



Data Extraction: Leveraging Technology to Better Analyze Client Data

By Roy Kvalo, CPA/ABV/CFF/CGMA, CVA

There are many challenges to face when providing accounting services for a variety of clients that utilize a wide array of accounting application platforms. One particular challenge is how to efficiently transfer data from a client's general ledger software to the analytical software commonly used by CPAs, including electronic spreadsheets.

As recently as fifteen or twenty years ago, this process of transcribing client data to the accountants' work papers was performed with pencil and paper. To a certain extent, this manual process continues today for many accountants and their clients. In some instances the only difference is that the pencil and paper have been exchanged for a computerized spread sheet; the actual transfer of data is essentially still performed manually.

From Transcribing to Analyzing

A better approach is to utilize data extraction software, sometimes referred to as general audit software, such as ACL or IDEA to facilitate this process. While we find these tools very useful in traditional service areas such as audits, they have also become increasingly important in non-traditional service areas such as agreed upon procedures, consulting arrangements, and my personal favorite: forensic and fraud accounting.

While the automation of data transfer alone will certainly result in significant time savings, the real savings occur in the analytics. In addition to time savings, data extraction also affords us the ability to dig deeper into the accounting records and utilize detail that might otherwise escape manual analytical procedures.

What Does Benford's Law Have to Do with It?

In the analytical process, our general audit software helps us to search for inconsistencies in transactions by performing digital analysis based upon Benford's Law. Benford recognized that in lists of naturally occurring numbers from real-life sources of data, the leading digit appears to be distributed in a specific, non-uniform way. Examples of naturally occurring numbers would include sales amounts, check amounts and stock prices to name but a few. Benford realized that for almost any naturally-occurring data set, the number 1 would appear first about 30% of the time. Non-naturally occurring data, including pre-assigned numbers such as postal codes or UPC numbers, would not follow Benford's Law.

Knowing patterns like those exhibited in Benford's Law allows the data extraction software to look for the human element that helps reveal both accidental errors and intended aberrations.

How Your Data May Be Analyzed

Data extraction programs offer numerous avenues to explore an entity's records. Here are several ways that the extraction software can bring to light information that is hidden within the various fields and records of a company's accounting data.

- For analyzing accounts payable, we can correlate vouchers or invoices posted with the corresponding purchase order amounts, identify potential duplicate payments, and extract invoices posted with duplicate purchase order numbers.
- For accounts receivable, we can show variances between delivery documents and invoices, identify duplicate invoices, credits, or receipts in any order.
- For cash, we can identify suspicious disbursements, including large even-dollar amounts and disbursements that are paid off-cycle.
- For a sales analysis, we are able to extract sales data by any classification such as customer name, product type and sales region.
- In the General Ledger, we can identify potential duplicate postings, and

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analyze suspicious postings that are split among a large number of general ledger accounts. We can also identify odd posting dates and debit postings to credit accounts or vice-versa.

The benefits to discovering these types of errors are clear – mistakes can be found and quantified. An employee can be better trained in response to a specific type of repeated error, or it may be determined that the employee is not a good fit for that particular task or job. As for discovering aberrations indicative of employee fraud, the benefits are obvious. Employee fraud may go on for months or years before discovery – anything that helps in detecting fraud earlier is useful. Employees who are aware that prevention and detection processes are in place (including powerful data extraction) may be less inclined to attempt fraud in the first place.

How Fuzzy Matching Can Clear Up Data

“Fuzzy Matching,” sometimes referred to as distance matching, is a data extraction tool that determines the number of key strokes that would be needed to turn one description into another. This is an effective analytical tool that provides us with the ability to compare data such as customer addresses to employee addresses. We use fuzzy matching to detect vendors with more than one vendor number, multiple post office box addresses, omitted phone numbers, and/or names sounding like – or spelled like – known vendors. We can also match vendor and employee names, addresses and phone numbers, as well as company names, addresses and phone numbers.

In analyzing salaries and payroll, we can compare and summarize costs for special pay and overtime. We are able

to compare time card rates and pay to payroll, and indicate variances and extract payroll checks where the gross dollar amount exceeds a set amount. The program also helps us identify changes made to exemptions, gross pay, hourly rates and salary amounts. We can also identify payments to terminated or non-existent employees, verify commission calculations and find multiple payroll deposits to the same bank account. Again, these procedures may help identify a need for training or an in-depth investigation of possible employee fraud.

At Curchin, we have been utilizing data extraction software since the late '90s. This technology has evolved into the highly flexible software applications of today. Our clients and our firm have benefited by moving beyond simple transcription into true data analysis. ■

Changes to Your 2013 Year-End Tax Returns from 2012

By Peter Pfister, CPA



When submitting your 2013 year-end taxes this tax season, you'll want to note some differences from when you filed for 2012:

- High income earners are subject to an additional payroll tax of 0.9% on wages and self-employment income received in excess of \$250,000 for married taxpayers filing jointly and \$200,000 for single taxpayers. This increases the employee's Medicare payroll tax to 2.35%.
- Taxpayers are also subject to an additional 3.8% surtax on certain unearned income to the extent that the taxpayer's modified adjusted gross income (MAGI) exceeds threshold amounts (\$250,000 for married couples filing jointly, \$125,000 for married individuals filing separately and \$200,000 for single filers).
- The top rate for capital gains and dividends increases to 20% for taxpayers with incomes exceeding \$450,000 for married taxpayers and \$400,000 for others. The 15% rate remains when income is below the above limits.
- A new top tax bracket of 39.6% begins at taxable income above \$450,000 for joint filers; \$425,000 for heads of households; \$400,000 for single filers; and \$225,000 for married taxpayers filing separately.
- Itemized deduction and personal exemption phase-outs, which had been previously suspended, are reinstated for those with adjusted gross income starting at \$300,000 for married taxpayers; \$275,000 for heads of household; \$250,000 for single filers; and \$150,000 for married taxpayers filing separately.
- The estate tax exemption is now permanently indexed for inflation. The 2013 exemption was \$5,250,000, and is currently estimated to increase to \$5,340,000 for 2014. In addition, the portability of the deceased spousal unused exemption was made permanent. The surviving spouse can apply the unused amount against any tax liability arising from subsequent lifetime gifts and transfers at death.

