

Financial Services Clipsheet
November 7, 2005

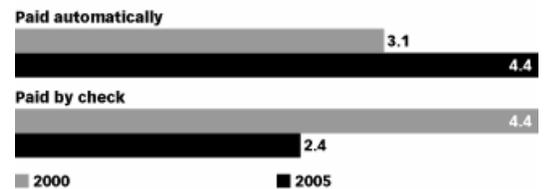
ARC

NACHA - rules for identification of business checks ineligible for conversion 11/2 PRNewswire The members of NACHA have approved an amendment to the NACHA Operating Rules that provides methods for Originators to identify business checks that are ineligible for check conversion, & provides corporate Receivers with methods to opt-out of check conversion. The existing rules for check conversion allow consumer checks to be converted. Many checks written by businesses are being inadvertently converted because Originators cannot distinguish many business checks from consumer checks. 'Business checks are being converted today,' said Elliott McEntee, NACHA. 'The rules will give originators simple & effective methods to identify business checks that should not be converted. The rules could lead to greater use of check conversion, particularly ARC, by making it easier for Originators to comply with the rules. We know that some companies have not implemented ARC because they believe they cannot identify many business checks that should not be converted.' The rules provide that checks that contain an auxiliary on-us field in the MICR line are ineligible for conversion. Such checks are typically used by corporate treasury, purchasing & A/P departments, & can be identified because they are 9 inches in length, compared to the standard 6 inches for consumer checks. Businesses that want to opt-out of check conversion can use check stock that contains the auxiliary on-us field. The new rules provide that checks for more than \$25,000 are ineligible for conversion. Virtually all such checks are business checks, & the dollar limit will ensure that checks sent to wholesale lockboxes are not converted. The rules provide businesses with the same ability as consumers to opt-out of check conversion, & provide RDFIs the same 60-day right of return for unauthorized transactions that exists for consumer check conversions. Under existing rules, Originators of ARC transactions must have reasonable procedures to allow consumers to opt-out, & this provision will now be available to businesses that do not use checks with auxiliary on-us fields. NACHA Operating Rules provide an RDFI with a 60-day right to return an unauthorized ACH debit upon obtaining a written statement from a consumer, & this provision will apply to ARC & POP transactions to corporate accounts. The rules become effective on 9/15/06. NACHA will begin education efforts with a teleseminar on 12/1. Check conversion has been available in the market since 9/00, when NACHA's rules for POP went into effect. In 3/02, NACHA's rules for ARC became effective. NACHA estimates that in 2004 there were 1.25b consumer checks converted into ARC payments, & that at its current growth rate may reach 2b payments in 2005, making ARC the fastest-growing payment application in the 33-year history of the ACH Network.

Banking & Payments

Check is still in the mail 11/4 eMarketer US households are moving away from writing checks & towards making automatic payments for their monthly bills. 2005 marks the first year more households used automatic payments rather than mailing out checks for these types of bills. A survey from Mastercard reveals that 2/3 of US households polled used automatic payments for some recurring bills in 2005. This is higher than the 64% of households that still used checks to pay these bills, & the gap between the 2 should continue to increase. High proportions of the consumers polled by Mastercard used auto-pay for recurring bills like telecom, Internet services, health club memberships & commuting expenses, but usage is expected to grow for other categories, including insurance, utility & cable/satellite bills. In 2000, US consumers paid an average of 4.4 bills by check & 3.1 automatically. By 2005, that situation has reversed, with an average of 4.4 bills paid automatically & 2.4 bills by check. The decline in the use of checks for recurring payments reflects the larger trend of fewer consumers using 'old fashioned' means to pay their bills. A study by ABA/Dove, Citigroup, Clearinghouse & Mastercard, found a consistent decline in the use of checks for monthly bill payments between 2001 & 2005. Among those who made automatic payments in Mastercard's survey, credit cards were the most popular method, followed by debit cards & deduction from a checking account. Although credit cards are the leading type of payment by a comfortable margin, debit card use has been growing at a faster pace. The use of these cards to pay bills increased faster between 2003 & 2005 than any other way to pay bills automatically, rising from 26% in 2003 to 31% in 2005. Online bill pay through a bank is less popular than other options, despite a push from banks to entice their customers to use this service. Many banks have offered the service free, & even give away prizes to randomly selected participants from time to time, but consumers seem to prefer paying recurring bills through the service provider, rather than adding another layer by using the bank. Since this study only covers automatic bill pay, it should not be assumed that online bill pay through banks is unpopular. The ABA study found that 39% had made at least one online bill payment in 2005, not much less than the 52% who had made automatic payments in 2005. eMarketer's *Online Banking* report found that estimates for online bill pay use through banks varied from 43% to 75% of US bank customers.

Average Number of Bills Paid by US Consumers Using Automatic Bill Payment vs. Paying by Check, 2000 & 2005



Note: n=762
Source: MasterCard International, October 2005
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Percent of US Consumers' Monthly Bill Payments that They Pay for with Checks, 2001, 2003 & 2005



Source: American Bankers Association/Dove Consulting a division of Hitachi Consulting commissioned by ACI Worldwide, Citigroup, The Clearing House, and MasterCard, October 2005
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Some banks shifting to electronic check transfers 11/3 of Arkansas banks may be accepting electronic checks by year's end, eliminating the 'float' or lag time between when a check is written & when it clears the bank. In October of last year, Check 21 became law, allowing checks to be processed electronically through a secure Internet transfer. Checks travel on trains, planes & local couriers during the clearing process, which can take several days. Experts have estimated that the processing time could be eventually cut to a few hours with electronic transfers. Befitting the faster process, conversion to the new method in Arkansas is proceeding faster than had been anticipated. Most banks in Arkansas, although probably not all, are likely to convert to electronic transfer by the end of next year, said James Thomason, Arkansas Bankers Bank. It had been expected that conversion by most banks could be several years away. 100 banks in the region of FRB St. Louis - which includes Arkansas & parts of 5 other states - have indicated that they are ready to begin implementing electronic transfer of checks, said Jim Broughton, FRB St. Louis. With the conversion, customers won't have the luxury of writing a check at a local business & waiting a day or 2 to deposit money to cover the check. 'If I write bad checks, I get caught much quicker,' Randy Dennis, DD&F Consulting of Little Rock, said electronic transfer of checks. 'Before it might take

as much as a week or 2 to find out if you're writing bad checks across the country or across an area. Now within 3 days they'll be able to identify you or shut you down.'

Top 10 trends in cash management 10/31 Aite As the US cash management industry transitions for a challenging & more competitive environment, smaller players are strengthening & vying for the market share now held by the top 5 providers. In *Top 10 Trends in Cash Management: Moving Beyond the Status Quo*, Aite examines some of the current trends promising to shake up the cash management industry over the next few years. It explores not only the critical business issues pushing banks to adopt new strategies, but the impact on technology vendors in the space. Today the top 5 cash management providers generate 60% of industry revenue. Smaller institutions are growing in strength, however, by not only joining forces, but by leveraging the latest technologies to differentiate themselves & level the playing field. By 2008, a portion of business is likely to shift down-market. 'Their more nimble structures enable them to move more quickly with new initiatives & provide superior customer service,' notes Christine Barry, Aite. 'Mid-size banks with between \$9b & \$30b in assets are likely to see the greatest growth in cash management revenues over the next few years as they, along with the small banks & new non-bank entrants, slowly chip away at the market shares of the current leaders.'

Check 21 proving more complex than planned 11/2 A year after Check 21 took effect, & supposedly triggered a race to use image exchange networks, many bankers are still at the starting blocks. Bankers now say they were initially overoptimistic about their ability to overhaul their check-handling centers, & that they underestimated the challenge of transmitting images to trading partners & posting electronic transactions to customers' accounts. Executives say they are satisfied with the industry's progress since Check 21 took effect on 10/28/04, & they predict that image exchanges will accelerate next year. They say that it will be 2007 before a significant number of checks are cleared in an image format. One sign of the difficulty in setting up these networks became apparent when the Federal Reserve officially launched its FedReceipt service for delivering images to paying banks. The Fed introduced FedForward, which lets banks transmit images to its processing centers, the day Check 21 took effect. But that was only 1/2 the job; until FedReceipt was introduced, the Fed had to print IRDs & deliver them to the paying banks. Fred Herr, FRB Atlanta, said that FedReceipt went live in September. Over the past year the Fed had said that the service would be available in January, then in May, before finally announcing it. 14 banks are using it now. The Fed is printing about 1.8m IRDs a day, still just a drop in the bucket compared to the roughly 35b checks written annually in this country. 'Most users of the imaging process have confidence in the process. We're moving more into an implementation stage rather than an investigative stage.' Other check imaging networks are reporting progress. 8 large commercial banks are now exchanging images over SVPCo. EDS receives image files through the SVPCo network & converts them into IRDs for delivery. Susan Long, SVPCo, said members are moving 240,000 check images a day over the network; 4 more banks are testing it now & are on track to start using it to exchange images this year. Viewpointe has started receiving images bound for one of its members, BofA, from a nonmember, Compass Bancshares. Viewpointe was originally designed as a shared archive for large banking companies to use to settle checks among themselves, but it modified its model this year by introducing the Pointe2Pointe service for exchanging images with nonmembers. Jennifer Lucas, Viewpointe, said Compass began sending images to Viewpointe last week, & that the 4 regional banks that have signed up for Pointe2Pointe should start using the service this year. 3 member banks - First Horizon, SunTrust & BofA - are settling checks through the archive; they settled 300,000 checks that way in September. But that progress only underscores how slowly all of these projects are moving. As recently as May, Viewpointe was saying that 6 or 7 of its 11 archive members would be sharing images by IIIQ, & that 8 or 9 would be doing so by yearend. Viewpointe's 5 owner banks have committed to using the archive to clear all check transactions with one another by IQ 2007. Only 2, SunTrust & BofA, are sharing images now. SVPCo has suffered some high-profile delays. KeyCorp & JPMorganChase started using its network for image exchange in September of last year, & in January, SVPCo projected that 16 of its 19 bank-owners would start using the network this year. 1/2 that many do so now. 'Our expectations were probably a little overambitious,' said John Feldman, BofA's image transaction & payments executive. Many companies underestimated the complexity of replacing paper check processing systems with electronic ones. Banks have had to update numerous other parts of their operations, from the design of monthly statements to the processing of returns & exception items. 'We're changing the backbone of the process that we have used for check processing for 50 years.' BofA, which processes more checks than any other US banking company, is the only one using both SVPCo & Viewpointe for electronic settlement, & Feldman said he expects to continue using both networks. 'Channel diversity is' important. 'We firmly believe we've got to play in both camps.' This year has been one of testing & evaluation for BofA, & image exchange volume could begin to ramp up by the end of 2006. Next year 'is the inflection year, the year we really begin to see the volumes between the banks grow.' Mitch Christensen, Wells Fargo, was a bit more cautious. Wells Fargo is not yet using images to clear payments with any trading partners. 'In the next year or 2 we will ramp up significantly. Probably the big ramp-up will be in 2007.' It uses the SVPCo network to deliver images to EDS, which prints them as IRDs & delivers them to paying banks. Wells Fargo bought an equity stake in Viewpointe in January. Banks will eventually adopt image clearing. 'We might be scaling a mountain that is a little higher than we thought. There may be some crevasses that we don't know about yet, but I haven't seen any roadblocks that are insurmountable.' Though small banks have gotten less attention than big ones, many are using images. Paul Danola, Metavante, said 5,000 small & midsize banks have signed up to use its Endpoint Network, & 3,500 of them are live now. Endpoint delivered 8m images to paying banks in September, 40% more than it did in June. Danola said that volume could jump to 50m items a month if Metavante could persuade a single top-tier bank to use the network. Metavante is talking to several big banking companies & hopes to close a deal by early next year. 'We're very bullish on the exchange component.'

