AI-Powered Business Intelligence: Shaping the Future of Accounting & Finance

Stephen Wolff

April 24, 2024

ima®

The Association of Accountants and Financial Professionals in Business

ORACLE NetSuite

Featured Presenter

Stephen Wolff

Managing Partner

Myers-Holum, Inc.

ima®

The Association of Accountants and Financial Professionals in Business

ORACLE NetSuite

About Myers-Holum

Award-winning leader in NetSuite, Boomi, Stripe and Google Cloud Platform solutions, Myers-Holum helps enterprises streamline operations, financials and business processes. Focused on making business transformation possible for fast-growing companies across industries, Myers-Holum partners with best-in-industry cloud software innovators. Focused on making business transformation possible for fast-growing companies across industries, Myers-Holum partners with best-in-industry cloud software innovators.

Key facts about our awards and recognition:

- Award-winning NetSuite Alliance Partner for the past decade, winning the North America Alliance Partner of the Year award year-over-year
- NetSuite Spotlight Awards across many verticals awarded to Myers-Holum together with our incredible clients
- Stripe Partner of the Year award for excellence in implementing Stripe Revenue and Finance Automation

Agenda

1. Introduction
2. Understanding AI & ML
3. Use Cases for Accounting Teams
4. Planning for the future
5. Conclusion
6. Key take away

Poll Question 1:

Has your organization evaluated or implemented ML or Generative AI tools?

a. Neither evaluated or implemented.
b. Evaluating but not yet implemented.
c. Already implemented ML and/or generative AI tools.

Poll Question 1 Results: (Placeholder)

Machine Learning vs. Generative AI

Artificial Intelligence & Machine Learning

AI Analytics combines artificial intelligence and analytics to generate insights, automate processes, and drive better business outcomes

Importance of AI & ML:

- Analytical tools are required
- Unified, clean data is required
- Comprehensive view of accounting events and business drivers
- Time & effort to implement will be required!

Machine Learning vs. Generative AI

Machine Learning

A method of data analysis that automates analytical model building.

- Fraud Detection
- Risk Management
- Forecasting

Generative AI

AI that can generate entirely new content, primarily in text format.

- Full report generation
- Reconciliation suggestion
- Flux analysis/memos
- Scenario generation and simulation

Use Cases

Use ML to answer questions *(with data)*

Model Type	Predictive Value	Question	Supervised/ Unsupervised?
Regression	Continuous numerical value	What will X number be?	Supervised
Classification	Labels/Categories (Yes/No)	Probability of a customer to churn, pay late?	Supervised
Clustering	Table/Ranking/Grouping	Bundles of products with same growth pattern? Groups of customers/vendors with similar habits?	Unsupervised
Anomaly Detection	Score (0-100)	Which payments are likely to charge back? Customers likely to churn?	Unsupervised

Supervised: Human provides the possible output values, easier to implement
Unsupervised: Computer provides the output values, more complex to implement

https://docs.oracle.com/en/cloud/paas/analytics-cloud/acubi/create-and-use-oracle-analytics-predictive-models.html#GUID-7B38F346-C43E-4BC8-9644-A3A38A86549D

Machine Learning: Models to Leverage in NetSuite Analytics Warehouse

Logistic Regression	Time Series Analysis (ARIMA)	Decision Trees	Random Forests
Will a customer purchase a product after receiving a marketing email?	What will be the sales of our new product in the next six months?	Which features of our products are driving customer satisfaction the most?	Can we predict which transactions are most likely to be fraudulent?

Machine Learning: Models to Leverage in NetSuite Analytics Warehouse

Neural Networks	K-Nearest Neighbors (KNN)	Support Vector Machines (SVM)	Naive Bayes Classifier
Can we forecast the demand for our products for the next year based on various factors (e.g., marketing spend, season)?	Can we identify potential customer segments based on purchase history?	Can we classify customer feedback as positive or negative based on text data?	Can we predict which email inquiries will lead to a sale?

Poll Question 2:

What is your company leadership attitude to ML based forecasting and predictive analytics?

