

The Future of Planning: Digital FP&A Using AI & Machine Learning

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The Association of
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in Business



Featured Presenters



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Agenda

1. Machine Learning Overview
2. AI in the FP&A World
3. Workday Adaptive Planning
4. Use Cases

Machine Learning Overview

Lots of Categories and Terms!



Machine
Learning




Intelligent
Planning



Predictive
Analytics



Predictive
Forecasting



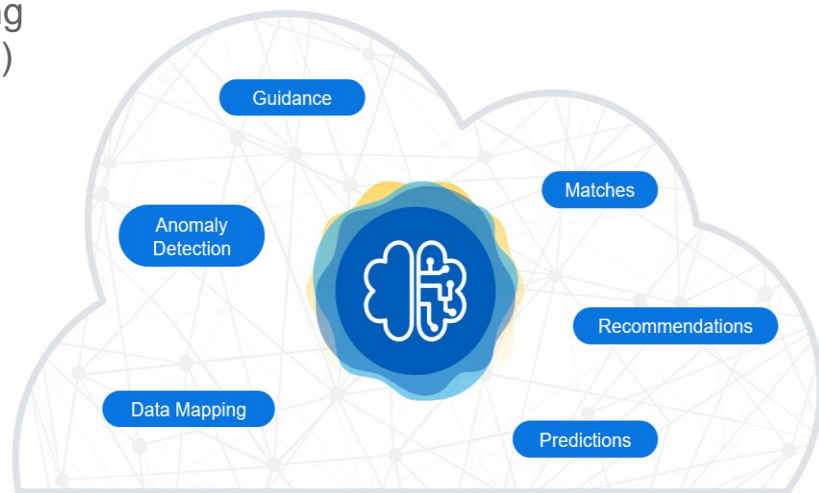
Artificial
Intelligence



Generative AI

What Is Machine Learning?

- **Machine Learning (ML)**—finding and using patterns in data to come to some sort of prediction (leveraging advanced algorithms, such as time series prediction)
 - Machine learning is a sub-discipline of artificial intelligence (AI)
- **Intelligent Planning**—machine learning plus data science
 - This encompasses other disciplines in data science beyond machine learning
- **Technology**—ML capabilities embedded, or “integrated,” into leading technology platforms
 - These should be transparent and seamless to users
 - ML can deliver significant value to a plan as the system “learns”



The Power of Machine Learning



Engaging Experience

Create an engaging experience personalized to each user



Increased Automation

Automate repetitive, predictable tasks for improved accuracy and productivity



ML-Assisted Decisions

Arm people with insights and recommendations for faster, better decisions

Polling Question #1

What is your organization' status in utilizing AI and ML for Planning?

- A. Not currently using, but considering over the next 1-2 years.
- B. Not currently using, but considering over the next 3-5 years.
- C. Partially using AI and ML for creating plans and forecasts.
- D. Extensively using AI and ML for creating plans and forecasts.
- E. No plans to use AI and ML

AI in FP&A World

AI and ML Predictions (Gartner Group)

Three Predictions on financial planning and analysis (FP&A) and controller functions and the use of technology:

- 1. By 2025, 70%** of organizations will use data-lineage-enabling technologies including graph analytics, ML, A.I., and blockchain as critical components of their semantic modeling.
- 2. By 2027, 90%** of descriptive and diagnostic analytics in finance will be fully automated.
- 3. By 2028, 50%** of organizations will have replaced time-consuming bottom-up forecasting approaches with A.I.

Accenture's perspective on AI



Companies with the most mature and diverse AI capabilities enjoy

50%

greater revenue growth on average versus their peers.¹

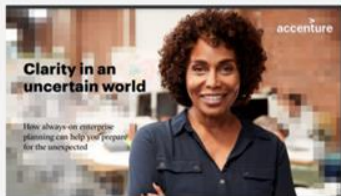
88%

of CFOs believe artificial intelligence will increase the accuracy and predictability of forecasts.²

Finance leaders planned to increase their investments in digital capability in 2021 by some

70%

from prior years.³



Clarity in an uncertain world



Making finance the predictive powerhouse



Finance at the core: A central nervous system to unlock breakout value

Sources:

1. "Clarity in an uncertain world", Accenture, July 2022

2. "Making finance the predictive powerhouse", Accenture, August 2022

3. "Finance at the core: A central nervous system to unlock breakout value", Accenture, February 2022

Current Trends



Adoption

Pace of machine learning adoption, across Financial Planning and Analytics (FP&A), Projected to increase significantly



R&D Investment

Technology innovation ramping up with machine learning capabilities built into the core of applications



Major Shift in Planning

Advanced capabilities driving major shift in future of enterprise planning

What Does the Future Hold? Trends?

