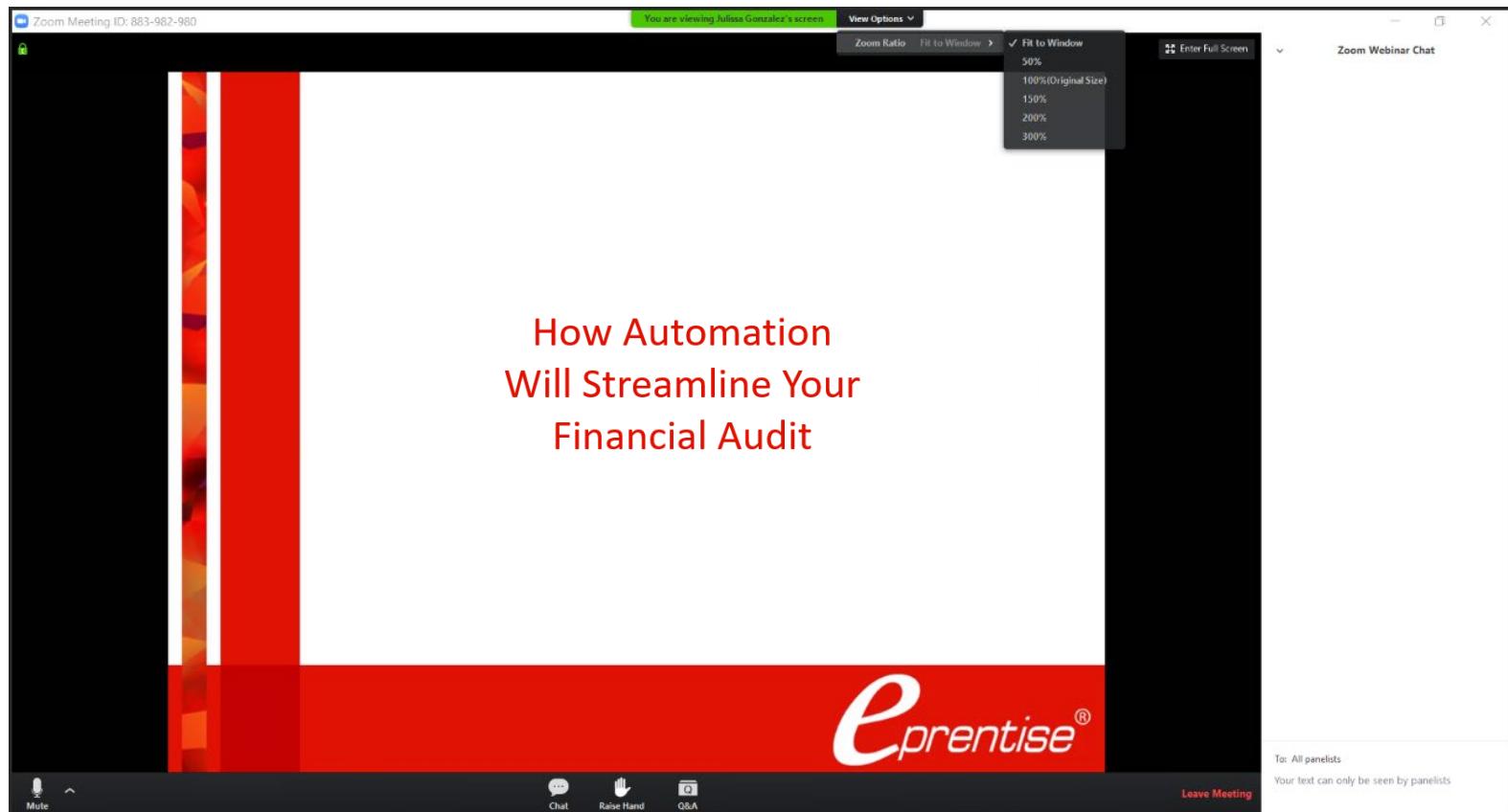


# How Automation Will Transform Your Financial Audit

# Webinar Mechanics

- Submit text questions.
- Q&A addressed at the end of the session and posted on LinkedIn.
- Everyone will receive an email with a link to view a recorded version of today's session.
- Polling questions will be presented during the session. If you want CPE credit for this webinar, you must answer all of the polling questions.



