



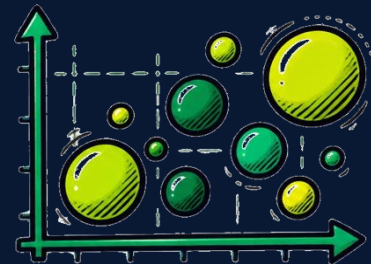
AI meets Oracle Analytics

How are we doing and the next question?

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Rovinj, 15 October 2026





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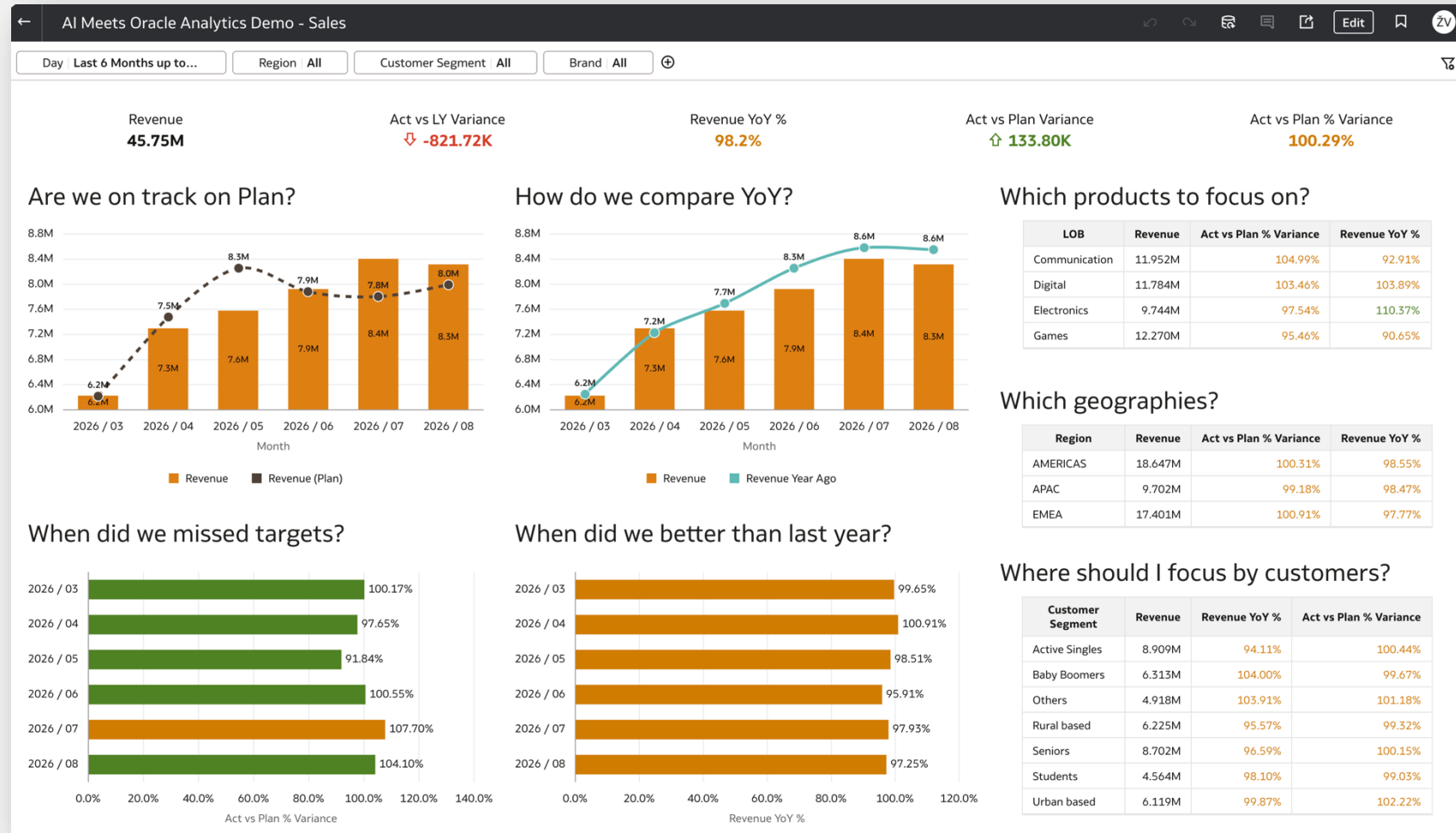
01.

How are we doing?



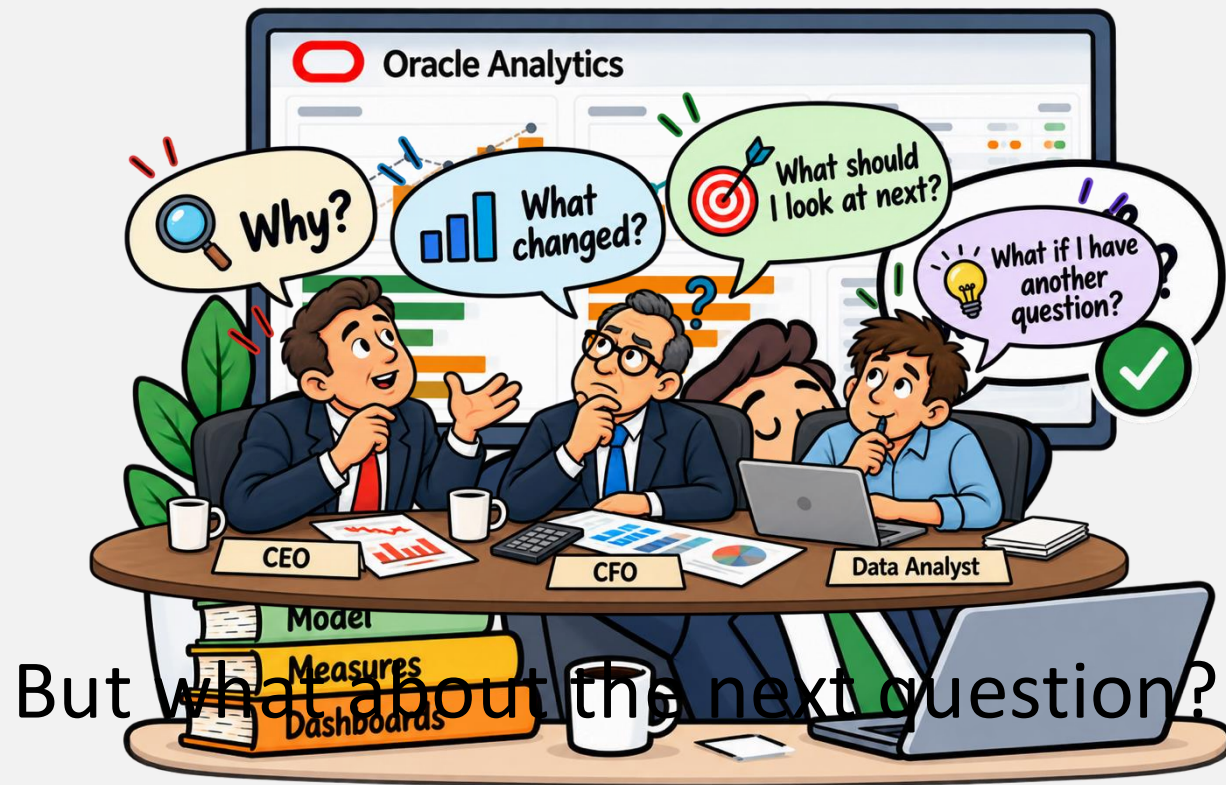
So, how do we answer *How are we doing?*

It sounds like a simple question. In analytics, it almost never is. But ...



