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The Domino Effect of Check 21

Paving a Path for Banks to Redefine and Reclaim the Payment System

A White Paper by J. D. (Denny) Carreker

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PAVING A PATH FOR BANKS TO REDEFINE AND RECLAIM THE PAYMENT SYSTEM

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Check 21 gives banks an extraordinary opportunity to pave their own way back to a position of preeminence in payments.

Domino theories are invoked when a seemingly simple or isolated event is predicted to provoke a series of reactions whose cumulative effect is both momentous and distant from the original event.

The enactment of Check 21 has entrained such a series of events in the payment system. These events — some profound, some mundane, some desirable, some confronting — can pave the way for commercial banks to reestablish their preeminence in the business of payments.

That banks will seize the advantage is not preordained, however. In this paper, Carreker outlines the imperatives for banks as an industry and as separate players in reshaping payments and commerce for the 21st century.

As of this writing, the Check Clearing for the 21st Century Act has been the law of the land for about a year. Better known as Check 21, it was long in the making, first emerging years ago as a Federal Reserve System initiative. Its general intent all along has been to modernize the check clearing system — to speed it up and lower its cost and risk.

On the face of it, the law appears to entail modest change, simply permitting a presenting bank (the bank attempting to clear a check) to present the paying bank (the bank on which a check is written) with a substitute check in place of the original check, and requiring that the substitute check contain a faithful image of the original check. Heretofore, barring an explicit agreement between the banks involved, presentment had to involve the original check.

With Check 21, no such agreements are required; substitute checks (also called image replacement documents or IRDs) are sufficient for presentment.

That is really the essence of Check 21.

But its actual impact outweighs its spare provisions. In the steady but very slow trend away from paper checks and toward electronic payments, Check 21 serves as the “tipping point.” It provides the incentive for banks to build on their image processing capabilities in order to proactively eliminate paper from the payment system, to truncate paper checks as early as possible in the collection process, to overcome the logistical burden and transportation costs of the old paper-based check system, and to make images and electronics not only available but also profitable.

In the course of doing so, banks will have an extraordinary opportunity to pave their own way back to a position of preeminence in payments — a position they have been slowly losing to non-bank providers of one-off payment services.

The potential payoff is considerable. Globally, payments amount to a $600 billion business. The US accounts for about a third of that amount, or $200 billion. US banks have about half of that business today, but their share has been steadily eroded by non-bank players that do not have the same safety and soundness protections and obligations.

Our research indicates that image exchange and other Check 21-driven changes can save the US banking industry about $2 billion a year.

With Check 21, banks have the opportunity to capture a sizeable percentage of this lucrative payments space. Doing so involves recognizing and capitalizing on a series of dominos that we see Check 21 precipitating.

AROUND THE WORLD

It should be noted that banks in other countries face similar challenges as they also embark on payments electronification. The challenge in each country varies, of course, by the prevalence of paper in the payment system. And payments infrastructure issues vary significantly from one country to another. But in general, banks in each country can position themselves to lead the change or be led – as individual banks and as an industry.

DOMINO ONE — IMAGE EXCHANGE AND IRDS

The first domino that Check 21 will tip into action is image exchange and IRDs. Image exchange is simply the direct exchange of images rather than checks between banks. Most US banks of any size already have some imaging capabilities — the basic nuts and bolts technology for capturing and storing images. But without the ability to exchange images, they still must exchange the actual paper itself and continue to incur all the physical handling and transport costs.

Today, US banks spend about $8 billion a year on just check processing and transportation. This includes receiving checks at the depositor's bank, processing them, transporting them back to the paying bank, handling exceptions and errors along the way, and eventually getting them back to customers.

With the adoption of image exchange and other Check 21-driven changes, our research indicates that roughly one quarter of these costs could be avoided — a savings of about $2 billion a year. This is not only a significant amount but also a critical savings for banks at a time when they are under great pressure to reduce their costs because of the revenue declines associated with check volume declines.

Once an image has been captured and made available, the number of valuable uses to which it can be put is virtually unlimited, and customer demand for images is high.

This is not to say that elimination of paper will necessarily be rapid. The law, after all, only mandates that banks accept substitute checks, not images. No matter how image-exchange-enabled one bank might be, if another chooses not to receive image files, the first bank must deliver substitute checks or the original checks.

