2018 Financial Leadership Summit

Technology Lab
CaseWare IDEA – Data Analysis

May 21, 2018 – Presented by Carolyn Newman – Audimation Services
Can Audits be more Effective?

Recent FEI CFIT and CGRC Discussions:

• The cost of compliance is growing and financial executives question the effectiveness of internal control audits
• Auditing standards were written before today’s technologies were invented and PCAOB inspections are challenging for PAs
• Audit Firms are expanding use of “cutting-edge technologies” (WSJ 3-8-16)

Audimation presented IDEA and CaseWare Monitor at the 9/15/16 CFIT Meeting
Why Auditors Use Data Analytics

- Risk assessment
- Internal control validation
- Substantive testing
- Advisory, investigations and other special assignments
- “Until the auditing standards are updated, there is little incentive for an auditor to use data analysis beyond understanding a business and assessing risks”

- 2013 Updating Audit Standards: Enabling Audit Data Analysis
- Bill Titera, EY (retired)
Why non-Auditors Need Data Analytics

• Risk assessment
• Internal control monitoring
• Fraud detection and prevention
• Data integrity and validation; systems conversions
• Business analytics to identify opportunities for revenue enhancement and expense reduction
  • Vendor management and regulatory concerns
  • Inventory optimization
  • Customer billings and credit management
  • Compliance areas: FCPA, taxes, labor
Clients – Who Uses IDEA?

Users in three principal market segments:

- CPA Firms
- Corporations
- Government

Highlights:

- Top 10 global public accounting firms
- Global licenses with 3 of the top 6
- 80% of the top 100 US accounting firms
- Government auditors for 9 of the 15 largest economies
- Blue chip corporate customers across all business segments
How IDEA Works

1. Import Data
   - Import from almost any source – from PDF to ERP

2. Perform Analysis
   - Extract
   - Sort
   - Search
   - Group
   - Calculated Fields
   - Stratify
   - Summarize
   - Age
   - Gaps
   - Duplicates
   - Sample
   - Statistics
   - Join
   - Append
   - Compare

3. Review Results
   - Pivot Tables
   - Reports
   - Charts
   - Exports
   - History
   - Project Overview

Automate
Use IDEAScript or the NEW Visual Script
Data Integrity and Analysis Using IDEA

• MORE DATA FEWER ANSWERS?

Do you receive PDF/Print files, or “messy” Excel files?

Use IDEA to save time and ensure data integrity for imported client data
Visualization using IDEA

Automatically Create customizable Dashboards
Discover Key Trends and Anomalies in any Data File with one-click.
Comparing Data Files Using IDEA

File Compare

Fast, Easy, Powerful!
Compare current period to prior period data on any data sets:

Purchases, Payroll, Inventory, Receivables, Fixed Assets, etc.
Data Integrity Using IDEA -- Dates

Quickly identify appropriate date range, data errors.

Also provides # records by month to detect any abnormally low or missing activity

Highlighting unusual weekend activity

<table>
<thead>
<tr>
<th>Date Statistics</th>
<th>INVOICE_DATE</th>
<th>PAY_DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Data Errors</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Earliest Date</td>
<td>10/18/2010</td>
<td>1/3/2012</td>
</tr>
<tr>
<td>Latest Date</td>
<td>11/14/2012</td>
<td>12/3/2012</td>
</tr>
<tr>
<td>Record # of Earliest</td>
<td>501</td>
<td>14</td>
</tr>
<tr>
<td>Record # of Latest</td>
<td>258</td>
<td>41</td>
</tr>
<tr>
<td>Most Common Day</td>
<td>Tuesday</td>
<td>Friday</td>
</tr>
<tr>
<td>Most Common Month</td>
<td>September</td>
<td>March</td>
</tr>
<tr>
<td>Items in January</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td>Items in February</td>
<td>103</td>
<td>82</td>
</tr>
<tr>
<td>Items in March</td>
<td>95</td>
<td>145</td>
</tr>
<tr>
<td>Items in April</td>
<td>60</td>
<td>86</td>
</tr>
<tr>
<td>Items in May</td>
<td>77</td>
<td>56</td>
</tr>
<tr>
<td>Items in June</td>
<td>66</td>
<td>80</td>
</tr>
<tr>
<td>Items in July</td>
<td>62</td>
<td>77</td>
</tr>
<tr>
<td>Items in August</td>
<td>90</td>
<td>57</td>
</tr>
<tr>
<td>Items in September</td>
<td>107</td>
<td>94</td>
</tr>
<tr>
<td>Items in October</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Items in November</td>
<td>79</td>
<td>82</td>
</tr>
<tr>
<td>Items in December</td>
<td>74</td>
<td>42</td>
</tr>
<tr>
<td>Items on Sunday</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Items on Monday</td>
<td>327</td>
<td>219</td>
</tr>
<tr>
<td>Items on Tuesday</td>
<td>390</td>
<td>272</td>
</tr>
<tr>
<td>Items on Wednesday</td>
<td>108</td>
<td>130</td>
</tr>
<tr>
<td>Items on Thursday</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Items on Friday</td>
<td>158</td>
<td>362</td>
</tr>
<tr>
<td>Items on Saturday</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Data Integrity Using IDEA -- Amounts

Test the completeness of your data by reviewing Numeric Field Statistics.

Highlight problem areas such as Zero Items, Negative Values.

Using Numeric Field Stats allows you to quickly see your Min, Max, Avg values for consideration in stratified sampling.
IDEA’s Latest New Features

• Character Statistics
• Integration with Python
• ODBC Drivers to easily link to Visualization tools:
  • Tableau
  • Power BI
  • Qlick

For a free and customized on-line demonstration, contact us at 888-641-2800!