

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

Stephen Wolff

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The Association of
Accountants and
Financial Professionals
in Business

ORACLE
NetSuite

Featured Presenter

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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.

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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

Machine Learning: Models to Leverage in NetSuite Analytics Warehouse

Logistic Regression

Will a customer purchase a product after receiving a marketing email?

Time Series Analysis (ARIMA)

What will be the sales of our new product in the next six months?

Decision Trees

Which features of our products are driving customer satisfaction the most?

Random Forests

Can we predict which transactions are most likely to be fraudulent?

Machine Learning: Models to Leverage in NetSuite Analytics Warehouse

Neural Networks

Can we forecast the demand for our products for the next year based on various factors (e.g., marketing spend, season)?

K-Nearest Neighbors (KNN)

Can we identify potential customer segments based on purchase history?

Support Vector Machines (SVM)

Can we classify customer feedback as positive or negative based on text data?

Naive Bayes Classifier

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?

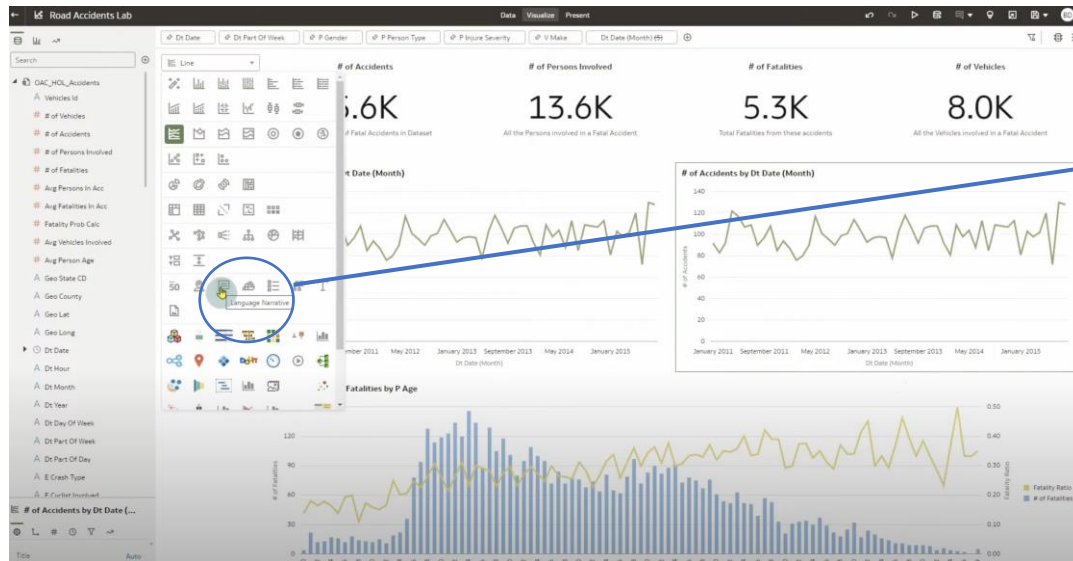
- a. Not aware/not interested
- b. Interested but not actively supporting
- c. Supporting through executive sponsorship
- d. Directly engaged in ML-based projects

Poll Question 2 Results: (Placeholder)