- For 30+ years, BI and analytics have turned business questions into models, measures and dashboards.
- And it works: we can see performance, trends, targets and where to focus.







This is how it is done today in most cases:

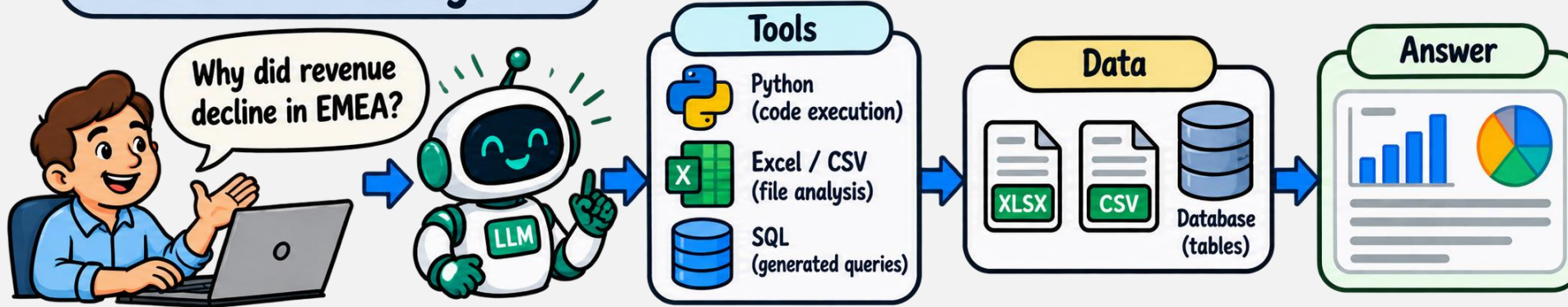
Approach	How AI gets the answer	Typical example
Upload a spreadsheet	AI reads Excel/CSV, profiles columns, calculates aggregates, creates charts	"Analyze this sales.xlsx and explain why margin fell."
Generate Python / R code	AI writes and runs code against the supplied dataset	pandas group-bys, correlations, forecasting, anomaly detection
Generate SQL	AI translates a question into SQL and runs it against a database	"Revenue by region for Q2 vs Q2 last year"
Use BI / analytics tools	AI calls platform APIs or tools instead of querying raw tables directly	search catalog, describe subject area, execute governed query
Use connectors / MCP / agents	AI invokes external systems as tools and combines their results	query analytics + CRM + documents in one conversation
Use retrieval from documents	AI searches reports, PDFs, policies, definitions, metadata	"How is Net Revenue defined?"



From AI Analytics to Governed Analytics

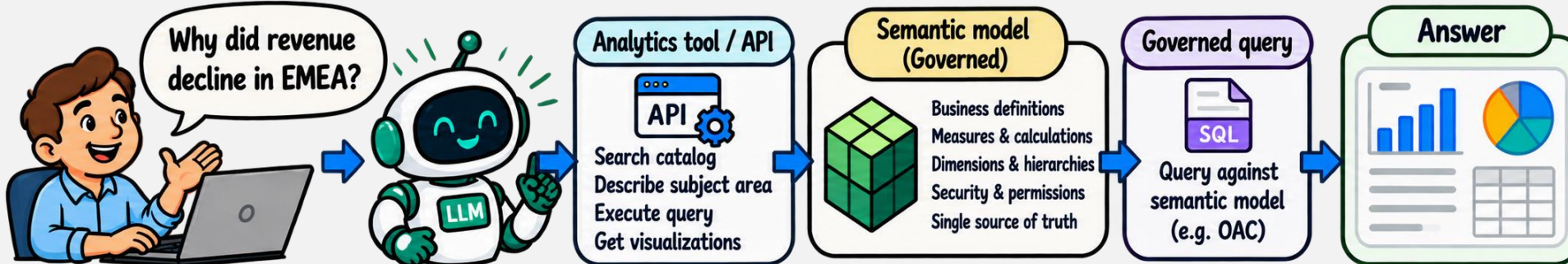
Same question. Different path to the answer.

General Ai analytics



- AI can analyze files.
- AI can generate Python.
- AI can generate SQL.
- AI can call tools.

Governed enterprise analytics



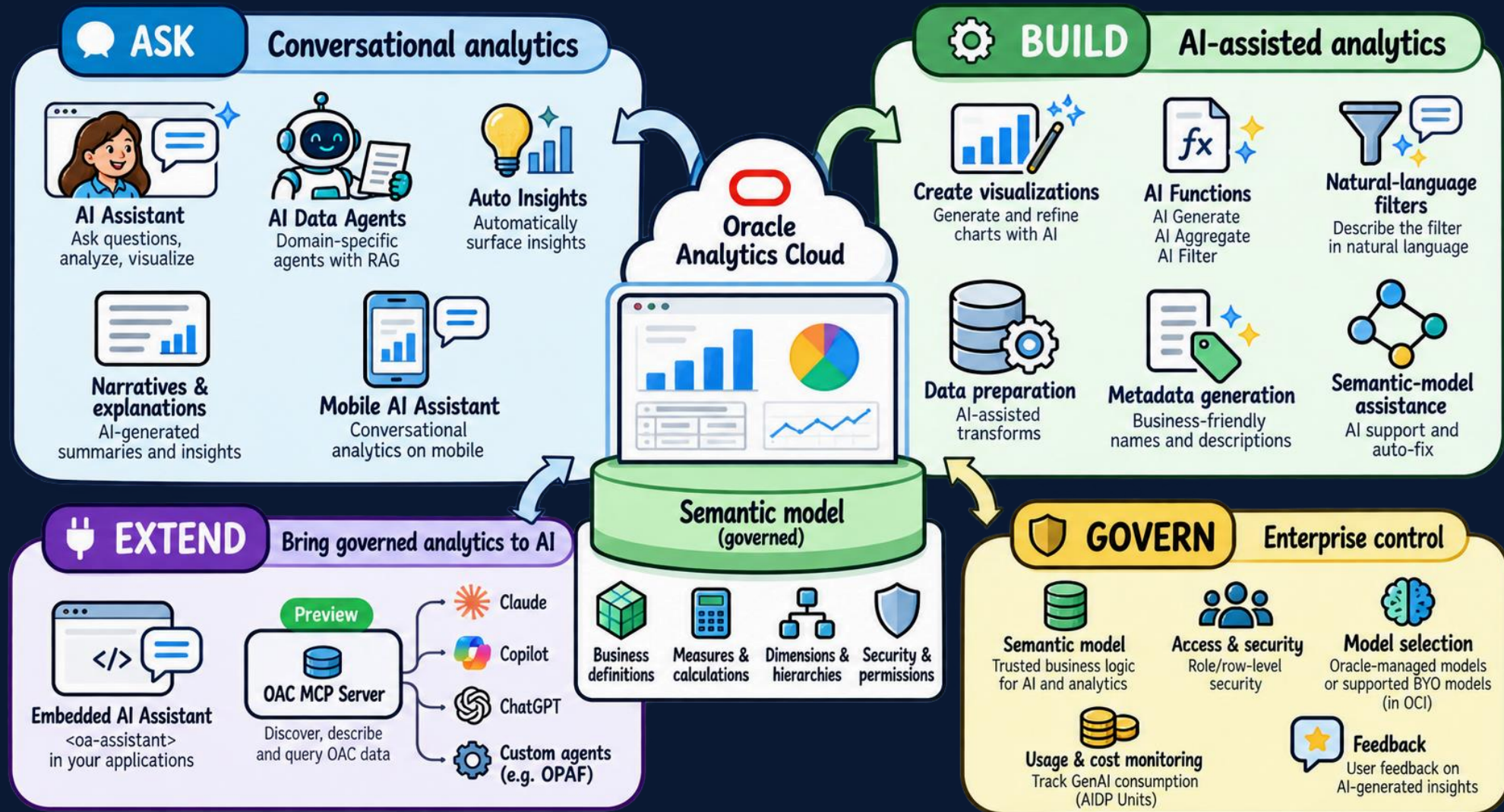
- But for enterprise analytics, we want it to call the **governed analytics layer**.