The cashless, cardless society Finextra 11/2 In the last decades we have seen several technology revolutions. The 1980's introduced the personal computer, the 1990's the internet & the 2000's the iPod. Chris Skinner, TowerGroup ponders the next wave of technological innovation & its likely impact on the banking community. The speed at which revolutions take place is collapsing. The TV took 3 decades to become accessible whilst the iPod took about 3 months. The digital generation is rapidly & radically re-landscaping markets from music to travel to fashion to entertainment to banking. All of which is made viable by the Internet & mobile connections. These days, in our connected global society, new ideas & innovations can spark new ways of doing business within months. The result is that we are living in a state of flux which is leading to a cashless, cardless society. Now, many of you will stop reading at this point because you think a cashless, let alone cardless, society is a fallacy. A cashless society is like a clothless suit - it is the Emperor's new clothes. Everyone can talk about the idea of a cashless society but, in reality, there's nothing there. We were living in a cardless society only 50 years ago. It was not until 1958 that the credit card revolution occurred with the 'Fresno Drop'. The Fresno Drop was conceived by a middle manager at the BofA named Joe Williams. Williams mailed out 60,000 credit cards to nearly every household in

Fresno in 1958. The result was that the BankAmericard became a success & the credit card became a routine part of our daily lives. So it took about 3 decades for the credit card to become accepted & another 2 for it to become the major retail payment mechanism in most countries. How long for it to disappear? Maybe a decade? & the same goes for cash too. What are the signs that this may happen? There are many. Here's the logical progression. To begin with, cash usage in America has halved in the last 8 years, from 60% of all payments to 31%. The same is true with cheque usage, halving from 30% of all payments to just 15%. The reason for the big drop is the fast rise of debit & credit card payments, rising from 10% to 51% of payments. This points to a cashless society being made possible by substituting cash with cards. The rest of this article will focus upon the signs of change that point to the ultimate replacement of cards. The first of those signs is the increasing use of mobile telephones for small value payments. Mobiles are paying for lots of things from car parking meters to taxi fares to drinks & snacks from vending machines. You only have to visit Finland, Japan or Australia to see folks text messaging machines with payments. Japan's NTT DoCoMo has made a business out of mobile payments with the i-mode mobile entertainment system, which gives access to Internet, 3G & other services. The result of increasing functionality on the phone has been a massive upsurge in spending on games, ringtones & other services through the phone. i-mode is now available in Japan, Germany, Netherlands, Taiwan, Belgium, France, Spain, Italy, Greece, Australia, UK, Israel & Russia & services are being continually enhanced in terms of range & functionality. The result is that mobile payments are becoming a standard for not just ringtones & games, but music, Internet orders & a variety of other payments. That leads to the second sign of change - the fact that payments are now sliced & diced. It used to be that we would only pay for things if they were 1.99, 11.99, 99.99 or any other amount with a .99. The fact is that the amount today is just the .99. Everything from i-tunes to i-mode prices access at a fraction of a cent & can support that micropayment transaction level because the amounts are being treated like airtime on the mobile. Just as you pay a fraction of cent for a fraction of a phone call, so you can now pay a fraction of a cent for a fraction of a tune. TowerGroup expects the total market for micropayments in the USA to reach \$11.5b by 2009, with almost \$5b being made by mobile phones. The mobile, internet & micropayment world of the future will not be fuelled by cards & cash but by clicks & texts. That leads to the third revolution in payments - waves. Rather than signing, clicking or texting, just wave your card at a payment station using RFID & Near Field Communication. Both are chip-based contactless payments systems that allow a card or other payments device, such as a mobile phone, to be uniquely recognised by a reader. Such chips are used primarily for tagging your dog or cat at the vet but they are being introduced extensively by the card infrastructure providers of Visa, Mastercard & AmEx, & by other card providers & issuers such as JPMorgan who launched the Blink card as a contactless device to their 94m American cardholders this year. All of these contactless payment systems are based on a credit, debit or prepaid card being loaded with value such that when you reach the purchase station you just wave the card over the station & you have paid. There are several things that concern me when it comes to contactless, mobile & micro payments. Most banks do not appear to take these developments seriously. Banks view mobile & micropayments as 'wait & see' pilots & trials, whilst many of the mobile & micropayment leaders are telco's such as NTT DoCoMo or innovators like PayPal. The same is true with the innovations in contactless payments. The Oyster card was introduced to London as a rechargeable contactless prepaid card in 2003. It originally targeted London's rail & subway users with lower cost fares and, as a result, has been a runaway success with over 2m users today. The use of the card is extending to pay for traffic meters, newspapers, burgers & chewing gum. In fact, it will soon become a real substitute for cash & therefore the use of cash will decline further whilst the use of the card will increase. But the vision for this type of contactless card does not stop there. The Oyster card is likely to follow the example of the Octopus card in Hong Kong. The Octopus card was launched back in 1997 & has 12.5m users today. Not only can the card be used for payments across a broad spectrum of retailers, but it is even usable in Bossini as from August 2005. Bossini is the equivalent of a Marks & Spencer or LL Bean agreeing to accept the card. Now, you have a real alternative to cash & credit & debit cards - the contactless rechargeable payments card from the local transport system. Mobile, micro & contactless payments are in fact disruptive technologies in the payments world. Disruptive technologies were identified by Clayton Christensen in *The Innovator's Dilemma*. Christensen talks about disruptive technologies as often being a cheap alternative to an existing product. The alternative is often a no-frills, stripped-down, basic option to the incumbent product which, as a result, is dismissed as cheap rubbish by the existing providers. However, as the cheaper alternative gains market traction, it gains investment dollars & uses those investment dollars to upscale & ultimately challenge the incumbent providers. One of the examples Christensen uses to illustrate this is the Japanese car manufacturers. When Japan entered the US car market in the 1950's, the cars were dismissed as irrelevant by Chrysler & Ford as they were cheap, rusty, poor quality & unfashionable. However, for people with a limited budget who just wanted a car to go from A to B, these new cars were ideal; affordable, comfortable & nowhere near as hard to acquire as an American car. Over the years, Honda & Toyota garnered more demand & upscaled until they became the most popular cars in the US. That is a disruption & we are seeing these disruptions in the payments world. There are many simple methods of making low value payments, each of which could, over time, upscale to higher value payments. For example, telecom firms focusing on mobile payments; online organisations such as PayPal taking a large slice of Internet micropayments; payment providers from the transport systems, such as Octopus & Oyster, offering electronic cash systems that are slowly upscaling from paying a fare to buying a burger to purchasing clothing. All of these mobile, micro & contactless payments are convenient & easy for consumers & have the potential, over time, to upscale. But upscale to what? This leads me to the second concern with mobile & contactless payments, which is that banks believe this is just for low value payments. Most mobile payments are for items under \$10 & contactless payments for items under \$100. What prevents these systems offering payments for higher value items is that there is no authentication of the payment. Unlike, card-based payments where you need to carry something you have - the card - you need to present something you know - PIN or signature. It is the second piece that allows higher value retail payments today. Without a second authentication mechanism, mobile & contactless payments will be restricted, but adding these verification mechanisms - PIN or signature - would defeat the reason for introducing these payment processes which is speed. The fact that contactless payments take 20 seconds off traditional payment times is the reason for its success in fast food restaurants, cinemas & subway stations. Add extra time onto the transaction & that defeats the purpose. You would expect to take longer over a \$1000 transaction than you would over a \$1 transaction. If you could bring in a second level authentication to the payment instrument then it could easily replace existing Chip & PIN & signature systems. That is where the importance of biometrics comes into focus. Biometric payments will maintain the speed of transaction whilst allowing high value payments based upon something you are, which is more secure than something you have or something you know. Biometric payment systems are few & far between but that could all be about to change. The very fact that governments have focused upon tightening border security through biometric programmes is the key to unlocking this potential authentication tool. As you pass through US customs today, you give your fingerprints & face for biometric authentication. Soon in the UK all citizens will be issued with biometric ID cards if the government achieves its aims. In the Netherlands, people are proactively signing up to the Schiphol airport iris recognition Privium service. The reason is that it allows you to queue jump customs & walk straight through to your flight. As governments force biometric programs into their countries, so will banking & payments piggy-back on this change. The reason, if for no other, will be to address the fraudulent

activities in banking today. The major inhibitor to online transactions is the fact that many consumers feel threatened by identity theft & online fraud. In particular, the media has done a good job of getting people concerned about these activities with reports of over 100,000 victims of identity theft in the UK in 2004 costing a total of £1.3b in losses. It takes up to 6 months for an identity theft victim to sort out the issues & 9 out of 10 victims think the fear the theft created for them will never end. 1 in 5 people throw out their bank statements & utility bills without giving a second thought to the potential dangers. In particular, many of us know that usernames & passwords do not work. Many of us write passwords down on post-it notes that are left on the desk or in drawers, & 1 in 5 of us use the same password for everything. So how secure is online banking when your customers use the same password to access their account as they do to order a book from Amazon? The result is that almost 1/2 of the customers of banks would think about switching to an alternative financial services provider if they offered stronger authentication. Usernames & passwords, signatures & Chip & PIN will never be completely fraud-proof because they rely upon something you have & something you know, both of which can easily be usurped or stolen. That is why many see the future of authentication being based upon something you are - your face, iris, finger or palm. That is why governments are introducing biometric border controls and, as a result, banks will do the same. This means that you now have a variety of developments that physically displace cash - mobile, micro & contactless payments - which can be used for higher value payments when they are combined with biometric authentication. If you agree with the hypothesis presented so far, then you have agreed that we could move to a cashless society, with most cash payments being replaced by cards & mobile. So what about becoming cardless? It will be a decade or so before cards disappear due to convenience & lifestyle. Imagine that your payment mechanism is built into a watch that your bank gave you. The watch includes an RFID or NFC capability, biometric recognition & is supported by existing infrastructures at the merchant front-end & money transmissions process back-end. The retail consumer can therefore go into any store, wave their watch at the contactless terminal, press their finger to the pay point & they have purchased the goods. No card or cash involved. That is the vision of the future of retail payments & we are almost there today. We have contactless payment terminals, fingerprint recognition payments, micro & mobile payments. The only logical step is to introduce non-card based payment systems. Some of these exist, like the Exxon SpeedPass keyfob - an RFID chip based contactless payment system in the US for gas. Or the JCB Credit Card Casio Watch - yes, you can pay for goods with a wave of your watch if you are a JCB credit card holder in Japan. It will not be long before the card evolves to the clothing or jewellery of your customer base. The near-term world of retail payments will be one of a cashless & cardless society. A society based upon micro & macro contactless payments with biometric secure authentication through bank provided mobile & wearable devices. All of this may be a long stretch from where we are today, but the concept of a non-card based cashless society is being trialled in Scandinavian countries, Asia & other innovative towns & cities across the world. It is only a matter of time before we see such capabilities delivered across Europe & America. The focus will be convenience & cool. Give your customers trend-setting payments devices rather than coloured cards. Deliver cashless solutions & infrastructures rather than notes & coins. Dump the gold or platinum card for the gold or platinum ring. Develop the mobile wallet with free phone, iPod, 8 megapixel camera & 3G. All sound a bit too visionary? A bit too quirky? Well just watch out. As Clayton Christensen can testify, the winners will be the ones who disrupt payments because they have a vision of the long-term. The losers will be those who think these innovations are meaningless.