# About eprendise

## ❑ Origin

- Founded by industry veteran Helene Abrams who was Oracle's first Applications consultant

## ❑ Who we are

- Product company supporting Oracle E-Business Suite customers' needs for financial and operational change
- Oracle Gold Partner since 2007
- Patent for Consolidation Methodology, 2012

## ❑ Our current target markets

- Large global corporate organizations
- Cross-industry

## ❑ Our current product lines

### ➤ Four business transformation software product lines:

- Consolidation merges and harmonizes one or more disparate, differently-configured, database instances into a single, fully-functional application
- Divestiture filters data when a company is carving out or selling off part of their business, to create a stand-alone fully functional environment for the divested entity with a limited data set
- FlexField changes the financial chart of accounts to support standardization and increase reporting reliability retaining all transactional history
- Reorganization changes or moves any configurations or set-ups and all related transactions. Reorganization is a broad category and includes software solutions for merging or separating organization units, ledgers, inventory organizations, or legal entities, calendar changes, currency changes, etc. Reorganization Software is used to comply with new regulatory or statutory changes, new organization structures, entry into new markets, and to support mergers, acquisitions, or divestitures.

## ❑ New product lines

- Automated Financial Audit
- C Collection Analytics

## ❑ Does not violate Oracle Support Agreement

# Learning Objectives

**Objective 1:** Learn about current audit practices and the major challenges of manual auditing.

**Objective 2:** Understand how audit automation can comply with current and future audit frameworks and standards.

**Objective 3:** Gain a deeper understanding of how automation can streamline the audit with specific real-world solution examples.

# Agenda

- ❑ Introduction
- ❑ Audit Standards and Framework
- ❑ Audit Service Delivery Models
- ❑ Audit Automation
- ❑ Example: Check Kiting

## Quick Facts

### ➤ Market Size and Projections (Financial Auditing Services)

- Global Financial Auditing Professional Services growth projection **190 billion USD - 2025**
- Projected to grow at approximately **7% CAGR** between **2018 to 2025**
- North America projected revenue for **2025 – USD 60 billion**
- Combined global financial audit and assurance revenue of **Big 4 - 37 billion USD- 2019**

### ➤ Audit Services – Growth Drivers

- Stringent regulations for financial statement reporting
- Revised laws for statutory auditing of corporates and enterprises
- Need for internal self regulation to pre-empt financial malpractices

### ➤ Trends in Financial Auditing

- Adoption of internal auditing as a regular practice.
- Increased use of advanced analytics to augment core auditing activity
- Optimization of audit service delivery models for process efficiencies

# Financial Audit – Standards and Approach

## □ Purpose

- Provide an opinion on financial statements
- Provide reasonable assurance and reduce risk of a material financial statement misreporting

## □ Standards

- U.S Financial Audits are conducted in accordance with the US GAAP
- Globally financial audits follow the International Standards on Audit (ISA)

## □ Approach

- Understand the Customer **Business** and **Industry**
- Review the Customer **Regulatory** Environment
- Analyze the Customer's Summary of Significant Accounting Policy (**SSAP**)
- Review the Customer's appetite for **Business Risk**
- Review the Internal Controls , determine **Control Risk**
- Determine the Audit Risk and the level of **Audit Assurance**
- Define Audit **Objectives**
- Finalize Audit **Scope**
- Set up Audit **Team**