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Home Office Deduction. The IRS announced a new optional method to determine your home office deduction, which will no longer require tracking actual expenses. The maximum deduction allowed under this safe harbor method is \$1,500 based on 300 square feet. For some, tracking actual amounts will result in a higher deduction.

And say goodbye to these items in 2014, as Congress did not extend:

For Individuals:

- Tax-free distributions by those age 70 ½ or older from IRAs for charitable purposes.
- The above-the-line deduction for qualified higher education expenses.
- The option to deduct state and local sales and use taxes instead of state and local income taxes.

For Businesses:

- 50% bonus first-year depreciation for most new machinery, equipment and software.
- Section 179 Deduction - a business could deduct up to \$500,000 of qualified property placed in service in 2013, subject to a phase-out above \$2 million. The maximum deduction plummets to \$25,000 for tax years beginning in 2014 with a \$200,000 phase-out threshold. ■

Firm News



Featured Employee: Elizabeth Mackanic



Elizabeth Mackanic, CPA, MBA, began her accounting career after graduating from Rider University (Rider) with a B.S. degree in Accounting. She later earned her MBA from Rider as well. After working for a larger public accounting firm, she joined The Curchin Group (Curchin) in August 2012 and is currently a Supervisor in the Audit Department. Elizabeth primarily supervises audit engagements for not-for-profit organizations and closely-held businesses, as well as providing tax services to corporate and individual clients.

Elizabeth chose Curchin because of the “small-firm feel with larger-client opportunities and the ability to achieve a good work/life balance.” At Curchin, she enjoys building relationships with her clients, appreciates an office team that is easy to work with and has access to talented people within the firm from whom she can learn.

In her time off, Elizabeth is an avid New Jersey Devils fan and likes to travel to warm destinations, having recently returned from vacation in Hawaii. ■

The Curchin Group Raises \$16,000 for Local Charities in Eighth Annual Miniature Golf Tournament



From left to right: Bob Fouratt-Curchin, Lynn Conover-Curchin, Mike Goldsmith-Curchin, Sue McClure-Girl Scouts, Dave Ferullo-Curchin, Carolyn Kvalo-Curchin, Peter Pfister-Curchin

Held on November 6, 2013, the Eighth Annual “Curchin Open” once again provided both fun and funds to the community, raising \$16,000 for two local charities. Clients, sponsors, and friends played a round of miniature golf on Curchin’s team-designed 9-hole course, which flowed through the Firm’s office. This year the beneficiaries were: Girl Scouts of the Jersey Shore, serving girls in New Jersey’s Monmouth and Ocean counties, whose mission is to build girls of courage, confidence, and character, who make the world a better place; and Family & Children’s Service (FCS), Long Branch, N.J., founded in 1909 with a mission to help people at vulnerable times in their lives through education, intervention, care and counseling. ■



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From left to right: Bob Fouratt, Peter Pfister, Carolyn Kvalo, Lynn Conover, Dave Ferullo

THE CURCHIN GROUP Celebrating over 55 years in Monmouth County, New Jersey, The Curchin Group helps small to mid-sized businesses and individuals reach their financial goals through providing a broad range of Assurance; Tax; Financial Planning; Business Advisory Services; and Litigation & Valuation Services. The firm is dedicated to giving solid financial advice, sustaining long-term relationships with its clients and employees and giving back to the surrounding community. For more information about Curchin, please contact Bob Fouratt at 732.747.0500 or bfouratt@curchin.com. ■

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Firm News

Curchin Group and Partner Peter Pfister Win 2013 Award for Innovation and Management Excellence for INPACT Americas

Curchin Partner Peter Pfister was presented with the 2013 Award for Innovation and Management Excellence (AIME) for chairing the Annual Curchin Open Miniature Golf Tournament (Curchin Open), during the INPACT Americas Partners Forum Fall Conference, held November 13-16, 2013 in Scottsdale, Arizona. INPACT Americas asked member accounting firms to share an idea, innovation or best practice with their peers, culminating with a presentation during the Partners Forum Fall Conference. Peter's presentation on the 8-year history of the Curchin Open was voted the winner of the award by the INPACT Americas members in attendance at the conference. ■

The Curchin Group Raises Over \$2,200 at the Making Strides Against Breast Cancer Walk

The "Curchin Cares" team raised \$2,293 toward its participation in the Making Strides Against Breast Cancer Walk on the boardwalk in Point Pleasant, New Jersey on Sunday, October 20, 2013. Included on the team were the following Curchin staff members and their families and friends: Carolyn Giunco Kvalo (Team Leader), Roy Kvalo, Sabrina Kvalo, Jeffrey Newman, Dan Geltzeiler, Lynn Curchin Geltzeiler, Phil Geltzeiler, Michael Goldsmith, Stephanie Yee, Elizabeth Mackanic, Barbara Willis, Carol Lynn Miller, Christine O'Neil, Michael Adago, Mark Sikora, Ivana Kazmierski, and Elizabeth Regan. ■