Check processing: The good, the bad, the...

Where’s Clint Eastwood when you need to cash a check?

The truth is, when it comes to figuring out how to make check processing less cumbersome, more cost-efficient – and, yes, maybe even profitable – the only pale riders coming to the rescue of U.S. commercial and retail banks are the banks themselves. And as hard as it may be for financial institutions to pull the trigger, the final showdown most likely will involve a decision to stop investing in what is destined to go away.

But getting to that climactic point in the payments screenplay involves a more thorough evaluation of current practices and developing trends, and one way to do that is to consider what’s bad, what’s good and what’s downright ugly about check processing as we know it. First, an assessment of...

The bad

To begin with, dealing with paper checks remains an extremely expensive proposition. Depending on how a bank does the cost allocation it can cost many times more to process a paper check than it does to make an equivalent digital payment. Over the last decade, banks have invested significant capital in the infrastructure necessary to move a paper check through their payment systems, and that's just the first tier. Ancillary costs associated with real estate and regulatory compliance represent additional indirect sunk costs. Worse, most capital assets devoted to check processing in terms of equipment, specialized/safeguarded facilities and specific geographic locations aren’t well suited to an alternative use.

Based on work with numerous banks, IBM estimates the cost of clearing a paper check to be anywhere from 9 to 15 cents per check. Moreover, fees levied in connection with an average bank’s payment system cover only 10 to 15 percent of the actual cost of running that side of the financial services house.¹

Equally important is the check unit-cost death spiral. The total number of checks being written by consumers is declining by perhaps as much as 7 percent a year, a contraction fueled by the comparative ease-of-use and popularity of debit cards, the automated clearinghouse (ACH) network and other electronic modes
Expense models constructed by several industry experts, including IBM’s proprietary unit cost algorithm, have demonstrated an inverse geometric relationship between the essentially fixed cost of check processing and volume. A reduction in volume of as little as 3 to 5 percent, for instance, can lead to a unit-cost jump of 15 to 30 percent – depending on a bank’s ratio of fixed to variable costs. That occurs because check volume decline is a smooth curve, but reducing assets deployed for check processing only can be done in large steps. One truck with one check in it costs the same to drive around as one truck with 100,000 checks in it. It turns out that larger banks with a greater number of places devoted to check processing can make the steps most closely match the curve. Small banks can just opt out and hand their check processing over to another party in one big step. Mid-tier banks face the most difficulty.

Making matters worse, the current system for processing paper checks is, logically speaking, backwards. Checks are presented to depositor banks often before a determination has been made about whether the party writing the check has the funds available to pay it or the counter party bank has the capacity to rapidly transmit funds to the deposit bank (or for that matter even exists). In addition, that illogical clearing path leaves the system more vulnerable to fraud. Compounding matters is the simple fact that the physical form of the check itself is a liability. The check is paper, and anyone with a home printer and a minimal level of skill can whip up a counterfeit batch.

That same inescapable physicality makes paper checks costly to produce, store and carry around. But enough bad-mouthing the paper check. Now it’s time to address...

**The good**

The upside is that there’s plenty of technology out there to drive the bad guys out of town. Reliable character recognition and image technology, automated fraud detection and security-rich, high-speed networks have put the banking industry in a position to shred paper processing in favor of digital checks, a transformation begun last year with the implementation of the Check Clearing for the 21st Century Act, also known as Check-21. Under its permissive interpretation, any bank in the country must be prepared to receive and process image replacement documents (IRD) as if they were regular paper checks.
Banks that wish to are free to convert all incoming checks to images, knowing they’ll not have to send any outbound paper, just digits that either become an image or an IRD at the receiving end. The law doesn’t actually force banks to switch to electronic check imaging, but they have to be prepared to deal with other banks that have chosen to go that route. And IRDs are subject to the same unit-cost death spiral as checks.

Beyond check imaging, new payment technologies are being invented. Some of the most interesting include radio frequency identification-based systems (RFID) like Hong Kong’s Octopus, cell-phone-based payments being used in Sweden and fingerprint-based debit systems being used in German grocery stores.

On the banking end of the process, are new technologies such as Kappa Image’s public key-type shared anti-fraud image database applications. Those are examples of full-scale digital check and payments processing, and the argument on their behalf ranges from cost-efficiency to improved security, to ease-of-use and consumers’ preference and influence. Electronic images have the potential to significantly cut transportation, labor and overhead costs associated with the processing of paper checks while narrowing the opportunity for fraud. Importantly, an industrywide electronic check format would align the U.S. payments system – and ultimately the economy – with national and regional systems already in place in Canada, Europe and rapidly deploying in Asia.

The advantage also goes to consumers, whose checks will be accepted at more retail outlets and less easily manipulated by fraudsters. They’ll also be able to manage their checking accounts completely online, viewing or even printing out digital images as they need them. It’s not uncommon to see frequent travelers pulling up check images on their PCs in hotels and airports as they confirm payments and balance their checking accounts. Benefits would include more effective error handling, easy access to the check image and/or substitute checks without a fee, privacy protection against market research firms for direct marketing and loss recovery.

