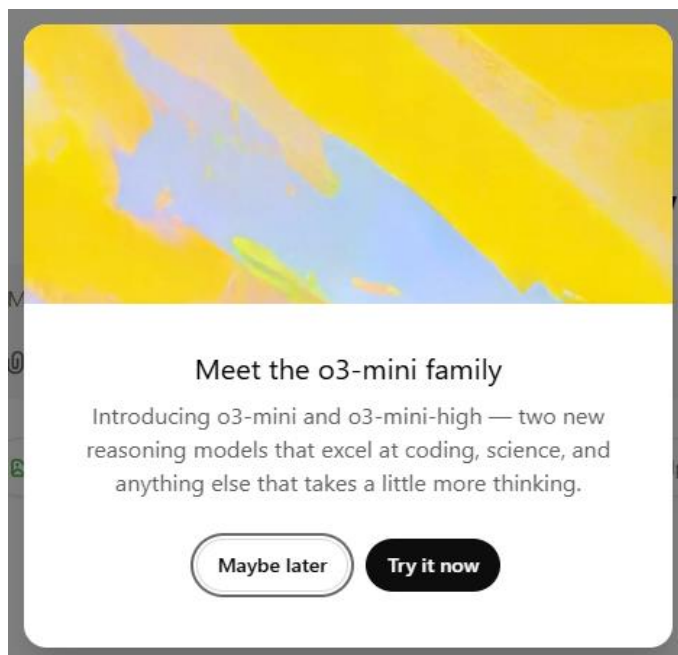


# ChatGPT o3 for Finance The Ultimate Guide

By Christian Martinez



So OpenAI released another new ChatGPT model

This time o3-mini.

What can it do?

And how can FP&A and Finance Teams leverage it?

As always, here is my guide!

## 1. What is ChatGPT o3-mini and Why is it a Game-Changer for FP&A?

ChatGPT o3-mini is OpenAI's latest **reasoning-focused AI model** designed for advanced problem-solving, including financial modeling, forecasting, and analytics.

It provides:

- **Enhanced accuracy in calculations**
- **Faster data analysis and interpretation**
- **Improved automation of repetitive FP&A tasks**
- **Higher reasoning capabilities for complex financial questions**

By integrating ChatGPT o3-mini into FP&A workflows, finance teams can reduce manual effort, improve reporting, and make data-driven decisions with confidence.





Now, what exactly can you do for FP&A and Finance with this model?

I have tried a few things:

## 1) Financial Forecasting & Scenario Planning

This was my first prompt:

*"Based on the following revenue data from the last 5 years, predict the next 12 months' revenue using trend analysis. Provide a best-case, base-case, and worst-case scenario with assumptions."*

  ChatGPT o3-mini ▾





### What can I help with?

Based on the following revenue data from the last 5 years, predict the next 12 months' revenue using trend analysis. Provide a best-case, base-case, and worst-case scenario with assumptions.

Year Revenue (\$M)


2019 50


2020 45

 Attach  Search




 Solve

 Help me write

 Surprise me

 Code

 Get advice

More

Then, the model started to think and shared its reasoning with me:



Thought about revenue trend analysis for 22 seconds ^

#### Gathering trends

I'm analyzing five years of revenue data, noting a decline in 2020 and a steady increase since, with an average yearly growth of 10.

#### Forecasting trends

I can see that projecting the next 12 months' revenue is possible by extending the established trend of steady growth, which suggests a continuation of the average yearly increase of around 10%.

#### Projecting revenue

I'm using a CAGR of 12.45% for a base-case scenario, while exploring best-case and worst-case trends by adjusting the growth rate to 15% and 10% respectively.

#### Refining scenarios

Taking a closer look at scenarios: 12.5% growth for base-case, 15 million for best-case, and 5 million for worst-case, considering market improvements, disruptions, and trends.

#### Evaluating growth trends

I'm noting the annual growth rates from 2019 to 2023, averaging 21.32%, and also looking at a linear regression model to project revenue.