Payment trends in the US 11/1 BTN It wasn't that long ago when putting 25c in the jukebox was as much a part of pop culture as putting an Elvis or Bill Hailey 45 on the turntable. The manufacturers of today's jukeboxes hope they have just as much appeal with recording artists like P Diddy, Britney Spears & Ashlee Simpson-with a notable enhancement: card payments instead of coins. Peppercoin, a payments technology firm that enables micropayments for digital content, & Tove International, a manufacturer of CD & digital downloading jukeboxes, have teamed together to deploy jukeboxes that accept credit cards as payment to play music. Rowe's jukeboxes attempt to marry digital music to physical jukeboxes. Instead of conventional CDs, Rowe's boxes include more choices than a standard jukebox library-more than 200,000 songs from the industry's largest labels, including EMI Music, Sony, BMG & Warner Music. The jukebox firm will use Peppercoin's Small Transaction Suite to accept credit card transactions at the new jukeboxes with consumers having the option of purchasing songs on a pay-per-use basis. Mark Friedman, Peppercoin, says his firm has been able to find success in facilitating small transactions in both the electronic & physical channels. Peppercoin specializes in helping banks & other payments companies build adoption of small payments quickly. In the case of jukeboxes, it believes it's found a way to tap a burgeoning market for smaller transactions using credit & debit cards. There is some evidence that suggests consumers are warming to the idea of using cards for different kinds of payments, & there's a gigantic market awaiting firms that can nudge adoption by creating demand. Ipsos-Insight estimated that about 37.5m American consumers would choose to use their credit & debit cards for transactions below \$5. & each year, consumers make more than 354b cash transactions of less than \$5, representing more than \$1.3 trillion in total revenue. According to Visa's cash management survey, only 58% of financial executives & cash managers view their cash management process as efficient, while noting plans to reduce their reliance on checks in the next year. 56% plan to reduce their use of checks, while 50% plan to increase their use of corporate payment cards. & 76% say they're satisfied with corporate payment cards for receiving payments, while 60% said they were satisfied with checks.

Forcing customers to electronic payments 11/1 BTN Numbers almost always tell the truth, & in the case of consumer payments, all the chatter is of the long-standing trend toward electronic transactions that's sure to continue for years to come. But there's a danger in dragging consumers into the future kicking & screaming simply because studies suggest that's the proper course. Personal electronic payments, either as a means to allow consumers to pay credit card bills, mortgages, loans & utility bills, or as point of sale payments, are as typical a product offering for most banks as savings accounts themselves-that wheel was invented long ago. But as more consumers use electronic methods to pay at least some of their bills, marketing experts say retailers need to tread carefully when selling the benefits of electronic payment. Of the greatest concern is the notion that firms are favoring one channel over another, or herding consumers toward options that are less expensive for the issuer, but perhaps still uncomfortable for the user-or at least not the optimum method for all transactions. 'We market payments in a way that it's a value that customers have a choice,' says Brad Arrowood, Wachovia. Wachovia, which has offered some form of electronic payment for the past 10 years, has recently added new options such as Visa Extra, a rewards platform build around debit cards that allows customers to earn points for everyday payments that can be used for a variety of 'rewards' once enough points are accumulated. The rewards product is designed in part to tap micropayments, or small purchases at retailers, usually less than \$100. It's more an attempt to reduce the amount of cash than the paper check-reducing goals of most electronic payment initiatives. There's a huge market to tap for Wachovia & other institutions in stored value cards-a First Data survey of 13,000 customers found that 5 out of 6 debit cardholders used their cards at the ATM or POS at least once in the previous 30 days. The research group says nearly half of consumers are interested in POS rewards programs. But Arrowood says it's important to market & communicate the idea of

choice to consumers, rather than a matter of one channel replacing another. 'We've found that customers do vary from payment to payment, & they value choice.' The customers may get a perk for trying a new product, but it's done with the understanding that a new method increases an existing base of payment options. 'It's important that customers understand the different payments options open to them & how to access those channels. It's about how they are accessing their money & it's important that they understand that.' Beth Lynn, First Data, says retaining a message of choice between PIN, credit cards, debits & check payment is vital because that's the reality for most consumers. 'Consumers don't go for a certain type of payment typically,' Lynn says. 'They always consider all forms.' Lynn says rewards programs for using new products should refrain from using the rewards to steer consumers. She says there are benefits for both merchants & the institution in using debit cards-the consumer usually spends more money & the institution saves costs. Wells Fargo's Jim Smith faces the difficult job of balancing the benefits of newer electronic channels with consumers who wish to continue with traditional methods, or only use electronic payment sparingly. Through a 'voice of the customer' program, it accumulates data on how customers interact & make payments & other transactions. While the Internet has become the institution's largest channel, surpassing ATMs, it's important not to choose a channel for consumers. 'We don't think you should choose when & where people do their banking.' Wells Fargo has offered online banking since 1996, & has offered its consumers the opportunity to pay credit card bills on the Internet since that time. It's since added mortgages, home equity loans, leases & payment options for an array of other products, with customer-to-customer payments being its most recent add. The way electronic channels do grow is more through a 'grassroots' effort, where the time saving convenience of using a mix of newer channels becomes apparent. When Wells started its electronic bill pay offer, the average household paid between 12 & 16 bills per month, with the total time of up to 3 hours to pay those bills by hand. A decade later, when a consumer adopts ebilling, that time drops to 30 minutes. 'It's more convenient & it's critical to offer that option to customers, but we don't force customers to pick one method over another.'

Check cashing outlets 11/3 ATM&DebitNews Millions of paychecks are placed into eager hands every week. While many of those checks will be deposited in a bank account, a significant number will be cashed at a bank, c-store or check-cashing outlet (CCO). The proliferation of CCOs points to the increasing number of workers who don't deal with a traditional bank. According to a financial services group that operates 133 CCOs in 17 states, 13,000 CCOs across the country cash \$80b worth of checks every year. Several kiosk companies, including Tranax Technologies & CashWorks, have been working hard on an automated, self-service offering for this market. 'The need for check cashing terminals grows as convenience for the service is demanded,' said Scott Holt, Tranax. He points to the growing availability of check-cashing services in places like grocery chains, liquor stores & virtually any high-volume retail location. The technology behind check-cashing kiosks is on the cutting edge of the industry. Document acceptors have long been the bane of manufacturer & customer alike, & check acceptors face all the usual challenges - reading a check that has been folded 3 times & sat on in a worker's back pocket for an hour. But once the check is accepted & scanned, bigger challenges lie ahead. 'More complex than the hardware technology that scans the check is the degree & level to which the software can analyze that check for payment to provide a positive customer experience,' said Dave Grano, Vero, an Oregon firm whose check-cashing kiosk offers wire transfers, bill payment & money orders. 'Traditional check-cashing utilizes the check MICR data primarily, if not exclusively, to analyze the check, resulting in 70 - 75% accuracy which is too low for a viable customer product.' Grano said that in addition to MICR, Vero's software considers a large number of data points across the check. Holt emphasized the strength of the software behind the scenes. 'Substantial R&D went into the development of the current check-scanning module, which focused heavily in reading checks of different conditions & formats.' Not just for the unbanked Conventional wisdom seems to suggest that the primary market for check-cashing kiosks is people with no banking relationship. But while the so-called 'unbanked' population might represent the biggest potential market for check-cashing kiosks, it is certainly not the only one. 'Check-cashing services report that 45% of customers using their service have banking relationships, but choose to use the service because of convenience.' It's easy to speculate that the same dynamic might hold true for the kiosk. 'CashWorks has noticed a significant proportion of its customers, 2/3, do have some form of bank account & choose to use CashWorks to provide their check-cashing services,' said CashWork's Will Sowell. 'Often it has to do with issues of convenience, such as a work schedule that makes it difficult to conduct banking during normal hours.'

Reengineering wholesale banking 11/1 BTN Disjointed wholesale bank offerings are a problem at most banks, & one they've known about for years; it's been the object of numerous bank reorganizations, & it's still bedeviling them. As Dave Hunkele, S1 puts it: 'As far as the top 25 banks, I see them making little to slow progress-and it's not that they're not trying.' The challenge is that converging multiple product fiefdoms across multiple markets is no minor task technically or politically; it requires knocking down silos & streamlining not only the front end where customers interact with the bank, but the middle & back office where employees support those interactions. But banks may need to try harder to converge these services. Several forces are coming together, analysts say, pushing banks to better cater to their corporate customers, or be sidelined by more nimble banks that do. Susan Feinberg, TowerGroup, identifies 4 main catalysts that may push the industry to real change: Steadily declining revenue from wholesale banking operations-the result of cutthroat competition to offer largely commoditized services. New sources of revenue from the wholesale banking group must be found through cross-selling & more differentiated offerings. Customers are pushing banks; they want more efficient services as they interact with a global network of customers, suppliers & business partners. Technology, in areas such as imaging, which is rapidly making convergence a practical pursuit. By converging their wholesale offerings & interactions with customers, banks & customers can manage risk better, meet regulatory requirements & lower expenses by monitoring a single point of contact instead of numerous points of contact. But to meet the challenge, banks will have to push past the superficial wholesale banking realignments of the past. One bank that has recently announced a big push to converge its wholesale banking offering is Scotiabank, & executives there are not coy about the fact that customers pushed them to do it. Last month, Scotiabank announced the creation of Global Transaction Banking-a new business unit aligned to offer major multinational import & export companies a comprehensive, integrated business solution that will include: cash management, payments, trade finance, correspondent banking & foreign exchange services. Effective 11/1, the unit will provide services in the NAFTA region with operations to follow in other regions. Albert Wahbe, Scotiabank, says the bank, with a presence in 50 countries, hopes to offer the same services in Asia by sometime next year. 'In our own institution different countries have different products. The challenge will be to integrate & streamline across different countries & across multiple products,' says Wahbe, who says customers didn't understand why the wholesale banking platform couldn't be as simple & streamlined as the retail platform. Scotiabank Group announced a new wholesale banking alignment in its Scotia Capital group. Scotiabank's NAFTA platform will provide corporate, government & institutional clients with a seamless approach to business, under the Scotia Capital brand. The realigned business model will be more centralized, with common processes, products & services. The 2 initiatives, while separate, represented the bank's push to streamline product lines. They would not offer competing products but complement each other. The bank

estimated the new Scotia Capital initiative could increase annual revenue CDN \$75 to \$125m after full ramp up. While Scotiabank is new to the integration game, Wells Fargo is a bank that's been at it since 1999, says Danny Peltz, Wells Fargo. Peltz explains that cross-selling has been the driver since Wells Fargo first integrated treasury management & the Internet in 2000. Since then the bank has launched a new service on the same single platform every quarter. There are now 45 applications, used by 70% of the bank's 26,000 corporate clients. Last year the customers, with minimum annual revenues of \$10m, processed \$4.4 trillion in payments over the platform. All this may just be the beginning for Wells Fargo, which sees its Internet platform & the Check 21 as positioning it to become a truly national bank, instead of a bank concentrated on the coasts. Its new Desktop Deposit feature allows companies to deposit checks over the Internet & add inputs that streamline their own reconciliation. 1.5m checks have been deposited this way from July to October & the company is on track-by signing up 20 to 40 customers a week-to have 500 on board by yearend.

Company News

AirNet finds mystery buyer 11/1 EPW AirNet Systems, a target of unwanted attention from investment groups since its check courier business was impaired by Check 21, has signed a letter of intent to sell the company to a nationally recognized but unnamed private investment group for \$4.55 a share, or about \$46m. AirNet's enterprise value is estimated to be \$99.2m by Yahoo Finance. Deals based on letters of intent have a way of falling through - CyberSource backed out of a similar letter to buy CardSystems Solutions-but if this deal succeeds, it will bring an end to a long- running struggle for control of AirNet, & likewise disappoint the investment groups that have been circling the firm for much of this year. The reason for the disappointment? The proposed price. When the investment groups, led by Pacific Coast Equity Partners, first began buying up AirNet shares late last year, it was trading at \$3.50/share. Eventually, Pacific Coast owned 450,000 shares, costing \$1.8m. Pacific Coast later joined with other groups to form Opportunity Partners. That group owns 1.554m shares, mostly bought at \$4.50/share. Several other groups piled in, all paying \$4.50/share, the price at which AirNet had traded since April. One such group, QVP Financial LP, bought 633,000 shares on 6/27. AirNet shares closed on 10/28 at \$4.20/share. The goal of all these groups was to make a short-term play, sell or break up the company & walk away clean. Jonas Meer, ANS Investments, said in May that, 'If they know how to handle the process right, & got \$7/share, I think all the shareholders would be happy,' including himself. In April, Opportunity Partners began rattling AirNet's cage, alleging mismanagement by chairman Joe Biggerstaff, criticizing his plans for reinventing the company, & claiming they could do better. Included in their plans was firing Biggerstaff. They forced themselves onto AirNet's board, presumably to protect their investments. AirNet hired a small investment banker, Brown Gibbons Lang, in January, & that company eventually produced the unnamed buyer. If the unnamed buyer closes-it has an exclusive right to negotiate until 11/30-it will mean that Pacific Coast Equity & its fellow travelers will receive minimal returns on their investments. If legal fees & other expenses are factored in, many of the speculators will probably lose money. There won't be much they can do about it, though. AirNet's deal with Gibbons Lang provided for a price of 32% over the share price on the day before the Gibbons Lang engagement was announced-\$3.50/share. When the speculators bought their shares, they bought that deal. C'est la guerre.