Retailers will save on operating costs (despite the cost of POS infrastructure to process paper checks) by truncating the check cycle at their counters, scanning in pertinent data from customer checks and returning the cancelled paper on the spot. Also advantageous to retailers will be the capability to confirm that a check is not fraudulent and that the funds to pay it are there. In addition, corporate officers and small business owners will be able to capitalize on the ability to make regular deposits several times a day without leaving their offices simply by scanning checks for deposit into a workstation provided by their bank or a third party.
Savvy banks also can take advantage by capitalizing on the move to Check-21 and digital checking to improve customer satisfaction and generate revenue. Electronic imaging can be leveraged, for instance, to create new products to help differentiate a bank from its competition. Rigid batch schedules make it nearly impossible to offer faster processing cycles for paper checks, for example, but with electronic imaging a single check could be targeted for rapid turnaround or other special handling. Corporate customers especially might be willing to pay more for the service, just as they currently pay for specialized lockbox services.

Additionally, check imaging opens up the potential for virtual branches. A small bank in Oklahoma that decides it wants to play in the big leagues in Manhattan, for instance, could install a scanner in the mailroom of a corporate client and quickly find itself in business serving that customer’s deposit needs. From that beachhead, it could move to offer cash management, lending and other products. Despite all that good, however, there’s no way to completely avoid …

The ugly

Many in the industry have concluded that when a bank attempts to economically run multiple payment processing systems while it lets the market determine the rate of migration from one to the other, the results are rarely pretty. And it’s easy to see why. Despite occasional success stories emanating from a few banks, when you add up all the costs and benefits of operating separate systems for paper check processing, image processing, IRD, ACH and debit systems, there’s simply no business case – especially when the most expensive of the four, checking, often is given away for free. Checking accounts generate revenue mostly from overdraft penalties, something image exchange of checks is going to reduce or eliminate.

Banks have, over the past 30 years, mastered the processing of paper checks, and some are ready, even eager, to get to the world of all-electronic payments. But the transition period looks so ugly that it is forcing some banks to continue to promote checks, and most banks to put off investments in the all-electronic systems that represent their future.

Currently, there appear to be only two solutions to the problems: Either forcibly shut down one channel (the processing of paper checks) and live with the customer dissatisfaction, or use available technology to converge all the available processes – traditional and digital – into a single process operating under a single set of business rules in a single, centralized payments department. At the same time, converged
systems could continually rebalance processing assets to match traffic volume in the different channels, leaving the market free to determine the rate of transition from paper to all electronic.

With the right IT platform and a set of redesigned processes, paper checks, images, IRDs and ACH all could be successfully processed at the same time using the same control system, while giving a bank the capability to convert to all-electronic payments when the time and the economics are right.

However banks decide to handle things, it’s clear they won’t be able to avoid the showdown for very long. IRDs are essentially a stopgap response and can be expected to ride off into the sunset. Likewise, ACH conversion most likely will be replaced by image exchange as the costs of exchange come down with volume. Last year all-electronic payments surpassed paper-based payments in the U.S., as they already have in Canada, the European Union and Asia.

For the banking posse, shooting down checks without losing customers and without investing in multiple payment processing systems is the challenge.
About the authors

Fred Ejlali is a Partner with IBM Business Consulting Services and has management responsibility for the payments practice within the company’s Banking Sector. He has more than 20 years of business and management consulting experience in the wholesale, consumer banking and credit card industries. Fred has been the guest speaker at several user association and trade conferences nationwide, and is the author of several white papers and thought leadership documents in the payments space. Fred can be reached at ejlali@us.ibm.com.

George Warfel is an Associate Partner with IBM Business Consulting Services and has 25 years of experience consulting to the banking and payments industry in the U.S. and internationally. He helped pioneer the conversion from paper to electronics, working to develop the first check image processing system with what is now PNC; a patented image-based LC system with HSBC; a patented multi-issuer smart card system with Amex, Visa, MasterCard and JCB; and an all-electronic, wireless funds transfer system for the central bank of Vietnam. Currently he is advising U.S. and Canadian banks regarding strategies and systems for Check-21 and its Canadian equivalent TECP. George can be reached at george.h.warfel@us.ibm.com.
About IBM Business Consulting Services
With consultants and professional staff in more than 160 countries globally, IBM Business Consulting Services is the world’s largest consulting services organization. IBM Business Consulting Services provides clients with business process and industry expertise, a deep understanding of technology solutions that address specific industry issues and the ability to design, build and run those solutions in a way that delivers bottom-line business value.

References
1 IBM Business Consulting Services experience.
2 Ibid.
3 Ibid.
4 Octopus Cards. http://www.octopuscards.com/eng/index.jsp