

# RFID Payment Platforms Gaining Momentum

At last week's CardTech 2007 payments industry conference, Visa, MasterCard and American Express provided updates on their RFID-enabled payments rollouts.

By Mary Catherine O'Connor

May 24, 2007—For Peter Ho, Wells Fargo Card Services' vice president and product manager, a comment from a restaurant employee in South Lake Tahoe, Calif., made all his hard work over the past year or so worthwhile. The young man recognized the credit card Ho used to pay for a meal, saying, "Hey, that's one of those contactless cards—I've been trying to get one," Ho told attendees of this week's CardTech 2007 payments industry conference in San Francisco.

Ho, who spearheaded Wells Fargo's rollout of an RFID-enabled Visa credit card last year, said that experience validated several important points. First, younger people "get it" and are ready to embrace RFID (contactless) payment cards. Second, the logo on the face of the Visa RFID card—which depicts radio waves and has been adopted by the three biggest U.S. credit card associations (American Express, MasterCard and Visa) as a means of signifying RFID-enabled devices—has become an effective icon. The companies had agreed to print the logo on all their RFID-enabled cards to make it easy for consumers to know where the cards can be used, because the same logo appears on point-of-sale terminals equipped to read the RFID tags embedded inside the cards (or other devices, such as fobs).

In addition to Wells Fargo, BB&T, Chase and SunTrust have also begun issuing Visa's RFID credit and debit cards, and JCB is issuing them in Europe. Chase issues MasterCard RFID cards as well, both under the Blink brand. In total, 7 million Visa RFID cards have been issued to date—half the number of MasterCard RFID cards and keychain fobs consumers now carry—though Visa is making a push to amp up its RFID payment program.

To that end, Visa recently branded its RFID payment devices (it will also come out with fobs and other form factors), changing the name from "Visa Contactless" to "payWave." Though the credit-card association had announced its use of RFID in payments in 2004, it had not created a brand name for the cards until now. The term "payWave" is intended to connote how a customer moves the card in front of a reader to complete a transaction.

Earlier this month, Visa also announced plans for a major rollout of payWave cards in Europe, beginning with a U.K. launch starting this fall. Visa is working with HSBC, Halifax Bank of Scotland (HBOS), Lloyds TSB (a group of U.K.-based financial services companies) and London's Barclays bank to issue the cards. Additionally, through a partnership with the London public transportation system, Visa is developing an RFID-enabled payment card that will also function as an Oyster payment card for transit fares. More than 10 million Oyster cards, containing NXP's MiFare high-frequency RFID chip, have already been issued to British commuters.

Using the combined Visa/Oyster card, commuters will be able to pay for transit fares and also purchase goods at RFID-enabled payment terminals that accept Visa's RFID payment protocol, because the chip embedded in

the cards will support both the Oyster and Visa protocols. Visa says around 200,000 consumers will receive the cards, which Barclays and the other two partner banks will initially issue. About 2,000 retailers will accept the Visa payWave cards in London.

Late last year, Visa announced the release of a global contactless-payments specification, designed to enable Visa Contactless (payWave) cardholders from all parts of the world to use their cards at any merchant that has deployed the spec in its RFID-enabled payment terminals. The new Oyster/payWave cards, and other payWave cards issued in Europe, will follow this specification, enabling European cardholders to use them both in Europe and in the United States. Once Asia adopts the global specification, European payWave cardholders will be able to use it there, as well. Visa's global specification also supports RFID transactions requiring a consumer to key a personal identification number into the payment terminal. In the United Kingdom, this is required for purchases of more than €10 (\$19.90).

Brian Triplett, Visa USA's senior vice president of emerging product development, told conference attendees the company will launch a pilot program testing the use of cell phones for RFID payments complying with the near-field communication (NFC) specification, which is based on high-frequency technology similar to that used in RFID cards. Visa is partnering with South Korean telecommunications firm [SK Telecom](#) on that project.

Additionally, MasterCard provided an update on its [PayPass](#) RFID payment platform rollout. Banks have now issued more than 14 million PayPass payment cards and fobs in 15 countries, said Cathleen Conforti, the firm's senior vice president and global PayPass product manager. This year, she added, the credit-card association is planning an additional 100 pilot programs in 29 countries. Some of the programs will incorporate the use of NFC technology for cell-phone payments. Conforti explained that a pilot program in which employees of the [Royal Bank of Scotland](#) were issued PayPass cards to use at eight merchant locations at the bank's Edinburgh headquarters (see [Royal Bank of Scotland Testing RFID Payment Cards](#)) has been moved to a permanent launch.

Conforti provided statistics from a MasterCard research study showing how the PayPass program is driving the types of financial benefits MasterCard and other card organizations have touted since first launching the technology in 2004. She said the study showed increased spending of 19 percent per PayPass account, as compared with accounts for which consumers have only been issued magnetic-stripe cards. It also indicated consumers with PayPass cards or fobs are using them 29 percent more often than those with non-PayPass cards, and that the average transaction size of a PayPass payment is smaller than for transactions made with magnetic stripe cards. Almost 80 percent of PayPass transactions are for purchases \$25 or less, which Conforti cited as evidence MasterCard is achieving one of its main goals: displacing cash for small purchases.

RELATED\_ARTICLES Merchant adoption is at the heart of the technology's success, and according to MasterCard, there are now 51 million merchant locations worldwide that accept PayPass payments. Almost all of these merchants also accept RFID payments made with Visa's payWave and American Express ExpressPay cards and fobs. What's more, [Discover Financial Services](#) is field-testing its own RFID-enabled credit cards, payment fobs and cell phones with embedded NFC modules (see [Discover Rolling Out RFID Payment Platform](#)).

Leigh Malnati, vice president of advanced payments for American Express, did not provide specific data on the number of ExpressPay RFID-enabled cards the company has issued, but noted that the company has seen consistent increases in adoption and usage of its ExpressPay cards and fobs, especially among young cardholders. Malnati added that American Express has taken a different tactic in launching the RFID cards than MasterCard and Visa: It has not done any national advertising, opting instead to use placards and similar advertising vehicles inside merchant locations that already accept ExpressPay.