Message ChatGPT

Attach Search



And then the output was:



## Historical Data Recap

Year	Revenue (\$M)
2019	50
2020	45
2021	60
2022	70
2023	80

### Observations:

- **2020 Dip:** Revenue dropped to \$45M, which may be due to external factors (for example, pandemic disruptions).
- **Recent Trend (2021–2023):** Revenue recovered and then increased steadily from \$60M to \$80M.
- **Annual Increases (Recent Years):**
  - 2021 over 2020: +\$15M
  - 2022 over 2021: +\$10M



Message ChatGPT

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It also provided me a summary and reasoning for each of the cases:

## Summary of Forecasts

- **Best-Case:** \$95–\$96M  
*Assumes accelerated growth due to improved market conditions and strategic opportunities.*
  - **Base-Case:** \$90M  
*Assumes continuation of the recent \$10M annual increase or roughly 12.5% growth.*
  - **Worst-Case:** \$85M  
*Assumes a slowdown in growth to about a \$5M annual increase (approximately 6–7% growth).*
- 

## Final Notes

1. **Data Limitations:** With only five data points (and one potential outlier in 2020), these forecasts should be considered indicative rather than precise. Additional data (quarterly figures, market indicators, competitive analysis) would help refine the forecasts.
2. **External Factors:** These scenarios assume that no dramatic unforeseen events occur over the next 12 months. Any such events would necessitate revisiting the assumptions.
3. **Methodology:** The linear approximation (and CAGR calculation) here is one of several methods available. Depending on your business and industry, you might also consider seasonal adjustments, more advanced time-series models, or qualitative insights.

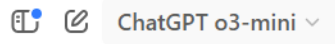
Using these assumptions and methods provides a structured way to think about the future revenue range for the next 12 months.



## 2) Budget Variance Analysis

For this, my prompt was

*"Here is the actual vs. budgeted financial data for the last quarter. Identify key variances, analyze root causes, and suggest corrective actions for next quarter's budget"*




## What can I help with?

Here is the actual vs. budgeted financial data for the last quarter. Identify key variances, analyze root causes, and suggest corrective actions for next quarter's budget. This is my dataset:

Category	Budget (\$M)	Actual (\$M)	Variance (\$M)
Revenue	25	23	-2
COGS	10	12	+2
Operating Exp	8	9	+1

 Attach  Search

 Solve

 **Brainstorm**

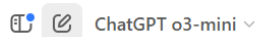
Code

 Summarize text

 Surprise me

More

Again, it started "reasoning" and it responded



 Thought about financial variance analysis for a few seconds ^

### Identifying variances and root causes

Revenue fell short by \$2M, contributing to a -8% decrease from the budget. Cost of Goods Sold (COGS) overshot by \$2M due to production inefficiencies or raw material cost hikes, affecting margins. Operating Expenses surpassed the budget by \$1M, likely due to overspending in specific areas. This led to a decline in Net Profit by \$5M from the budget, resulting in a net profit of \$2M.

Below is an analysis of the financial performance based on your provided dataset, along with identified key variances, potential root causes, and corrective actions to help improve next quarter's budget performance.

## 1. Key Variances

- Revenue:
  - Budget: \$25M
  - Actual: \$23M
  - Variance: -\$2M




## 2) Monte Carlo Simulations and Programming

Now, one of the use cases in which this model is quite good is coding. So I tried to get Python code:

My exact prompt for you to use as well was:

*Act as a PhD of Finance, Data Science, Mathematics and Business and give me Python code to create a monte carlo simulations full analysis.*

*My dataset looks like this:*

  ChatGPT o3-mini ▾





### What can I help with?

Act as a PhD of Finance, Data Science, Mathematics and Business and give me Python code to create a monte ~~carlo~~ simulations full analysis.