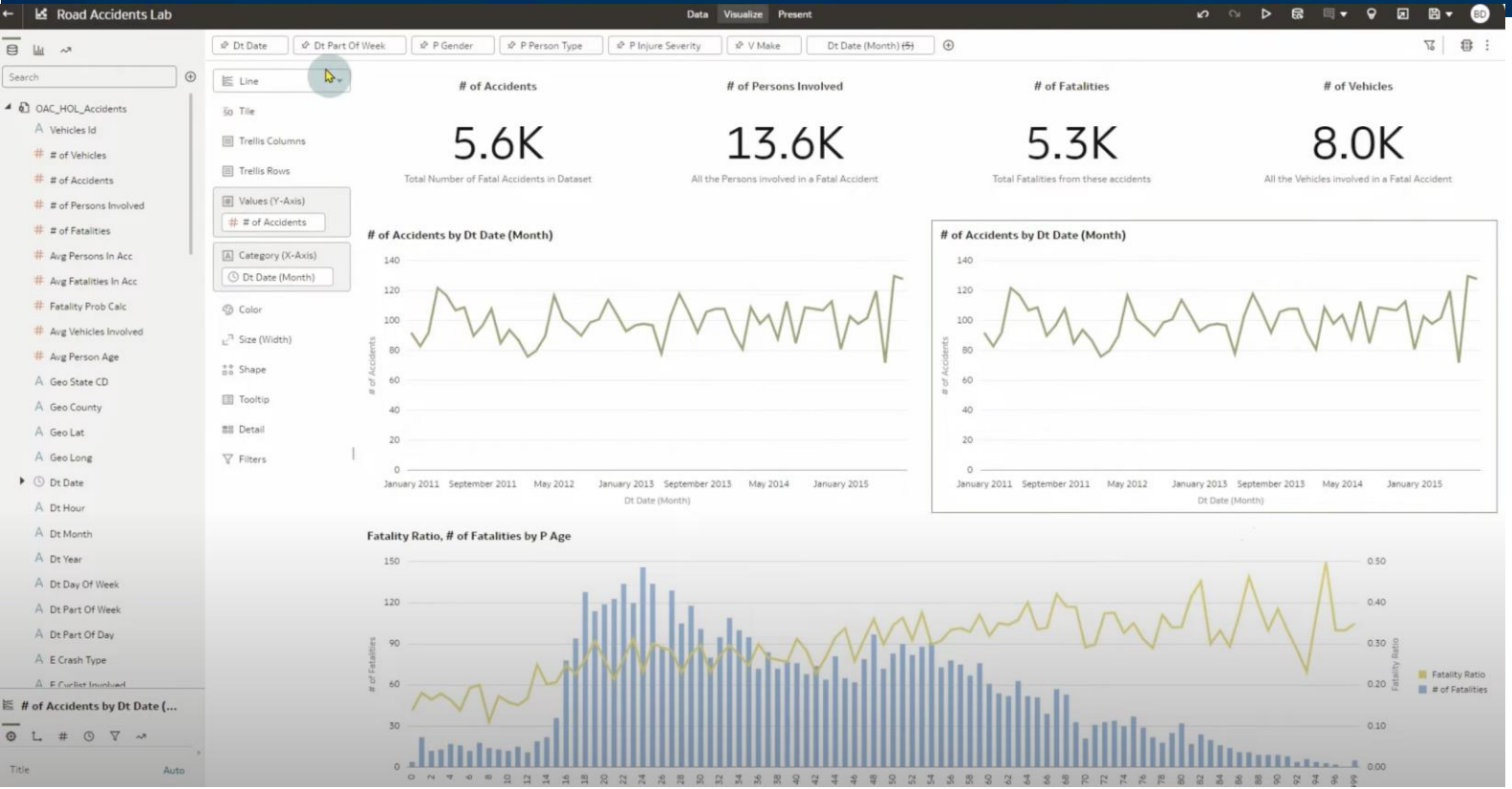
a. Not aware/not interested
b. Interested but not actively supporting
c. Supporting through executive sponsorship
d. Directly engaged in ML-based projects

Poll Question 2 Results: (Placeholder)