Axalto to provide 5m contactless payment cards for the US market this year 11/7 Businesswire Axalto, a leading provider of microprocessor cards, 'will provide 4m of its contactless smart payment cards to top banks in the US by the end of this year' said Paul Beverly, Axalto. The issued Mastercard PayPass cards will include credit & debit cards to enable 'wave & go' payments. 'US financial institutions are leading the move to contactless payment cards. Axalto is committed to helping these institutions put a contactless card in the hand of each consumer to bring payments into a future that is faster & more convenient.' Axalto's smartcards, manufactured in Maryland in the US & in Orleans in France, contain best in class contactless technology to ensure privacy & security for cardholders. The cards provide superior read range & are specially designed for durability. Axalto's product has an optional embossing capability that allows issuers to use all 4 available lines for embossing on the front of the card. Issuers use this fourth line to add a company name & for other marketing purposes. According to Frost & Sullivan, Axalto holds a leading position in banking smartcards in the world, with total shipments of 70m smart banking cards in 2004.

Bharosa - online authentication solution to counter Check 21 fraud 11/7 PRWEB Bharosa, a provider of secure multifactor online authentication solutions, today announced a solution to authenticate users at the point at which they access highly sensitive digital check images online. The new product, Bharosa CheckPad expands Bharosa's bundled suite of Virtual Authentication Devices, answering demand from financial institutions for Bharosa patent-pending technology applied to digital check image encryption. Digital check images are becoming widely implemented in place of paper checks following enactment Check 21. While digitization creates check handling efficiencies for banks, since images lend themselves to rapid retrieval, transmittal & storage, these same advantages can increase fraud risks. The highly sensitive contents of checks, including account numbers, check numbers & customer signatures, can more easily be obtained by fraudsters. & once revealed, information on an account's recent check activity & balances may be all a fraudster needs to begin writing counterfeit checks undetected by the financial institution. Bharosa CheckPad checks this fraud before it happens by requiring strong, multifactor online authentication, at login & during an online banking session when a user attempts to view an image of a paid check. Proprietary Bharosa technology encrypts the actual check image displayed online, so it can not be easily 'read' through any automated means, such as Spyware programs or Trojans. This is made possible through a number of unique & patent-pending Bharosa encryption methods. Bharosa Virtual Authentication Devices are licensed to 2.2m users in 61 countries & offer multifactor authentication strength comparable to their hardware & software token-based counterparts, but without hardware or proprietary software installations of any kind. This brings the advantages of a non-device dependent approach, including low cost, flexible deployment & ease of use. Bharosa Virtual Authentication Devices provide the enterprise with optimal defenses against identity theft crimes including Phishing, Trojans & Malware. Edward Ching, analyst with the firm Rodman & Renshaw, states that 'Bharosa's innovative solutions should be an attractive security option for enterprises to deal with sophisticated attacks.'

BioPay granted biometric check cashing patent 11/1 Businesswire BioPay announced that the company has been issued a patent for their biometric check cashing process marketed as BioPay Paycheck Secure. US patent 6,957,770 covers methods for speedy enrollment of check presenters & automatic assessment of transaction fees based upon merchant defined rules. BioPay houses the nation's largest commercial biometric database & its Paycheck Secure product is a complete payroll check cashing solution designed to stop fraud & speed check cashing transactions. 'This patent affirms our place as the industry leader in biometric transaction processing,' says Tim Robinson, BioPay. 'By creating check cashing & payment transaction solutions that rely on an individual's unique finger image, BioPay is minimizing check fraud & identity theft & enhancing

consumer privacy because nothing is 'left-behind' at the time of transaction.' Since its founding in 1999, BioPay has been leading the industry in terms of biometric process patents, with 40 pending. BioPay has gained distinction as the intellectual capital leader by developing patents, rather than acquiring them, & boasts the most diversified patent-pending portfolio in the biometrics industry. BioPay has enrolled 2m consumers in its biometric database & has authorized transactions \$7b. 1,500 merchants in 42 states are using one or more of BioPay's methods for processing financial & other transactions requiring ID, such as payroll check cashing, biometric payments, loyalty programs & age verification programs.

BioPay targeting the hispanic market for biometric check cashing 11/4 *Businesswire* BioPay, a leading biometric transaction processor in the country, will be expanding its program that targets retailers who serve the nation's expanding Hispanic community for its Paycheck Secure product. BioPay has 2m enrolled consumers & has completed \$7b in authorized transactions to date. BioPay has found success in metro areas with Spanish speaking populations such as: LA, San Francisco, Miami, Orlando, Dallas, Houston & Raleigh-Durham. The company plans to expand their presence with retailers in metro areas with large Hispanic populations such as Phoenix, Chicago, NY, Las Vegas, & Washington DC where BioPay is headquartered. BioPay's Paycheck Secure system allows consumers to enroll at a grocery store, liquor store, convenience store or check cashing location. Once enrolled, the consumer can cash their payroll check at the enrolled location (or in some cases across a chain of locations) just by 'putting their finger down' to confirm their identity. BioPay's Paycheck Secure is installed in many Hispanic & total market grocery chains across the country including Cardenas & Mi Pueblo in California; Malone's Cost Plus in Dallas & El Presidente in Miami. BiLo, Raley's & Lowes Food Stores are among over 1,500 retailers that are offering the biometric system to their customers. New immigrants from countries such as El Salvador, Mexico, & Guatemala have fueled an ongoing rise in the estimated 9 - 10% of Americans households who do not have a checking account according to US Treasury, or an estimated of 30m people in America. Often 'lightly documented' these hard-working residents have traditionally found it difficult to cash their paycheck at a bank or a retail store. Because of the certainty of biometric identification, consumers are gravitating towards retailers using this new technology. 'I love it. As a person without a bank account, cashing my paycheck has just gotten much easier with BioPay's Paycheck Secure,' says Isidro Vega from California. 'I just walk in, put my finger down & the clerk instantly 'knows' me" says Vega. Ed Vela, Jax Markets added 'I love the system. It works amazingly well. Before I used it in my store I was losing \$12,000 per quarter & once we installed it, we nearly eliminated fraud.'

BofA, CashEdge offering transfers for small firms 11/4 Many banking companies offer separate online services to small & large businesses, but companies like BofA & CashEdge are trying to bring large-business payment services to mom-and-pop shops. In January, BofA began offering online B2B & employee payment services to small businesses. CashEdge is offering a small-business service. Both companies' services use the ACH network to make A2A transfers. Small businesses are 'looking for ways for a bank to save them time,' Peter Berbee, BofA, said. 'They view online banking as a fast & convenient way to keep up on their finances.' Owners of small businesses 'were looking for ways so that they didn't have to cut a check' every time they wanted to pay employees or vendors. This year businesses have made 100,000 payments - worth over \$100m - through the company's service. The payments settle in 3 days, but Berbee said that small businesses want to be able to make some payments faster, & they will be willing to pay more to do so. His company plans to offer small businesses a next-day online payment service, for which they would pay a larger fee, in the first half of next year. 'Our large commercial customers use different payment speeds for different things.' Large businesses can make next-day, 2-day & 3-day payments. 'Small businesses definitely have different payment-speed needs.' BofA uses CashEdge's transfer service for consumer accounts, but neither company would say whether CashEdge helped develop BofA's small-business service. CashEdge said that one of its bank customers, which it would not name, is using its small-business service. Neil Platt, CashEdge, said its small-business service is similar to what BofA is offering. CashEdge started a service that lets small businesses send electronic invoices, which can be paid using the ACH system & can be used with the payment service. The initial response from the bank using the small-business offering has been encouraging, Platt said. 'It seems to be a very successful application. Small business is a very attractive segment for banks, but it's not very well served by the banks. Small business kind of gets caught in between retail & corporate banking.' Beth Robertson, TowerGroup, said other banks & vendors allow online payments for small businesses, but CashEdge's invoicing function makes its offering stand out. 'It's very useful. What they try to do in designing these products is to enhance the functionality in ways that small businesses need but not to be as full of complex features & functionality as would be offered in a cash management interface.' Dan Schatt, Celent, said banks are not meeting the electronic-payment needs of small businesses. 45% - 50% of consumers still use checks for most of their payments, but 80% of small businesses do so. 'Payment is one of the most important functions that small businesses need in terms of financial services.' Online services such as the ones from CashEdge & BofA are 'definitely needed in the market. A small business is very cognizant of its cash flow & wants to maximize it.'

CLS – origins & performance 11/1 *EPW* Herstatt risk is named for the Herstatt Bank, which defaulted on its trades in 1974 & created the conditions-narrowly averted-of a global, house-of-cards default. At that time, the forex market was based on the idea that all parties stood behind their trading commitments. When Herstatt defaulted, it took in all the money it was owed, & then closed its doors, leaving a lot of banks holding the bag. Banks all over the world had to scramble to avoid a meltdown. Similar crises accompanied the default of Drexel, Burnham Lambert in 1989, & the Russian coup attempt in 1991. That was why BIS, after years of listening to the G-20 dither about solving the problem, told them in 1997 that either they do something, or the world's central banks would do it for them. Thus was born the CLS. When the Continuous-Linked Settlements Bank (CLS) was conceived in 1997, the idea was to eliminate default risk from the \$1.2 trillion-a-day foreign exchange market. That market, among other things, makes international payments possible by allowing companies to buy the \$126b a day in various currencies that they need for their international operations. If that default risk, called Herstatt risk in the trade, had been permitted to persist, the danger likewise would have persisted that a sudden, house-of-cards collapse of the old foreign exchange market would leave the global financial system in ruins. 8 years & \$600m later, that particular risk has been largely eliminated from forex, market, because CLS clears & settles its forex trades in real time, cash for cash, & all trades are irrevocable. Today, CLS, which clears & settles forex trades from all over the world in real time & several times a day, has become the principle means for clearing & settling most of the world's forex trades. To offer some idea of the volumes that flow through the CLS computers: The bank handles a weekly amount equal to the US GDP. The CLS handles 83% of the forex volume of its 49 members, which are the world's largest banks & foreign exchange dealers. 600 banks, brokers & corporations settle through CLS by contracting with those members. Forex trading costs & technical problems, systemwide, have fallen by 50%, according to TowerGroup. But no success is unmixed, & in this case, the global forex system has merely traded one big risk for a bunch of little ones. 'They've traded systemic settlement risk for an increase in liquidity risk, & I think, to some extent, in operational risk, because if the CLS systems go down during that 5-hour time window when trades are