My dataset looks like this:

Date	Revenue	COGS	Gross Profit	Operating Expenses	Net Profit	Market Growth Rate	FX Rate Impact	Interest Rate Impact	Inflation Impact	One-Time Events
2023-01-31 00:00:00	1025988.28	647689.34	378298.94	184543.5	263159.58	0.0225	0.0042	0.0298	0.0213	1000000

 Attach  Search



And then it gave me the output.

  ChatGPT o3-mini ▾

 Share



```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns

# For reproducibility
np.random.seed(42)

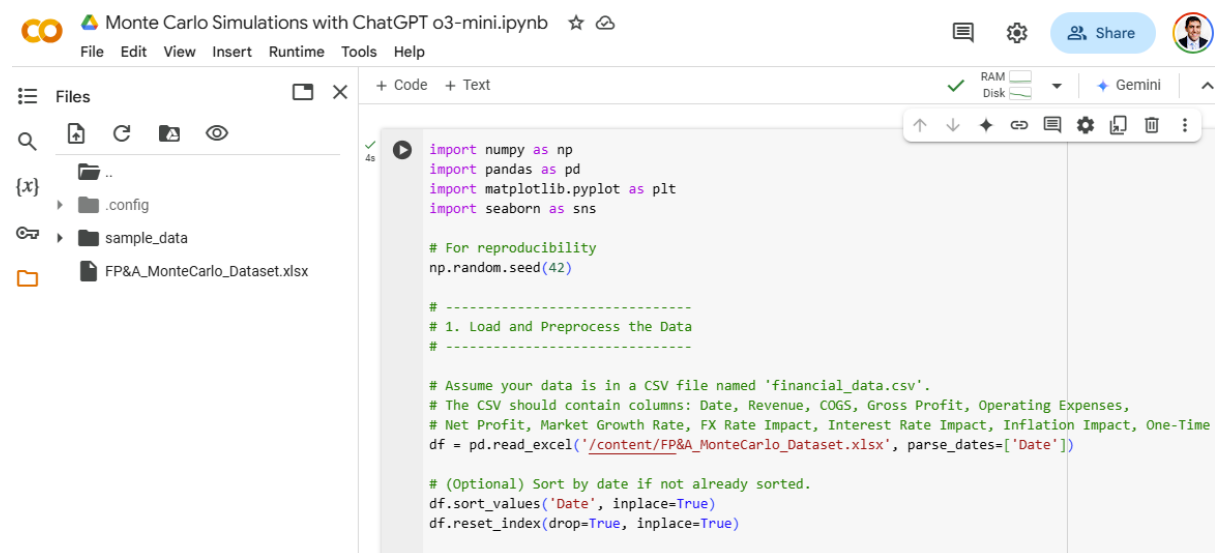
# -----
# 1. Load and Preprocess the Data
# -----

# Assume your data is in a CSV file named 'financial_data.csv'.
# The CSV should contain columns: Date, Revenue, COGS, Gross Profit, Operating Expenses,
# Net Profit, Market Growth Rate, FX Rate Impact, Interest Rate Impact, Inflation Impact, One-Time
df = pd.read_csv('financial_data.csv', parse_dates=['Date'])

# (Optional) Sort by date if not already sorted.
```