02.

How does Oracle Analytics fit into this story?

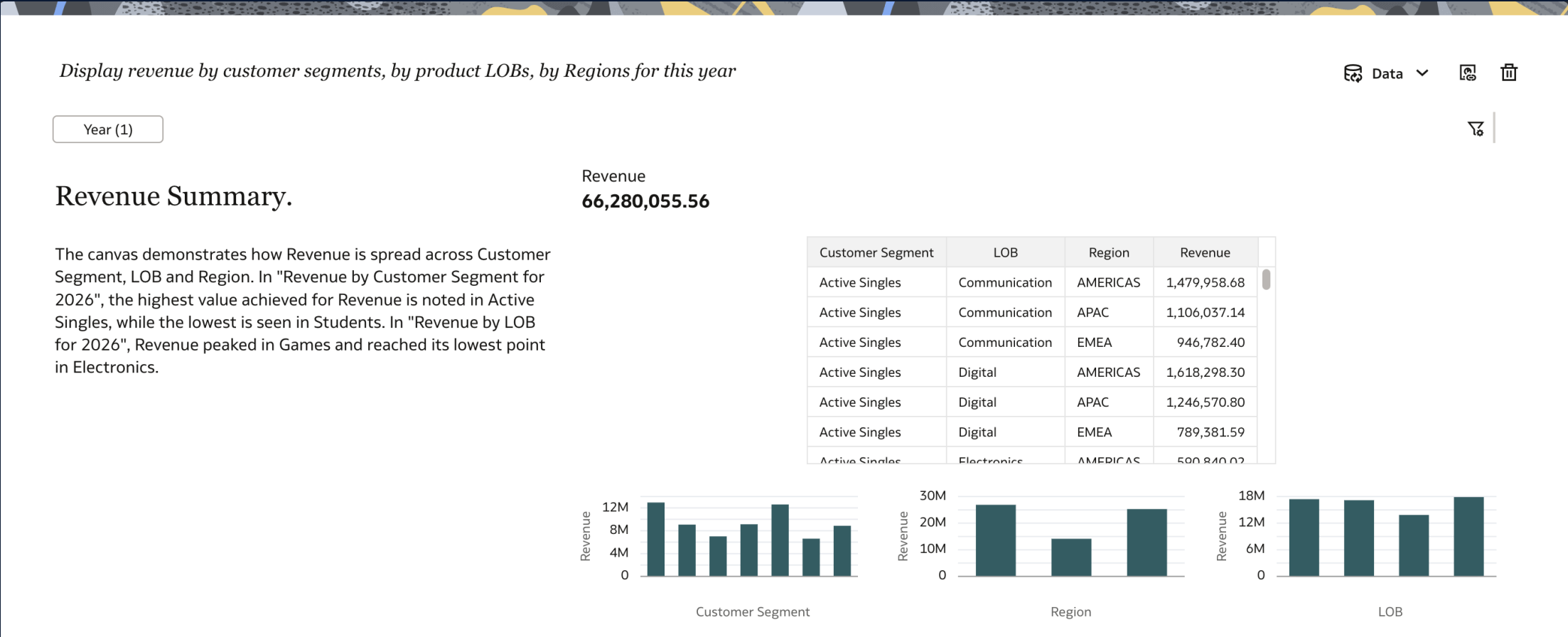


One Governed Foundation. Many Ways to Use AI.



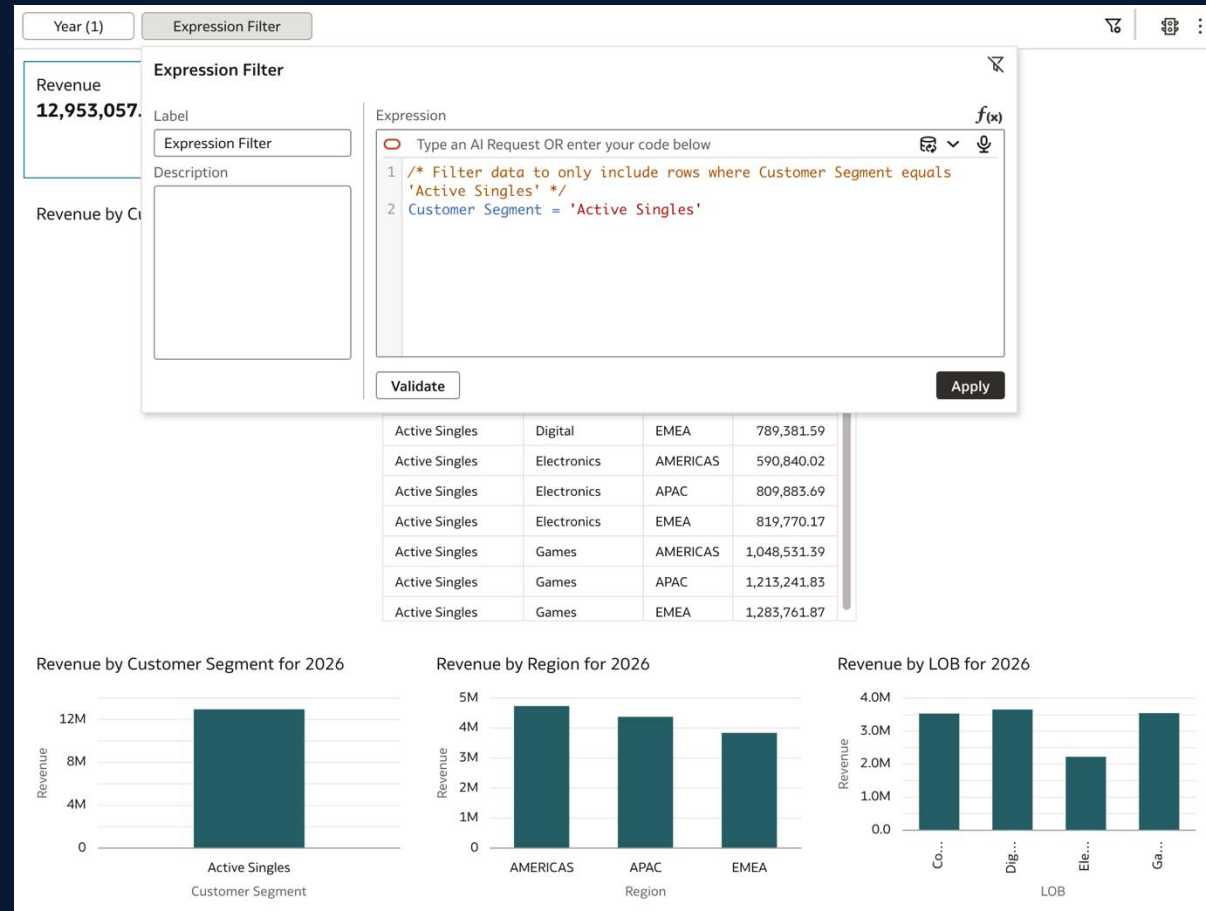
Ask BI

Display revenue by customer segments, by product LOBs, by Regions for this year



Natural-language expression filters

‘Filter data on Customer Segment = Active Singles’



Workbook AI Assistant

Display revenue by customer segments, by product LOBs, by Regions for this Year

Here's a Table that shows Customer Segment, LOB, Region, Revenue. Filtered by Year: 2026.