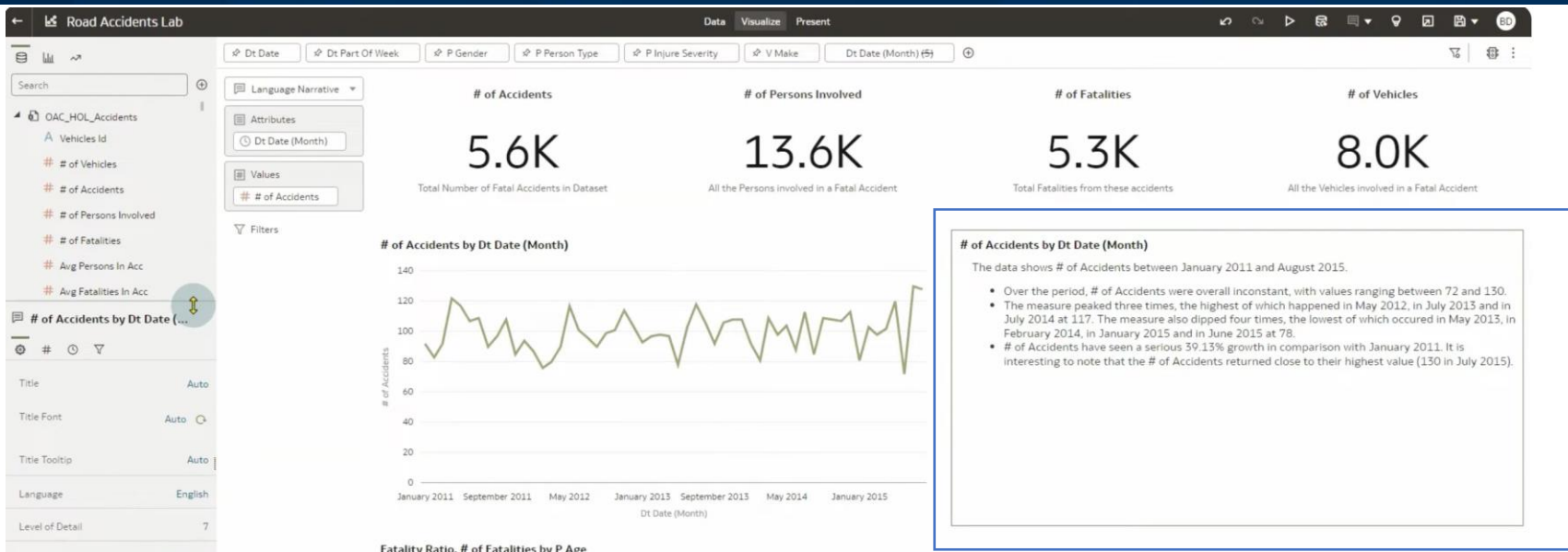
Use Generative AI to create responses

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



Revenue
Report

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

- The 1- Revenue fluctuated throughout the current period, oscillating between 1,046 and 782,094.
- The measure sank 10 times, the lowest of which occurred 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

The screenshot shows the Oracle NetSuite interface. At the top, there's a navigation bar with various tabs: Accounting Core, AI Company Invoices, Edit, Back, and Actions. Below this, the record details for 'AI Company Invoices' are displayed. The record includes fields for NAME, ID, OWNER, DATE CREATED, LAST MODIFIED, and VERSION ID. The 'AI Company Invoices' record is shown with a status of 'TESTED' and an effective date of '12/14/2023 11:16 am'. The 'UPDATE DATE' field is also visible. The interface includes a search bar and a user profile for Stephen Wolff.

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Search

Help Feedback Stephen Wolff SS SW PRM US v2022.1 8.19 (ACE/ZAB) - Administrator

Accounting Core

AI Company Invoices

Edit Back Actions

NAME: AI Company Invoices

ID: 10

OWNER: Kathryn Glass

DATE CREATED: 9/30/2023 11:11 am

LAST MODIFIED: 12/14/2023 11:16 am BY: Stephen Wolff

VERSION ID

DESCRIPTION: AI Company Invoices

STATUS CODE: TESTED

EFFECTIVE DATE: 12/14/2023 11:16 am

RETIRED DATE

UPDATE BY

UPDATE DATE

PROCESS THE RECORD: [Process this record](#)

CLICK TO VALIDATE QUERY: [Validate this record](#)

PROCESS CYCLE

☐ DO NOT RUN IN BATCH

SOURCE TIMESTAMP

A developer identifies source system tables and transactions.

The screenshot shows the 'Column Map' configuration page in Oracle NetSuite. The page has a navigation bar with tabs: 1. Column Map, 2. Transaction Map, 3. Selection Rule, 4. Transaction Header, 5. Transaction Detail, 6. Run Sets, 7. Variables, 8. Lookup Values, 9. Run Logs, 10. Validation Logs. The 'Column Map' tab is selected. Below the navigation bar, there's a 'VIEW' dropdown set to 'Default View' and a 'COLUMN MAP' dropdown. The main content area shows a table with columns: EDIT, NAME, ID, FRIENDLY NAME, FRIENDLY DESCRIPTION, SOURCE TABLE NAME, SOURCE COLUMN NAME, STATUS CODE, EFFECTIVE DATE, RETIRE DATE, UPDATE BY, and UPDATE_ACTION. The table lists various columns and their mappings, including START_TIMESTAMP, END_TIMESTAMP, STRIPE_INVOICE_ID, STRIPE_CURRENCY, STRIPE_SUBTOTAL, STRIPE_TAX, STRIPE_TOTAL, and STRIPE_CHARGE_ID.

1. Column Map 2. Transaction Map 3. Selection Rule 4. Transaction Header 5. Transaction Detail 6. Run Sets 7. Variables 8. Lookup Values 9. Run Logs 10. Validation Logs

