

**MERCATOR
ADVISORY GROUP**

Check 21: Harnessing A Billion Points Of Light

April 2004

Principal Analyst

Tim Sloane

(001) 508 845 5412

tsloane@mercatoradvisorygroup.com



Contributing Analysts

Tamara Hamlin

TABLE OF CONTENTS

1. PAPER FREE CHECK PROCESSING?	3
THE WORLD BEFORE CHECK 21 LEGISLATION	7
CHECK CONVERSION (ACH & EFT).....	10
IMPACT OF CHECK CONVERSION ON CUSTOMERS	14
MOTIVATION BEHIND CHECK 21 LEGISLATION	15
2. IS IMAGING READY?	19
THE WISDOM OF DISTRIBUTED ACQUISITION	20
3. CLEARINGHOUSE OPERATIONS AND IMAGE EXCHANGE.....	21
THE ACH PROPOSAL	22
ENDPOINT EXCHANGE	22
IMAGE EXCHANGE	22
NETDEPOSIT	22
VIEWPONTE	23
SOLUTIONS FROM THE FEDERAL RESERVE.....	23
4. THE MERCHANT PERSPECTIVE.....	26
5. CONSUMER BENEFITS & IMPACT	27
6. FRAUD & RISK	29
C21 OPPORTUNITY FOR FRAUD.....	29
INVESTIGATION & PROSECUTION.....	30
7. CONCLUSION.....	32

List of Exhibits

FIGURE 1: RECONVERTING BANK ASSUMES NEW RISKS.....	6
FIGURE 2: CHECK CLEARING & SETTLEMENT PROCESS	9
FIGURE 3: COMPARISON OF BENEFITS: CONVERSION VS. IMAGING	11
FIGURE 4: DISTRIBUTION OF CHECKS BY DOLLAR VALUE	16

1. Paper Free Check Processing?

A study conducted by the Federal Reserve Board in 2001 estimates that 49.6 billion checks are written annually in the United States (up from 32 billion in 1979) accounting for \$47.7 trillion in payments and while this is declining there is no end in sight for paper checks. A large and complex industry has evolved to clear these checks, and the Check 21 legislation will change the entire ecosystem this October. From the check originator, to those that process and transport checks; to the bank that releases funds and notifies the originator – every participant faces major changes in technology, processes, volumes, and risk.

Check 21 legislation makes opting out impossible because the substitute check is legal tender under Check 21. Every participant in the check processing value chain must accept substitute checks. Therefore the only question that remains is how each participant should prepare for the changes that happen this October.

To create a viable plan demands a solid estimate for the number of substitute checks that will be received, but it is difficult to know how many downstream participants will adopt check imaging in the effort to eliminate the cost associated with handling paper checks. It would seem logical that downstream participants will adopt Check 21 solutions anywhere where imaging will reduce costs or increase profit. But Check 21 shifts liability, and so some processors will likely wait to see if the pioneers discover any negative consequences from Check 21 adoption.

The problem is Check 21 legislation doesn't define a legal image replacement; it defines the legal *substitute check* in Section Four as:

(b) LEGAL EQUIVALENCE.—A substitute check shall be the legal equivalent of the original check for all purposes, including any provision of any Federal or State law, and for all persons if the substitute check—

(1) accurately represents all of the information on the front and back of the original check as of the time the original check was truncated; and

(2) bears the legend: "This is a legal copy of your check. You can use it the same way you would use the original check."

Notice the "if."

Highlights of this report include:

- Check processors that experience declining volumes will find it difficult to properly invest in Check 21 enhancements, making a selection of Check 21 processing partners a critical issue.
- Check conversion provides greater benefits than check imaging and is growing at more than 800%. To manage costs paying banks must address the challenges they have with conversion and drive consumer adoption.
- Image validation and data accuracy solutions are critical to fraud control and cost containment but these technologies are unproven at the volumes being anticipated.
- For every million checks imaged, 6,210 to 66,800 are defects and a large component of these errors are checks assigned to the wrong account. Reconverting banks must address the ramifications of these errors given the warranties Check 21 legislation implements.
- International outsourcing can be applied at low cost and low risk to reduce check errors and fraud rates.

