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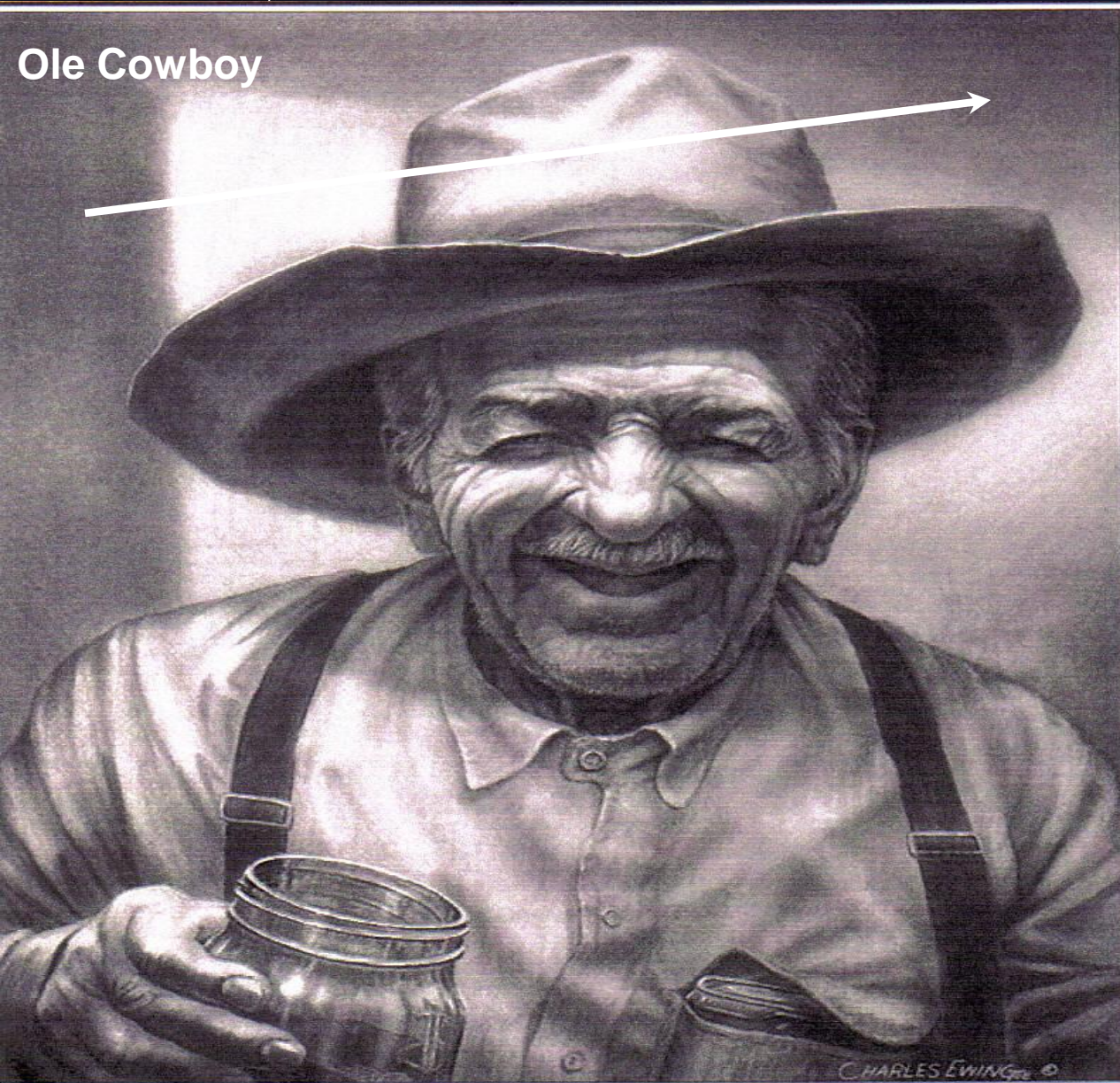
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November 7, 2009



AGENDA

- From the Beginning
- Technology Overview
- Bi-Directional Approach
- Continuous Controls Monitoring (CCM) Overview
- Examples – CCM Rules
- CCM Results
- Internal Client Feedback
- Continuous Auditing (CA) Overview
- Comparison – Traditional vs. CA Approach
- Closing Comments