cleared & settled, you're in deep trouble,' says David Madieros, TowerGroup. Liquidity risk is the danger that a firm on one side of a trade cannot come up with the cash to settle; operational risk is the danger of a system crash. Another risk in the system that didn't exist before CLS is downstream risk-the danger that 1 of the 600-odd smaller institutions clearing through CLS members defaults, requiring the member bank handling the trade to stand behind it. The dangers of liquidity risk are real, & have changed the way CLS members operate, says Jonathan Butterfield, CLS. Outside the US, 'There is absolutely competition for the funds, so part of the design that the industry agreed to is that these cash obligations had to be netted, because the daily values are absolutely huge.' CLS members use algorithms to 'net out' their various daily trading positions, leaving them with a minimum sum that needs to be traded. On 10/28, the total amount settled through CLS-on both sides of the trade-was \$2.3 trillion, but the net cash actually exchanged was \$20b. Unlike the old days, when settlement could be postponed according to the needs of the parties, CLS trades are cleared the day they're made. The cash changes hands. Finding ways to come up with that cash, something banks hadn't had to do under the old system, 'was something banks had to learn how to handle, & I think some of the learning was a bit of a scramble,' says Butterfield. The resulting need for cash has led to some grumbling in the CLS ranks. 'When you ask, 'Is it not true to say that the netting algorithm has reduced the amount of cash you need,' they say, 'Yes.' But the rejoinder is, 'You're requiring me to be able to move very specific sums of money at very specific times.' It's a cash-for-value tradeoff.' CLS recognizes the problem & is trying to refine the netting process to minimize it. The operational risk danger regularly rears its ugly head, because of inevitable computer problems at various national payment, bank, or broker/dealer systems. But at least once-on 3/23/03-the whole system was threatened. That day, a mechanical input problem at CLS' core systems in Coventry, England, delayed its ability to process payment instructions, forcing CLS engineers to refresh the system. The CLS operates within a 5-hour operational window when all the world's markets are open, & by the time the engineers refreshed their system, CLS was running out of operating time, because the Japanese & Australian forex markets were closing. This meant that all trades in either the Yen or the Australian Dollar couldn't settle. Japan is one of the world's largest forex traders. The crisis was resolved, but it was, as the British like to say, a close-run thing. The upstream default risk is more arcane, & less dangerous to the global financial system. But it's a danger that was created by the CLS's creation. For example, if a Bulgarian bank is using a CLS member bank to clear a Yen trade, but a bank in Botswana defaults on a forex obligation to the Bulgarian bank, that Bulgarian bank will have trouble meeting its CLS obligation & may in fact default. The same thing can happen if a small forex dealer, anywhere in the world, suddenly loses its capital in a bad trade. In these cases, the member bank handling the trade for the defaulter is obligated to stand behind the trade. But if such an event triggered a larger wave of defaults-something that has not been acknowledged to have happened-the results could be devastating. 'They've accomplished the settlement problem, but it's not just settlement parties doing the trading; there are settlement members & non-settlement members,' says George Thomas, Clearinghouse Payments Co. 'So if a trade between 2 counterparties that are not members of CLS goes through a CLS member, then the trade between the 2 settlement members is being settled simultaneously, but that doesn't mean the settlement member is going to get his money from either of the other parties to the trade.' Before the CLS was created, Thomas ran CHIPS, part of the NY Clearinghouse. CHIPS, which cleared & settled all US Dollar forex trades, still exists, settling about the same volume as CLS in such financial instruments as forex derivatives & hedging trades. The irony? Before the CLS existed, the smaller-bore default risks Thomas describes never made it into the forex mainstream. They were introduced to the system by the CLS itself, because in order to sell the idea, it encouraged its member banks to make profits on their membership by offering CLS settlement services to these smaller operators. In this sense, & as CLS continues growing, it's a victim of its own success, solving one set of problems but creating another, in much the same way that life is often a matter of choosing between unattractive alternatives.

First American Payment Systems & Govolution 11/1 *Businesswire* First American Payment Systems LP, one of the fastest growing merchant credit card processing acquirers in the US, acquired Arlington VA-based Govolution. Govolution is a provider of electronic payment technology & services to the public sector. The company enables federal, state & local governments & their depository institutions to electronically process consumers' credit, debit & ACH payments made through a variety of methods, including Internet, telephone or in person. Govolution provides an application to process electronic transactions & an interface with the government's own systems, enabling reporting & transactions through a consolidated environment. Industry analysts estimate that \$9 trillion is collected annually for taxes, tolls, citations, permits & payments for public sector organizations & other regulated industries. Consumer demand is shifting those payments away from paper-based methods, such as cash & check, towards electronic payments. The acquisition of Govolution gives First American a distribution channel into the emerging C2G payments market. 'We believe that Govolution has the most robust technology available in the government e-payment sector,' said Neil Randel, First American. 'Using Govolution's management team, we plan to aggressively market & expand into this rapidly growing market.' Christopher Flaesch, Govolution, said that the acquisition will enable Govolution to develop its strong market position. 'With the financial strength & product breadth of First American, we will make Govolution's solutions even better & expand our presence in the government market. First American's acquisition of Govolution opens an exciting new chapter in the ongoing development & deployment of our enterprise e-payment solutions,' said Govolution's Joshua Bixler. 'What began as the first secure Internet credit card collections system approved by the Treasury has matured to become the recognized standard for state & local government payments coast-to-coast.'

Fiserv & Intria Items 11/1 *Businesswire* Fiserv agreed to sell to CIBC its minority interest in the 2 companies' Intria Items, an item processing joint venture. Michael Woeller, CIBC, said CIBC decided to purchase Fiserv's stake in Intria Items as part of the ongoing reorganization of CIBC's back-office operations that support the bank's retail banking services. 'Intria Items is a joint venture that has worked well. Intria Items increased its revenues, profitability & employment; improved its service levels; & expanded into new markets from the time the joint venture was formed by CIBC & Fiserv in 1996.' 'Intria Items has been a rewarding venture,' said Norm Balthasar, Fiserv. 'Fiserv & CIBC each have learned a great deal from Intria Items - about how to manage a joint venture, about best practices in payments technologies & about creating a successful business when starting with a bank's cost center. We believe the Intria Items model is a very viable one for banks around the world. Fiserv will continue to value CIBC as a trusted business partner & friend.' Fiserv will assist CIBC in achieving its objectives for Intria Items with Ken Acheson president of Intria Items & Fiserv Canada. 'Ken's experience in managing complex item processing operations - at Fiserv & other companies - will serve us well as we move through this stage of development for Intria Items.' CIBC remains a Fiserv client for the company's Fiserv ICBS international core processing software - in use at FirstCaribbean Bank Ltd, CIBC's Barbados venture with Barclays Bank PLC; & at CIBC's Canadian bank operations. Intria Items uses imaging software from Fiserv ImageSoft & CIBC is a client for Fiserv's InformEnt data warehouse. 'Fiserv has done an outstanding job, & we place importance on our continuing relationship - as a strategic provider to CIBC & as an adviser on technological issues.' The change in relationship between CIBC & Fiserv was included in Fiserv's IIQ earnings press release as 1 of 3 client relationship changes affecting revenues,

primarily in 2006. Fiserv anticipates recognizing a 1-time realized gain on sale of investment of \$0.15/share in IVQ 2005. Intria Items handles 1b item processing tasks each year. The company offers an integrated suite of services that includes check clearing, document imaging, file management, lockbox processing, account & deposit processing, print & mail, & currency services - all delivered through its national network of processing centers. Intria Items will operate as a separate business of CIBC, will continue to serve its existing external clients & will look for new clients, & other avenues of growth. 'We are committed to maintaining the highest standards for service, integrity & dependability that clients have come to expect from Intria Items.' Since its inception, Intria Items has become a significant player in the item processing industry, gaining more than 50% of the Canadian market for currency processing, achieving annual double-digit revenue growth, being named one of the top 50 companies to work for in Canada & achieving ISO 9001:2000 certification.

Hypercom - wireless payment terminal 10/24 *WirelessNews* Hypercom announced availability of its handheld, wireless Optimum M2100 card payment terminal for merchants & service providers in Europe, the Middle East & Africa (EMEA). The compact, high-speed device offers secure mobile POS transaction functionality for restaurants, delivery services, car rental companies, sports stadiums, medical facilities, kiosks & other businesses that require non-stationary payment systems. 'Optimum M2100 is an important addition to the mobile POS space that combines the reliability of Hypercom equipment with a broad feature set that meets the technology & functionality requirements of users in any retail environment needing wireless capabilities,' said Emilian Elefteratos, Hypercom. 'It gives merchants & service providers a fast, flexible, secure & easy-to-use wireless point-of-interaction device to grow their business.'

JPMorganChase RFID cards 11/2 *DCVelocity.com* At least Elvis is still king. Because it's becoming more apparent that cash isn't. Last week Chase Bank sent RFID-enabled credit cards with 'blink' to 3m customers. The 'contactless' credit cards will be available initially at 1,800 merchants in the NY Tri-State area. Now, buying a bottle of spring water at 7-11, movie tickets at AMC Theatres, or paying for a prescription at CVS can be accomplished with a quick flick of the wrist-as long as it's holding one of Chase's RFID credit cards. Other retailers participating in the program include Duane Reade, Regal Entertainment, Sony Style & Wawa. Chase rolled out the program to 2m of its cardholders in NY & 900,000 in Philadelphia. To use Chase cards with blink, card members simply hold their card near a POS reader at checkout, instead of swiping their card or handing it to a store employee. As card members hold their Chase card with blink near POS reader, the reader emits a tone & a light indicator signals payment confirmation. The rollout represents a warning flag for the greenback, which has been losing ground to the ubiquitous debit card, & faces a new threat in the form of RFID-based contactless payment systems. ABI Research predicts a sharp increase in the use of contactless payment services during the rest of the year & into 2006. 'As consumers continue to use card-based transactions for smaller, traditionally cash-based purchases, contactless payment capabilities make more sense, especially for card issuers looking to increase customer loyalty & convenience,' says Erik Michielsen, ABI. The expansion of contactless payments from closed systems to open systems tied to bank accounts & major credit card issuers will lift the services to the next level. McDonalds, which functions in a 'fast' environment, has plans to deploy contactless systems in nearly all of its North American locations this year. Chase initially rolled out its RFID credit cards in May as part of a pilot. Bank officials say that customers reacted positively to the faster checkout times afforded by the card, which resulted in last week's launch. Chase has close to 5m RFID-enabled credit cards in use worldwide. 'We believe these innovative cards with blink will provide merchants & cardmembers with the increased speed & convenience they want at the POS,' says Carter Franke, Chase Card Services. During trials for the card, the most significant time savings was realized in the drive-through environment, where transaction time was reduced by as much as 20 seconds as compared to paying with cash. Consumers liked the convenience of not carrying cash for everyday purchases, meaning they no longer needed to fumble around for change & small bills, or be confined by the amount of cash they were carrying. 60% of respondents to a Mastercard survey said they use cash less often today than they did 5 years ago. For merchants, blink transactions speed check-out times & allow consumers to spend less time waiting in lines. Research has shown that customers who use blink cards often spend more per transaction & are happier with their store experience. Chase cards with blink provide a reliable, trusted payment method that works in environments where speed is important. 7-11 plans to rollout the technology at its 5,300 stores nationwide, including its locations in Manhattan. 'Because 7-11 is synonymous with convenience, we continually look for ways to improve the consumer's shopping experience at our stores,' says Rick Updyke, 7-11. 'The Chase cards with blink enable a faster, easier transaction. Contactless payment complements 7-11's strategy of providing consumers convenient, speedy service.'

Mastercard results 11/1 *Businesswire* Mastercard announced operating results for IIIQ & first 9 months of 2005, with double-digit growth in gross dollar volume (GDV) & purchase volume. Growth is fueled by increased cardholder spending around the world, the continued global implementation of the company's customer-focused strategy, & the ability to deliver innovative products & value-added processing, information & related services. 'The strength of the Mastercard brand, & our portfolio of innovative payment solutions, continue to resonate around the globe, illustrated by our operating performance this quarter,' said Alan Heuer, Mastercard. Cardholders worldwide used Mastercard-branded cards (excluding Maestro & Cirrus) for 4.9b transactions in IIIQ. This generated GDV of \$424.4b in IIIQ, up 12.5% over the same period last year. For the first 9 months of the year, GDV has grown by 11.9% to \$1,215.2b. GDV includes purchase & cash volume. As of 9/30/05, Mastercard's 25,000 customer financial institutions around the world issued 725.2m Mastercard-branded cards, a 10.6% increase over the same period in 2004; Mastercard's acceptance network allows cardholders to use their Mastercard cards at 23m acceptance locations around the world. The value of purchases on Mastercard-branded cards increased 14.5% to \$300.0b in IIIQ. Purchase volume increased 13.8% in the first 9 months of the year, reaching \$856.2b. Mastercard's growth has spanned credit & debit. GDV for worldwide credit & charge programs increased by 10.7% to \$335.8b in IIIQ, while GDV for debit programs rose 20.0% to \$88.6b. 'Mastercard's global customer base continues to benefit as cardholders around the world are turning to Mastercard for a combination of acceptance, convenience & flexibility.'