Imaging technology in use today is unable to “accurately represent all of the information on the front and back of the original check” if that information is written in yellow or red ink, nor will imaging systems detect watermarks even if they are visible to the naked eye. The inability to live up to this high standard will likely be overlooked for low value checks but it becomes an important issue for high value checks because the legislation also defines new indemnification principles that make the first bank that converts the check into an image, or accepts the image from a non-bank, legally responsible for the quality of the substitute check. Section Six of the Check 21 legislation reads:

(1) IN GENERAL.—If the indemnifying bank produces the original check or a copy of the original check (including an image or a substitute check) that accurately represents all of the information on the front and back of the original check (as of the time the original check was truncated) or is otherwise sufficient to determine whether or not a claim is valid, the indemnifying bank shall—

(A) be liable under this section only for losses covered by the indemnity that are incurred up to the time that the original check or copy is provided to the indemnified party; and

(B) have a right to the return of any funds it has paid under the indemnity in excess of those losses.

So the indemnifying bank’s loss is limited if it can produce the original check or a substitute check that is “sufficient to determine whether or not a claim is valid...” The dilemma in this phrase is that one interpretation might be that the substitute check should be able to expose clues commonly used at the point of check acceptance to detect a fraudulent check, including the look and feel of the check, the paper stock, watermarks, and the presence and state of any anti-tampering agents. Eventually paying banks will test the interpretation of this phrase when a large value check is determined to be a definite fraud; and yet accepted by the bank of first deposit, imaged, and destroyed. With 24% of all checks valued at more than \$500, and 2% valued between \$10,000 and \$50,000, litigation to test exactly what level of information is considered “sufficient to determine whether or not the claim is valid” will likely occur sooner rather than later. Until the interpretation is made clear, the bank of first deposit will accept the risk, sell the risk, keep the check, or process the check as it always did to avoid the issue.

As long as the cost savings possible with imaging solutions is large, and the cost of claims low, then check imaging will prove profitable. As a result, companies that accept, process and transport large volumes of low value checks will almost certainly move rapidly to adopt check imaging, since the low value of the check makes the destruction of the check after imaging a relatively low risk proposition. The challenge of course is to define where the concept of low-value kicks in, and this cutoff point will define the grey area that attracts fraudsters.

Of course a processor can convert high value checks to images and store the originals for some period of time, but the cost of implementing the new imaging solution combined with the need to store and make the

physical checks retrievable on demand will negatively impact the savings made from imaging adoption. The processor may decide to continue forwarding high value checks, but this scenario can only be profitable in the short term. The cost of check transportation is kept relatively low because of the high volumes. If 75% of existing check volume stops (the volume of checks under \$500) then the economics of check transportation will change and the cost of transporting a check will rise dramatically endangering the profitability in doing the check processing the old way.

A company that implements check conversion and destroys the original check has one of the following conditions:

1. Sufficient claims are resolved using the image so profitability remains.
2. The cost savings from imaging exceeds the cost incurred from claims.
3. Liability has been addressed contractually through partnership with others in the value chain.

The challenge is to predict which, if any of these, is the right assumption to make.

Some financial institutions have embraced check imaging as a solution across all processes and departments with the expectation that imaging will deliver a competitive advantage. Other institutions are less confident regarding the benefits of imaging and plan to implement only solutions mandated by the legislation or the solutions that have been proven cost effective in similar operations. But determining if a check imaging solution will be cost effective is no easy task, it requires knowledge of how the check clearing process will change in the future and a close approximation of the new volume of transactions that will enter each business processes – but this information can only estimated. With profitability in the balance, these estimates are critical components of the Check 21 response plans and so the industry is understandably anxious.

