



## Is your internal audit maximizing the value of data analysis technology?

Audit-specific data analysis software is used by 47% of internal audit departments; of this number, 85% use ACL.

*Based on the 2001 Internal Auditor magazine survey*



### Implementing a comprehensive data analysis strategy can improve the quality, efficiency, and effectiveness of internal audit processes.

Internal auditors are under increasing pressure to assure organizations that they are effectively evaluating risk management, control, and governance processes. Even with tight budget constraints and limited staff resources, internal audit is facing greater expectations for performance than ever before, through demands for increased productivity and production of tangible, value-added contributions to the organization.

Specialized data analysis technology helps meet these challenges. A survey conducted by *Internal Auditor* magazine shows that 88 percent of internal audit departments use some form of data extraction and analysis software. Some 47 percent of that number use software specifically designed for auditors, while the remainder use generalized software such as spreadsheets and SQL databases.

But are internal audit departments implementing data analysis technology in ways that maximize their effectiveness and provide the greatest benefit overall? How effective is generalized software in enabling internal auditors to respond to the pressures they face?

### Typical approach to implementing data analysis software

Frequently implementation of data analysis technology in internal audit is only partially successful in realizing concrete results and productivity gains. Typically software is acquired and a limited number of individuals are trained. On an ad hoc basis, a few auditors apply their skills to select projects and become proficient users who demonstrate tangible and quantifiable results. However, the majority of auditors have little opportunity to apply data analysis technology in an effective way throughout all aspects of the audit process. While this is an improvement over the traditional approach – in which data analysis was the sole domain of IT auditors using technical data retrieval and reporting tools – it still yields less than optimal results. It does save time and enhances the value of audit findings, but many potential benefits are never realized because data analysis within internal audit is not perceived to be a strategic initiative that requires a comprehensive implementation strategy.

### Strategic implementation produces tangible results

Audit-specialized analysis software is designed to enable auditors to maximize their effectiveness in assessing information integrity and compliance. Such software provides internal audit with an opportunity to make a strategic change in the approach to audit. Traditionally the focus has been on judgmental and statistical sampling to conclude on transactional integrity and compliance. But there is a need to go beyond samples and simple file interrogation tools. If auditors can quickly and efficiently review 100 percent of transactional data, there are opportunities for a significant shift in audit strategy where extensive use of data analysis becomes key to the audit process.

A well-planned and executed implementation of a new audit approach is critical to such a strategy. In this approach, the acquisition of software becomes a relatively minor part of the process. Some of the essential components of a successful data analysis implementation strategy include:

- A clear mandate and support from senior management
- Planning and objective setting
- Resolution of internal data access issues, the greatest single barrier to success
- Phased implementation, identifying areas for faster and more significant return on investment
- Structured decisions on when to take an ad hoc analysis approach and when to implement standardized applications
- Training and optimum use of resources
- Assessment of results

As is the case with any key operational system, successful implementation of a comprehensive strategy for data analysis almost always requires substantial assistance from external specialists. If data analysis is to be a key component of an internal audit strategy, then it too will require assistance in planning, training, application development, and general implementation issues.



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A Fortune 100 manufacturing company attributes more than \$3 million in cost savings over the past five years to use of ACL in the areas of inventory management, vendor audit, and purchase order reconciliation.

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## Generalized software leaves gaps

The *Internal Auditor* survey reveals that those auditors using generalized software do so because it costs less. Virtually all organizations already have software such as spreadsheets or SQL query tools that internal audit also can use. With ready availability, low license fees and apparently little training required, these solutions appear to be low cost. When examined more closely, however, use of generalized software for internal audit can include hidden costs, such as:

- Inability to read non-relational mainframe files, often referred to as legacy data, which still represent a very significant percentage of data that auditors need to access. Costly IT staff and processing time is needed to extract data for auditor use
- Inability to conduct complex testing or perform audit-specific analyses
- Limited record processing capabilities for spreadsheet software. Although adequate for simple testing of summary data or small extracts, spreadsheets can be very inefficient when analyzing large amounts of data

## Specialized analysis software designed for audit and control processes

Data analysis software designed for audit allows auditors to maintain independence while minimizing overall costs and increasing productivity. Such software increases the efficiency and effectiveness of auditors in many ways, including:

- Simplifying access to virtually any data
- Providing a log to record the detail of every process performed
- Optimizing processing to handle files of unlimited size at high speeds
- Integrating data from disparate systems
- Creating computed fields to test calculations or make up for deficiencies in operational systems
- Checking for data integrity to enable rapid review of entire databases, identification of all data anomalies, and verification and reconciliation of numeric totals

## ACL enables implementation of a comprehensive strategy for data analysis

ACL provides business assurance that complements and completes business intelligence. ACL's whole solution gives organizations access to all their data and enables them to analyze, and independently validate data and transactions for integrity, in a fraction of the time once required. ACL's powerful analytics and robust capabilities have enabled tens of thousands of organizations around the world to achieve fast payback, reduce risk, assure compliance, minimize loss, and enhance profitability, while making decisions with speed and confidence. With ACL, organizations can trust their data and see results like never before.

ACL is a proven performer, with clients in 176 countries, including 83 of the Fortune 100 and nearly half the Global 500. ACL clients also include more than 500 national, state, and local governments on six continents, and all the Big 5 accounting firms.

*ACL offers a series of white papers on specific Business Assurance issues. They define the challenges, examine solutions, and provide practical illustrations of the ways in which organizations have achieved business assurance in particular areas.*

*For a copy of the ACL white paper on which this summary is based, please contact us at [info@acl.com](mailto:info@acl.com).*