Year: 2026

Customer Segment	LOB	Region	Revenue
Active Singles	Communication	AMERICAS	1,479,958.68
Active Singles	Communication	APAC	1,106,037.14
Active Singles	Communication	EMEA	946,782.40
Active Singles	Digital	AMERICAS	1,618,298.30
Active Singles	Digital	APAC	1,246,570.80
Active Singles	Digital	EMEA	789,381.59
Active Singles	Electronics	AMERICAS	590,840.02
Active Singles	Electronics	APAC	809,883.69
Active Singles	Electronics	EMEA	819,770.17
Active Singles	Games	AMERICAS	1,048,571.30

● ○ ○ ○

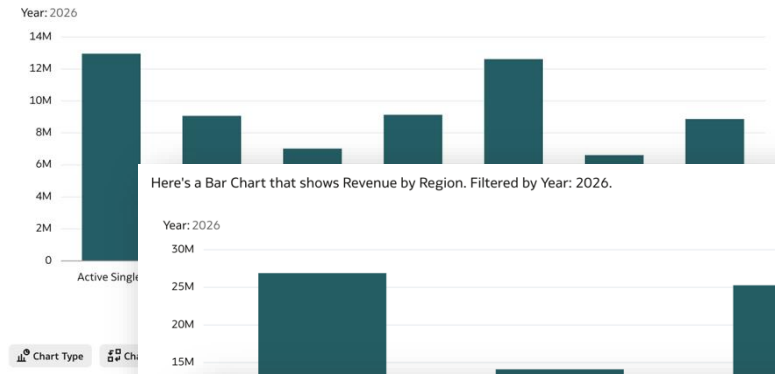
Chart Type Change Add Remove



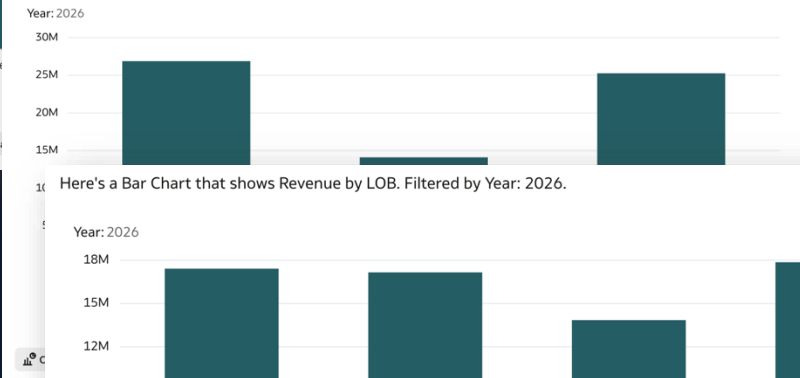
Follow up or ask a new question



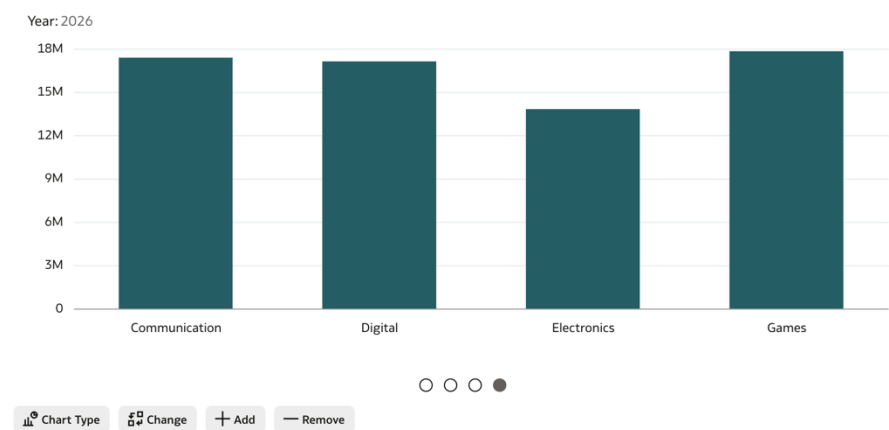
Here's a Bar Chart that shows Revenue by Customer Segment. Filtered by Year: 2026.



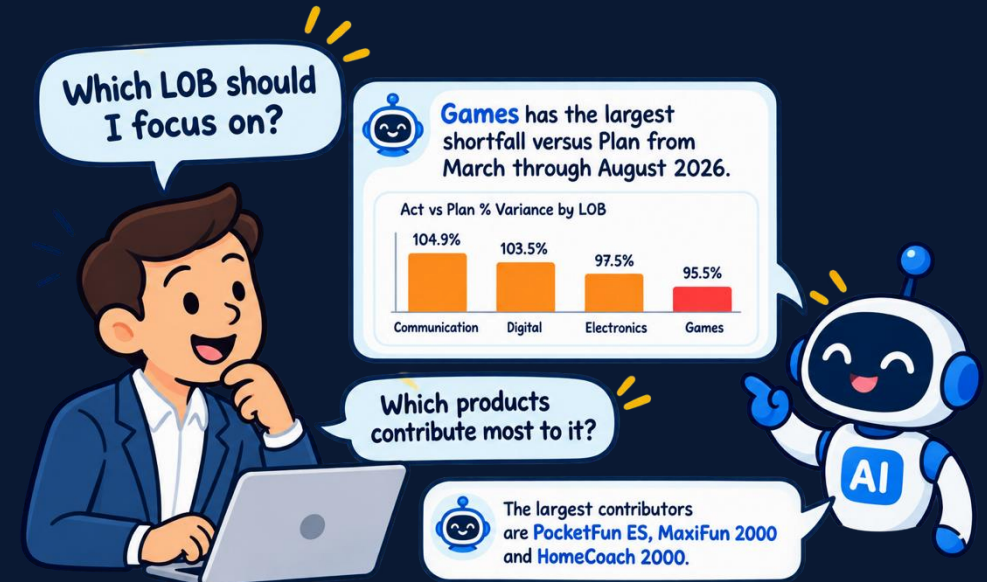
Here's a Bar Chart that shows Revenue by Region. Filtered by Year: 2026.



Here's a Bar Chart that shows Revenue by LOB. Filtered by Year: 2026.



03.



Using AI Agents in Oracle Analytics

(Pre) AI Agent

Semantic Model: Synonyms, AI Descriptions

Search Index

Set up content indexing and crawls to optimize user searches.

Data ModelCatalog

Data Model	Assistants	Crawl Status	Sensitive Data	Homepage Search	Synonyms	AI descriptions
OA Boocamp Subject Area	☒ (66 of 2000 per data model)	Name & Values		☒		The OA Boocamp Subject Area contains data related to 
D Billing Date	☒	Name & Values				
D Customers	☒	Name & Values				
Customer Nr.	☒	Name & Values	☐		customer ID * Customer Number *	Unique identifier for the customer, represented as a numeric value. Examples: 4313, 8627, 9515. Also known as Customer Number.
Customer	☒	Name & Values	☐		client * Buyer * customer name *	Name of the customer, represented as a string. Examples: Tanner Abel, Ega Bramz, Cayla Cox. Also referred to as the Buyer.
Gender	☒	Name & Values	☐		customer gender * sex *	Name of the customer, represented as a string. Examples: Tanner Abel, Ega Bramz, Cayla Cox. Also referred to as the Buyer. Gender of the customer, represented as a character string with two characters. Also referred to as the Buyer. Female. Examples: F, M
Marital Status	☒	Name & Values	☐		marital status * relationship status *	Marital status of a customer, such as Married, Single, or Divorced. Examples: Married, Single, Divorced.
Customer Segment	☒	Name & Values	☐		client segment * customer group *	Category of customers based on demographics, such as Active Singles or Urban based. Examples: Active Singles, Urban based, Students.
Customer Type	☒	Name & Values	☐		client type * customer category *	Type of customer, such as TYPE 1 or TYPE 3. Examples: TYPE 1, TYPE 3, TYPE 5.