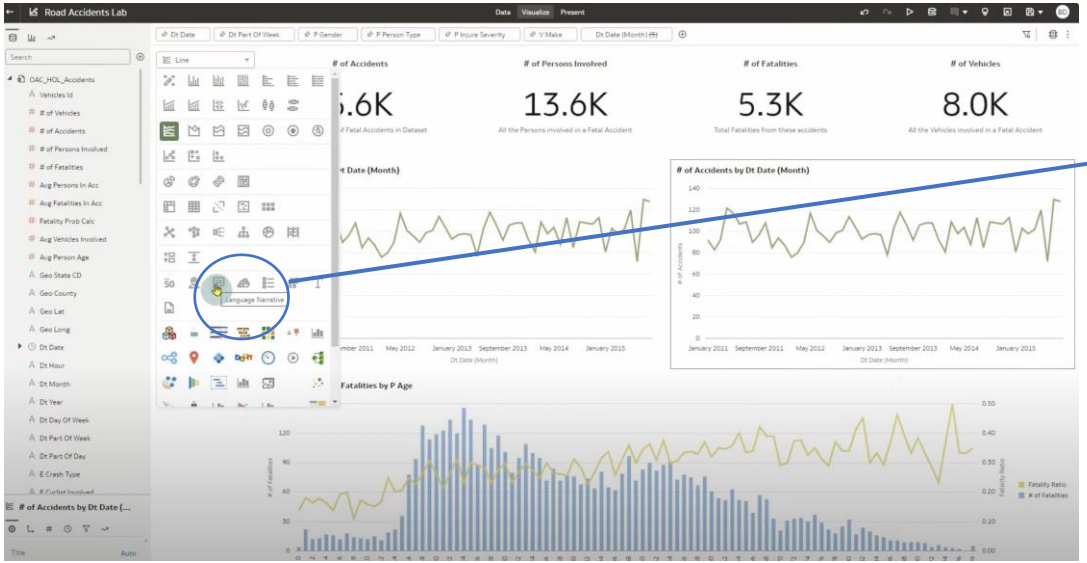
Use Generative AI to create responses

1. Provide a company specific “Search” to business users to ask questions based on accounting data.
2. Automatically generate explanatory text on variance analysis reports based on accounting events and other business information
3. Automatically identify reference fields for transaction matching
4. Automatically apply judgement to external transactions and accounting events and propose accounting treatment, GL designation, revenue recognition, etc.

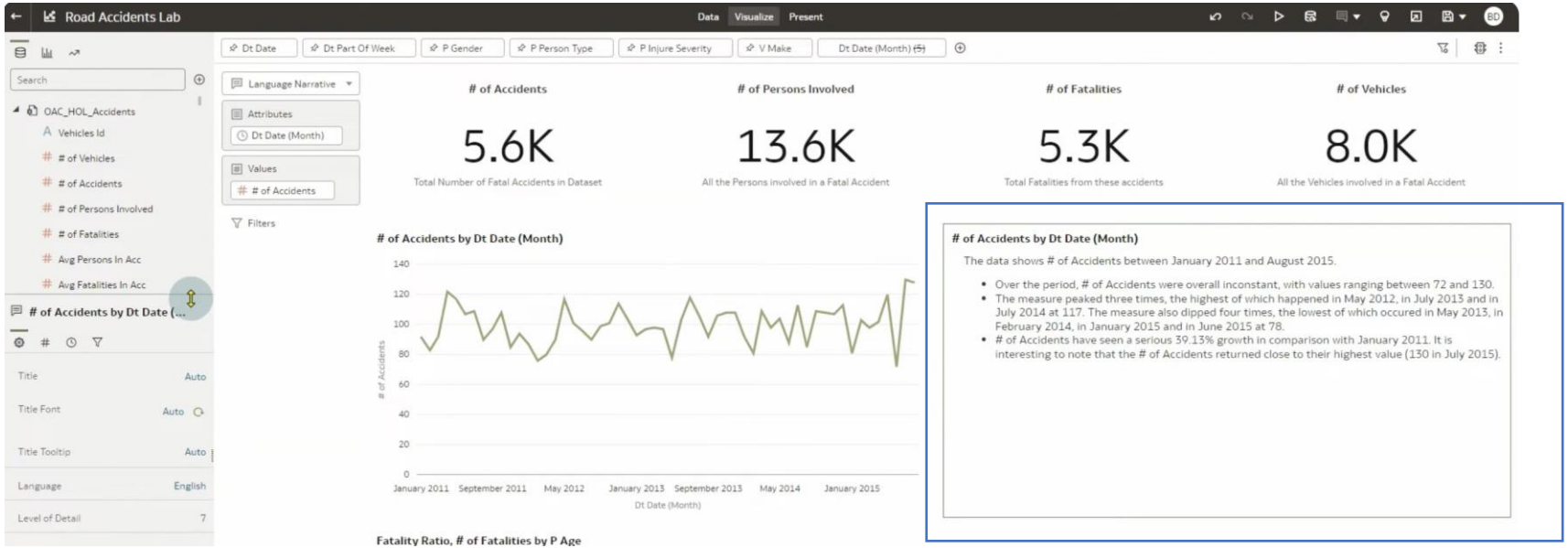
Accessible Use Case–
Natural Language Narration