Adding to this anxiety is that Check 21 legislation has shifted the warranties and indemnification obligations to the reconvert bank. Those firms that receive the check first have the largest incentive to convert it into an image, but are also now held accountable for the accuracy of that image. The definition of the reconvert banks is defined in Descriptions, Section Three:

(15) RECONVERTING BANK.—The term “reconvert bank” means—
(A) the bank that creates a substitute check; or
(B) if a substitute check is created by a person other than a bank, the first bank that transfers or presents such substitute check.

Checks may no longer need to be transported, but until either the image quality is specified to the degree that legal compliance is assured, or accountability is contractually passed elsewhere, the early destruction of high value checks appears imprudent because the reconverting bank also has new responsibilities under the Check 21 legislation as described in the Federal Reserve Board's Code of Federal Regulations in Section One page 4 and presented here:

The Check 21 Act imposes additional duties on reconverting banks. A reconverting bank must identify itself as such on a substitute check and must preserve the endorsements of parties that previously handled the check in any form. The reconverting bank will be the first bank to provide the substitute check warranties and the first bank in the chain of indemnifying banks, and thus ultimately should bear any loss traceable to a problem that existed as of the time the substitute check was created.

Since the reconverting bank must warrant the substitute check, the bank must carefully appraise its contractual relationship with external processors that submit images and/or substitute checks. Reconverting banks must make sure that appropriate contracts and processes are in place to address the new obligations and risks (see Figure 1).

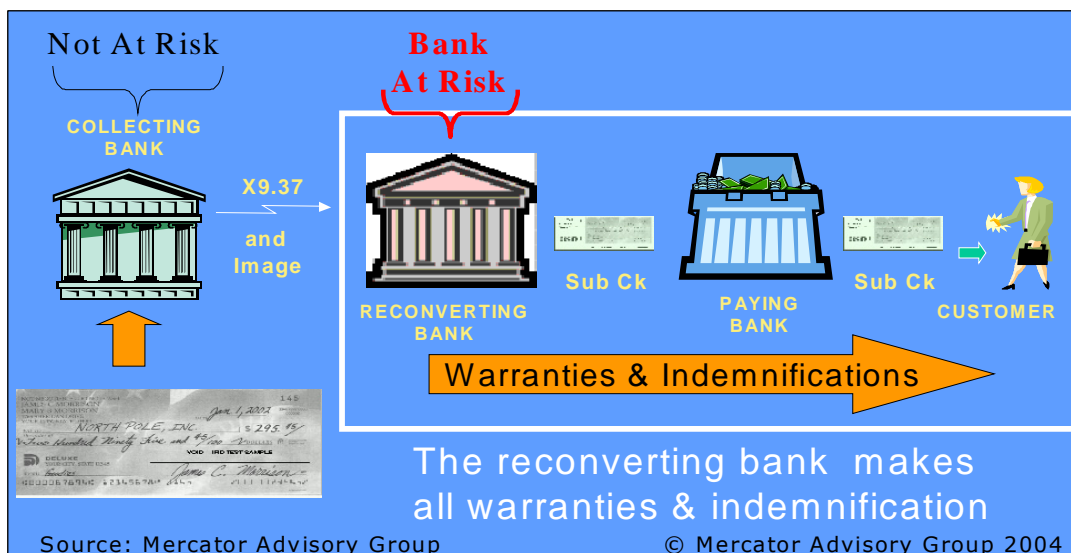


Figure 1: Reconverting Bank Assumes New Risks.

The passage of Check 21 does not mandate check truncation, it opted instead to provide banks of first deposit the option of truncating the physical check by establishing the "substitute check" as a legal substitute that all participants must accept. Under the legislation, the depositing bank or its agent can create a file with substitute images of the paper checks, and the printed version of that electronic file is then delivered to the paying bank. This lets depository banks truncate the physical check while also providing the paying bank the ability to demand a physical document.