Since many banks have chosen to take measured steps on the way to full image exchange, they have necessarily opted to invest in IRD capabilities – the ability to create IRDs upon capturing an item and to ship them in the most expeditious way. While few consider IRDs to be a sound long-term solution, they do expect IRDs to be an essential step on the way to long-term electronification.

CARREKER AND IMAGE EXCHANGE/IRDS

Carreker's software for image exchange, ExchgLink, was successfully tested in a 2004 milestone exchange of images between its client Key Bank and JP Morgan Chase. Test volumes were successfully exchanged, and ongoing exchanges continue with larger volumes. Wells Fargo is also deploying ExchgLink

To ensure that it can be smoothly integrated into banks' existing payments technology and methodology, ExchgLink is based upon technology already used by most of the large US banks for electronic check presentment (ECP), which bridges the transition from paper to image with an exchange of electronic information. 75% of ECP exchanges made today use Carreker's ECP technology.

Carreker's IRD authoring software is being deployed by the Federal Reserve as well as two very large payment banks.

Once image exchange unfolds, banks will be working not only from images they capture themselves but also images captured by other banks at many capture points. The original paper checks will not be available to them as they are today. Thus the quality of the images will be paramount. Banks will be loath to accept images from any source that cannot guarantee the quality of their images.

CARREKER AND IMAGE QUALITY

Carreker provides Image Inspector, a software solution that inspects images and flags suspect items for rapid repair. It is the first of several components in the company's planned Image Quality suite. Image Inspector was a component of the successful pilot of ExchgLink at Key Bank, and Wells Fargo has also conducted testing of Image Inspector with positive results.

DOMINO TWO — IMAGE APPLICATION CASCADE

Image exchange vastly expands the business case for distributed capture.

The next domino will be a cascade of image applications. Once an image has been captured and made available, the number of valuable uses to which it can be put is virtually unlimited, and customer demand for images is high and growing higher.

Some uses, like image statement delivery and positive pay, have been in use for some time and are being enhanced in value by the growing volume of images. Some, like image lockbox and image self-service, are still coming into their own. Regardless of the application, banks have the opportunity to differentiate their service offerings, tighten their payment relationships with customers, and generate increased payments revenue by enhancing these services over time.

Another set of image applications involves the bank's "back office" — all the extra handling functions that it takes to resolve issues that arise in check processing (bad checks, lost checks, customer questions, posting errors). The main back-office functions of exceptions, research, adjustments, and return items have been costly consumers of human resources, even with extensive automation, relying on access to the original check or a microfilm of the check.

Image enablement of these back-office functions is creating significant improvements in productivity levels and service levels. Instead of multiple keying of the same information over and over in one function after another, the simple transfer of the image. Instead of customer response times of days and weeks, just seconds, minutes, or hours. Instead of dependence on local labor because of physical constraints, access to global labor supply.

CARREKER AND IMAGE DELIVERY AND BACK OFFICE

Carreker offers image delivery applications for statement, CD, and online images.

In addition, Carreker's full suite of image-enabled technology for the primary back-office functions which includes Inbound Returns/Express, Adjustments/Express, Exceptions/Express, and Express Research. As of this writing Carreker is beta testing Express Research at a bank to be named, and the other solutions are in full production at leading banks.

The image-enabled back office promotes an additional opportunity for banks to derive a greater return on their image investment: offshore outsourcing for major cost reductions.

In recent months, as the business case for offshore outsourcing of many bank functions continues to be validated, the focus is shifting to business process outsourcing (BPO) of back-office, payment-related functions. And in fact many international banks with captive holdings in prime offshoring locations like India have proven the business case for offshoring payments processing, in some cases using Carreker's image systems.

CARREKER AND OFFSHORE BPO

Carretek LLC is a partnership between Carreker Corporation and Mastek Limited, a leading global offshore outsourcing company with state of the art outsourcing facilities in India used by many leading companies, including banks, around the world. Carretek assists banks in understanding, quantifying, and implementing their payment BPO opportunities. In the third quarter of 2004, Carretek announced a three-year contract to offshore selected functions of a large US company.

Banks are positioned to create a shared utility and industry data base for guaranteeing payments at the point of capture.