Accessible Use Case–
Natural Language Narration



Accessible Use Case– Natural Language Narration



Revenue Report

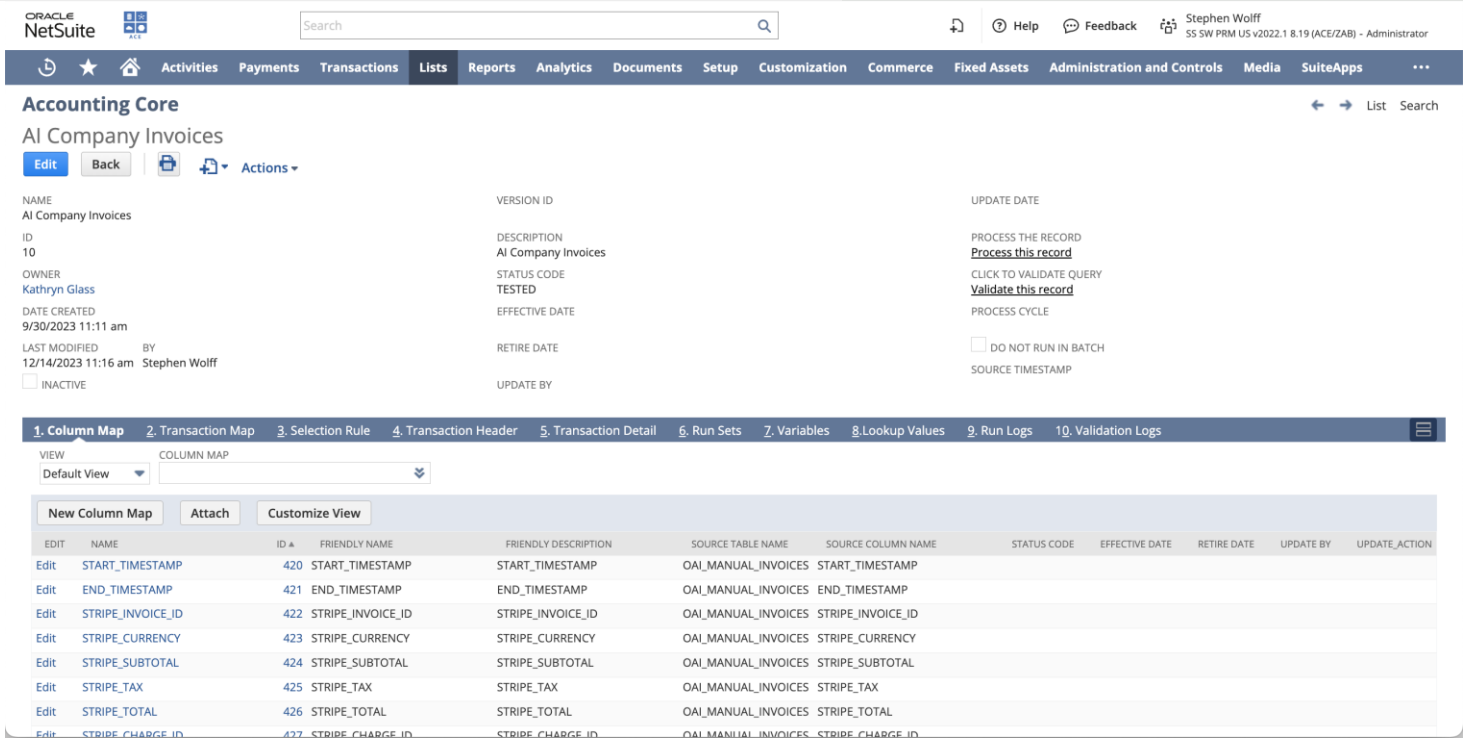
The data represents the 1- Revenue between January 6th, 2008 and November 19th, 2010.