# Financial Audit – Testing Framework

## Testing Framework

- The testing framework includes the following testing criteria to assert the financial transactions
  - **Test of Controls (TOC)**
    - i. Test the effectiveness of internal control enforcers.
    - ii. Decision to conduct this test depends on the auditors assessment of the ICR
    - iii. Provides the framework within which the auditor determines which substantive tests are required
    - iv. Outcome (**Effective Rely , Effective Not Rely, Ineffective Rely**) significantly impacts the substantive tests that follow.
  - **Substantive Test of Transactions (STOT)**
    - i. Test of accuracy of book-keeping of record and financial statements

# Financial Audit – Testing Framework-cont'd

## ▪ Substantive Test of Details(STOD)

### i. Types

- ✓ Examination
- ✓ Recalculation
- ✓ Third-party confirmation
- ✓ Inquiry
- ✓ Re-performance

### ii. Testing Criteria

- ✓ The extent of the test is determined from the test of control outcome
- ✓ If the outcome is effective reply, the below tests will be performed cursorily, else tested extensively.

Example: Vouching process to substantiate the accounting balances by identifying underlying documents

## ▪ Substantive Test of Analytical Procedure(STOA)

- i. Study plausible relation between data elements to understand the disruption in the relation due to
  - ✓ Unusual transactions
  - ✓ Accounting deviations
  - ✓ Misstatements
- ii. The scope and extent of this test is determined by the outcome of the 'Test of controls'
- iii. When controls are weak result in extensive analytics testing
- iv. Even when controls are strong, extensive analytics testing is carried out as a measure of verification and test of details.

# Poll Question

# Manual Audit – The Traditional Service Delivery Model

## □ Manual Auditing Model – “SALY”

### ➤ Onsite Service Delivery

- Dedicated field audit teams working out of client locations.
- Time and Labor based service.
- Arguably the earliest and most common service model
- Field auditor responsible for data identification, collection, auditing and communicating with the client

### ➤ Onsite - Offshore Service Delivery

- Decentralized team of analyst augments the dedicated field auditors
- Central team pulls flat files, performs analytics
- Field team uses analyzed data for action
- Evolution over the traditional onsite only model
- Relatively less expensive but still heavy manual effort
- Onsite site presence generally limited to audit planning and closure activities
- May be dedicated or shared manpower or infrastructure as per the case

# Manual Audit: Key Components and Limitations

| Process   | Tools   | Working Papers  |
|---|---|---|
| <ul style="list-style-type: none"><li>▪ Point-in-time approach to auditing</li><li>▪ Based on auditor's proprietary knowledge</li><li>▪ Labor-intensive, manual effort</li><li>▪ Time-consuming process stretching over long durations</li><li>▪ Auditor requires technical competence and performs routine non-judgmental functions</li><li>▪ Auditor opinion is based on sample data that comes with a caveat regarding fraud detection</li></ul> | <ul style="list-style-type: none"><li>▪ Involves potentially hundreds of spreadsheets linked together</li><li>▪ Use of native, home grown tools for data mining and reporting</li><li>▪ Client can manipulate data and spreadsheet loads before turning over to auditor</li><li>▪ Use of technology is limited to audit transaction data source</li><li>▪ Use of canned queries to extract and analyze data</li><li>▪ Non-scalable for the exponential growth in data volumes</li></ul> | <ul style="list-style-type: none"><li>▪ Custom reporting</li><li>▪ Off the shelf desktop applications for reporting</li><li>▪ Lacks ability to run trends</li><li>▪ Little or no actionable insights</li><li>▪ Point-in-time reporting</li><li>▪ In case of huge volumes of data, the M.S. Excel based analysis and reporting becomes cumbersome</li><li>▪ Report is open to manipulation</li><li>▪ Difficult to trace anomalies and spreadsheet errors back to source data</li></ul> |

# Automated Audit – “Current Scenario”

- Audit industry in general and financial auditing in particular is seen to be behind the curve in technology adoption vis a vis other financial sectors.
- Technology penetration restricted to Sox compliance, Tax audit etc.
- AI, Data analytics being gradually used for analyzing mostly unstructured financial data.
- ‘Substantive test of details’ audit done largely manually in the absence of productized software