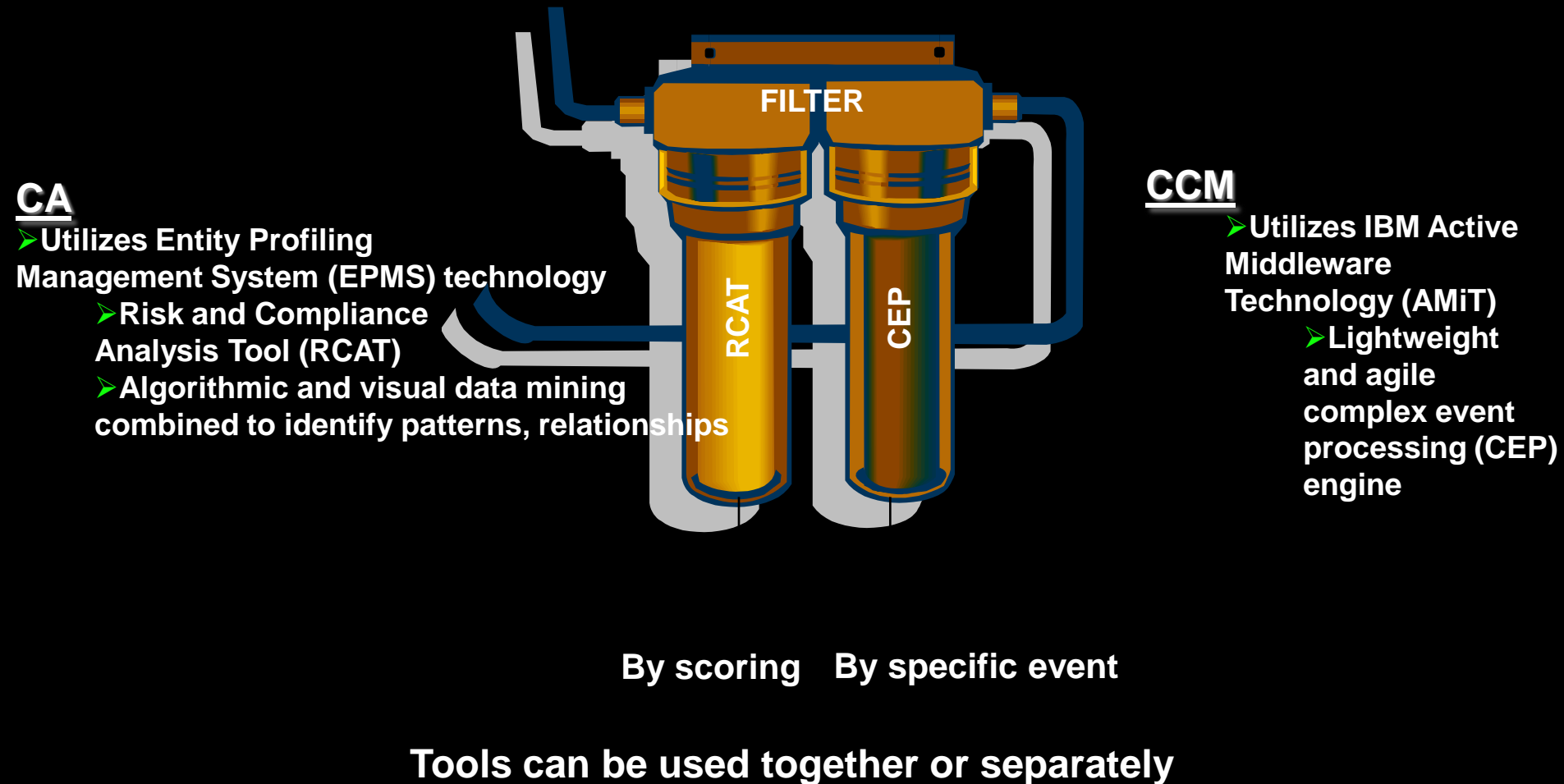
Ole Cowboy

Words of wisdom from the Ole Cowboy to consider when starting to develop your CCM/CA model:
***“Build your fences horse-high, pig tight, and bull-strong.”** Oh, and watch out for them arrows along the way.

Picture by Charles Ewing

*Adage from unknown source

Auditing and Monitoring Risk with IBM Technology



Bi-Directional Approach

CM - Real time detection and prompt correction of specific control deficiency

CA - Verification of effectiveness of multiple controls

Risk Coverage Broad – Review Periodically Throughout Year

Continuous Monitoring Continuous Event Processing

Specific Process Approach

“to monitor in **real time** predefined activity in target process (ex - netting in AR) indicating potential **control deficiencies**”

Accounts
Receivable

Business
Partners

Continuous Auditing

Risk Compliance Analysis Tool

Broad (O2C) Approach

“to aid in **periodically** analyzing and identifying high risk HW & SW transactions in Order 2 Cash space to determine **control effectiveness**.”

