



*World-Class Solutions,
Leadership and Advocacy
1875-2000*

Industry Practices: Risk Based Fraud Detection Systems

Adopted by the Deposit Account Fraud Committee
American Bankers Association
13 April 2005

Background:

As recently as the late 1980's and early 1990's, the standard for check fraud detection involved a signature comparison process based only on the dollar amount of the check. This single criteria review process is very labor intensive and one-dimensional, problematic with decision accuracy, and often ineffective for fraud detection. It requires review of thousands of items in order to detect and confirm a single fraudulent item. With nearly 40 billion checks written annually, many of the largest depository institutions have moved to a risk-based fraud detection system which in many cases is more effective at monitoring risk and preventing fraud.

Current Practices:

These risk-based fraud prevention systems provide depository institutions with a multi-dimensional tool that allows them to limit their review to those checks that pose the greatest risk to the customer and the bank. Depository institutions can review as few as several hundred items to find a single fraudulent item, a vast improvement over the single criteria review process. For large institutions, risk-based systems, in concert with other fraud prevention strategies and systems have significantly improved the accuracy of identifying fraudulent checks.

Financial institutions' fraud experience and level of risk exposure varies by size of the institution, geography, etc. Thus, no single solution works for all institutions. However, one type of risk-based check detection system used in the banking industry is a rules-based filter which utilizes a customer's check writing history to search for "out of pattern" activity. Typically, the detection system consists of rules that seek and compare information on the check presented with the customer's check-writing history.

Individual bank, based on a number of variables, including check fraud experience, which, as noted earlier, can vary by bank, even among banks of similar size and location. Which rules are applied and the manner of their application will also depend on the particular filter system in place and other fraud filters used by the institution.

For example, some banks utilize a rules-based detection system at the teller line and in the back office; others may only utilize the system in the back office for in-clearing checks. The policies and procedures used at the teller line for check cashing differ significantly than those used in the back office.

In addition, individual bank thresholds and parameters of the rules-based system are affected by each bank's policies, processes, check product features, customer base, and current regional and local crime rings. Thus, there is no standard industry application of parameters and thresholds nor would one be appropriate or effective.

Those using risk-based systems review their check loss files on a continuous basis in order to monitor for check fraud activity and trends, which can change rapidly, and determine risk exposure. These reviews help guide depository institutions in setting and periodically adjusting the thresholds and filter parameters as appropriate for the individual institution. Because of the multiple and ever-changing variables that determine how to set the thresholds and parameters, settings will vary depending on the depository institution.

Even with use of these rules-based systems, challenges in identifying fraudulent deposit account transactions remain. Fraud activity that occurs within the ranges of a customer's normal check writing pattern, for example, is extremely difficult to identify. Accordingly banks have a nearly impossible task of detecting certain types of fraud. For example, bookkeeper fraud poses a unique threat. In this type of fraud, bookkeepers have access to information regarding the customer's check writing patterns and are able to operate within those activity frames. Where weak controls exist within the company, they often have access to blank check stock and in many cases have shown that their duties frequently include reconciling bank statements. They are thereby able to mask fraudulent transactions. Therefore, the fraudulent activity bypasses filter detection and puts both the customer and the bank at great risk. In such situations, the customer is in a better position than the bank to prevent and detect such fraud.

While check fraud detection has evolved into a more deliberate science, so has check counterfeiting and forgeries. When detected early, check fraud can be stopped with minimal or no impact to the customer or loss to the bank. In order to continue to keep pace with the fraud perpetrators, the banking industry continually develops and implements new technologies to add further dimensions to combating check fraud.

For related information on the evolution of check fraud prevention, see the American Bankers Association document "Signature Verification Evolution to Exception Check Review," adopted by the ABA Deposit Account Fraud Committee on 12 April 2000.

ABA Contact: Nessa Feddis, Senior Federal Counsel
E-mail: nfeddis@aba.com