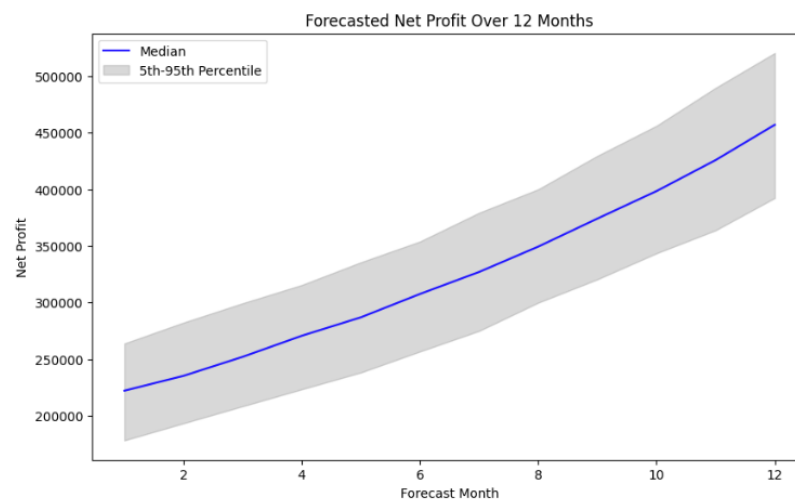
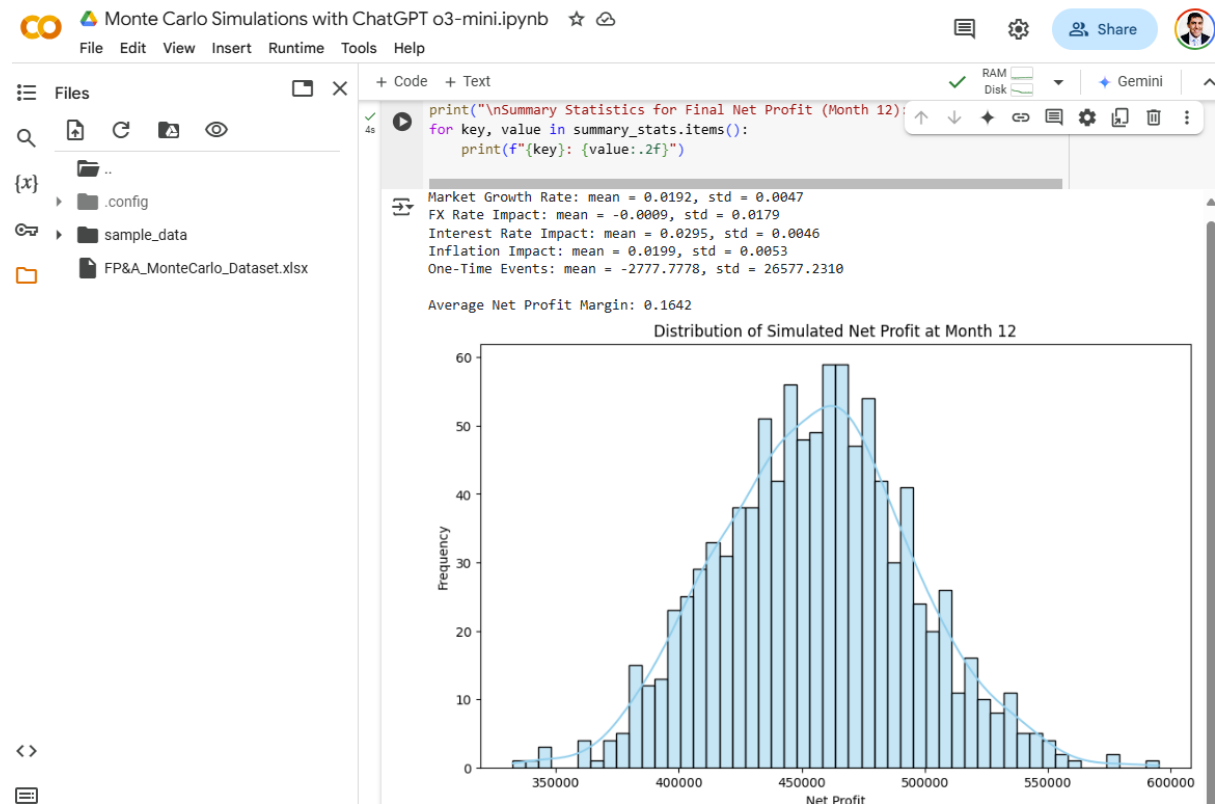
As always, I used this output in Google Colab. I could have also used Python in Excel!