Pricing, Billing, AR Collection, AR Delinquency, Asset Management, Revenue Recognition,

Risk Coverage Specific – Review Continuously

Continuous Controls Monitoring Overview

- Deployed in 37 countries in AR process (primarily in 2008)
 - Some countries for Business Partner and Procurement processes
 - Other processes for consideration include Accounts Payable and Payroll
- Monitoring 427 rules (attributes)
 - 291 fraud
 - 136 operational
 - Results incorporated into IBM's overall framework of controls
- Improving line and audit efficiency and effectiveness
 - Preventing control circumvention
 - Detecting control deficiencies real-time and reducing time for remediation
 - Eliminating opportunity for fraud
 - Confirming controls operating as intended (not sampling – 100% tested)
 - Significantly improving allocation of resources during audits to areas of greater risk
 - Input for audit planning, resource allocation for future audits, continuous auditing
 - Preventing potential damage to IBM's image
 - Preventing continuation of inappropriate behavior
 - Avoiding rework cost to reverse unauthorized transactions

Examples of CCM Rules

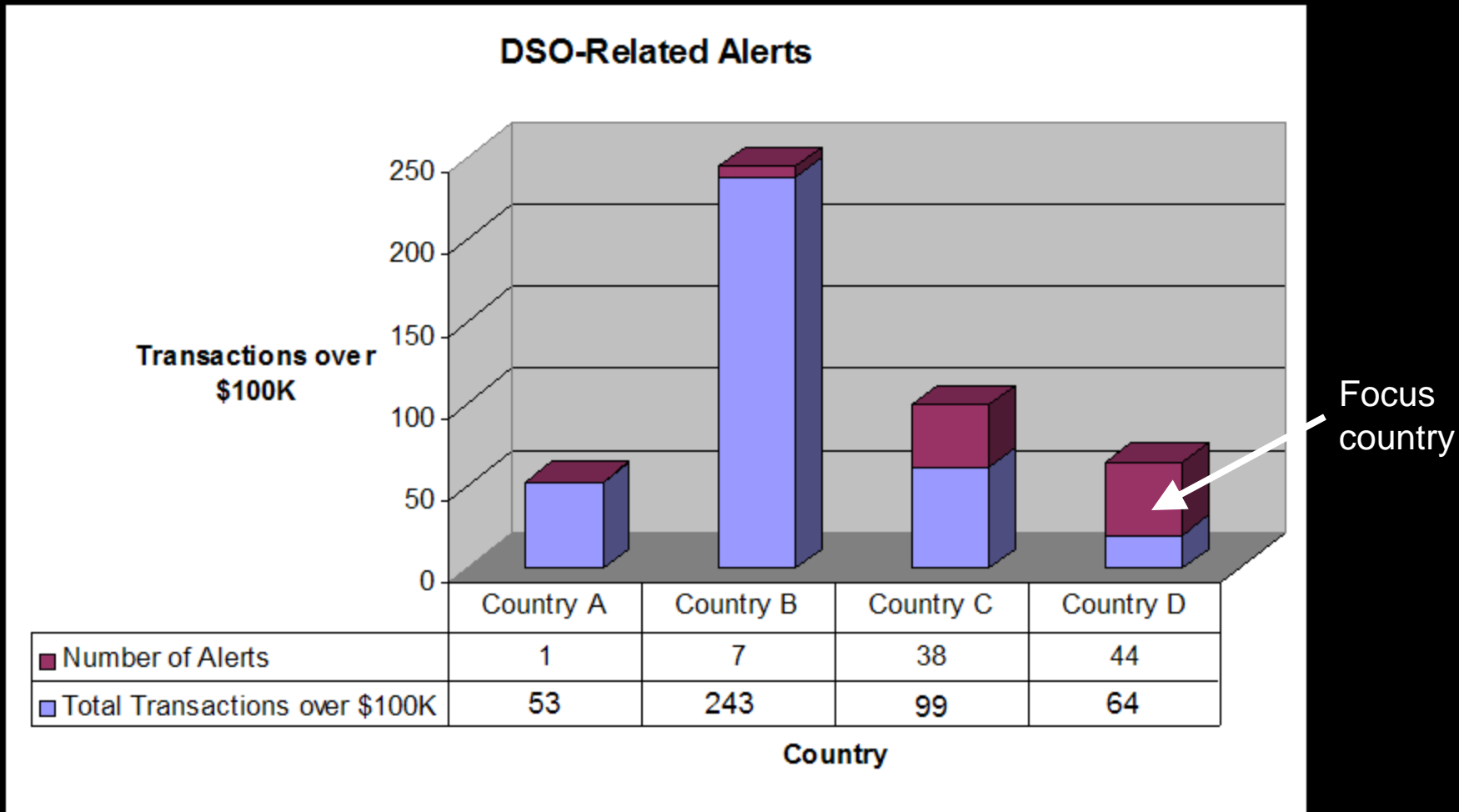
❑ AR

1. Customer concessions exceed \$25K
2. Check for COD if BDWO >\$50K
3. Netting transaction at customer and enterprise level
4. Reversal of enterprise SBWO
5. Unassociated SBWO
6. Unassociated bank adjustments
7. Deviated refund
8. Billing of customers not credit worthy
9. Collection admins making contact on open invoices



The Ole Cowboy says, ***“Sometimes you get, and sometimes you get got.”**
Develop well thought out CCM rules that will reduce the risk of “getting got”.

Focus on Highest Risk Areas



- ✓CCM data used for trending and performance comparisons
- ✓Improves allocation of attention to areas of highest risk and declining controls
- ✓Helping to prevent deterioration of cash flow

Closed Loop Reporting