- **Planning Shift**—The way organizations plan will fundamentally shift (data driven, plan by exception, more continuous planning, increased automation).
- **Enhanced Scenario Analytics**—Eliminate “heavy lifting” of today’s most advanced planning. Open the door for entirely new kind of scenario planning. Deliver insights at the right time to augment planning.
- **Technology**—Capabilities will become richer, more robust, and more user friendly (built into core application). Innovation in this area is increasing rapidly across select technology providers.
- **Broader Use Cases**—Support will continue for a broader range of planning use cases. Expect to see significant adoption for industry-specific planning.



Polling Question #2

What area of your planning do you believe AI and ML will have the most value for your organization?

- A. Revenue
- B. Workforce / Headcount
- C. Expenses
- D. Operational Plans (marketing, manufacturing, supply chain, other)
- E. Managing Cash Flow

Workday Adaptive Planning



Embedded

Directly into the planning platform

Extended

To leverage 3rd party innovation

Open Framework

*Support for data scientists with
Jupyter Notebook integration*

Use Case Examples



Use Case #1

Anomaly Detection

- Machine learning generated Predictive Plan gives instant feedback to users
- Catch potential errors in bottoms up process
- Set custom upper and lower bounds for detection

<



Use Case #2 Outlier Reporting


- Predictive plan allows for quick analysis in reports and analytics for Plan comparison
- Catch potential outliers at any intersection of Plan
- Easily drill into more information

Financial Planning Reports / Intelligent Planning - Expense Variance Analysis												
Level Corporate Version Working Budget Currency USD												
	Q2 2022				Q3 2022				Q4 2022			
	Predicted Values	Working Budget	% Var	Zone	Predicted Values	Working Budget	% Var	Zone	Predicted Values	Working Budget	% Var	Zone
▼ 6000 Operating Expenses												
▶ 6100 Payroll	547,284	639,551	-14%	✓	529,064	639,551	-17%	✓	552,928	639,551	-14%	✓
▶ 6200 Taxes & Benefits	175,257	101,097	73%	⚠	162,952	86,851	88%	⚠	167,207	83,634	100%	⚠
▼ 6300 Office Expenses												
▶ Training	459	639	-28%	⚠	189	189	0%	✓	419	419	0%	✓
▶ 6320 Equipment Rental	7,367	6,960	6%	✓	7,431	6,288	18%	⚠	7,467	7,248	3%	✓
6330 Maintenance	5,834	5,400	8%	✓	5,923	5,400	10%	⚠	6,008	5,400	11%	✓
6340 Telephone	2,368	2,685	-12%	✓	2,452	2,685	-9%	✓	2,480	2,685	-8%	✓
6350 Legal & Professional	71,543	0	0%	✓	67,903	0	0%	✓	67,827	0	0%	✓
6360 Office Supplies	745	495	51%	⚠	770	511	51%	⚠	680	487	40%	⚠
6365 Vendor Contracts	0	1,350	-100%	⚠	0	1,350	-100%	⚠	0	1,350	-100%	⚠
▶ 6370 Office Rent	70,109	63,068	11%	✓	71,341	63,068	13%	✓	65,863	63,068	4%	✓
▶ 6380 Depreciation	40,397	49,526	-18%	⚠	41,253	49,751	-17%	⚠	37,782	49,993	-24%	⚠
Total 6300 Office Expenses	198,824	130,123	53%	⚠	197,263	129,243	53%	⚠	188,527	130,650	44%	⚠
▼ 6400 Travel & Entertainment												
6420 Hotel	5,905	1,500	294%	⚠	6,218	750	729%	⚠	6,456	2,500	158%	⚠
6430 Meals	2,992	510	487%	⚠	3,134	255	1,129%	⚠	3,240	850	281%	⚠
6440 Mileage/Parking	750	300	150%	⚠	783	150	422%	⚠	809	500	62%	⚠
6450 Other T&E	31,002	34,131	-9%	✓	34,903	39,474	-12%	✓	31,949	31,632	1%	✓
Total 6400 Travel & Entertainment	40,648	36,441	12%	✓	45,038	40,629	11%	✓	42,453	35,482	20%	⚠
▶ 6500 Marketing	13,677	18,350	-25%	⚠	13,316	16,400	-19%	⚠	13,957	11,350	23%	⚠
6999 Other Expense	6,190	2,250	175%	⚠	4,963	12,250	-59%	⚠	8,384	2,250	273%	⚠
Total 6000 Operating Expenses	981,880	927,812	6%	✓	952,596	924,923	3%	✓	973,456	902,916	8%	✓

Use Case #3

Machine Learning Forecasting

- Machine learning generated forecast for more intelligent starting point
- Efficiently generate forecasts across complex intersections
- Incorporate internal/external data to make the prediction even 'smarter'



