largest processor of PIN-secured transactions. Concord is an investor in SafeCHECKsm, an electronic check initiative designed to reduce costs and losses and improve operational efficiencies.

Check Fraud and Losses Are Driving New Services

Ron Congemi began the discussion by highlighting the challenges and costs of check fraud. Check fraud is an important issue for retailers and financial institutions. Retailers incur an unacceptable \$12 - \$15 billion in losses annually due to bad checks. Among financial institutions, check fraud is shifting from larger financial institutions to those with less than \$5 billion in assets.³ These losses are motivating all industry participants, including government and service providers, to explore and develop new methods to reduce check losses. The overall strategy is to shift check payments to methods that resemble the debit environment.

³ Source: ABA Deposit Account Fraud Survey Report, released 11/2002

Among these new methods, multiple check conversion applications—enabled by rules established by NACHA—are experiencing amazing growth. ACH e-check transaction volume grew from 14.3 million in Q1 2001 to 97.5 million in Q3 2002.

SafeCHECK Background

SafeCHECK represents an online strategy to reduce payment industry check losses and increase operating efficiencies by leveraging real-time payments expertise; connectivity to financial institutions, payment processors, and retailers, and affiliations with risk management companies. It routes check information directly to financial institutions for real-time verification and debit using the existing debit network infrastructure.

Three EFT networks participate in SafeCHECK: STAR, NYCE, and PULSE. In addition, 11 major financial institutions, holding 40 percent of domestic DDAs, participate. Nine of those financial institutions are expected to be operational by June 2003.

SafeCHECK uses the processing infrastructure created by the online EFT networks to route electronic check conversion or check verification messages between merchants/merchant acquirer processors and SafeCHECK issuer member financial institutions.

SafeCHECK Products

SafeCHECK currently supports two major product sets:

- **Check Debit.** A paper check is converted at the point of sale into a real-time, online electronic transaction. The electronic transaction is routed from the merchant, through the EFT network to the SafeCHECK issuer member. The merchant receives real-time approval, indicating that funds have been debited from the consumer's account.
- **Check Verification.** A merchant or check acceptor inquires electronically about the status of the account on which the check is drawn and the availability of sufficient funds. (A SafeCHECK verification may be used for a paper check or an e-check ACH debit.) The electronic transaction is routed from the merchant, through the EFT network to the SafeCHECK issuer member. Check verification may be originated at the point of sale and via the Internet for an e-check ACH debit.

Currently, checks converted at the point of sale that are not drawn-on a SafeCHECK member are presented through the ACH. In the future, SafeCHECK expects to support a more robust check conversion product for these items. In these cases, the issuing bank will be asked to confirm the availability of sufficient funds to cover that check at that time.

SafeCHECK Benefits

- **Merchant Benefits**
 - Reduced check fraud, back-office costs, and processing time
 - Guaranteed funds for check debits
 - Real-time verifications and debits
 - Faster funds availability and reporting
 - Higher sales

□ **For Consumer Financial Institutions**

- Reduces check fraud losses, check processing costs, and false declines
- Creates interchange revenue
- Offers connectivity via existing STAR ISO interface
- Promotes customer migration to debit cards

Why Star Is Involved in Check Conversion

Congemi closed by describing Star's interest in check conversion as part of its commitment to support merchants and financial institutions in their efforts to improve payment efficiencies in the on-line debit environment. He argued that a critical attraction of SafeCHECK to merchants is that it enables them to maintain one procedure, whether conversion is to ACH or SafeCHECK.

Not all checks can be converted to ACH transactions (e.g., commercial and credit card checks), but SafeCHECK issuer members have the option to support such checks and the merchant will know in real time if the check can be converted to an on-line debit.

As with all new payment innovations, Congemi emphasized that success will require cooperation of the payments industry and retailers to make this effort economically feasible and desirable for consumers.

The Future of Payments at the Point of Sale: Merchant Perspectives Moderator: T. Jack Williams

Donald Roddy, Treasury Manager, Sonic Corp.
Henry Bray, Retailer Operations Manager, ExxonMobil Corp.
Daniel Olstad, Director, Best Buy Co., Inc.

Jack Williams reiterated his belief that successful innovation at the point of sale must address and accommodate the needs of merchants. Merchants have the frontline relationships with consumers but, in the view of many merchants, are often required to make substantial investments to support payment innovations proposed or mandated by organizations representing the interests of issuers. Carried to extremes, these inherent market tensions have the potential to frustrate new payment innovation.

He noted that merchants are likely to support innovative payments initiatives *if* they offer real value, i.e., increasing sales, generating actionable marketing data about customers, and—to a lesser degree—introducing operational efficiencies. Payment providers who understand and address these needs are more likely to be successful.

Williams introduced representatives of three merchant organizations that use payments as an integral part of their consumer marketing strategy.

Sonic: America's Drive-In
Donald Roddy, Treasury Manager, Sonic Corp.

Sonic is "America's drive-in." Donald Roddy described his company's mission to "surprise and delight" customers with made-to-order food; unique menu selections; fast, personalized carhop service; and a fun, retro-future look.

