

**LEVERAGING TECHNOLOGY  
TO IMPROVE  
INVESTIGATIONS**

A Comparison of Traditional Solutions and  
Recent Innovations

# THE PROBLEM

Investigators spend an inordinate amount of time on a time-consuming and error-prone manual analyses.

- Organizing documents and accounts
- Searching for noteworthy transactions
- Logging and aggregating pertinent data
- Building a solid case for fraud or other financial crime.

Investigations often involve hundreds or thousands of pages of financial documents, so that **tens of millions of transactions per year** are manually reviewed in any given state. It is virtually impossible for an unaided worker to accurately and comprehensively analyze that volume of transactions without the potential for overlooking a noteworthy transaction which might be decisive in building a compelling case.



*"I have a system."*

Reviews are sometimes reduced to cursory manual work; accuracy can be sacrificed in order to work through backlogs.

# CURRENT SOLUTIONS

## GENERIC OCR SOLUTIONS

### PROS

- ALLOW USERS TO DIGITIZE LARGE SETS OF INFORMATION QUICKLY
- RELATIVELY INEXPENSIVE

### CONS

- TEMPLATE-BASED
- CANNOT READ POOR QUALITY STATEMENTS
- INCONSISTENT ACCURACY
- REQUIRES USER TO CLEANSE DATA
- DOES NOT PROVIDE ANALYTICS

# CURRENT SOLUTIONS (CONTINUED)

## OUTSOURCING

### ■ PROS

- HIGH ACCURACY ON A TRANSACTIONAL LEVEL

### ■ CONS

- EXPENSIVE
- SLOW, CAN TAKE WEEKS TO RETURN DATA
- DOES NOT PROVIDE ANALYTICS
- PRONE TO HUMAN ERROR

# NEW SOLUTIONS

## HUMAN EMPOWERED AUTOMATION

### ■ PROS

- 99% ACCURACY
- ALGORITHMICALLY RECONCILED
- INEXPENSIVE
- FAST, AVAILABLE ONE-HOUR TURNAROUND TIME
- DATA INTEGRITY
- CUSTOMIZED ANALYTICS
- SEARCHABLE, SORTABLE TRANSACTIONAL DATABASE

# THE EXTENT OF HUMAN ERROR

## WHAT IS THE PROBABILITY THAT YOU...?

- *Overfill your bath and flood bathroom: 1 in 100,000*
- *Error in simple arithmetic with self-checking: 3%*
- *Read 5-letter word with poor resolution: 3%*
- *Put 10 digits into calculator wrongly: 5%*
- *Dial 10 digits wrongly: 6%*