(Pre) AI Agent

Supplemental Instructions, First Message, Knowledge Base

	Supplemental Instructions	Welcome Message	Knowledge Documents
What	Rules for how the agent interprets questions and uses the data (up to 6,000 characters)	The first message users see when they open the agent	Uploaded files (PDF, text) the agent can search before answering
Why	Brings business language and governed measures into the agent's reasoning	Sets expectations and shows users how to ask good questions	Adds context that isn't in the data: definitions, policies, background
How	Short positive rules: "use Revenue YoY for change versus last year". Avoid prohibitions; they caused refusals	3–4 example questions that are proven to work, plus a tip: name a measure and a period	Keep them descriptive, like a glossary. No instructions: retrieved text can appear word for word in answers

Semantic model = what the data means.

Instructions = how to interpret questions.

Welcome message = how to ask.

Knowledge = what the data can't tell.



(Pre) AI Agent

Example: Supplemental Instructions, First Message

ROLE AND SCOPE

You are a sales performance analyst for the OA Bootcamp Subject Area. Answer every question about revenue, plan, prior year, profit, products, geography, customers or time by querying the Subject Area. Never answer business performance questions from general knowledge. If a question cannot be answered from the Subject Area, say so in one sentence.

EXECUTIVE LANGUAGE MAPPING

Apply when users use subjective terms.

- "focus on", "needs attention", "underperforming", "gap", "shortfall", "missed", "behind plan" = most negative Variance to Plan.
- "on track" = Variance to Plan and Act vs Plan % Variance.
- "vs last year", "growth", "YoY" = YoY Variance and Revenue YoY %.
- "decline", "drop", "fall" without a stated basis = use the comparison basis of the previous question; if none, use Variance to Plan.
- "driving", "contributes", "where", "concentrated" = break the measure down by the next level of the relevant dimension and rank members by contribution.

GOVERNED MEASURES

Use these measures exactly as defined: Revenue, Revenue (Plan), Revenue Year, Revenue % Variance, Profit, Profit Margin %. Never recompute variances from Revenue, Revenue % Variance.

TIME

- Use Billing Date for all sales analysis. Use Month for trends.
- Always apply an explicit year or month-range filter.
- If the user states no period, reuse the period of the previous question.
- "When did X start" or "first" = the earliest month within the current period unless the user asks.

DIMENSION ENTRY LEVELS

- Products: start at LOB, then Product Type, Product, Brand, Product Item.
 - Geography: start at Region, then Area, Country, State/Province, City.
 - Customers: start at Customer Segment, then Customer Type, Customer.
- Drill one level at a time unless the user names a level.

...

Welcome Žiga!

Welcome! I'm your sales analytics assistant for the OA Bootcamp data.

I analyze Revenue against Plan and against last year, and help you find where performance gaps are concentrated: by product, region, customer segment and month.

Try asking:

- How is Revenue performing versus Plan from March through August 2026?
- Which LOB has the largest shortfall versus Plan from March through August 2026?
- Which Games products declined most versus last year from March through August 2026?
- Show Games' decline versus last year by Customer Segment from March through August 2026.

Tip: include a period and a comparison (Plan or last year) in your question for the most accurate answers.

AI can make mistakes. Verify important results. Responses may vary over time as models and context evolve.

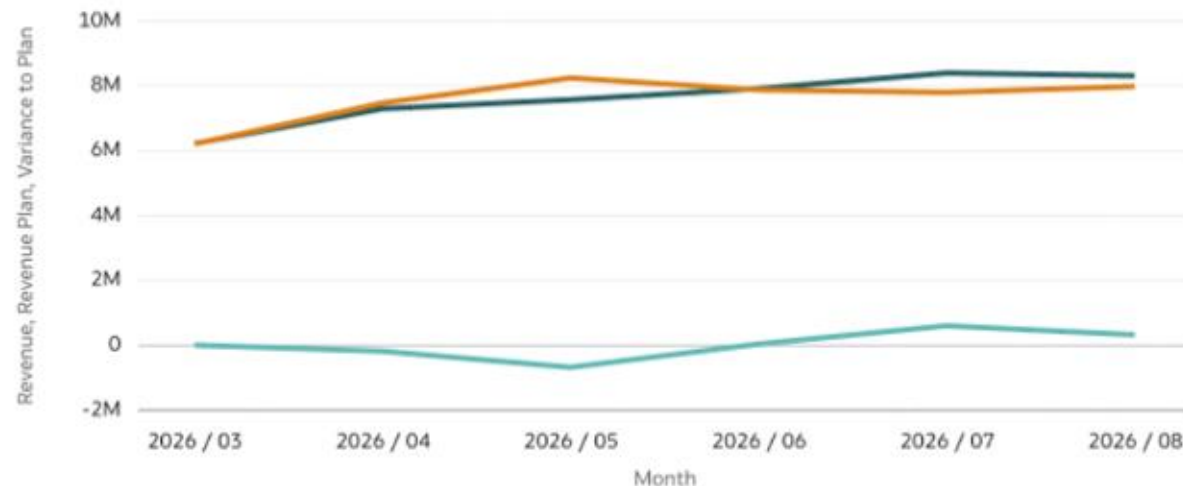
AI Agent (1)

How is Revenue performing versus Plan from March through August 2026?

How is Revenue performing versus Plan from March through August 2026?

Here's a Line Chart that shows Revenue, Revenue Plan, Variance to Plan by Month. Filtered by Year: 2026, Month: 2026 / 03, 2026 / 04, 2026 / 05, 2026 / 06... +2.

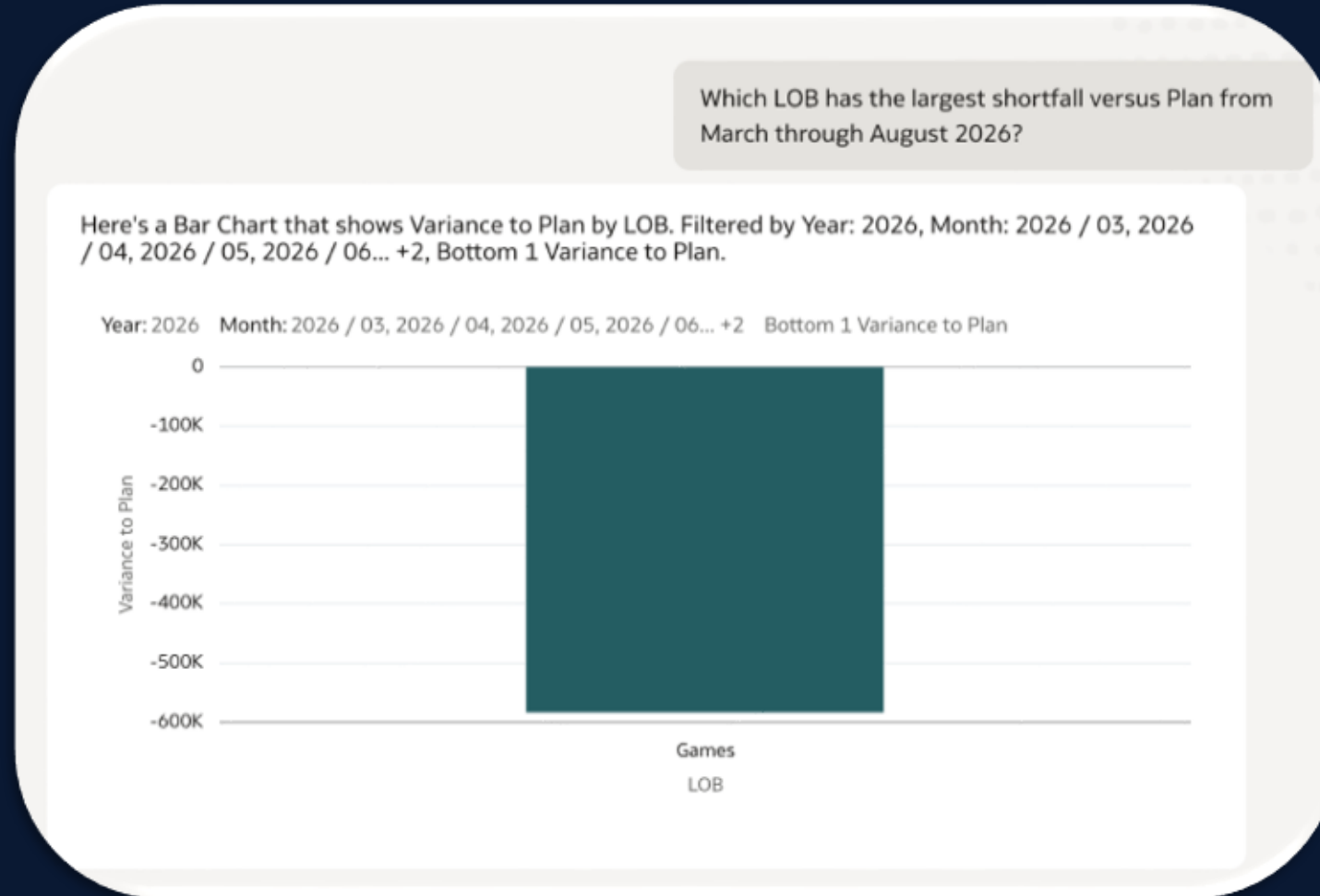
Year: 2026 Month: 2026 / 03, 2026 / 04, 2026 / 05, 2026 / 06... +2