DOMINO THREE — DISTRIBUTED CAPTURE

The third major change that Check 21 will put in motion is the increasingly distributed capture of checks — ever closer to the check writer. The more quickly the check can be captured, the lower the expense in terms of transportation, data entry, and errors, the less opportunity for fraud, and the greater the potential for later deposit deadlines and faster availability of funds.

In theory, there is no limit to where the check could be captured, especially as imaging devices follow the normal technology price curve, diminishing in cost even while gaining in sophistication. Image capture at the branch is no longer a novelty, image capture at the ATM is becoming a reality, as is image capture at the point of sale.

As for image capture at lockbox, corporate customer, and correspondent bank sites, that has been taking place for some time now, but primarily just for the bank's own purposes, with the image then archived or discarded rather than deployed in the subsequent payment stream. But with the emergence of image exchange, which makes it possible for the capturing bank to make greater use of the image, the business case for distributed capture increases significantly.

By pushing capture out to its earliest point, banks can reduce their deposit processing expenses, achieve faster funds availability, enjoy later deposit deadlines, and share these benefits with their customers. And they can position to expand their capture capabilities to corporate customer sites.

CARREKER AND IMAGE CAPTURE

Creative Payment Solutions, a subsidiary of BB&T, licensed Carreker's Source Capture solution and as of this writing is in test production with an insurance customer, capturing remittances and coupons remotely and transmitting them electronically for posting and collection. Future releases of Source Capture are planned for capture at branch, cash vault, and ATM locations.

Approximately 60% of check images archived by the top 50 banks in the US and Canada are captured and stored by Carreker applications (or will be when each user has completed current implementations). Carreker's capture applications are used by the Federal Reserve System, Viewpointe, Symcor, and many individual banks.

DOMINO FOUR— PAYMENT GUARANTEE

What makes that required spending on Check 21 tolerable is the prospect of new product and service revenue.

All three preceding dominos can be precipitated by the efforts of individual banks working in concert with their technology partners or another bank at a time. The fourth domino — payment guarantee — refers to the ability to guaranty check payment at the time the check is captured and imaged. This event requires the actions of banks as an industry — again in concert with their technology partners.

Given that banks' customers today bear a staggering burden of check fraud (roughly $8 billion annually), the outcome would be well worth the effort in terms of the bank customer relationships, revenue, and resulting ability to reestablish banking's dominant position in value-added payment services.

When image capture is pushed out to its earliest point, images are exchanged among the largest banks, detailed check payment data is archived and accessible, and customers have paid access to images, all parties will be increasingly interested at the earliest juncture in the goodness of the funds involved. Are the funds in the account? Is the transaction fraudulent? Is the customer who he claims to be? Is payment guaranteed?

With all these image capabilities in place, banks are positioned to create a shared utility and industry database that would enable them to guarantee payments at the point of capture. Today, these same banks contribute their negative databases to non-bank entities and then pay those entities fees for access to their own data. But in the new image-enabled, post-Check 21 world, they can, more efficiently than any other entity, assemble an on-line real-time engine for guaranteeing payment and reaping the safety, soundness, and commercial rewards.

CARREKER AND PAYMENT GUARANTEE

Carreker's fraud mitigation technology is already used by the large US banks to protect more than 70% of US DDA accounts. The software uses advanced methodologies to compare account activity with historical and user-defined rules, fraud trends, and historical and normal behavior patterns. These solutions can serve as a significant component of the payment guarantee database, along with additional bank-provided information in an industry-monitored arrangement.

DOMINO FIVE — EXTENDED SERVICE CAPABILITIES

The last domino is farther in the future but no less logical than the first four, and it arises directly from them. Banks will be positioned to offer extended service capabilities that arise from the sheer wealth of the data they will assemble, their scale and efficiency, and their core competence in back-office transaction management.

If they can archive billions of items flawlessly for their checking customers, why not archive billions of transactions for their corporate customers? If they can handle millions of return items flawlessly and efficiently for their own accounts, why not offer return item management services to their retail customers? If they can manage exceptions at minute error levels in their own shops, why not take on the exceptions of their customers? If they can monitor operational compliance by their own tellers and processing clerks, why not the operational compliance of their customers' transaction processing employees?

The banking industry needs to reassess its own role in practices that benefit their competitors at banking's expense.