Read my guides on previous posts for this:





Then the output of the code was:



Summary Statistics for Final Net Profit (Month 12):  
Mean: 455438.89  
Std Dev: 39136.21  
5th Percentile: 392320.63  
Median: 457034.15  
95th Percentile: 520475.95

## **Other Key FP&A Use Cases for ChatGPT o3-mini include:**

### **a) Financial Forecasting & Scenario Planning**

- Generate predictive models based on historical data.
- Run **what-if analyses** to evaluate different financial scenarios.
- Identify key drivers of revenue and cost fluctuations.

### **b) Budgeting & Expense Optimization**

- Analyze historical spending patterns and suggest budget allocations.
- Identify cost-saving opportunities using AI-driven insights.
- Create dynamic budget models that adapt in real-time.

### **c) Variance Analysis & Performance Reporting**

- Automate variance reports comparing actual vs. budgeted figures.
- Provide deep insights into performance deviations.
- Generate automated commentary on financial reports.

### **d) Financial Modeling & Sensitivity Analysis**

- Build complex financial models in Excel with AI assistance.
- Conduct sensitivity analysis on key financial variables.
- Automate model updates with real-time data feeds.

### **e) Data Extraction & Reconciliation**

- Extract insights from financial statements, reports, and databases.
- Automate data cleaning and reconciliation processes.
- Reduce errors and ensure data accuracy.

### **f) Cash Flow Management & Liquidity Planning**

- Predict cash flow trends using AI-powered forecasting.
- Identify potential liquidity risks before they occur.
- Optimize working capital by analyzing receivables and payables.

### **g) Executive-Level Decision Support**

- Provide CFOs with AI-generated strategic insights.
- Assist in preparing board presentations with key financial metrics.
- Identify industry trends and benchmark against competitors.

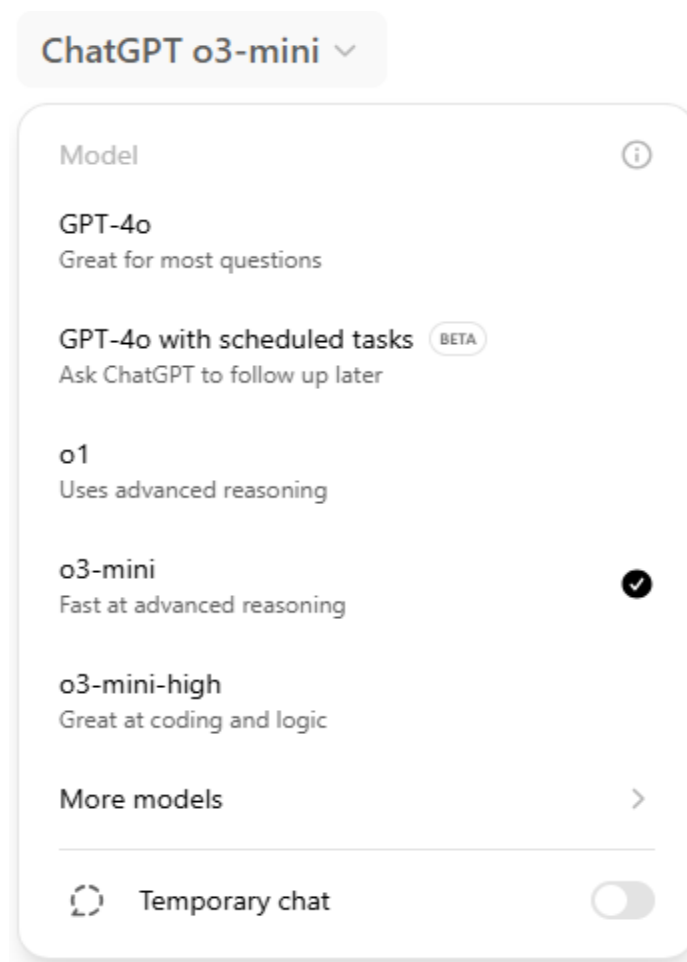
## Who Can Access OpenAI o3-mini and How?