- *Shows:* Revenue and Plan by month, with Variance to Plan as the bottom line. Overall +134K (+0.3%): on Plan.
- *Says:* This is the question my dashboard already answers, and the agent gives the same answer: over six months we're on Plan. There was a dip in April and May, with May about 674K below Plan, but by July we were ahead again. If I stopped here, I'd conclude everything is fine.

AI Agent (2)

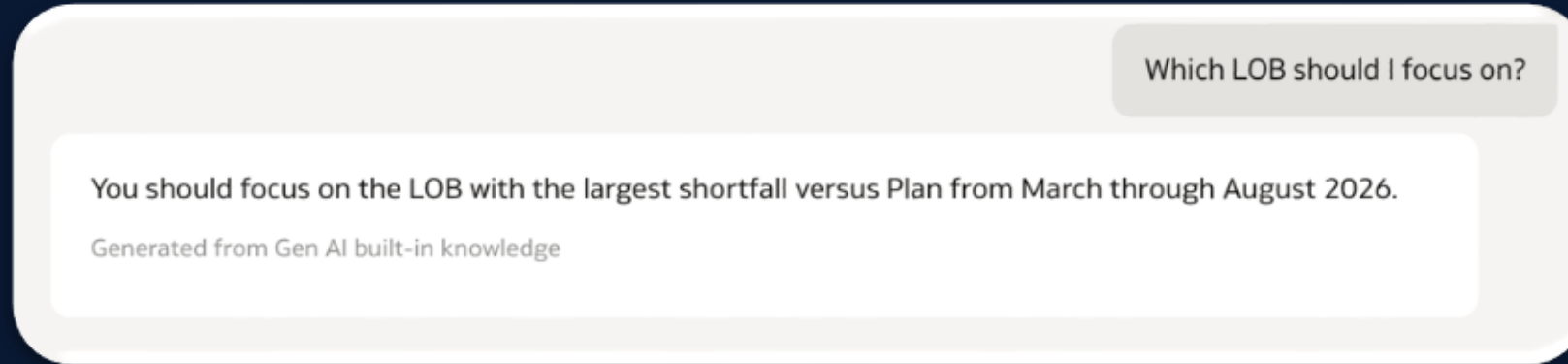
Which LOB has the largest shortfall versus Plan from March through August 2026?



- *Shows:* Games, –583K. The agent applied a "Bottom 1" filter, so the chart itself is the answer.
- *Says:* But 'on Plan' is a total. One level down, Games is 583K behind. The total looks fine only because Communication and Digital are ahead of Plan and cover for it. This is where the dashboard stops and the next question begins.

AI Agent (3)

Which LOB should I focus on?



- *Shows:* A generic answer, labeled "Generated from Gen AI built-in knowledge". No data was queried.
- *Says:* Now I ask the way an executive naturally would, and I get advice instead of analysis. Note the label: the agent is honest that this came from general knowledge, not our data. It isn't inventing an answer. 'Focus' isn't a measure. When I ask with a measure and a period, as in the previous question, I get governed analytics. That's the most important lesson for anyone deploying these agents: the question has to name what to measure.

AI Agent (8)

Change Chart Type to Language Narrative

Change Chart Type to Language Narrative

Here's a Language Narrative that shows Decline vs Last Year by Customer Segment. Filtered by Year: 2026, Month: 2026 / 03, 2026 / 04, 2026 / 05, 2026 / 06... +2, LOB: Games.

Year: 2026 Month: 2026 / 03, 2026 / 04, 2026 / 05, 2026 / 06... +2 LOB: Games

The data shows Decline vs Last Year for a total of seven Customer Segment values.

Breakdown per Customer Segment

We can see that a few Customer Segment values account for more than 50% of the total. This group is composed of two Customer Segment values:

- Active Singles with 25.5%
- Seniors with 24.6%

The five other Customer Segment values combined make up the rest of the list, accounting for 49.9% of the total.