Mastercard debit increase triple that of credit 11/1 *DTN* Reflecting a recent trend in card-based payments, signature-debit card dollar volume on Mastercard's US network grew at double-digit rates in the first 9 months of the year, far outstripping growth in credit card transactions. Mastercard reported today that its signature, or offline, debit cards in the US accounted for 2.02b purchase transactions in the January through September period, racking up \$85.1b in POS volume, up 26.3% from the same period in 2004. Credit cards, meanwhile, accounted for 4.09b POS transactions, good for \$345b in volume, an increase of 9.1%. The average credit card ticket was almost exactly double that of the average sale on a signature-debit card, \$84.35 vs. \$42.13. Results for IIIQ were little changed from the 9-month trend. US purchase volume on debit cards grew 26.6% in the period, to \$29.6b, on 705.7m transactions. Credit card volume hit \$121.8b, a rise of 10.9%, on 1.43b transactions. The bank

card association, which is in the process of becoming a publicly held corporation, reported its members had 273.2m credit cards in circulation in the US as of 9/30, on 228.7m accounts. They had issued 73.2m signature-based debit cards, on 66.8m accounts. Signature-based debit is far more popular in the US than in most other regions of the world, where debit transactions secured by PINs tend to hold sway. The US accounts for 2/3 of all Mastercard signature-debit cards worldwide, but just 45% of all Mastercard credit cards.

Mitek - remote capture solutions 11/3 PRNewswire Mitek has signed OEM agreements to provide Benchmark Technology Group & EFC Systems with its Intelligent Recognition Suite to automate remote check deposits. The payment industry has undergone rapid change with Check 21 last year. OEM agreements allow both companies to embed Mitek's technology into their next generation check processing applications that enable banks & merchants to decentralize check imaging & processing, further speeding check settlement & funds availability. By deploying Mitek's Intelligent Recognition Suite, quality & fraud filtering solutions, banks & merchants can enjoy exceptional time & money saving benefits by performing these functions at the point of presentment. Benchmark Technology Group has incorporated Mitek's Intelligent Recognition Suite including QuickStrokes, QuickFX Pro & ImageScore to provide automatic recognition of checks & bank documents scanned directly at the teller line. 'By embedding Mitek's distributed capture recognition toolkits into our transaction processing software, STeller, we have been able to provide a fully automated bank teller solution that addresses every possible transaction a teller may perform. It is the most comprehensive & automated teller application on the market. It is unique in that every transaction is balanced in real time at the point-of-presentment; Mitek's strength in intelligent document recognition brings this feature from concept to reality. This technology enables our tellers to take time once devoted to manual data entry & focus on service & value added sales opportunities with every customer.' EFC Systems is an innovator in the distributed check imaging marketplace dating back to 1998 & utilizes the Mitek Intelligent Recognition Suite for image quality & CAR/LAR functionality in its DigiFunds, DigiProof & Prontus applications which provide remote deposit, back room proof of deposit & branch capture solutions. 'We look to offer our financial institution, processor partners & corporate end users with solutions that are easy to implement & have improved image quality with reduced data entry requirements,' said Ernie Chappell, EFC. 'Mitek has been a pleasure to work with. Their teams are responsive & their products deliver on the promise of industry leading recognition.'

Mobile Evolution - mobile card processing 10/28 WirelessNews Merchant services provider Mobile Evolution announced a suite of mobile credit card processing solutions, including ccFone, ccWeb, & ccVoice. The company said the mobile credit card processing solutions allow transactions to be approved over digital wireless phones, a simple Web interface or voice lines. 'More people are providing products & services outside traditional offices & retail spaces,' explains John Oberg, Mobile Evolution. 'Mobile Evolution fills a merchant services void for small & mid-sized businesses in a wide range of industries - from plumbers & electricians to direct sellers, artists & web designers. In many cities, a taxi driver who accepts credit cards through their cab company is likely to pay an extra 10% fee. We process credit cards for a fraction of that.' Mobile Evolution's 3 core products, ccFone, ccWeb & ccVoice, make up the mobile credit card processing solutions, & ccChoice, which provides subscribers access to all 3 platforms. Of the 3, Mobile Evolution noted that ccFone appears to have the broadest appeal, employing a step-by-step approval interface directly on the screen of a digital wireless phone. 'Our system was designed using robust, open-source programs by leading technology & financial services partners. We use 128-bit encryption - the same level of security used in online banking - to ensure the protection of all sensitive information.'

NY Port Authority RFID developments 10/31 informationweek The Port Authority plans to install readers in 13 transit stations by spring. After a long wait, commuters traveling between NJ & NY could soon be using RFID technology to board trains. The Port Authority of NY & NJ voted 4 years ago to approve the project, but only began to establish guidelines for their use last spring. The PA plans to install readers in 13 stations by next spring. The PA is offering to help the Metro Transportation Authority make improvements in NY City next year. Though the MTA has money set aside to install readers & issue RFID cards to riders, its board has not yet voted to take the step. Similar technology was installed on toll sections of NY's I-87. Drivers on the NY State Thruway have been using EZ Pass since the early 90s. RFID cards are being used by train & bus commuters in other cities, including Washington & Chicago.

P&H automating bank file transfers 11/7 To keep up with surging demand, the cash management software vendor P&H Solutions plans to upgrade its outsourced service to banks by automating many of the routine file transfers that are executed by the banks' corporate customers. Ralph Dangelmaier, P&H, said that the hosted version of the company's P&H Web Cash Manager now supports 80,000 corporate users served by 100 individual banks. He expects the number of companies using P&H's data center to grow fivefold next year, to 400,000 from its existing bank customers. With new customers, the number of users could top 1m in 2007, he said. Automating the file transfer management system in the data center is vital to meeting the growing demand, Dangelmaier said. 'It enables us to scale it in a more efficient manner.' P&H is installing software from MessageWay Solutions, Livonia MI, to automate the delivery & retrieval of data from bank or corporate endpoints. Greg Faubert, MessageWay, said the software gives P&H the ability to convert files from proprietary formats to standardized ones that work with other business applications, including electronic data interchange & Swift messaging formats. The automated delivery & retrieval enables P&H to focus on exception management, Faubert said. 'It only alerts staff when something needs to be attended to.' Dangelmaier said P&H will begin a phased introduction sometime before yearend, initially converting new files to the MessageWay format & then converting existing customer files to it. The project will probably not be completed until early next year. MessageWay provides messaging systems to BofA, Citigroup & Barclays.

Paymentech - wireless POS terminal 10/27 TorontoGlobe&Mail Paymentech Canada is streamlining payment at the POS with the introduction of the portable Express Aerial terminal from AmEx. This short-range wireless POS device is designed for restaurants, bars, patios & specialty retail environments. The terminal can be taken directly to the customer, making payment at the table. Features of the terminal include card masking on receipts & handover functionality allowing customers to input a tip or gratuity without employee assistance. The merchant experience is simplified by the terminal's easy installation & rapid processing time.

Peppercoin secures \$10m funding 11/2 Finextra US micropayments firm Peppercoin has secured \$10m in a 2nd institutional round of funding led by venture capital firm Wall Street Technology Partners & including previous investor Pod Holding. Peppercoin says an additional \$2m was contributed by payments industry investors Total Technology Ventures. The vendor says a Boston institutional investment adviser & several private

individuals returned to participate in the round as well. The new funding comes on the heels of \$8m the company received from a previous round of financing held in August. Mark Friedman, Peppercorn, says the new investment is substantial & timely. 'Financial institutions & their merchant customers are recognising the benefits of a blend of pre-paid, subscription, pay-as-you-go & post-paid payments offerings for growing businesses in the physical & online world.'

Precision Dynamics - RFID cashless payment solutions 11/3 *Businesswire* Precision Dynamics Corp (PDC), a leader in automatic wristband ID, has introduced, Smart Kiosk & Smart Reader. RFID is not a new technology, but using RFID wristbands for cashless payment at amusement parks is. PDC's RFID POS Cashless Payment System consists of Smart Kiosk, Smart Band RFID Wristbands, & Smart Readers, all located throughout a venue for quick & easy purchases. Smart Kiosk is a free-standing booth with touch-screen that allows patrons to load money using cash, credit or debit cards onto Smart Band RFID Wristbands which are typically provided to patrons at admissions. Smart Reader is a free-standing combination POS system & reader that replaces the need for expensive stand-alone POS systems & readers. Most of the time spent waiting in lines is attributed to the financial transactions of handling & counting cash or processing credit cards. 'The system helps increase throughput at concession stands, reducing long lines that often deter patrons from making additional purchases. It is practical for water & amusement parks where patrons don't like to carry wallets, & loose cash can get wet or lost. It provides a convenience for park owners & patrons,' commented Robin Barber, PDC. Smart Band RFID Wristbands are used for a variety of functions, including cashless payment, tracking of purchases, & access control. They provide nontransferable positive patron ID while helping to increase per capita spending, enable cashless transactions at POS, & eliminate the need for tickets at events. PDC's Smart Bands are being used at Hyland Hills Water World in Denver as part of its new cashless POS System. 'PDC's RFID wristband offers our guests a convenient & hassle-free method of making purchases with a simple wave of their wristband. It's secure, easy to use, & has increased in-park spending,' said Bob Owens, Hyland Hills Water World.

VeriFone - PC-based payments 11/3 *Businesswire* VeriFone announced PCCharge Performer, a bundled hardware & software package that provides merchants with an all-inclusive PC-based electronic payments solution. PCCharge Performer includes VeriFone's PCCharge Pro payment processing application & the stylish SC 5000 programmable PIN pad with magnetic stripe reader, along with help desk & warranty services. PCCharge Pro is a Windows-based payment processing software product designed to save merchants time & money by providing features & performance at POS. The SC 5000 is an ergonomic Visa PED-approved PIN pad with magnetic stripe card reader that supports all payment types, including credit, debit, EBT, gift/loyalty. 'PCCharge Performer provides ISOs, acquirers & merchants with a solution for secure, cost effective & highly reliable PC-based payment processing,' said Paul Rasori, VeriFone. 'Merchants who have a PC at POS can now accept payments on it as well, & the SC 5000 makes it easy to accept PIN-based debit & mag-stripe credit cards.' PCCharge Performer includes a 1-year buyer protection plan, 1-year end-user support program, & deployment & kitting services. PCCharge Performer provides a highly flexible payment processing solution that is supported by a wide array of major processors & supports multiple payment types. Easy to install & use with a familiar & intuitive Windows-based GUI interface, the product meets the latest security standards, such as PABP validation, CVV2, AVS & data file encryption.