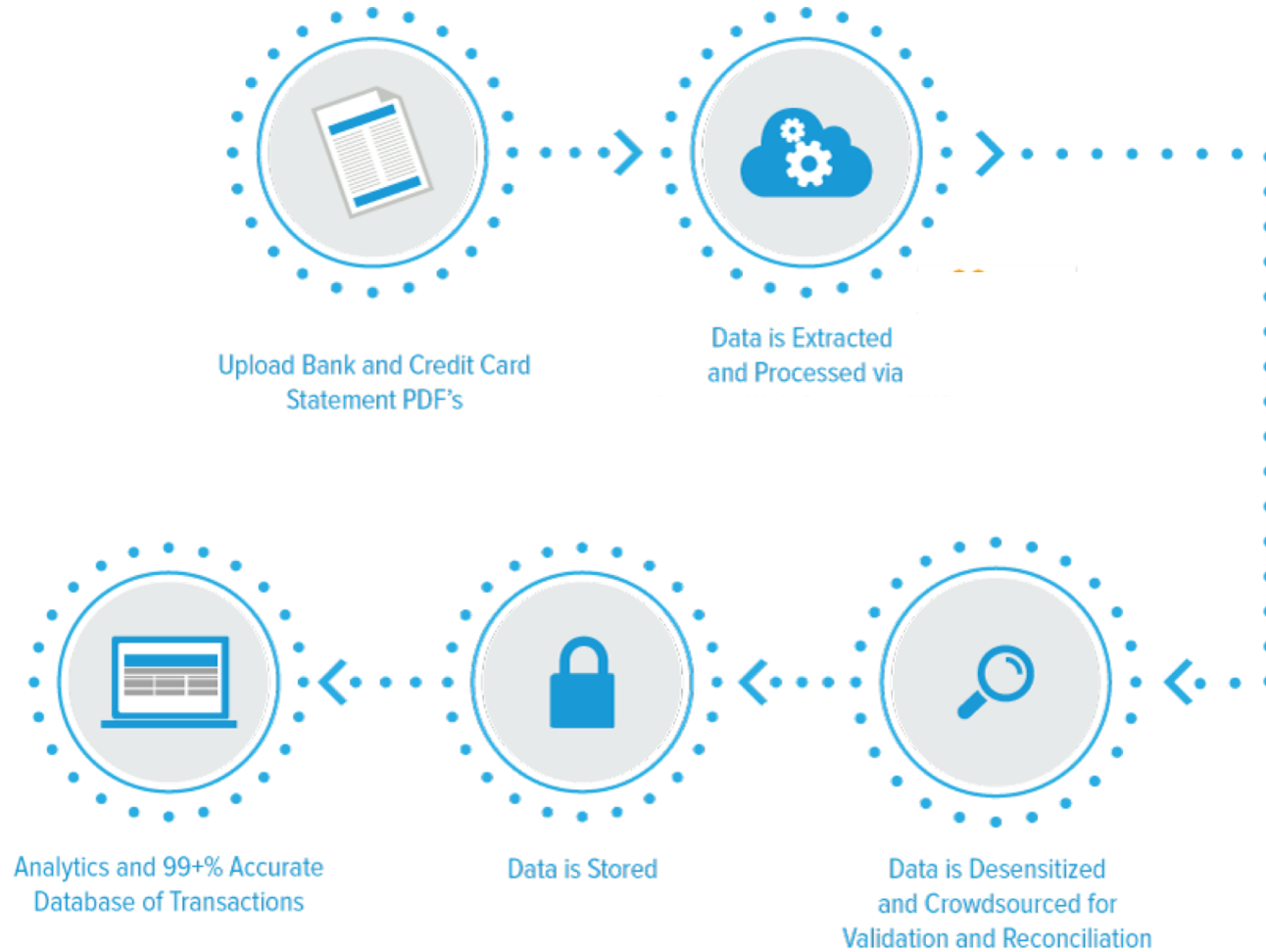


Anywhere from 200,000 to 400,000 Americans die each year from medical errors. Many are as simple as accidental drug overdose due to mismanaged paperwork.

***“Human error may be the third leading cause of death in the U.S.”***

*- Johns Hopkins University Study*

# HUMAN AIDED DATA WORKFLOW



# A STREAMLINED INVESTIGATIVE PROCESS

## Customized analytics add efficiency and efficacy to financial analyses

Analytics can return the name of the financial institution, account number, names of account owners, account type, account balances plus agency specific Analytics including these:

- List of all balances that exceed a specified threshold
- List of all transactions that exceed specified threshold
- List of external bank transactions
- Total deposits or income
- Maximum deposit by month
- Maximum debit by month
- All deposits over specified threshold
- All debits over specified threshold
- List of all transfers
- List of all recurring transactions
- List of any State-specified transactional description such as Social Security or Insurance or other key words
- Alert of missing bank data



# AUTOMATION V. MANUAL ANALYSIS

ANALYZE MORE DATA IN LESS TIME WITH 99+% ACCURACY

	Current Approach	Human Supported Technology
Accuracy	<p>Many auditors “spot-check” data, missing critical pieces of information.</p> <p>Those who conduct comprehensive reviews hire data entry clerks, sacrificing speed and cost.</p>	<p>The process has redundancy and algorithmic reconciliation built-in.</p> <p>Each transaction can be validated to ensure 99+% accuracy.</p>
Speed	<p>The “spot-check” approach is fast but inaccurate.</p> <p>Comprehensive reviews are slow and often result in ongoing backlogs.</p>	<p>The ability to process documents with a quick turnaround time.</p>
Cost	<p>With fully loaded labor costs, investigations can cost between \$1.00 and \$4.00 per page depending on staffing and case volumes.</p>	<p>Cost is lower than a fully manual approach</p>

## SCALABILITY = MORE SUCCESSFUL INVESTIGATIONS

Human supported technology can reduce backlogs and improve both efficiency and efficacy, enabling investigators to conduct more investigations faster, and without the expense and management headaches of additional hires. Such solutions can replace costly, labor-intensive manual document reviews with hyper-accurate, automated file processing and intelligent analytics. Investigations can be conducted more accurately and more expeditiously with more accurate data.

# DEPARTMENT OF REVENUE EXPERIENCE