# Audit Transformation – A Software-Based Approach

- Emerging Technology
  - Audit firm PWC believes that approximately 40% of standard audit practices will be automated.
- Relies on software application for routine tasks
  - Directly accesses and pulls transaction data directly from the enterprise financial system into the audit application
  - Algorithms identify exceptions based on audit parameters set
    - Auditors focus only on anomalies
  - Drill-down directly into transaction components allows further analysis
- Increases accuracy, completeness, and consistency
- Manages workflow, review, and approval process
- Automatically generates working papers

# Automated Audit – Compelling Reasons

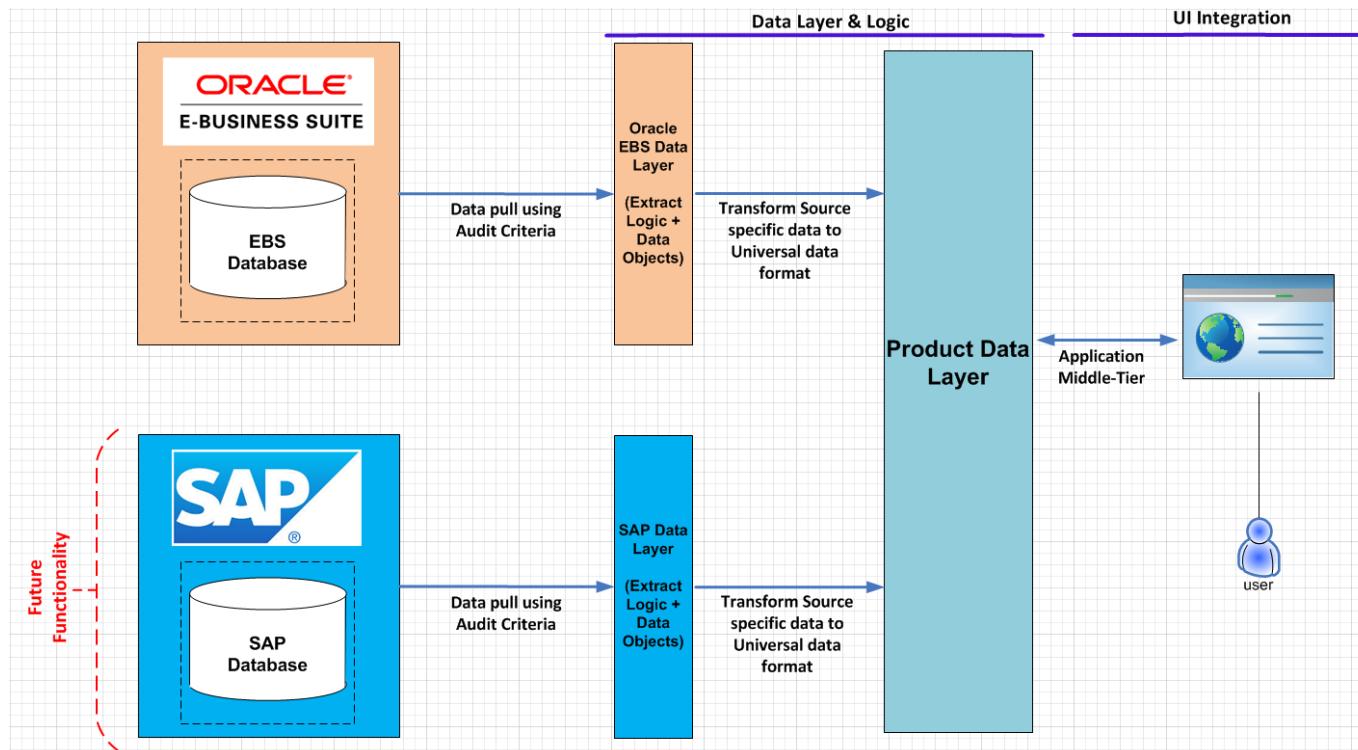
- Keep pace with exponential growth in financial data volumes and the ever-increasing complex web of financial transactions
- Audit every single journal entry instead of a relying on randomly drawn sample if required
- Get insights from unstructured data spread across a multitude of sources
- Reduce the time gap between occurrence of transactions and identification of irregularities
- Create a universally accessible platform to allow audit to happen from anywhere
- Provide audit services reliably with relatively smaller or shared pool of auditors
- Implement standards across audits both within the organization and across related entities