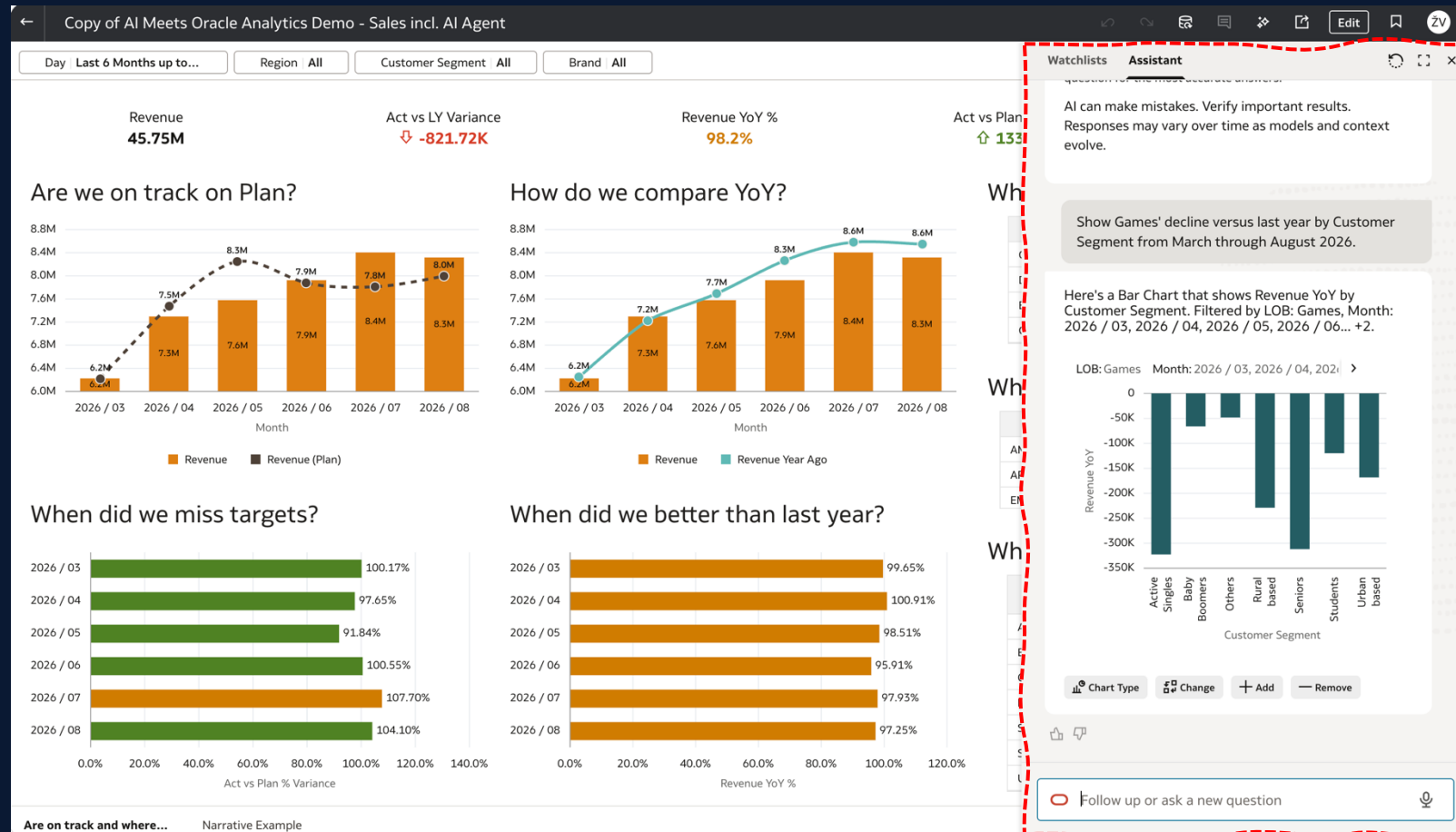
When taken together, the seven Customer Segment values reach a total value of -1,265,282.83, an average of -180,754.69.

- *Shows:* Written analysis. Total -1,265,282.83. Active Singles 25.5% and Seniors 24.6%, together half of the decline.
- *Says:* Same data, now as text. Active Singles and Seniors together account for half of Games' decline. This narrative is generated from the query result, not from the model's imagination, so every number traces back to the semantic layer. It also shows the wording discipline I care about: it says where the decline is concentrated, not why it happened.



(Post) AI Agent

Attach AI Agent to the Workbook



04.



Setting and using Oracle Analytics Cloud MCP Server for Conversational Analytics



Setting up

Where do I get information about my OAC MCP Server?

- Navigate to Profile → MCP Connect
- Follow the instructions and install the **MCP Connect Tool**
- Update MCP configuration file in MCP host application (i.e. Claude Desktop client)

The screenshot shows the 'MCP Connect' configuration page in the Oracle Analytics Cloud interface. The user is Žiga Vaupot. The page is divided into a left sidebar with navigation links (My Profile, Privacy, Shared Links, Advanced, App Keys, Mobile Access, Access Tokens, MCP Connect) and a main content area. The main content area has three sections: 'Client ID for MCP OAuth' with a masked client ID and a 'Copy' button; 'Scope for MCP OAuth' with a long URL scope and a 'Copy scope' button; and 'MCP Connect Tool' which includes a 'Download' button and installation instructions. At the bottom, there is a 'Copy JSON' button and a text area containing a JSON configuration for the MCP server.

Client ID for MCP OAuth
Use this client ID when configuring OAuth for MCP clients.
***** [Copy](#)

Scope for MCP OAuth
Use this scope when configuring OAuth for MCP clients.
`https://o1n3e6o5n63dto6zpyacmq6v52jeyuna.analytics.ocp.oraclecloud.comurn:opc:resource:consumer::all` [Copy scope](#)

MCP Connect Tool
Download this tool and register it with your MCP Host application to manage your connection from it to the Oracle Analytics MCP server. A browser will launch to prompt you to login with your Oracle Analytics credentials when you start the MCP Host application. [Download](#)

Installation

1. If Node.js 18 or later is not installed, download Node.js from <https://nodejs.org> and install it.
2. Unpack the zip file
3. Copy the MCP server configuration below to your MCP Host application's MCP configuration:

[Copy JSON](#)

```
{
  "mcpServers": {
    "oac-mcp-connect": {
      "command": "node",
      "args": [
        "/path/to/oac-mcp-connect.js",
        "https://oac001-frdxwkbmily-g9-fr.analytics.ocp.oraclecloud.com"
      ]
    }
  }
}
```

Setting up

Update `claude_desktop_config.json`

```
{ } claude_desktop_config.json X
Users > zigavaupot > Library > Application Support > Claude > { } claude_desktop_config.json > ...
1 {
2   "mcpServers": {
3     "oac-mcp-connect": {
4       "command": "node",
5       "args": [
6         "/Users/zigavaupot/Documents/oac-mcp-connect/oac-mcp-connect.js",
7         "https://oac001-_____.fr.analytics.ocp.oraclecloud.com"
8       ]
9     },
10  }
```

We're good to go. Restart Claude and log in to Oracle Analytics when prompted:

- The agent runs as *your* OAC user, so data-level security still applies.
- The agent sees only what the semantic layer exposes.



Let's start

Set Project Instructions

Projects / AI meets OA Demo

AI meets OA Demo

How can I help you today?

+ Chat Cework Opus 5.5 Medium

Set project instructions

Provide Claude with relevant instructions and information for chats within AI meets OA Demo. This will work alongside your [profile instructions](#) and the selected style in a chat.

You are a sales performance analyst. Answer only from the OA Bootcamp subject area via Oracle Analytics tools. For performance questions always compare Actual vs Plan, vs Last Year, and Profit/Margin. Use completed months only. Say where something happens, not why.

Cancel Save instructions

Instructions

Add instructions to tailor Claude's responses

Memory

Only you View memory
Project memory will show here after a few chats.

Context

Add PDFs, documents, or other text to reference in this project.

Folder

Only you
Add a folder on this computer for Claude to work in.

Scheduled

Set up recurring tasks for this project.



How are we doing?

What data can you see in Oracle Analytics?

What data can you see in Oracle Analytics?

Used oac-mcp-connect integration, loaded tools >

The connection is working again, and I can see the catalog. One detail matters: the subject area is spelled "OA Boocamp Subject Area" (missing the "t" in Bootcamp). My earlier lookups used "OA Bootcamp", so I'll use the exact name from now on.

Subject area: OA Boocamp Subject Area

This is the source I'll answer from. It has these tables:

- **Facts:** F Sales and F Sales Plan. Having both is what makes Actual vs Plan comparisons possible.
- **Metric folders:** Revenue Metrics, Profit Metrics and Counts.
- **Dimensions:**
 - D Billing Date and D Payment Date (two separate time dimensions)
 - D Customers
 - D Geography
 - D Orders
 - D Products

Datasets in the catalog

I can see these, but I won't use them for performance answers:

- *OA Bootcamp (local)*, described as revenue, customer and order trends
- *Project Demo2, Returns and Returns2* (two copies), in the OA Bootcamp folders
- *Sales Sample*, uploaded from SAMPLE_SALES_DATA.xlsx
- *tfl - arrivals board, tfl - stations and tfl - vehicle positions*, in the AIDP demo folder

Next step

I haven't looked inside the tables yet, so I don't know the exact measure names. I also need to check which date dimension the plan is linked to. Billing Date is the likely one, but I'll confirm it before running "How are we doing?". With that settled, I can compare Actual vs Plan, vs Last Year, and Profit/Margin.