VIEW: Default View COLUMN MAP

New Column Map Attach Customize View

EDIT	NAME	ID	FRIENDLY NAME	FRIENDLY DESCRIPTION	SOURCE TABLE NAME	SOURCE COLUMN NAME	STATUS CODE	EFFECTIVE DATE	RETIRE DATE	UPDATE BY	UPDATE_ACTION
Edit	START_TIMESTAMP	420	START_TIMESTAMP	START_TIMESTAMP	OAI_MANUAL_INVOICES	START_TIMESTAMP					
Edit	END_TIMESTAMP	421	END_TIMESTAMP	END_TIMESTAMP	OAI_MANUAL_INVOICES	END_TIMESTAMP					
Edit	STRIPE_INVOICE_ID	422	STRIPE_INVOICE_ID	STRIPE_INVOICE_ID	OAI_MANUAL_INVOICES	STRIPE_INVOICE_ID					
Edit	STRIPE_CURRENCY	423	STRIPE_CURRENCY	STRIPE_CURRENCY	OAI_MANUAL_INVOICES	STRIPE_CURRENCY					
Edit	STRIPE_SUBTOTAL	424	STRIPE_SUBTOTAL	STRIPE_SUBTOTAL	OAI_MANUAL_INVOICES	STRIPE_SUBTOTAL					
Edit	STRIPE_TAX	425	STRIPE_TAX	STRIPE_TAX	OAI_MANUAL_INVOICES	STRIPE_TAX					
Edit	STRIPE_TOTAL	426	STRIPE_TOTAL	STRIPE_TOTAL	OAI_MANUAL_INVOICES	STRIPE_TOTAL					
Edit	STRIPE_CHARGE_ID	427	STRIPE_CHARGE_ID	STRIPE_CHARGE_ID	OAI_MANUAL_INVOICES	STRIPE_CHARGE_ID					

Future Use Case – Generating Transaction Classification

Today's Process of Integrating to Accounting Systems

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Search

Help Feedback Stephen Wolff SS SW PRIM US v2022.1 8.19 (ACE/ZAB) - Administrator

Activities Payments Transactions **Lists** Reports Analytics Documents Setup Customization Commerce Fixed Assets Administration and Controls Media SuiteApps Support

Accounting Core

AI Company Invoices

Edit Back Actions

NAME: AI Company Invoices
ID: 10
OWNER: Kathryn Glass
DATE CREATED: 9/30/2023 11:11 am
LAST MODIFIED: 12/14/2023 11:16 am BY: Stephen Wolff
☐ INACTIVE

VERSION ID
DESCRIPTION: AI Company Invoices
STATUS CODE: TESTED
EFFECTIVE DATE
RETIRE DATE
UPDATE BY

UPDATE DATE
PROCESS THE RECORD: [Process this record](#)
CLICK TO VALIDATE QUERY: [Validate this record](#)
PROCESS CYCLE
☐ DO NOT RUN IN BATCH
SOURCE TIMESTAMP

1. Column Map 2. Transaction Map 3. Selection Rule 4. Transaction Header 5. **Transaction Detail** 6. Run Sets 7. Variables 8. Lookup Values 9. Run Logs 10. Validation Logs

VIEW: Default View TRANSACTION DETAIL MAP

New Transaction Detail Map Attach Customize View

EDIT	ID #	TRANSACTION MAP	MAP TYPE	NETSUITE SUBLIST ID	NS LINE FIELD	SOURCE	FORMULA	?	ITEM OVERRIDE	REMOVE
Edit	66	OAI Invoice Journal	Account Debit	line	{account}		123	No		Remove
Edit	67	OAI Invoice Journal	Account Debit	line	{debit}		SUM(STRIPE_TOTAL)	No		Remove
Edit	68	OAI Invoice Journal	Account Debit	line	{memo}		substr(stripe_charge_id,1,2) ' ' substr(START_TIMESTAMP,1,10)	No		Remove
Edit	69	OAI Invoice Journal	Account Credit	line	{account}		575	No		Remove
Edit	70	OAI Invoice Journal	Account Credit	line	{credit}		SUM(STRIPE_TOTAL)	No		Remove
Edit	71	OAI Invoice Journal	Account Credit	line	{memo}		substr(stripe_charge_id,1,2) ' ' substr(START_TIMESTAMP,1,10)	No		Remove