- The the 1- Revenue fluctuated throughout the current period, oscillating between 1,046 and 782,094.
- The measure sank 10 times, the lowest of which occured on March 3rd, 2010, on May 5th, 2010, on June 8th, 2010, on June 22nd, 2010, on June 30th, 2010, on July 2nd, 2010 and on July 28th, 2010 at 36,977. The measure also peaked eight times, the highest of which happened on March 8th, 2010, on June 6th, 2010, on June 20th, 2010, on July 1st, 2010, on September 5th, 2010, on October 2nd, 2010 and on October 9th, 2010 at 345,954.
- Overall, the 1- Revenue has seen an outstanding 7,613.77% rise in comparison with January 6th, 2008.

At least one T00 Calendar Date appears to be missing in the current selection.

Future Use Case – Generating Transaction Classification

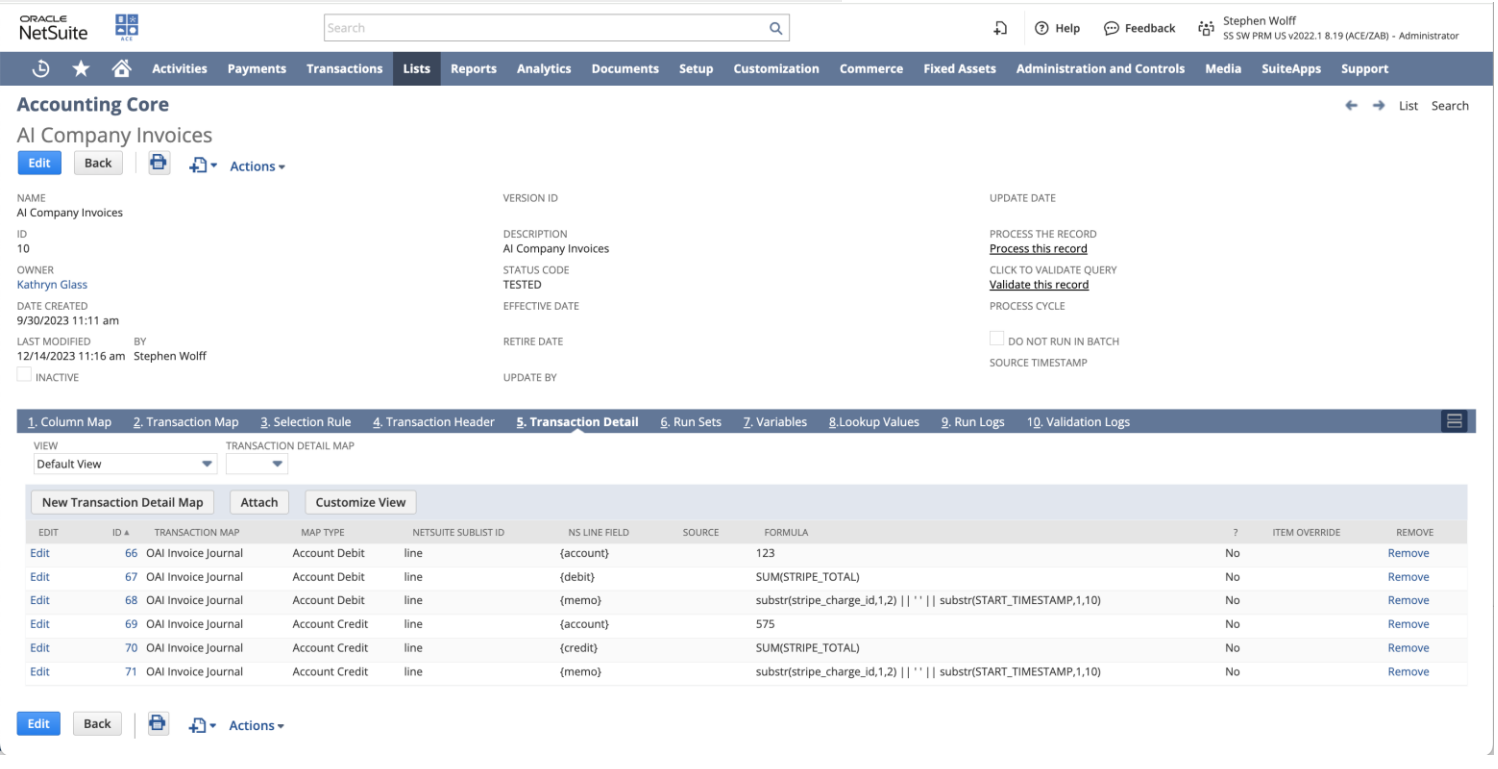
Today's Process of Integrating to Accounting Systems