It is true that many non-bank companies are attracted to these information management businesses, but a customer's decision often comes down to an increasingly important criteria these days: trust. As in, which company would you most trust with confidential data about your customers? Which company would you most trust to handle financial data flawlessly? Which would you most trust to correct a transaction gone awry? Banks have a long-time trust advantage over customers, and as they conform to ever more stringent regulations and disclosures that non-banks do not, the trust issue is increasingly in their favor.

THE CHECK 21 SPEND

For any investor — bank, technology provider, or individual investor— an obvious question in considering the Check 21 dominos is, "How much?" How much will it cost for banks to comply with Check 21 and, more important, to take advantage of the once-in-a-century opportunity that Check 21 offers the industry.

The industry has not yet reached a unified quantification of the size of the spend — in part because many banks are just now realizing Check 21's implications. But among the very largest banks, estimates in the range of $75 to $100 million (not including hardware) have been validated. For the industry in total, a range of $1.5 to $2.5 billion over the next three to five years appears reasonable at this writing.

What makes that spend tolerable, sizeable as it is, is the prospect of new product and service revenue resulting directly from the innovation envisioned in the last two dominos. Our research of the potential revenue is ongoing, but early estimates of just the check guarantee service referenced above as Domino Four, developed for merchants who today absorb by far the larger portion of check fraud, indicate a bank revenue potential of $2 billion.

BANK AND INDUSTRY IMPERATIVES

If the domino effect of Check 21 paves the pathway for banks to reclaim the payment system — and along with it some significant share of the $100 billion now earned by non-bank providers — the question is, what next? What must banks do to take advantage of the opportunity?

A number of firm commitments are in order — some made bank by bank, some as an industry.

AS INDIVIDUAL BANKS:

1. *They must commit to manage payments as a business across the bank, not a separate set of payment types constituting their own disconnected, sometimes conflicting businesses. Another way of saying that is to start with the customer and the customer's payment needs and reshape the payment business across the enterprise accordingly.*

As an industry, banks need to organize to facilitate the rapid and widespread adoption of image exchange across the industry while they still retain payment market share and relationships.

2. *They must embrace industry best practices, adapted to their own strategies and markets, that drive the inevitable progression from paper-based payment services to electronic payment services. This is essential to the management of shareholder value during the period of dramatic transitioning.*

3. *They must manage to the predictable gaps. An inevitable result of their enterprisewide look at their future payments business will be what-if scenarios and the technology and business requirements they will entail. What payment volumes can they expect by type, for which types of customers? How will shifting volumes, new players, and new data change pricing sensitivities? What will customers value most in future offerings? Among all the payment tactics we might adopt, where are my bank's strengths?*

4. *They must develop and drive a paper migration plan. There will be no "throw the switch" day in the paper-to-electronics migration. Banks will have to manage an ongoing if shrinking paper stream, a growing electronic stream, and myriad combinations of both. For some time now, these trends have tended to "manage" some banks. Going forward, banks will need to manage the migration as closely as they manage their credit exposure, as closely as they manage any other function that contributes directly to the bottom line.*

FOR THE INDUSTRY:

1. *The large banks need to come together and develop a consensus around the most valuable initiatives they could undertake to recapture the franchise. What are the barriers? Do their regulators sufficiently understand the emerging payments environment and the impact of their decisions on banking's ability to carry out its charter? Does the industry recognize competitors without as well as it recognizes competitors within? Have the industry's various associations evolved along with payment realities?*

2. *As an industry, banks need to organize to facilitate the rapid and widespread adoption of image exchange across the industry while they still retain payment market share and relationships. They must do so before even more checks have been converted to electronic payment types that circumvent the bank of first deposit. Since image exchange promises to be the source of enormous expense reduction, new service revenue, and fraud reduction, it*

would be folly to leave it to unfold as though it were simply another optional initiative. The value of image exchange will increase in direct proportion to the volumes. The industry can profit by openly identifying barriers to image exchange and gathering to weigh the common good against separate agenda.

3. *The industry needs to assess its own role in practices that benefit competitors at banking's expense. As an example, before losing any more priceless information or influence to non-bank providers of valuable fraud data, they need to look far ahead at the value potential of payment guarantee, recognize the practices that diminish their role, and identify the industry-wide steps that must begin today to recapture their role and expand it to yield better customer relationships and new forms of revenue.*

Check 21 is a once-in-a-century opportunity. More than likely its dominos will fall no matter what. But if banks and the banking industry can direct how and when they fall, they can direct the future of the payment system.