CONTINUOUS CONTROLS MONITORING YTD ALERTS REPORT COUNTRY A ACCOUNTS RECEIVABLE PERIOD ENDING MONTH YEAR

ALERT ACTIVITY

Rule	Rule Description	SOX Control Y/N	Generated Current Month	Generated YTD	Valid	Valid Alert: Mgmt Pre-Approved Exception	KCFR Open **	Total Open	Comments
13	Potential Netting Transactions: Small balance write-off which include multiple enterprise numbers (An individual write-off where the items are not associated).	KCO 506 - Non Financial Adjustments	11	73	73	0	2	2	Five circumvention of controls detected YTD. Reversals processed and defects reported in WWBCIT. Two alerts from Sept 29 reviewed in Oct.
14	Potential Netting Transaction: Bank adjustment transactions which include multiple enterprise numbers. (An individual bank adjustment where the items are not associated).	KCO 506 - Non Financial Adjustments	0	0	0	0	0	0	Rule implemented in April. No alerts YTD
Totals			11	73	73	0	2	2	

** KCFR = Key Control over Financial Reporting. Alert activity related to SOX controls should be considered to be reported with the quarterly SOX testing results.

Client Feedback

- **AR**
 - “.....our best time from detecting an alert and testing it is now 6 hours. This morning you notified us of 7/3 alerts detected at 8:47am EDT....your note to us was 2:26PM EDT. We had a tester on it at 3:00PM EDT. That means that just 6 hours after the key was pressed to process the transaction...it was detected and being tested. That kind of detection speed could not be accomplished without your team's assistance. I look forward to extending this to our other control points if possible
 - CCM supports distribution of workload throughout the quarter instead of all at one time
 - CCM monthly alert measurements are being used as a key factor in self assessment ratings
- **BP**
 - “CCM allowed us to create visibility to areas that we could not manually review due to resource issues and system limitation”