A developer identifies source system tables and transactions.

Future Use Case – Generating Transaction Classification

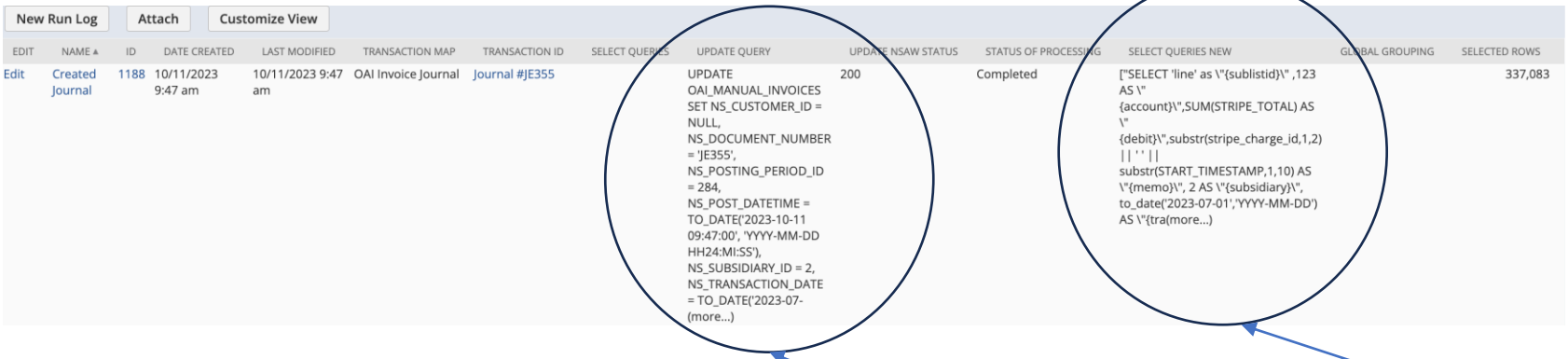
Today's Process of Integrating to Accounting Systems



A developer writes code to transform source system data and map to ERP transactions and tables.