Visa eases retailer fees, faces resistance 11/1 *Reuters* Visa said it will cut the fees it charges retailers to process small transactions, a bid to win greater market share in the face of lawsuits accusing it of overcharging businesses. The largest US credit card association said it will reduce the 'interchange' fee it charges retailers to accept credit & debit cards on purchases of \$15 or less & add 7 classes of merchants to this 'small ticket' program. Visa said it will increase to \$25 from \$15 the maximum purchase for which 17 classes of merchants may accept card payments without customer signatures. The changes take effect in April. Visa announced them in the wake of lawsuits by major retailers, such as Kroger & Walgreen, & merchant trade groups accusing it & smaller rival Mastercard of setting excessive transaction rates. 'It's a nice gesture, but it doesn't accomplish much & may set consumers back,' said Mallory Duncan, National Retail Federation. 'They are trying to entice businesses that don't take plastic, which can keep prices down, to accept plastic, driving prices up.' Visa is seeking more volume from markets it estimates generate \$750b in annual spending, including \$375b in cash. Visa's volume for purchases under \$25 in these markets totaled \$39.2b last year. 'This will help us offer consumers more places to use cards & make it easier to use them on transactions where cash is now often used,' said Niki Manby, Visa. Retailers joining the small ticket program will see interchange fees fall about 20%. Merchants in the program are expected to pay 1.65% plus 4c per credit card transaction. The debit fee will fall to 1.55% from 1.6%. Interchange fees on all US purchases average about 1.56%, according to a Fed study. Visa's small ticket program is expanded to include bus lines, car washes, copy services, laundries & dry cleaners, news dealers, newsstands & tolls & bridges. It has covered commuter transport providers, fast-food stores, garages, movie theaters, restaurants, taxis & limousines & video rental stores. These 14 groups, & convenience stores, drugstores & service stations, qualify for the no-signature program. Merchants & merchant groups that have sued the card associations are seeking tens of billions of dollars of damages. Companies, including Kroger, Walgreen, Albertsons & Safeway sued Visa in July over interchange fees. Trade groups, such as the National Association of Convenience Stores, sued Visa, Mastercard & dozens of banks, accusing them of colluding to set high fees. 'This means that the losses borne by retailers & consumers will be even greater & thus any damages related to the lawsuits will increase,' Duncan said. Manby said merchants might benefit from faster card transactions & increased sales from consumers who are not carrying much cash. WalMart has filed with federal regulators to open its own bank, to handle payment processing.

Visa Europe establishes V-Pay Pan-European acceptance base 10/25 *Visa* Visa Europe announced the completion of a series of V-Pay transactions in Germany, France, Greece, Turkey, Norway, Finland, Poland, Portugal, Hungary, Estonia & Lithuania. This series of transactions takes the number of countries where V-Pay has been tested to 21 countries with 31 acquirers across Europe. Jon Prideaux, Visa said, 'This demonstrates that V-Pay acceptance is a reality for Europe with de facto acceptance at 2m EMV merchant terminals across Europe. 'Visa is committed to delivering a European debit solution that contributes to an open & interoperable European payments environment. We believe that V-Pay is the 21st century competitive debit choice for Europe. With our infrastructure being activated by acquirers all over Europe, issuance is set to take place in 2006'. V-Pay is always chip, PIN, which means an optimal level of security & issuer control with minimal fraud losses. It builds on the investment of the European banks in EMV infrastructure across Europe, & provides local & European governance, which will minimise costs & provide a consistent & secure acceptance network for European banks. Some details about V-Pay: Is an EMV chip & PIN only debit product. Is compatible with local market account numbering structures supporting 16-19 digit account numbers beginning with 4, 5 or 6. That means issuers, acquirers & merchants in those markets can use their existing systems & infrastructure with minimal changes. Can be co-badged with domestic debit brands. Is

designed to be in line with the SEPA Cards Framework, advocated by ECB & the European Payments Council. Option to carry the PLUS mark enabling global access to ATMs. Is compatible with all EMV compliant terminals. V-Pay has its own acceptance mark.

Wawa Food Market, Hypercom & contactless payment 11/7 PRNewswire Wawa has purchased & installed 2,000 Hypercom Optimum L4100 high-speed card payment terminals at 540 retail stores in DE, MD, PA & VA. Wawa has named Hypercom its preferred supplier of card payment devices based on the L4100's advanced functionality, including the ability to support contactless payment systems that speed checkout by eliminating swiping & signature requirements. The Hypercom terminals are configured to Wawa's specifications to accept magnetic stripe credit/debit cards & smartcards & contactless cards or key fobs that communicate with the terminal without any physical contact. These contactless systems utilize embedded RFID tags to securely transmit consumer account information over radio frequency waves. 'We switched our payment terminal business to Hypercom because the L4100 gives us a strong feature set, flexible configuration, & a combination of security & reliability that we did not find in any other unit we evaluated,' said Guy Festa, Wawa. 'All of our checkout counters are now equipped with the Hypercom product & ready to accept the new contactless forms of payment for faster checkout.' Features that led Wawa to select the L4100 include: High transaction speeds, based on a 200Mhz 32-bit Intel XScale processor. A 64K color 5.7" 1/4 VGA screen, permitting exact reproduction of corporate logos, advertising & promotional messages to deliver strong branding & marketing messages at POS. A bi-directional, dual-sided magnetic stripe reader, an exclusive feature that speeds checkout by allowing cards to be swiped from right or left no matter which way the magnetic stripe is facing. An advanced screen protection & replacement system, including a scratch-resistant Terrapin screen protector, automatic disabling of the unit to prevent accidental screen damage if the protector is not in place, & easy no-adhesive replacement of the protective overlays. Multiple connectivity options, with the ability to support RS-232, Ethernet, & powered or non-powered USB on the same device enabling retailers to switch POS systems without replacing their payment terminals. Contactless RFID reader, capable of supporting ExpressPay from American Express, MasterCard PayPass & Visa Contactless payment programs to help speed transaction times. The Optimum L4100 features a changeable bezel enabling retailers to incorporate their own branding, integrated signature capture, an optional compact flash card slot, & an optional EMV Level 1 & 2-approved smart card reader. The terminal is Visa PED compliant & can handle credit, debit, gift, loyalty & EBT & electronic check conversion. 'The fact that Wawa selected Hypercom over their incumbent supplier is an endorsement of our L4100 terminal & of our reputation in the industry,' said OB Rawls, Hypercom. 'These are clear competitive advantages that we expect will continue to build our business.'

Banking & Payments abroad

South Africa - payment cards SundayTimes 10/20 Research by Visa & First National Bank (FNB) indicates that South Africans use a debit or credit card to make over 50% of their payments - a number that Galia Durbach, FNB, believes should increase. The popularity of card-based transactional products is increasing. 'With the addition of debit cards as a payment mechanism to credit cards & petrol cards, the use of card-based transactions is on the rise. With the introduction of the Mzansi account for first-time banking, more South Africans than ever before have a bank card of some type.' To create greater awareness of safe card usage, FNB & Visa are holding FNB Card Security Week. This security week is geared to help consumers to get the most from their card-based banking products, helping them to avoid fraud. 'Card payments are in essence more cost effective & safer than using cash. Cash is risky, & can be costly - drawing money & depositing money all incur some cost for customers & in the event of theft, cash can never be recovered while lost or stolen credit or debit cards can be cancelled.' 'By using card-based systems, the risks & costs of cash are taken out of the system.' Cards are portable, & can be used internationally without the need for foreign exchange, with 1/2 of South Africans using their cards while travelling. Visa's Neil Hawkey says the South African perception of risk around using cards as payment mechanisms continues to be high, with 54% of Visa's sample reporting that they had security concerns when using cards while traveling in Africa. 36% of people did not know what procedure they should follow if they suspected being the victim of a card-related crime. Durbach notes that criminals are always on the prowl looking for opportunities to abuse card-based systems; if cardholders are aware of what to look out for & know their responsibilities should they fall victim, their risk of any loss is very low. Consumers should always be aware of the types of scams that criminals use. 'Some of the major scams that we're seeing include card skimming, phishing & identity theft'. Hawkey believes that the modus operandi of organised criminals has changed in the same way as the business world. 'Travel & communication have been made easier & more accessible. Visa & the banks are using technology to mitigate the risk, with the issuing of chip card technology throughout the world, criminals will face increased difficulty in operating & crime will be less viable.' While great attention is being paid to card skimming, it is important that sight is not lost of the more traditional, less technologically - advanced types of fraud, such as application fraud & card interception. Card skimming involves the use of an electronic device that records the details of the magnetic stripe on a credit or debit card with a single swipe, giving the thief the details of your card which can be used elsewhere or to create a cloned card. Phishing is a new delivery method for an old fraud attempt, which is either conducted using the telephone or email, & which entices a cardholder to part with their details on the pretext that it is the bank calling or requesting details by email. Identity theft is perpetrated when a criminal assumes the identity of a customer to steal their funds. Hawkey believes that 10 years ago criminals would send a fax or call via the phone to obtain your personal details. Now they use the Internet. Just as you wouldn't give somebody your details when they arrive at your front door asking for personal information, nor should you give this information away on the Net. At FNB we advise customers to make use of InContact, the SMS message service that notifies customers each time a transaction takes place on their account. This serves as an early warning system & will immediately alert customers to any suspicious transactions so that they can immediately put a stop to the card.'

Buying airline tickets in countries where cash is king AirTransportWorld 10/05 There are areas of the world, notably US & UK, where credit cards are ubiquitous. There are 500m credit cards floating around the US; the average household has 8. In the UK there are more cards than people. The widespread use of plastic-as-payment in these countries along with the development of the electronic ticket has enabled the migration of airline ticket sales to the Internet with substantial savings to carriers. But in much of the world, credit card usage is still in its infancy. That includes China, the fastest-growing travel market in the world, plus other areas of Asia, parts of Europe & much of Latin America. AmEx Business Travel predicts that China will become the world's 3rd largest business travel market in 5 years. Boeing & Airbus predict that China will become the 2nd largest aviation market after the US within 20 years. According to People's Bank of China, the country's central bank, only 130,000 revolving credit cards were issued in China in 2000. The largest online travel sites allow customers to select flights, but they then must make a telephone call to book them. The slow growth of credit card usage in China & other regions has as much to do with culture as with economic