# Poll Question

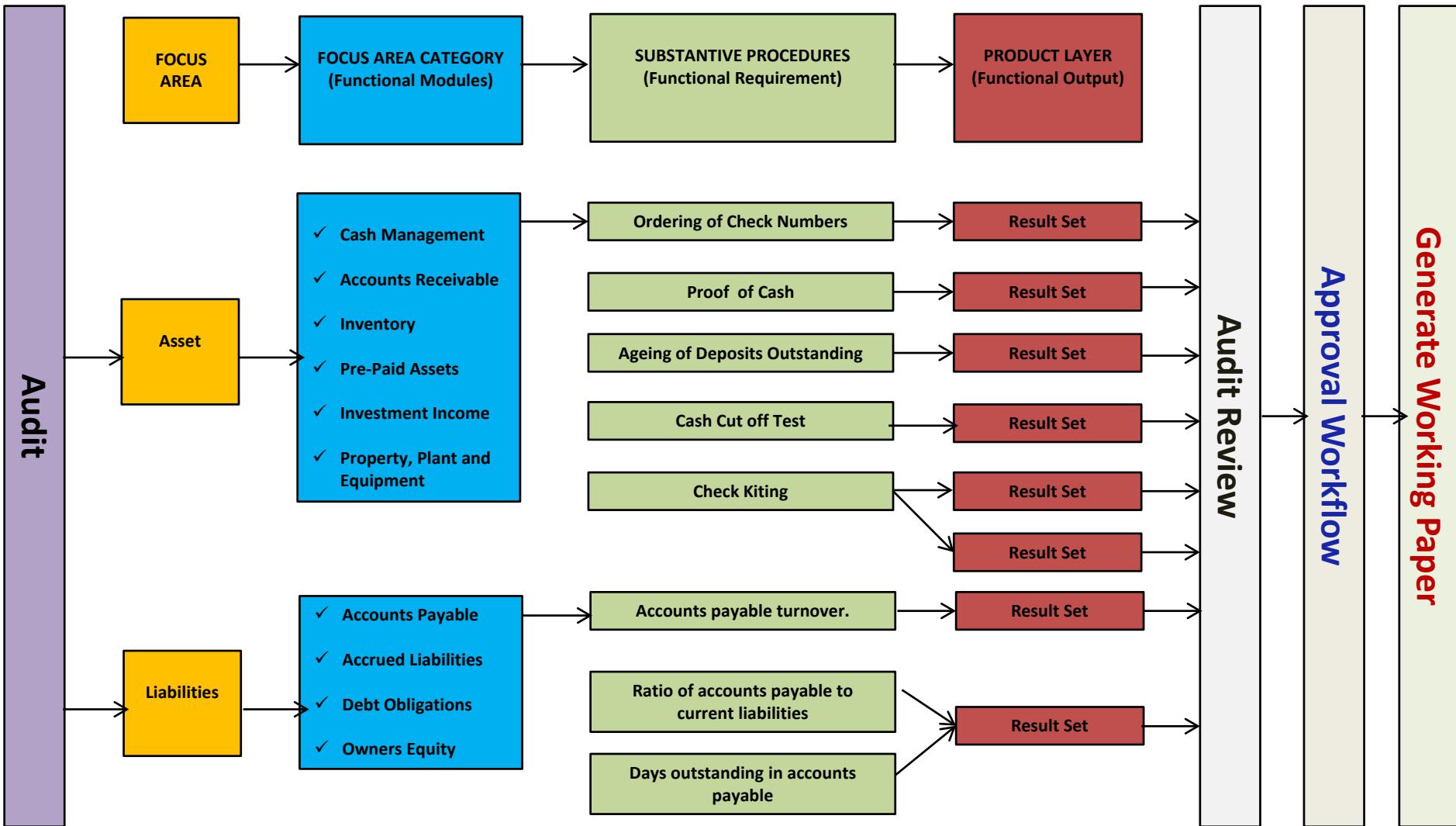
# Automated Audit – Architecture

## ☐ Key Features

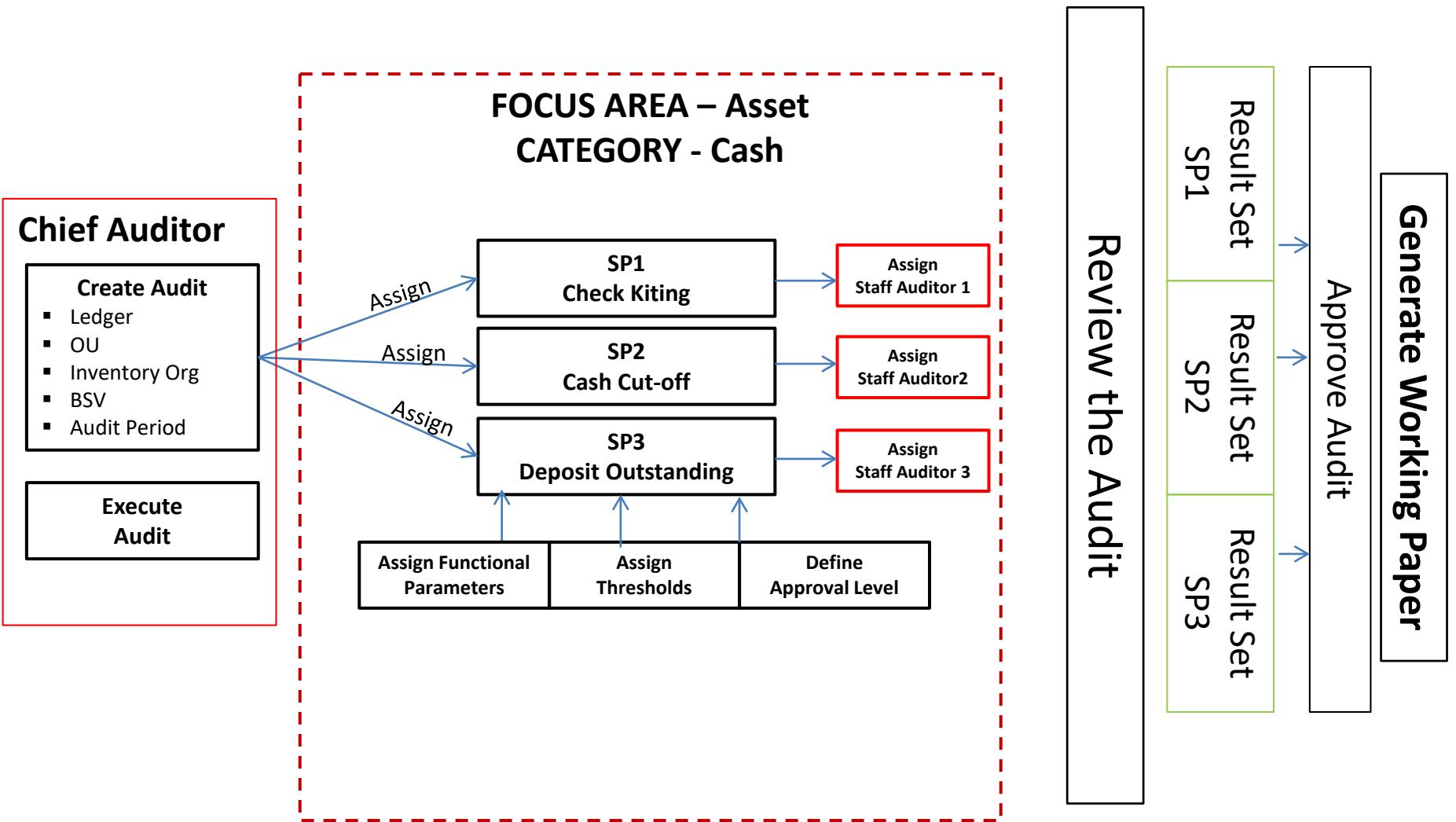
- **Web-based** architecture allows cloud installation and shared services delivery model
- **Canonical** Data Model for importing data from disparate sources
- **Agnostic** data layer allows for integration with various ERP applications
- **Uniform** product layer across all data sources