As of year-end 2002, Sonic included 2,533 corporate and franchise stores in Mexico and 32 states with sales of \$2.2 billion. Its core market is in the south-central states.

Roddy described Sonic's success as based, in part, on its brand communication strategy. This over-arching strategy includes differentiating Sonic from the competition, strengthening and reinforcing its brand identity, and increasing top-of-mind consumer awareness—in essence, a brand experience in which the customer "drives the process from beginning to end."

Sonic applies this branding commitment to putting customers in the "driver's seat" in developing its payment strategies. As such, Sonic attempts to provide customers with a full array of payment options and a distinctive payment experience, not generally found in the industry. In developing its payment strategies, Sonic considers five key factors:

- Surprising and delighting customers
- Increasing customer loyalty
- Increasing traffic
- Increasing the average ticket amount
- Increasing sales

The payment options supported by Sonic include:

Credit Cards: Visa, MasterCard, Amex, Discover

- Credit card acceptance began in 1997 at corporate stores and earlier in some franchise stores.
- 80 percent of Sonic stores now accept credit cards.
- Credit card tickets are 65 percent higher than the average of cash tickets.
- Between September 2000 and September 2002, credit card sales as a percentage of net sales increased more than 50 percent. Some locations have experienced increases as high as 150 percent.
- Mass media advertising of credit card acceptance began in 1998.

Checks

Sonic has a tradition of accepting checks at many drive-ins.

Electronic Conversion

- In November 2002, 24 Sonic stores began accepting checks for check conversion.
- At these stores, average bad check expense was reduced from 0.071 percent to 0.014 percent as a percentage of sales.
- Nevertheless, customer acceptance has come slowly, highlighting the need to provide additional consumer education to enhance understanding of the service.

□ Gift Cards

Roddy believes that gift cards have the potential to displace difficult-to-manage gift certificates and increase sales opportunities. Gift cards have proven popular with Sonic's customers.

- Sonic began testing gift cards in November 2002 at 77 participating stores.
- More than 10,000 gift cards were activated during the first two months.
- 3 percent of activated gift cards have been reloaded (via phone or in store).

□ Future of Credit/Debit

In conclusion, Roddy reiterated his belief that credit and debit card transactions will continue to grow in popularity with Sonic's customers. At the same time, he and his colleagues are committed to continuing to evaluate new payment technologies in their effort to integrate the payment experience into the Sonic brand strategy.

ExxonMobil: Proud Past, Powerful Future

Henry Bray, Retailer Operations Manager, ExxonMobil Corp.

Henry Bray opened his presentation by defining the ExxonMobil merchant environment. He noted that ExxonMobil petroleum and convenience stores must be thought of not as a "destination" but as a "stop on the way." The company's goal is to "enhance life on the move" by providing quick, easy, quality service to every customer, every time, everywhere. The company views payments as a strategic component in accomplishing this goal.

ExxonMobil has led the petroleum/convenience store industry in consumer payment options with innovations that include card pay at the gas dispenser, debit card acceptance, Speedpass, merchandising at the gas dispenser, and radio frequency identification (RFID)/card pay at the carwash. The company prides itself on paying close attention to costs but is not afraid to invest in payment innovations "if there is a return in making payment options part of customer convenience."

The most visible recent example of ExxonMobil's commitment is the introduction of Speedpass, an RFID tool that customers use to activate gas pumps and authorize payments. Although Speedpass is an "expensive" application, ExxonMobil introduced it and continues to support it because of its advantages in simplifying the consumer purchase experience and building consumer loyalty.

Bray reported that nearly 90 percent of Speedpass users are "highly satisfied." Speedpass also may be used for payment in ExxonMobil convenience stores and at 440 Chicagoland McDonald's, and acceptance is being tested in supermarkets.

As in the consumer spending market as a whole, the petroleum/convenience store industry is experiencing a decrease in cash tendering and an increase in card payments, a combination of debit cards, third-party credit cards, and proprietary credit cards.

Emerging Trends in the Petroleum/Convenience Store Segment

For ExxonMobil, the benefit of expanding payment options is directly related to improving customer relationship management. In practical terms, this means building loyalty by knowing more about its customers.

Bray also reported on emerging payment vehicles and technology trends being introduced in the petroleum/convenience store industry, although not necessarily being adopted by ExxonMobil.

□ Emerging Payment Vehicles

- Electronic coupons
- Reward/loyalty exchange
- Prepaid cards
- Electronic checks
- WIC/EBT

□ Emerging Payment Technology

- Radio frequency
- Smart cards
- Biometrics
- PED compliance
- Triple DES

Economic Reality

Payment transactions in the petroleum/convenience store environment are complex for a wide range of reasons, including the large number of customer payment positions in each retail outlet (generally 10 to 28 terminals), an outdoor/hazardous environment that requires specialized hardware, card sales based on preauthorizations followed by data capture, and outdated legacy POS systems.

The complexity is compounded by the size of the industry (171,000 gas outlets and 132,000 convenience stores) and the maturity of its infrastructure. For example, upgrading PIN encryption device (PED-compliant) dispensers could cost the industry up to \$900 million and upgrading to PIN pads could cost an additional \$85 million. At the same time, average operating income in the petroleum/convenience store industry declined approximately 11 percent during the past year.