development. In many places, the idea of buying something for which you cannot pay is not socially acceptable. For the most part, the 'borrowing culture' is prevalent only in areas of the world that are influenced strongly by Anglo-Saxon culture: US & UK, Australia, Canada, Hong Kong & Singapore. Even in Western Europe, the POS for airline tickets is most often a travel agency & the purchase is made in cash. But the rest of the world is catching on. American Express is doing its part to spread the plastic gospel. In recent months it has signed deals with banks in Russia, Hungary, Brunei & Hong Kong, with other Asian markets to follow. AirAsia's Kathleen Tan says that carrier is seeing significant growth in credit card usage: 'It's a lifestyle.' AirAsia was one of the first airlines in Asia to dispense with paper tickets. It recognizes the efficiency of selling direct to consumers, & it has become one of the top e-commerce companies in Malaysia. 'More consumers are feeling comfortable paying for purchases online using credit cards.' AirAsia accepts only credit cards for online bookings, but it has developed an alternative cash system for customers using its call centers. A purchaser has until the end of the following business day to make a cash payment at an AirAsia airport location or sales office, at a post office, or at any of Alliance Bank's 81 branches throughout the country. Once the payment is made, the airline e-mails the itinerary to the purchaser as confirmation. The carrier offers similar options in Thailand & Indonesia. 'In Malaysia, we have recently implemented the option for our guests to pay via direct debit.' Customers with accounts at Maybank, another large Malaysian bank, can pay directly from their accounts when they purchase tickets online. Plans are underway to add banks with direct debit facilities. The program is still in its infancy, 'but encouraging figures have shown that we are reaching out to more people with the direct debit option.' AirAsia is encouraging credit card usage through its own co-branded Mastercard. Cardholders earn 'AirAsia RM' when they use the card to make purchases from select merchants & the credits can be redeemed for free flights. In Latin America, the use of credit cards to make online purchases has been hampered by mistrust on the part of merchants & customers. 2 years ago, Western Union launched a program that helps airlines overcome those issues. Western Union allows customers to book online & pay cash plus a service fee at any Western Union location. Full payment must be made within 24 hours of the booking. Joe Jackson, Western Union Payment Services, says the system is in use by Continental Airlines, AeroMexico, Mexicana, Chile's LAN Airlines & LAN Peru. 'You'll be seeing announcements from other major carriers soon.' Continental was an early adopter. 'As an international airline, we need to offer more than credit cards, especially in Latin America, Asia & Europe,' says Scott Stachowiak. 'If you look at Latin America, you see a mistrust of banks & credit cards. It's a cash-based society.' Continental.com gets \$50-\$60,000 worth of business from the program each week, & 'it's largely incremental revenue. Every Western Union location becomes a very cost-effective city ticket office.' The largest group of customers using the program are flying to or from Puerto Rico, with Mexico City a 'close second.' A fair amount of Western Union business comes from passengers traveling between Newark & South Florida; NJ & Miami have large Cuban populations. People who move to the US from Latin countries bring their cultural attitudes toward credit cards with them. 'The Latin piece is absolutely huge for us. We cater to their preferences, with signage & payment choices. It's important to us.' Continental offers 2 other payment options that appeal to different segments of the population: Telecheck, a domestic-only service that is designed for people who are used to paying utility bills online, & Bill Me Later, which targets customers who are leery of putting too much information online. Although the US is blanketed in plastic, Western Union notes that 23m US households do not have credit cards, & it cites studies that say 32% of Americans still prefer to pay for purchases with cash. & even those who have credit cards may be 'maxed out' on their spending limits 45% of customers with credit cards are within 5% of their credit limits at any given moment, & up to 40% of requests for remote credit card authorizations are rejected. Jackson points out that a great many US airlines have shuttered their city ticket offices, leaving customers with few options for cash payments. 'We've got a distribution system second to none,' & airlines can make use of it. In China, the biggest nut that Continental needs to crack, 'BilltoBill seems like an industry leader. We are definitely looking into those guys' to reach the nation's 81m Internet users. BilltoBill, owned by Melbourne Australia-based Oriel Communications Ltd., enables websites to sell into China using a variety of 'electronically integrated' online & offline payment services. While credit card growth is slow in China, debit cards have taken off in a big way, soaring from 14m in 1995 to about 500m in 2000, according to People's Bank. Each bank issues its own debit card & BilltoBill provides a 'gateway' to all of them. It accepts credit cards issued by local Chinese banks. Other options include bank transfer, cash payment at bank branches & courier payments. In Europe, where credit cards are widely accepted but usage is nowhere near the levels of the English-speaking world, alternatives range from the sophisticated to the mundane. Germany offers a direct-debit option called ELV that is accepted by several low-cost carriers such as Ryanair & easyJet. Bibit Global Payment Services, a Dutch company that was acquired by the Royal Bank of Scotland in 2004, offers a menu of alternatives to online customers ranging from conventional credit & debit cards to on & offline methods that are tailored to specific countries: Direct debit, open invoicing, ELV, carte bancaire, cash-on-delivery, etc. (Bibit's resemblance to BilltoBill is no accident; BilltoBill's Martijn Hovinga was with Bibit). Bibit is targeting low-cost, low-fare carriers that attract the European customers least likely to carry credit cards young 'holiday-makers' rather than business travelers but that want their customers to use the lowest-cost booking channel. Among its clients is Hapag-Lloyd Express, & Expedia is using Bibit for international sales. Continental is 'just starting to look at Eastern Europe,' Stachowiak says, including the most prosaic of payment options: The grocery store. Wizz Air, the Central European low-fare carrier that launched in 5/04, struck a deal to distribute tickets through the 42 Tesco 'hypermarkets' in Hungary. You can find them at the tobacco counter.

Cards, ATMs & POS

PIN debit will represent 24% of retail transactions by 2012 10/27 CardLine PIN debit cards will be used for 24% of retail transactions in 2012, but will account for only 1.3% of payment revenues for banks, according to IBM Business Consulting Services. That's because PIN debit cards don't generate interest payments & the interchange fees are low, Deborah Baxley, IBM. The analysis of retail payments covers 2002, with projections for 2007 & 2012, but doesn't take into account the many merchant lawsuits challenging interchange prices. Bank revenues from retail payments will reach \$135b in 2012, up 57% from \$86b in 2002, IBM predicts. Revenues from check payments will fall 25% in that time, & credit card transactions will surpass check transactions in 2006. Debit card transactions, combining PIN & signature debit, will make up the largest number of payment transactions by 2011. Despite debit inroads at the cash register, banks will continue to derive most of their retail payment revenues from credit cards. Revenues from credit card interest, interchange & fees will account for 86.3% of total revenues in 2012, while debit & checks will each contribute less than 7%. IBM says it is the largest provider of retail payment systems in the US, working with 8 of the top 10 issuers, 3 of the top 5 acquirers, & most of the major retailers.

Consumers are going online in larger numbers to buy gift cards *internetretailer 11/4* The proportion of consumers who purchased gift cards online in 2004 grew 50% over 2003, to 9% of gift card buyers from 6%, reports First Data, which offers gift cards through First Data Prepaid Services. That proportion will explode this year: 39% of respondents intending to buy gift cards this year will buy them online. Use of gift cards for online purchases is growing strongly. 10% of those who received gift cards in the last year used them online, up from 6% the year before.

18% said they are likely to make a purchase on a merchant's web site using a gift card this year. 54% of respondents who purchased gift cards said they have purchased gift cards for others as Christmas gifts, double the 23% who did so in 2001, when First Data began tracking consumer behavior. Gift cards accounted for \$17b in holiday sales in 2004, according to NRF. 59% of American adults, an estimated 131m people, purchased or received a gift card in the previous 12 months, up 23% from 2001. The average value loaded onto gift cards has fluctuated over the past 5 years from a low of \$41 per card in 2003 to a high of \$59 per card in 2004, reflecting increased gift card sales at diverse retail, restaurant & entertainment locations offering lower average ticket goods & services, according to First Data. Of those who receive cards, 56% spend more than the initial value of the card they received.

US gift card sales are extending into new sectors *CNN 11/2* Gift card sales at traditional retailers such as department stores, may be hit in the 2005 year-end shopping season by sales at non-traditional outlets such as supermarkets, drug stores & gas stations. As a provider of gift cards & solutions, Stored Value Systems advises that since 2000, its customer base has grown to 75,000 non-traditional retail locations, from 1,500 locations previously. Salons, spas, restaurants & convenience stores are currently the hottest sectors for gift card programs, SVS reports, mainly due to offering the convenience of one-stop gift shopping. 7-11 is one example of a non-traditional outlet where third-party gift cards can be bought at the same time as a tank of gasoline or a few groceries. Circle K set up gift card malls at over 2,100 locations, to allow customers to buy all their gift cards at one location. With gift cards ranked by the NRF as the third-most desirable gift item after CDs/DVDs & clothing, traditional retailers (department stores & chains) could feel the pinch if sufficient gift cards are sold at non-traditional locations. In 2004, total gift card sales in the US amounted to \$20b, or just under 1/2 of annual sales, whereas the NRF's initial projections were for \$17.3b in sales. A potential downside of gift cards for retailers is that revenue is not tallied immediately, which means that card sales in November & December may not deliver profits until cards are spent. With SVS reporting in July that US consumers plan to spend an average of \$248 on gift cards during the year-end shopping season however, retailers are likely to bite the bullet & test the waters.

Other

Retailers falling short in consumer data security *11/3 DTN* Merchants have a long road ahead of them in securing the consumer transaction data they house in their databases. Fewer than 1/2 of retailers surveyed have a formal plan in place to handle database intrusions, & of those that do, only 1/4 have tested it, according to the *Retail Data Security Benchmarking Study*, by Retail Systems Alert Group. 32% of those surveyed are encrypting consumer transaction data, a key requirement of the Payment Card Industry data-security standard (PCI). 'We were surprised that not everyone was in tune with PCI,' said Brian Kilcourse, Retail Systems Alert. 'We have a long way to go. I frankly thought we would have made more progress.' The findings come in the wake of incidents in which hackers have been able to gain access to sensitive consumer transaction databases housed by retailers & payment processors. The largest such incident involved CardSystems Solutions, a card-transaction processor for merchants. But other such data breaches were reported in recent months by BJ's Wholesale Club, DSW Shoe Warehouse, & Polo Ralph Lauren. In January, the card networks introduced PCI as a single standard for securing card-transaction data. The survey included responses from 71 retailers & merchandisers, according to Retail Systems Alert Group, & was intended to collect information on the extent to which merchants are collecting & using consumer data, & how they are securing it.

November 7 1918 Rumors close NYSE Word that a peace agreement had been signed ending World War I put Wall Street in a festive mood. The New York Stock Exchange closed early & traders hit the streets to celebrate. The problem was that no one had actually signed a peace agreement - it was just a hopeful rumor that had made its way to the trading floor. One week later, the armistice became a reality & the war finally drew to a close.

November 8 1933 FDR unveils CWA In 1933, the US was struggling through the Depression. The major economic indices were sagging & the unemployment rolls seemed to be growing fatter by the day. With winter looming on the horizon, Roosevelt & Henry Hopkins, one of the architects of the New Deal, moved to offer relief. They unveiled the Civil Works Administration (CWA), a program designed to secure temporary work for people who would otherwise have to endure a winter of unemployment. The CWA provided a mix of white & blue-collar jobs that promised to pay normal wages for a limited schedule of work. Though ungrounded more in compassion than careful planning, the program succeeded not only in helping workers through the winter, but in giving the country a badly needed infusion of cash. The CWA had pumped \$1b into the economy by May 1934. Roosevelt never intended the CWA to be a permanent solution to the unemployment problem-he attempted to curtail the program in December 1933. So, by the spring of '34, the CWA was retired & the government began to look for new ways to keep the nation working.

November 9 1903 Rich Man's Panic The Panic of 1903 reached its nadir -the Dow dropped to a paltry 42.15 as the stocks of industrial companies plunged to single-digit lows. Also known as the 'Rich Man's Panic,' the fiscal crisis dragged on for the rest of the year, taking a severe toll on banks, & many steel & iron producers.

November 11 1986 High-Tech Merger The ever-competitive computer industry got a bit tighter on this day in 1986, as Sperry Rand & Burroughs merged to become Unisys. While the deal cost a cool \$15 million in 'changeover' expenses, it paid immediate dividends: Unisys shot to the #2 spot on the list of the nation's biggest computer companies.

November 12 1946 Driving for Dollars This day marks the launch, in 1946, of a uniquely American invention: the drive-through bank. Indeed, on this day the Exchange National Bank in Chicago unveiled the nation's first 10 drive-up teller windows, which no doubt delighted Americans who neither had the time to park nor the inclination to ever leave their cars.

November 13 1789 Death & Taxes Complaining about taxes is nothing new for Americans. Indeed, in a letter he wrote on November 13, 1789, Benjamin Franklin lamented to a friend, 'In this world nothing can be said to be certain, except death & taxes.'

November 13 1879 NYSE Gets Connected The burgeoning communications industry joined hands with Wall Street on this day in 1879, as the New York Stock Exchange made the move to the modern era, installing telegraph & phone lines.

November 15 1876 *Happy Birthday, Ticker!* The stock ticker was unveiled on this day. Not only did this invention feed traders a steady stream of information, but it gave rise to that festive public event, the ticker-tape parade.

November 16 1914 *Report results in birth of Fed* By 1913, the nation had seen its share of bank crises, including an especially severe one in 1907. The seemingly continuous cycle of panics prompted the formation of the National Monetary Commission, a committee charged with diagnosing & prescribing a remedy for the all-too-frequent bank panics. The Commission found that the nation's banks were so 'unrelated & independent of each other that the majority of them had simultaneously engaged in a life & death contest with each other.' The report triggered the passage of the Federal Reserve Act in 1913, which in turn paved the way for the formation of the Federal Reserve. This bank, which officially opened for business on November 16, 1914, was initially designed as a more or less 'passive' institution, focused primarily on staving off any future bank panics. Over the years, though, the Fed has taken on a more active role in guiding & stabilizing the financial services industry.