# Automated Audit – Entity Relationship



# Automated Audit - Process Flow



# Automated Audit: Key Features

## Hierarchical Account Structure

- Trial Balance(s) to Natural Accounts - from the most generic audit procedures applicable across the enterprise to the more specific ones for subunits

## Global Standards

- An innovative solution that is compliant with a wide variety of global regulatory and industry standards

## Reduced Risk

- Reduces risk by enabling consistent and harmonized audit processes across the organization. Scalable ,Repeatable and enable better compliance
- Facilitates internal auditing to proactively identify and mitigate risks

## Increased Audit Cover

- Ability to select the entire universe or a rules-based sample of transactions for the audit and then deploy pre-defined sampling techniques [ Random, Interval, Cluster Random] to narrow down the search results
- Perform mass audit of transactions
- Tight integration to ERP system

## Multi-User

- Ability to split audit scope by trial balance category and procedures
- Prioritize, Rank and Assign work to a team of auditors.
- Manage and monitor work assignments
- Built-in approval hierarchy
- Full team and workflow management and review

## Context-Sensitive pattern analysis

- Predefined self learning rules at the procedure level to perform automatic audit of transactions
- Ability to configure patterns at the procedure level
- Apply patterns on the result set to highlight the red flags and potential systemic issues

## Extendable and scalable audit

- Framework is based on the Substantive Test of Details
- Framework is flexible and allows addition of user-defined substantive procedures
- Ability to extend system defined audit procedures

## Continual Improvement

- Compare audit findings with prior audits and provide best practices and improvement recommendations

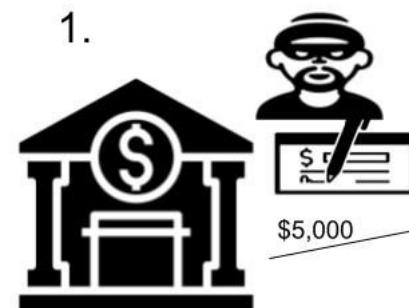
## Auto- generate Audit Working Paper

- Auditing working papers can be generated real-time during the audit process
- Notes, comments, attachments may be added for any transaction

# Poll Question

# Check Kiting

## Cycle of a Check-Kiting Scheme



The scammer writes a check for \$5,000 linked to his account at Bank A, which only has a balance of \$1,000



The scammer then deposits the \$5,000 check with a checking account at Bank B.



To cover his or her tracks, the scammer writes a \$10,000 check from his account at Bank B and deposits it at Bank A.

The scammer then withdraws \$3,000 from his/her account at Bank B based on the credit that bank has given the account because of the bad \$5,000 check

Image source: <https://www.depositaccounts.com/blog/check-kiting.html>

# Check Kiting Example - Automated Audit

## Using Automated Audit

### ➤ Substantive Procedure

- Look for checks written before year end but not listed on bank reconciliation as outstanding may suggest "check kiting."