Edit Back Actions

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

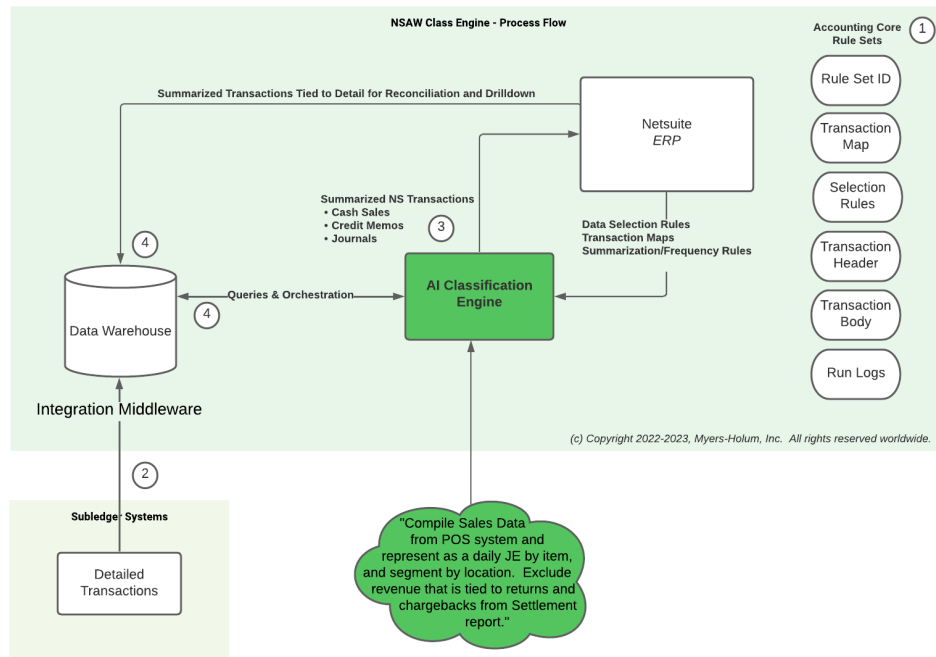
New Run Log													Attach	Customize View
EDIT	NAME ▲	ID	DATE CREATED	LAST MODIFIED	TRANSACTION MAP	TRANSACTION ID	SELECT QUERIES	UPDATE QUERY	UPDATE NSAW STATUS	STATUS OF PROCESSING	SELECT QUERIES NEW	GLOBAL GROUPING	SELECTED ROWS	
Edit	Created Journal	1188	10/11/2023 9:47 am	10/11/2023 9:47 am	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

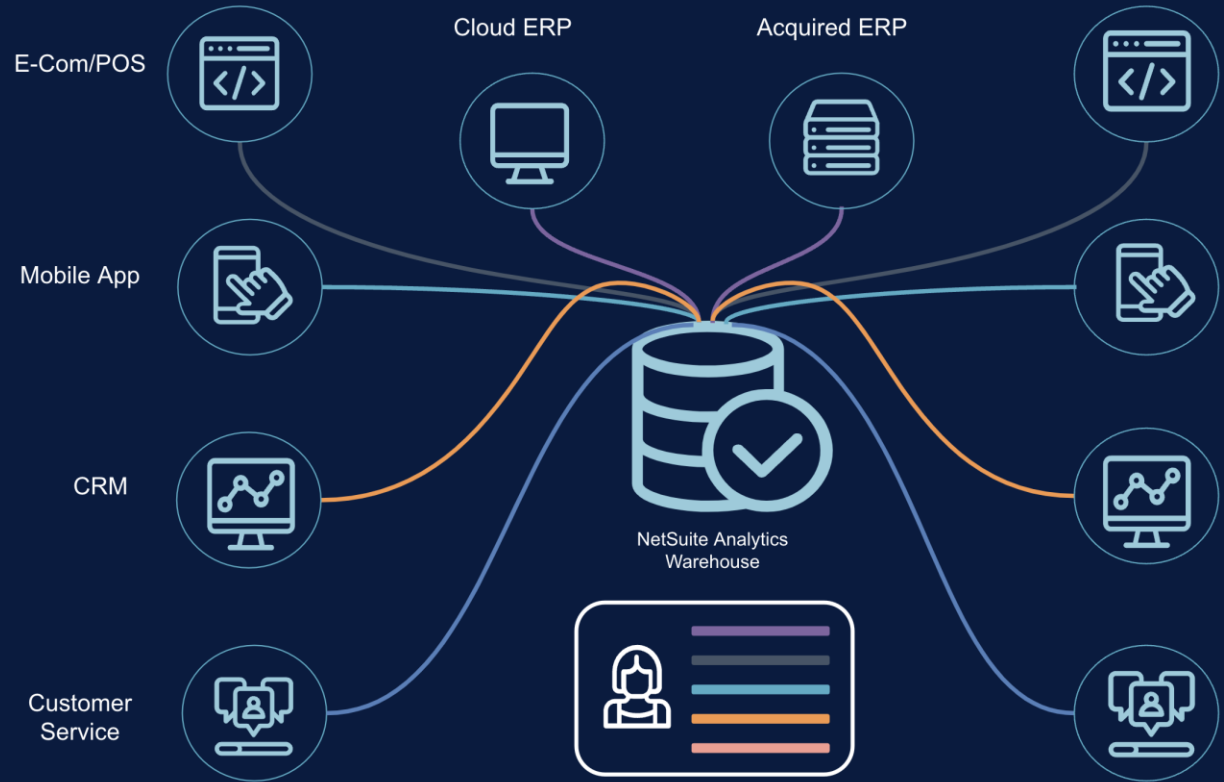
- Implementing a data warehouse

Blended Data, MDM Strategies & BI Continuity



Blended Data

- Data Integration
- Data Transformation
- Data Enrichment



Master Data Management

- Data Repository
- Data Governance
- Data Integration

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



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

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