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The Other Side of Check 21

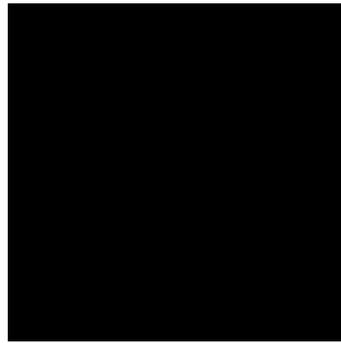
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The Other Side of Check 21

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Has the movement away from the posting processes associated with the clearing of physical checks through image technologies and now reliance on distributed items capture technologies created an unforeseen and possibly unrealized risk to banking?

For the past fifteen years, the focus of image processing technology solutions and standards in this space has remained predominantly upon the negotiable check that is received at the branch or back office for payment or deposit. This ensures that the financial value of the transaction gets processed and credited to the receiving financial organization. While this is certainly of extreme importance, it is only one half of every transaction. You still need to post the account to which the transaction is attributable.

Transaction Workflow Evolution

Looking at the history, there has been significant changes in the last 50 years in banking with regards to how this second half of the transaction, posting to a customer's account, was handled. You may be old enough to remember going in to make payments on a mortgage at the local building and loan or bank. The clerk behind the counter took the payment and went back to a large filing cabinet of cards where he or she would manually mark down the payment, carrying out principal, interest (likely based upon a rule of 78s) and escrow. This was a system of green eye shades and ledger cards that had existed back for decades.

The next stage was that checks and payment coupons, or the bottoms of statements were presented at the branch to make monthly payments. By the seventies, MICR (magnetic ink character recognition) printing, those unusually-shaped numbers at the bottom of processing documents and checks, were used as a methodology to allow

processing. Technology and logistics made everything work. Items were read by magnetizing the metallic content within the special MICR ink on the documents and files were created to post depositors or borrowers accounts. Technology became so effective that it could not increase the speed of operation of reading documents or the paper check and deposit or payment slips would physically self-destruct as they moved through the reader routing the items through differing opening and closing gates.

When 9/11 happened, planes did not fly and checks did not clear. Moving physical checks was now seen as risky. A better way was needed to ensure that a disruption to the payments network would not repeat. As an industry we invented Check 21 image exchange and the Federal Reserve was the pillar in making this a reality. This caused a revolution in the approach to the acceptance and clearing of items presented by customers for deposit or payment to their accounts that continues to this day.

A close follower to the enablement of image capable items capture was the movement to replace back office sorting operations that had been in place since the seventies with a new branch capture technology and for some, teller capture solutions with document image capture integrated into teller processing. These solutions placed a fleet of small image capture devices distributed through the branch network. Big iron sorters, like the mainstay IBM 3890 have been removed and made the foundation for new coral reefs. By 2013, back office sorter operations had all but disbanded, as the branch now performed the process of capturing and balancing work for transmission to posting and for clearing.

And right there is the concern: We as an industry have built a national process to capture and deliver images of checks upon a distribution standard known as X9.37, while a disruption in connectivity to core processors, or a technological invasion as occurred with point of sale terminals in retail has the dangerous potential to disrupt the second half of each transaction. What accounts receives the credit for a deposit? Which loan gets credit for a payment? What transfer or withdrawal from what account?

Defining Regulator Expectation

Regulatory business continuity expectations for virtually all institutions working with third-party providers is detailed in the FFIEC IT Examination Handbook for Business Continuity and Disaster Recovery, *Appendix J - Strengthening the Resilience of Outsourced Technology Services*. Just released February 6, 2015, the FFIEC detailed how financial institutions need to ensure that third-party service providers do not negatively affect the ability to recover IT systems and return critical functions to normal operations in a timely manner.

Without the hypothetical ability to post accounts from the army of small capture devices now deployed across branches and back office departments, just how do you post an account? How do you meet the expectation of resiliency with your prescribed transaction service provider?

This provides an interesting concern for a majority of mid to larger sized institutions that contract core account processing upon daily memo-post; overnight batch processed applications, coupled with branch or teller-based items capture. For those unclear or unfamiliar with this processing methodology, an institution utilizes daily memo-post to

overnight processing when the transactions throughout the day are posted and tallied against an ongoing daily balance, yet the actual update of the 'account of record' occurs as result of all transactions received being organized from all recipient points and processed overnight. If you have a period during the night where 'account updates' are being processed, it is likely this is the method your organization's core account processing system operates. Aside from debiting or crediting accounts for the days' activity, the nightly batch process supports key account based activity such as interest accruals, late fees and overdraft processing based upon the 'account of record' balance.

In the 'old days' of big iron sorters, all responsible organizations had recovery arrangements with businesses that offered access or delivery of sorter technology to perform recovery of the items processing function. Items Processing was often considered the heart pumping the blood of the banking operation, as all paper-based transactions passed through this function. With elimination of back-office sorting after the movement away from paper processing to image processing, this recovery capability of paper items and core account posting virtually no longer exists. But where is the replacement core processing applications feed that ensures resiliency? How long could a worst case scenario be manually supported, if at all?

The risk management assumption that has carried the industry to date is that with so many branch or teller capture devices deployed, there would be other locations where processing was operational and could be completed. This is an effective strategy for an event that might be weather or location related. What happens when it is a

technology-based problem, or worse, a cyberattack focused upon the capture technology itself? Does your technology service provider who provides account processing services have contractual obligation for the posting capture technology utilized at the branch? If not, who is responsible for problem solving connectivity to your core applications processing environment? These are just a few of the key questions that must be asked and understood.

This is an area of business resumption resiliency that we believe this new Appendix J is meant to identify and raise to a higher level of historic concern. Questions that could be asked:

- Does your core account processor allow manual entry of transactions to update the ‘account of record’ without batch processing updates?
- Is it reasonable to have all physical transactions received manually entered?
- Are all transaction types capable of being received, such as curtailment loan payments, supported through on-line entry alternative?
- Are options of on-line entry available for all account types, i.e., CDs, IRAs, etc.?
- Does resiliency support a business case for movement to a real-time processed core account solution, now are in your strategic roadmap?
- Who validates and tests the software upgrades to branch capture devices?
- How have you addressed multiple communication pathways from your branch locations to the site(s) of core processing? If

you subscribed as part of an outsourcing arrangement, how has your provider addressed this concern?

- Is this a business case for you to request of your vendor, or for you to pursue development of a manual to electronic posting disaster recovery/business resumption recovery process using a new or pre-existing account posting format (such as ACH Originations)?
- What is your Recovery Time Objective (RTO) for posting daily account activity?
- What is the RTO for communications recovery from your providers?
- Do you have an RTO for the roll-back of software, or updates to branch capture software?

Remember, with this hypothetical discussion core account processing is fully functioning either on your own technology or outsourced to a third-party in another city or state. Electronic transactions are being received from ATMs, On-Line Banking and ACH. It is just the physical activity showing up in branches and in the mail and being scanned internally that is being discussed as being at risk.

This is a conversation that you may want to initiate now, ahead of the curve. It just may be one of the more important discussions you have with your providers, keeping Appendix J rolled up in your back pocket.



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