### ➤ Check Kiting Purpose:

- It is aimed at financial misreporting
- Check kiting serves best towards the year end to falsify cash balance in financial statements.
- Inflate the year end cash balance for reporting in the year end financial statements by
  - ✓ Exclude un-cleared payments from the year end cash balance (avoid showing cash depletion)
  - ✓ Include future dated un-cleared deposits in the current year cash balance (show cash inflation)

### ➤ Target Data Selection Criteria

- This procedure is most often applied towards the year end with the audit period range as per below criteria:
  - ✓ 15 days – Effective rely
  - ✓ 30 days – Effective non-rely
  - ✓ 90 days – Ineffective non-rely

### ➤ Material Amount Threshold: xx USD

# Check Kiting – Automated Audit-Cont'd

## ➤ Check Kiting Target Data Selection

- i. Select all the 'Cash' natural accounts belonging to the 'Company code' input parameter
- ii. Select all payments and receipts for the cash natural account
- iii. Check/Receipt creation date should be between the target audit dates
- iv. The check and receipt effective date can be before or after the year end
- v. The check and receipt status can be cleared, un cleared or void (reversed for deposit)

## ➤ Check Kiting Rule Engine

**Based on the outcomes of the below rules, checks may be marked as 'kited' and the associated risks highlighted**

- i. Time gap between check creation date and check effective date for regular payment and deposit
- ii. Checks (regular& void payment/regular & reversed receipts) that are remitted but not cleared
- iii. If check creation date is later than the check effective date for regular payment and deposit
- iv. The manual check with respect to material amount for regular payment and deposit
- v. Check for the existence of reverse entries in case of a void payment and reversed receipt.
- vi. For void payment and reversed receipt, Check if new payment or receipt created in the new year for the same customer/supplier for similar amount across the entire legal entity for same or different invoice(s)

# Check Kiting – Compare Manual vs Automated Audit

## Check Kiting Test (Manual Audit)

- Conducted on limited sample data selected randomly
- Generally conducted as part of statutory audit
- Auditor opinion comes with a caveat regarding fraud detection
- Detect check kiting post facto

## Check Kiting Test (Automated Audit)

- Conducted on a sample of data or on full universe and check each journal entry
- Repeat the test as often as required
- Auditor opinion more certain when testing for universe of data
- Proactively flag check kiting risk

# Current Audit Products

## Manual Audit (File Uploads)

- Relationships lost between GL and underlying data- it has to be reconstructed from “flat files.”
- The file is subject to manipulation- client “cleaning up” a file prior to providing to auditor
- In depth knowledge needed of the table relationships (i.e. Process manufacturing, project accounting, etc.)
- File uploads still require significant manual processes.
  - Manual file join scripts may be required.
- User data may be limited. i.e. Who were the original users for the workflow (Order to cash, procure to pay, etc.)
- Data files may be unmanageably large requiring segmentation or concatenation.

## Automated Audit Differentiators

- Ability to research transactions/balances that are significant either because of dollar amount or because they were selected for audit (statistical sampling, random sampling, etc.) by connecting to all the underlying data points
- Preservation of the complete accounting representation- the relationships between all the related tables and entities is preserved.
- Seamless vouching (from the G/L or SLA transaction to the source e-documentation) for existence testing for assets and revenue.
- Seamless tracing (from the source e-document to the GL transaction) for completeness testing for liabilities and expenses.
- Instant ability for one auditor to see if any related transactions (i.e. cost of goods sold, to inventory, to sales orders) have been covered in other audit procedures.

# Sources

- <https://www.bloomberg.com>
- <https://www.thebusinessresearchcompany.com>
- <https://www.intosai-faas.org>
- <https://en.wikipedia.org>
- <http://www.usatoday.com/story/money/2017/02/06/special-report-automation-puts-jobs-peril/96464788/>

# Questions?

# Thank You!

## Contact

Chirag Rao  
Project Manager  
[crao@eprentise.com](mailto:crao@eprentise.com)



**- One World, One System, A Single Source of Truth -**

[www.eprentise.com](http://www.eprentise.com)  
[www.AgilityByDesign.com](http://www.AgilityByDesign.com)  
[www.crystallizeanalytics.com](http://www.crystallizeanalytics.com)