Today, many systems are reaching the end of their useful life, and the industry is looking at replacement options. The successful option will enable the industry to reduce processing fees and share systemic savings based on declines in fraud losses.

Bray cautioned that payment service providers must recognize that the petroleum/convenience store industry is under significant financial pressure. All projects to introduce or upgrade payment systems must be economically justified based on fraud/chargeback savings or incremental sales revenue. In his view, imposition of unrealistic process requirements, such as Triple DES, may result in some petroleum outlets' dropping card pay in the dispenser for debit.

Payment Innovations at POS: A Merchant's Perspective

Daniel Olstad, Director, Best Buy Co., Inc.

Best Buy is the largest volume specialty retailer of consumer electronics, personal computers, entertainment software, and appliances. Headquartered in Eden Prairie, Minnesota, the company operates retail stores in almost every state and is on track to have more than 550 stores nationwide by 2004.

In his presentation, Daniel Olstad discussed Best Buy's perspective on payment innovations at the point of sale.

Payment Strategy

The drivers of Best Buy's payment strategy include:

- **Cost control.** Controlling the fees associated with the various types of payment instruments that Best Buy accepts (private cards, debit cards, bank credit cards, and checks) and the bad debt payment risk.
- **Additional revenue streams.** Exploring vendor partnerships and add-ons (e.g. late fees and debit protection program) to create incremental revenue streams.
- **Promotional value.** Leveraging payment instruments to create ancillary promotional value (e.g., extended financing and creative gift card designs to generate sales).
- **Efficiency.** Emphasizing payment instruments that decrease tendering time and streamline back-office processing by minimizing chargebacks, exceptions, etc.
- **Consumer behavior.** Understanding consumer behavior and consumer profitability potential with the goal of meeting customers' payment expectations.

Consumer Behavior

Because Best Buy serves a largely consumer market, it is extremely conscious of consumer payment expectations. Olstad contended that while consumers don't expect to pay more for products based on their payment instrument preference, the bankcard associations spend millions of dollars to encourage consumers to make payment decisions that are expensive for merchants.

Today, consumers have more choices about the payment instruments they use. They also combine increased concerns about payment privacy and security with increased expectations regarding simplicity, style, and image. And both consumers and merchants require reliability. The payment instruments that Best Buy offers must work every time. Failure at the point of sale degrades customer loyalty, which it – and all merchants – cannot afford.

Because technology is a component of Best Buy's image, it believes that it must be on the forefront of payment technology. But it will not add a payment option until the technology that supports that option is perfected—for risk of alienating its customers.

Initiatives and Innovation

Demonstrating Best Buy's commitment to payment innovation, Olstad outlined several recently introduced payment initiatives.

- **Debit.** PIN-based debit, introduced last summer, is Best Buy's "biggest opportunity" at one-third the cost of credit card acceptance and one-half the cost of check acceptance. Debit accounts for 9 percent of Best Buy's volume, and the company would like to significantly increase that percentage.
- **Prepaid products from Visa, MasterCard, Discover, and American Express.** This payment option is "great," but split tenders (partial payment from a prepaid card and the remainder from another payment instrument) contribute to what Olstad described as an "awful" consumer/merchant interaction.

Best Buy is actively examining future payment solutions:

- **Check conversion.** Best Buy is working to support check conversion. A significant issue is differentiating business and personal checks. Currently, 15 percent of checks accepted by Best Buy are business checks, which are not eligible for conversion.
- **Smart cards.** Smart cards are seen by Best Buy as a potential opportunity, but only if the loyalty benefit can be achieved. Magnetic stripe cards are a proven technology that works well and, to date, the compelling argument to shift to the more expensive smart card alternatives has not been developed.

Best Buy has a disciplined program of monitoring evolving new technologies, including:

- RFID
- Biometrics
- Substantive storage ("smart cards on steroids")
- Functional devices (such as cell phones)

Conference Conclusion

The conference closed with a brief discussion of the importance of bringing payment industry participants together to discuss emerging issues. It was noted that the discussions especially benefited from the participation of sophisticated merchant players. Importantly, the focus on common issues and challenges among the sometimes-disparate perspectives of industry sectors and competitors demonstrated a responsible recognition of the interdependencies inherent in the consumer payments business.



Conference Summary

PAYMENT CARDS CENTER

Innovation at the Point of Sale

Conference Speakers and Discussants

- **Henry Bray**, *Exxon Mobil Corp.*
- **Peter Burns**, *Federal Reserve Bank of Philadelphia*
- **Ronald Congemi**, *Star Systems, Inc.*
- **Teri Hoehn**, *NACHA - The Electronic Payments Association*
- **Daniel Olstad**, *Best Buy Co., Inc*
- **Donald Roddy**, *Sonic Corp.*
- **William H. Stone, Jr.**, *Federal Reserve Bank of Philadelphia*
- **Dante Terrana**, *VISA U.S.A. Inc.*
- **T. Jack Williams**, *National Processing Company*

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