Financial Planning | Modeling / ML Forecasts

ML Forecasts

Actuals End * (i) Dec_2021 ▼

Forecast Method
Define the algorithm for the forecast

Algorithm * (i) prophet ▼

Seasonality (i) Yearly ▼

☐ Add weekly seasonality

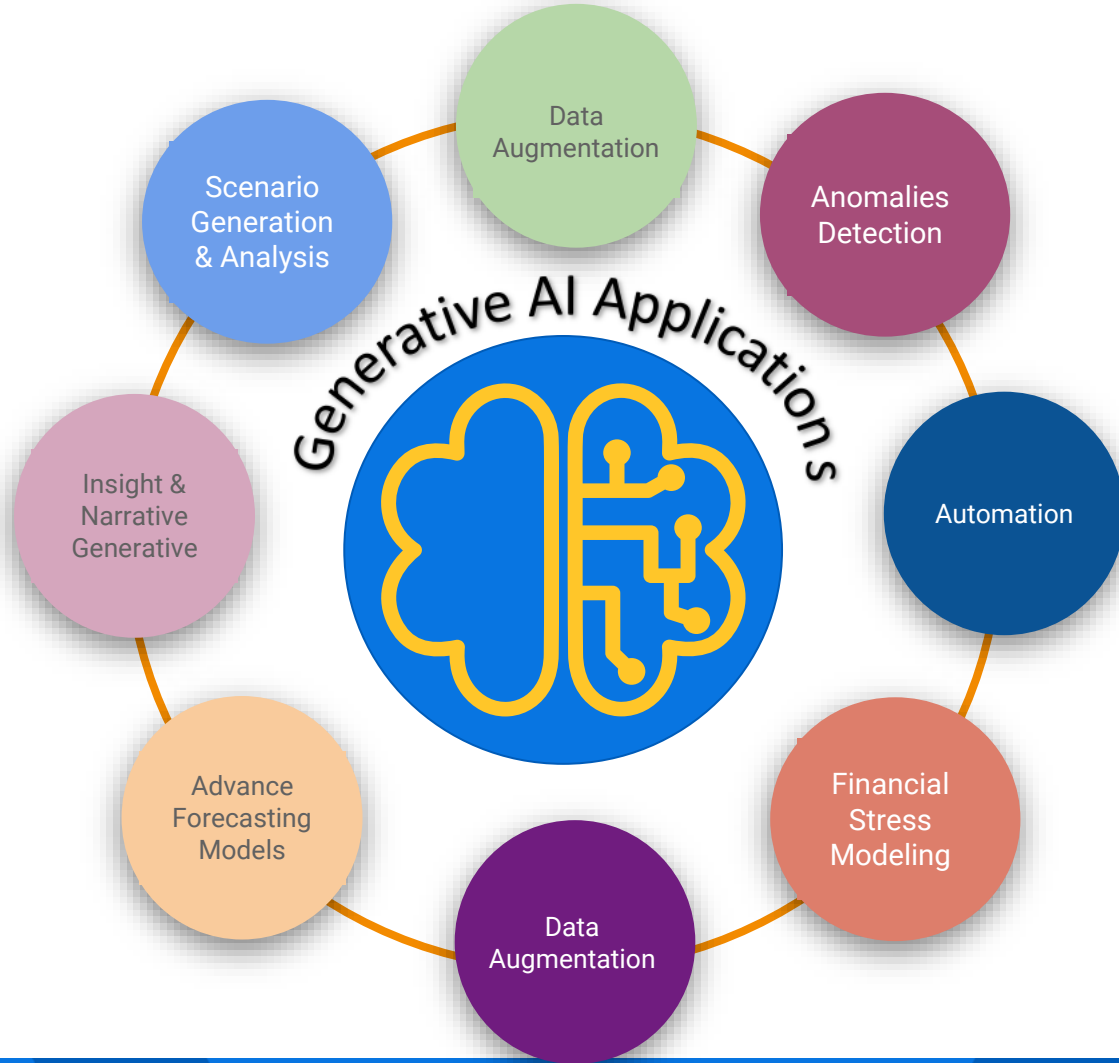
☐ Round negative forecasted values to zero

Levers
Select the modeled sheet with data to leverage in the forecast

Lever Sheet (i) Select One ▼

Create Cancel

The Future: Generative AI



Generative AI: Empowering FP&A



- A personalized financial insights and analysis
 - based on their specific needs and historical actions
- On-Demand narrative financial reports



- Generate & Compare potential scenarios
 - Generative What-ifs Scenarios while allowing user adj
- Assist in strategic decision-making



- Monitors a wide range of data sources to provide immediate alerts
 - Macro economics, Weather etc.
 - Anomalies in Actuals or Forecast



- Natural language queries about financial data
 - Top-performing products
 - Gross Profit for a division
 - Alternative roll-ups

Polling Question #3

What AI and ML functionality are you most excited about?

- A. Data cleaning / hygiene
- B. Forecast generation
- C. Reporting, commentary and variance explanation
- D. Optimization / goal setting
- E. Other [please write into chat]

Questions and Answers



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Thank you!

Workday

<https://www.workday.com/>



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