Starting today (31st January 2025), ChatGPT Plus, Team, and Pro users can access OpenAI o3-mini, with Enterprise access set to launch in a week.

This new model replaces o1-mini in the model picker, offering higher rate limits and lower latency, making it an ideal choice for coding, STEM, and logical problem-solving tasks.

As part of this upgrade, rate limits for Plus and Team users have been tripled, increasing from 50 messages per day with o1-mini to 150 messages per day with o3-mini.

Additionally, o3-mini now integrates search, providing real-time answers with links to relevant web sources—an early prototype of OpenAI's broader search integration efforts.



For the first time, free plan users can also try o3-mini by selecting "Reason" in the message composer or regenerating a response, marking a significant step in making advanced reasoning models accessible to more users.

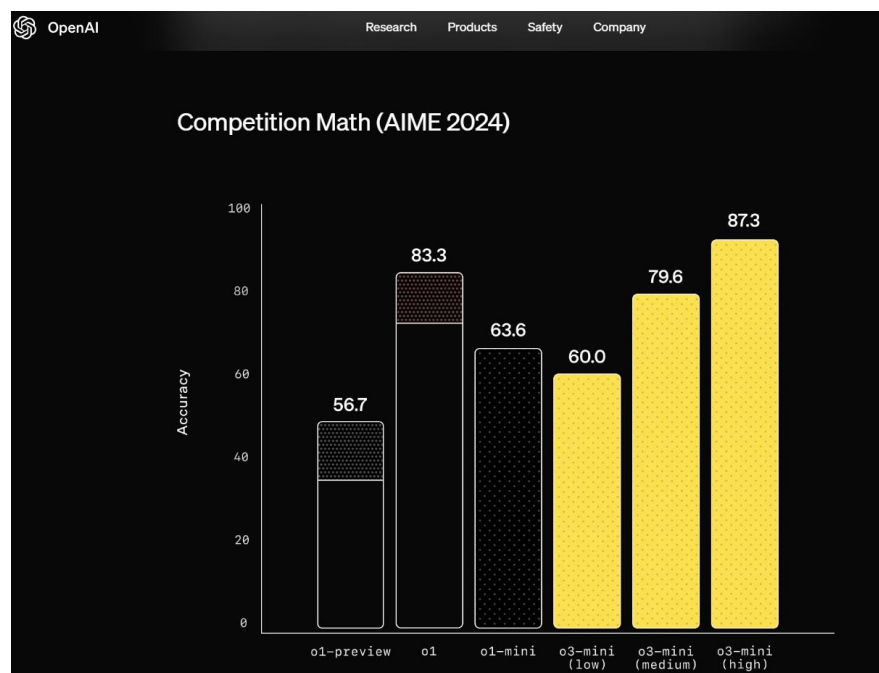
While OpenAI o1 continues as the general knowledge reasoning model, o3-mini is designed as a specialized alternative for technical tasks requiring precision and speed.

In ChatGPT, o3-mini defaults to medium reasoning effort, balancing speed and accuracy. However, all paid users have the option to select o3-mini-high in the model picker for a more intelligent but slightly slower response.

