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DATA KEY TO RISK-BASED AUDITING

TRADITIONAL VERSUS RISK-BASED AUDITS

To ensure organizations reach their objectives, it is imperative that internal audit reviews the controls in place to reduce the risks their companies face. In order to distinguish this process from 'traditional' internal auditing, the term 'risk-based internal auditing' was coined.

Risk-based internal auditing begins by first assessing an organization's objectives and providing an opinion as to whether internal controls are reducing the risks threatening them to acceptable levels. Based on the opinions formed, it is then determined if those objectives will be achieved.

In contrast, traditional internal audit is limited to considering the controls over financial, fraud and possibly IT risks as well.

Today, risk-based internal auditing is the standard expected for internal auditing. According to the Chartered Institute of Internal Auditors, risk-based internal auditing allows internal audit to conclude that:

- Management has identified, assessed and responded to risks above and below the risk appetite
- Responses to risks are effective but not excessive in managing inherent risks within the risk appetite
- Action is being taken to correct situations where residual risks are not in line with the risk appetite
- Risk management processes, including the effectiveness of responses and the completion of actions, are being monitored by management to ensure they continue to operate effectively
- Risks, responses and actions are being properly classified and reported

All transactions for the period can be summarized by account and by journal source. A quick review of the results can tell the auditor such things as:

- What types of entries exist
- Whether there are a high number of manual journal entries and what accounts are most often affected
- Volume of activity in loan accounts
- Whether excessive credits that are not from an accounts receivable posting source are included in accounts receivable
- Whether excessive debits that are not from an accounts receivable posting source are included in revenues
- Whether the ledger balances and how many transactions are included in each account

With this detailed analysis, auditors can identify significant recorded activities that might represent risks, ask more specific questions, and gain an understanding of the environment.

Comparing this type of summarization with a similar summary from the prior year will help the auditor know more about changes during the year and be able to narrow the scope of items to consider for the current year.

ANALYTICAL PROCEDURES

Analytical procedures include everything from simple financial statement balance and ratio comparisons to complex correlations, time series and trend analyses; however, they also include visually scanning records to identify large and unusual items. In each case, the objective is to set an expectation, then perform the test or other procedure and compare the results to the initial expectation. Audit evidence consists of the documentation of that process, together with the auditor's conclusion about the account balance or set of transactions after explaining and corroborating the reasons for variances

Analytical Procedure	Impact on Audit	Value for Client
Summarize entire year of cash disbursements by payee and compare with a similar summary from prior year	Allows auditor to note excessive payments and payments to new payees. Auditing by exception is effective for fraud detection.	Efficiencies for check processing can be recommended in cases where excessive payments, while accurate, are wasteful for the client.
Compare inventory unit costs between years	Lowers the cost to perform inventory testing in second and third years of an audit. Increases can be compared with expectations based on auditor's knowledge of economic trends and other factors for prices.	By analyzing all inventory items, special reports can be provided to clients that will help them see anomalies or errors in their inventory data that might not be material, but would still provide valuable action items.

INTERNAL CONTROL TESTING

Internal controls over the major transaction classes include manual and automated control activities that assure management's directives are carried out. In most companies today, IT significantly affects control activities, especially in the areas of authorization and segregation of duties (through passwords and other access controls), accuracy, and completeness (through IT general controls over program change control and processing controls in each significant application). Testing controls to determine reliability of details will be needed if theinformation system data is to be used for these kinds of analytical procedures.

Data analysis software is useful in facilitating tests of controls: it calculates sample sizes based on the desired confidence level and precision, and computes achieved confidence to help the auditor document his or her conclusions.

Sampling modules are also available to extract the sample on a random, systematic or stratified random basis. Stratified random sampling is useful if the auditor is designing a “dual-purpose test” because the sample will randomly select items from each strata per the auditor's judgment as to how many items to select from each group.

Conclusions

Auditing is an iterative process that requires the auditor's judgment to constantly evaluate the evidence and determine when procedures are sufficient to minimize audit risk. Data analysis software provides better coverage and reduction of risk than can be achieved manually or with spreadsheets alone. It is an auditor's tool for gaining an understanding of the client's systems and reporting environment; identifying anomalies, errors and potential fraud; and extracting all items of individual significance within a transaction or master file.

Accounting firms that are most successful in implementing data analysis incorporate the procedures into their audit process. They provide adequate training and support to staff, and guard against over-relying on technical specialists. They overcome the challenge of insufficient staff levels by arming their field auditors with data analysis software, which frees their IT auditors to work on others areas.

Properly implemented and integrated into the audit, data analysis can solve the dilemma of the expectations gap concerning the auditor's responsibility to detect material misstatements in the financial statements

Appendix

Tests included in SmartAnalyzer:

GENERAL LEDGER TESTS

Identify journal entries that are:

- Out of balance
- Duplicates
- Missing
- Posted on weekends, specific dates or times

Reports and summaries by:

- User
- Account combinations
- Journal entries with large amounts
- Journal entries with rounded amounts
- Journal entries with amounts that end in 999
- Journal entries with specific comments
- Account number
- Period or source
- Account balances by source or period

INVENTORY TESTS

- Aging by receipt date
- Recalculate inventory balance
- Calculate inventory turnover ratio
- Calculate unit turnover ratio
- Zero or negative unit cost
- Negative quantity on hand
- Inventory location summary
- Inventory received around a specified date
- Last sales price lower than unit cost
- Compare sales price with unit cost
- Large inventory amounts
- Duplicate field search

ACCOUNTS RECEIVABLE TESTS

- Aging by due date or invoice date
- Accounts with balances or transactions exceeding credit limits
- Accounts with credit balances
- Transactions around a date range
- Duplicate transactions
- Debtor transaction summary

ACCOUNTS PAYABLE TESTS

- Aging by invoice date
- Duplicate invoices or payments
- Creditors with net debit balance
- Creditors with balances or transactions exceeding credit limits
- Creditor transaction summary
- Invoices without purchase orders
- Posted on weekends, specific dates or times
- Transactions summarized by user
- Transactions with rounded amounts
- Duplicate field search

FIXED ASSETS TESTS

- Fixed assets additions
- Asset category summary
- Recalculate straight line depreciation
- Recalculate declining balance depreciation
- Depreciation exceeding cost
- Duplicate field search

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