Continuous Auditing Overview

02C

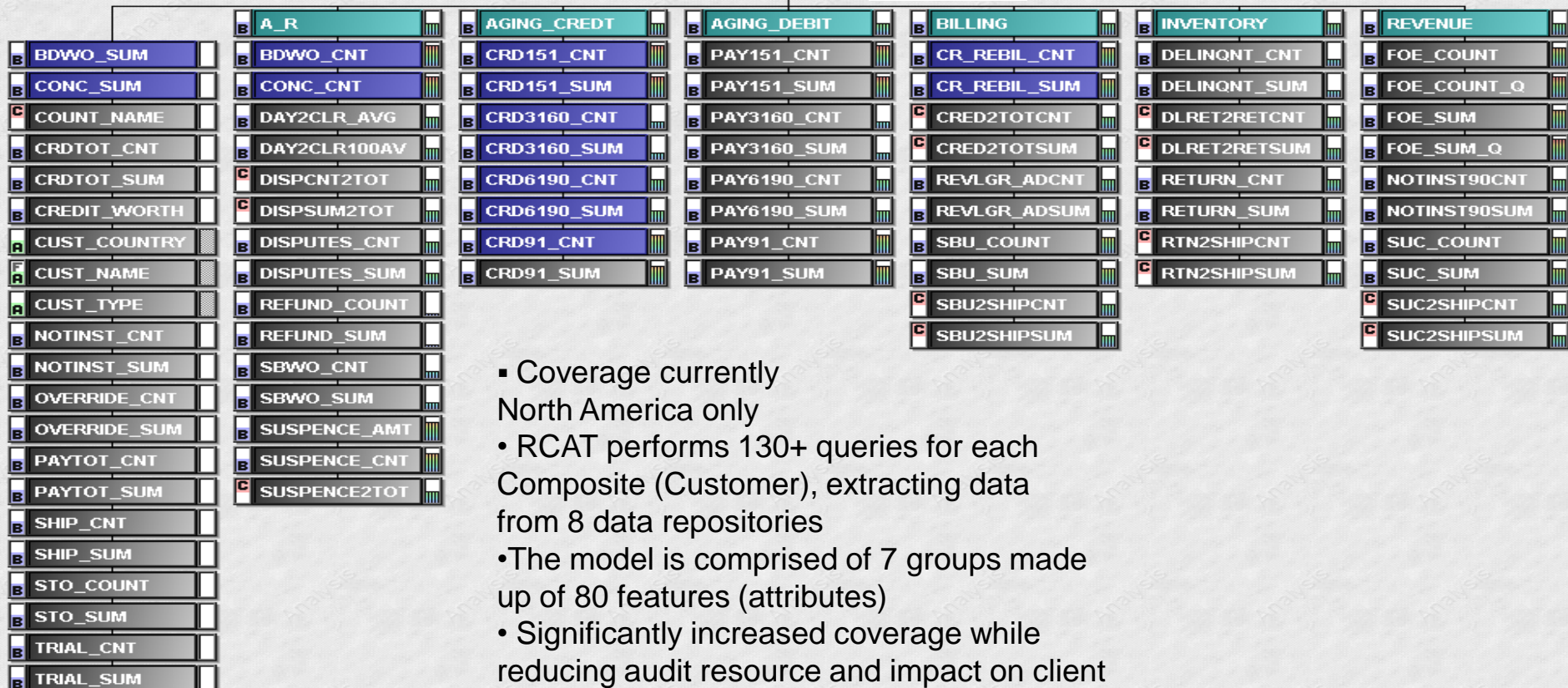
Solution Delivery

Trans Pricing

Fulfillment

AR Collections

COMPOSITE (Customer)



- Coverage currently North America only
- RCAT performs 130+ queries for each Composite (Customer), extracting data from 8 data repositories
- The model is comprised of 7 groups made up of 80 features (attributes)
- Significantly increased coverage while reducing audit resource and impact on client

Rationale - Order to Cash Go/NoGo Approach

Mature vs. Emerging Business Areas

Q2C processes are well defined, readily available on-line, and generally stable thereby requiring less face-to-face interaction between auditor and client

approach provides more audit resource to focus on emerging business areas which require larger investment of audit time

Line organizations, particularly fulfillment, expressed concern about increasing negative impact of audits

approach utilizes suite of technology to improve auditor efficiency and reduces need to rely on line organizations for information

approach significantly reduces line involvement except when conditions indicate significant control deficiencies

Tested Technology

approach utilizes technology already successfully applied in other business areas

COMPARISON

TRADITIONAL AUDIT

Data

Push

When requested

Single source

Risk Based Analysis

Coverage

Cyclical

“Go” Model

**Audit resource – 13 to 20
person-weeks/review**

**Client impact – dedicated
resource**

CA APPROACH

Data

Pull

Immediate When Needed

Multiple “trusted” sources

Enhanced Risk Based Analysis*

Coverage

On demand

Go/No Go” Model

**Audit resource – 90% reduction in
person-weeks**

Client impact - only as needed



More words of wisdom from the Ole Cowboy,
“Don’t interfere with somethin’ that ain’t botherin’ you
none.”

*RCAT analysis + Exception Teamroom + **CCM** data

Closing Comments

■ CCM/CA Value Propositions

- ✓ Invaluable tools, particularly during times of economic stress
- ✓ Promptly detects control circumvention and reduces time for remediation
- ✓ Prevents control deterioration
- ✓ Eliminate opportunities for fraud
- ✓ Aids in prevent damage to company image
- ✓ Aids in creating positive behavior culture.
- ✓ Improvement in efficiency and effectiveness of line and audit resource



Some final words of wisdom from the Ole Cowboy,

“Every CA/CCM journey has a few pot holes, but the destination is well worth the bumps along the way.”

Please feel free to send additional questions to John Langford
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