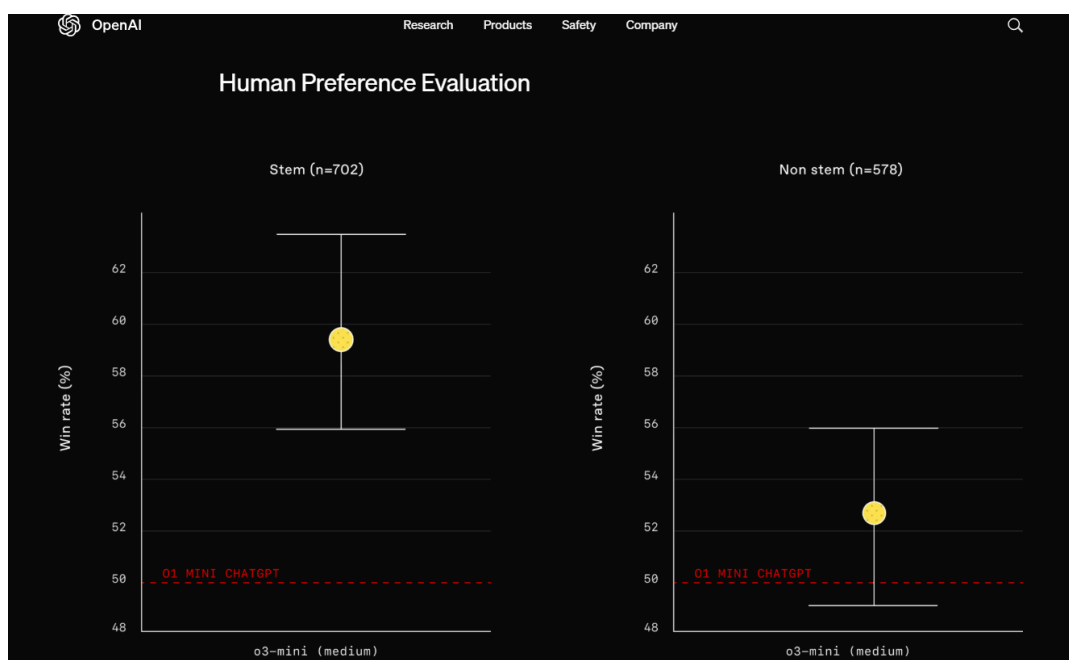
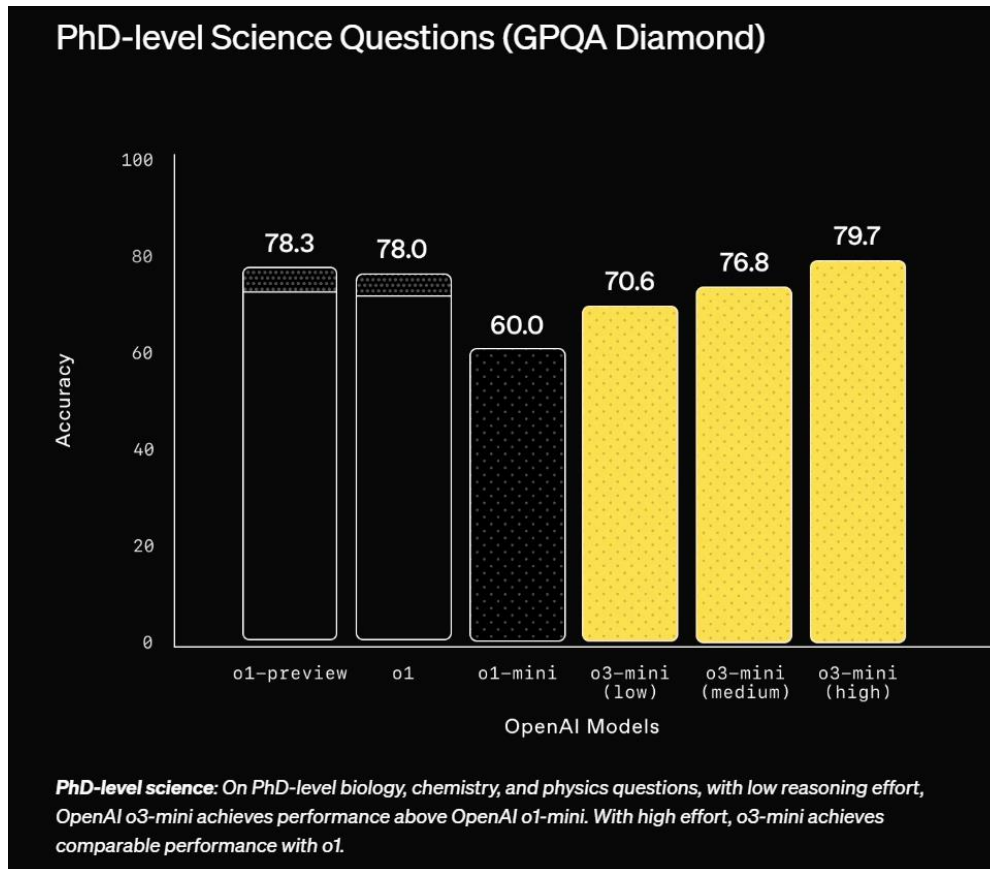
Pro users benefit from unlimited access to both o3-mini and o3-mini-high, ensuring maximum flexibility and performance.