Future Use Case–
Generative Transaction Classification

Today's Process of Integrating to Accounting Systems



New Run Log | Attach | Customize View

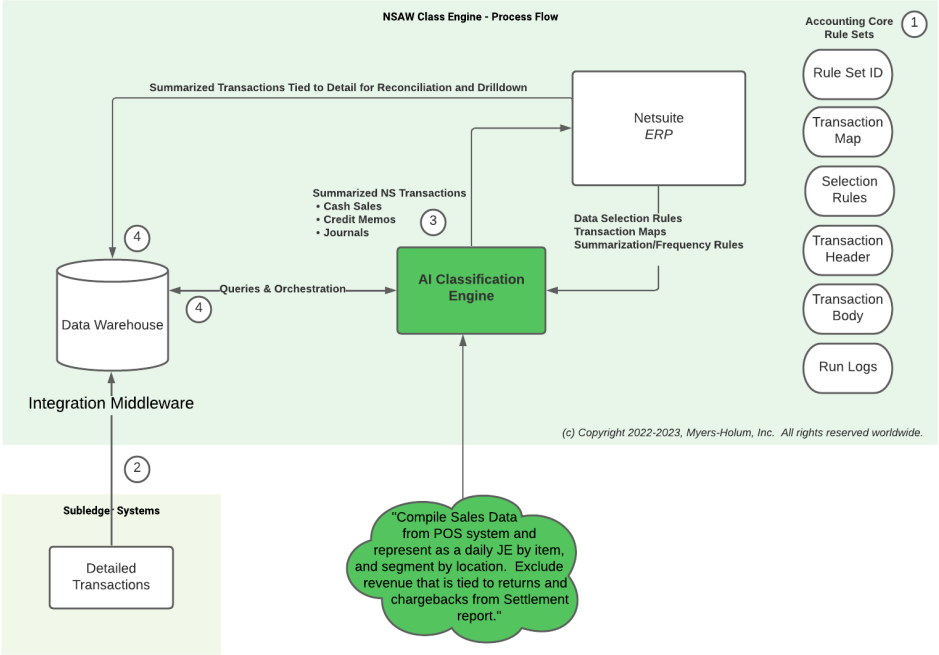
EDIT	NAME ▲	ID	DATE CREATED	LAST MODIFIED	TRANSACTION MAP	TRANSACTION ID	SELECT QUERIES	UPDATE QUERY	UPDATE NSAW STATUS	STATUS OF PROCESSING	SELECT QUERIES NEW	GLOBAL GROUPING	SELECTED ROWS
Edit	Created Journal	1188	10/11/2023 9:47 am	10/11/2023 9:47 am	OAI Invoice Journal	Journal #JE355		UPDATE OAI_MANUAL_INVOICES SET NS_CUSTOMER_ID = NULL, NS_DOCUMENT_NUMBER = 'JE355', NS_POSTING_PERIOD_ID = 284, NS_POST_DATETIME = TO_DATE('2023-10-11 09:47:00', 'YYYY-MM-DD HH24:MI:SS'), NS_SUBSIDIARY_ID = 2, NS_TRANSACTION_DATE = TO_DATE('2023-07- (more...)	200	Completed	["SELECT 'line' as \"{sublistid}\" ,123 AS \" {account}\",SUM(STRIPE_TOTAL) AS \" {debit}\",substr(stripe_charge_id,1,2) || ' ' || substr(START_TIMESTAMP,1,10) AS \"{memo}\", 2 AS \"{subsidiary}\", to_date('2023-07-01','YYYY-MM-DD') AS \"{tra(more...)		337,083

Developers write code deploy integrations through an iPaaS or another platform. Accounting teams must then reconcile source systems to ERP transaction ledger.

Future Use Case–
Generative Transaction Classification

Future Process of Integrating to Accounting Systems

- Transaction classification, matching and reconciliation will become increasingly automated with application of Generative AI.
- LLM's will be applied to the "glue" that today sits between a company's many enterprise applications and ERP.



Poll Question 3:

Has your organization begun the process of implementing an Enterprise Data Warehouse and/or BI?

a. No plans to implement a Data Warehouse or dedicated BI tools.
b. Evaluating but not yet implementing a data warehouse and/or BI.
c. Currently implementing or already implemented a data warehouse and/or BI.

Poll Question 3 Results: (Placeholder)