Some of the other technical of o3-mini from OpenAI's release were:

Similar to its OpenAI o1 predecessor, OpenAI o3-mini has been optimized for STEM reasoning. o3-mini with medium reasoning effort matches o1's performance in math, coding, and science, while delivering faster responses. Evaluations by expert testers showed that o3-mini produces more accurate and clearer answers, with stronger reasoning abilities, than OpenAI o1-mini.



Testers preferred o3-mini's responses to o1-mini 56% of the time and observed a 39% reduction in major errors on difficult real-world questions. With medium reasoning effort, o3-mini matches the performance of o1 on some of the most challenging reasoning and intelligence evaluations including AIME and GPQA.



## How to Implement ChatGPT o3-mini in FP&A Workflows

### Step 1: Define Use Cases & Goals

- Identify pain points where AI can add value (forecasting, budgeting, reporting).
- Set measurable KPIs for AI-driven FP&A improvements.

### Step 2: Integrate AI with Existing Tools

- Connect ChatGPT o3-mini with Excel, Google Sheets, and FP&A software.
- Use API integrations to streamline financial data analysis.

### Step 3: Automate Reporting & Analysis

- Set up AI-powered dashboards for real-time insights.
- Schedule automated variance analysis and financial reports.

### Step 4: Train FP&A Teams on AI Utilization

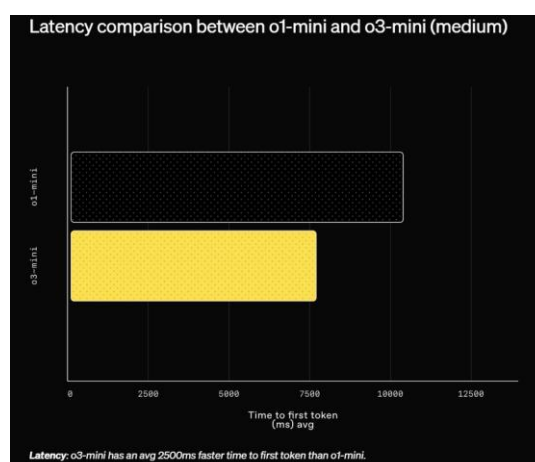
- Provide training on how to ask ChatGPT the right financial questions.
- Encourage teams to validate AI-generated insights with expert review.

### Step 5: Monitor, Evaluate, and Optimize

- Continuously assess AI performance and fine-tune prompts.
- Incorporate user feedback to improve AI adoption in FP&A processes.

## Model speed and performance

With intelligence comparable to OpenAI o1, OpenAI o3-mini delivers faster performance and improved efficiency. Beyond the STEM evaluations highlighted above, o3-mini demonstrates superior results in additional math and factuality evaluations with medium reasoning effort. In A/B testing, o3-mini delivered responses 24% faster than o1-mini, with an average response time of 7.7 seconds compared to 10.16 seconds.



And finally, some **best Practices for Using ChatGPT o3-mini in FP&A**

- ✓ **Use Structured Queries:** Frame precise financial questions for the best AI responses.
- ✓ **Validate AI Recommendations:** Cross-check AI-driven insights with human expertise.
- ✓ **Leverage Multiple Data Sources:** Integrate real-time financial data for accurate forecasting.
- ✓ **Ensure Compliance & Security:** Use AI within governance frameworks to protect financial data.