Planning for the Future - Implementing a data warehouse

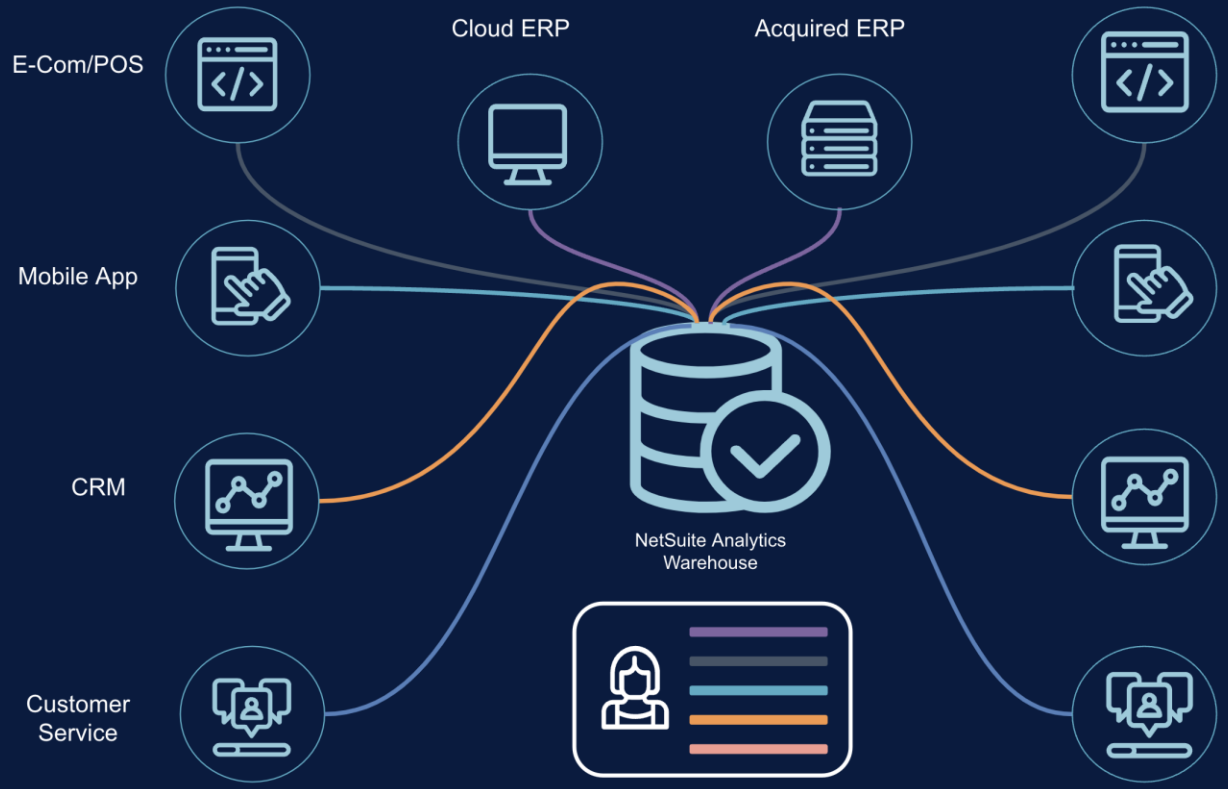
Blended Data, MDM Strategies & BI Continuity

ORACLE NETSUITE
Alliance Partner

Myers-Holum

Blended Data

- Data Integration
- Data Transformation
- Data Enrichment



ORACLE NETSUITE
Alliance Partner

Myers-Holum

Master Data Management

- Data Repository
- Data Governance
- Data Integration

Note: NSAW is *not* an MDM tool, but it enables MDM projects

ORACLE NETSUITE Alliance Partner

Myers-Holum

Poll Question 4:

In your individual role, do you plan to use AI/ML in Accounting or Finance functions anytime soon?

a. Already using ML/AI today
b. Within a year
c. Not this year, but in the future
d. Not considering it

Poll Question 4 Results: (Placeholder)

Best Practices to Implement ML & AI

- Executive Sponsorship – Top-down support
- Run parallel and transition slowly
  - In a forecasting scenario, leverage ML based forecasting processes side by side with standard field forecast and provide business leaders with both versions through several cycles in parallel
- Human input will never be entirely replaced
  - ML does not understand macro implications, business strategy change etc.
  - Data scientists validate model performance, executives and business operators should understand the inputs and data set behind the models
- The initial build of a ML-forecast will take time
  - Large data sets (several years) are required

Questions and Answers

Stephen Wolff
Managing Partner
Myers-Holum, Inc.

ima®
The Association of Accountants and Financial Professionals in Business

ORACLE NetSuite

Thank you!

Oracle NetSuite

www.netsuite.com

ima®

The Association of Accountants and Financial Professionals in Business

ORACLE NetSuite