Searched available tools oracle analytics search catalog >

OA:Catalog Search ▾

Request

```
{
  "types": [
    "subjectAreas",
    "datasets"
  ],
  "limit": 100
}
```

Response

OA:Describe Data ▾

Request

```
{
  "datamodelName": "OA Boocamp Subject Area",
  "tablesOnly": true
}
```

Response

```
{
  "tables": [
    {
      "tableName": "D Billing Date",
      "fullQualifiedName": "\"OA Boocamp Subject Area\".\"D Billing Date\"",
      "description": ""
    },
    {
      "tableName": "D Customers",
      "fullQualifiedName": "\"OA Boocamp Subject Area\".\"D Customers\"",
      "description": ""
    }
  ]
}
```



So, how we are doing today?

Used oac-mcp-connect integration, ran 2 commands >

Year to date, January to September 2026: revenue is slightly below plan and below last year, but profit and margin are ahead of both. October 2026 is still in progress, so it's left out.

YTD Jan–Sep 2026	Actual	vs Plan	vs Last Year
Revenue	66.28M	−0.20M (−0.3%)	−1.03M (−1.5%)
Profit	4.60M	+0.16M (+3.5%)	+0.26M (+6.0%)
Margin %	6.9%	6.7% plan (+0.3 pp)	6.4% LY (+0.5 pp)

By quarter

- Q1:** revenue was 4.1% below plan and 0.7% above last year. Profit of 0.51M was well above plan (0.28M) and last year (0.39M).
- Q2:** revenue was 3.4% below plan and 1.7% below last year, with May the weakest month (−8.2% vs plan). Profit was 1.76M, 11% under plan and 7% above last year.
- Q3:** revenue was 5.9% above plan but 3.0% below last year. Every Q3 month beat plan and every Q3 month was below the prior year. Profit of 2.33M was above plan (2.18M) and in line with last year (2.31M).
- September:** margin reached 10.1%, the highest month of the year, against 9.3% plan and 10.1% last year.

By region (YTD revenue)

- AMERICAS:** 26.9M. −0.5% vs plan, −1.5% vs last year, margin 7.6%.
- EMEA:** 25.3M. +0.4% vs plan, −1.8% vs last year, margin 6.0%, the lowest of the three regions.
- APAC:** 14.1M. −1.2% vs plan, −1.0% vs last year, margin 7.3%.

By line of business (YTD revenue)

- Games:** 17.9M. −5.0% vs plan, −9.2% vs last year, margin 8.1%. This is the largest gap on both comparisons.
- Communication:** 17.4M. +4.4% vs plan, −7.1% vs last year, margin 7.3%.
- Digital:** 17.2M. +2.8% vs plan, +3.8% vs last year, margin 5.7%. It is above both plan and last year, but has the lowest margin.
- Electronics:** 13.9M. −3.1% vs plan, +12.0% vs last year, margin 6.6%.

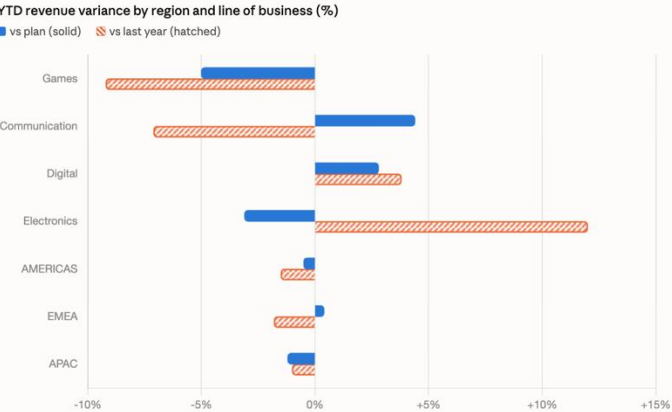
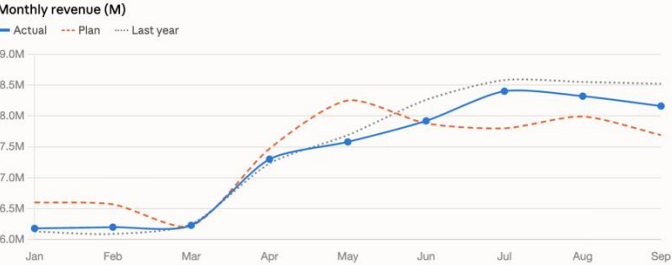
How some numbers were derived

- Plan profit:** the subject area has no plan profit measure, so I calculated it as Revenue (Plan) − Costs Fixed (Plan) − Costs Variable (Plan).
- Last year's profit:** I queried 2025 directly instead of using `AGO(Profit, Year, 1)`. In this model that function returned the *previous month's* profit, not the same month last year. The built-in Revenue Year Ago measure did match 2025 correctly.

You may want to check the time-dimension level setup in the semantic model, and possibly rename the subject area to fix the “Boocamp” typo.

visualize this response

Thought for 5s >



Drill into Games ↗ EMEA margin by LOB ↗

Here is the January–September 2026 picture from OA Boocamp Subject Area, drawn from the same query results as my last answer.

The plan line in the margin chart uses plan profit derived as Revenue (Plan) minus fixed and variable plan costs.

Break down Games revenue vs plan and last year by product and region

Used oac-mcp-connect integration, ran a command >

Games, January–September 2026: revenue is 17.86M. That is 0.95M (5.0%) below plan and 1.82M (9.2%) below last year. All three regions and all four products are below last year.

Plan is only set at line of business × region. At product level the plan measure comes back empty. So the product breakdown below compares to last year only.

By region

Region	Revenue	vs Plan	vs LY	Profit (Plan / LY)	Margin (Plan / LY)
AMERICAS	7.32M	−0.38M (−4.9%)	−0.70M (−8.8%)	0.60M (0.68M / 0.72M)	8.2% (8.8% / 9.0%)
EMEA	6.76M	−0.34M (−4.8%)	−0.69M (−9.3%)	0.48M (0.55M / 0.60M)	7.1% (7.7% / 8.1%)
APAC	3.78M	−0.23M (−5.8%)	−0.42M (−10.0%)	0.37M (0.38M / 0.41M)	9.8% (9.4% / 9.7%)
Games total	17.86M	−0.95M (−5.0%)	−1.82M (−9.2%)	1.45M (1.60M / 1.73M)	8.1% (8.5% / 8.8%)

- AMERICAS and EMEA account for 1.4M of the 1.8M gap to last year.
- APAC is furthest below plan in percentage terms, but it is the only region where margin is above both plan and last year.

By product, vs last year

Product	Revenue	vs LY	Profit (LY)	Margin (LY)
PocketFun ES	11.68M	−1.00M (−7.9%)	0.68M (0.85M)	5.8% (6.7%)
MaxiFun 2000	2.64M	−0.40M (−13.1%)	0.28M (0.32M)	10.8% (10.7%)
HomeCoach 2000	2.31M	−0.26M (−10.2%)	0.31M (0.34M)	13.6% (13.4%)
Game Station	1.23M	−0.16M (−11.3%)	0.18M (0.21M)	14.3% (15.5%)

- PocketFun ES makes up 65% of Games revenue and 55% of the decline vs last year. It also has the lowest margin, down 0.9 pp.
- MaxiFun 2000 has the steepest percentage drop.
- HomeCoach 2000 and MaxiFun 2000 kept their margins despite lower revenue.

Revenue vs last year, product × region

Product	AMERICAS	EMEA	APAC
PocketFun ES	−0.35M (−6.8%)	−0.37M (−7.8%)	−0.28M (−10.1%)
MaxiFun 2000	−0.16M (−13.3%)	−0.16M (−14.0%)	−0.07M (−11.0%)
HomeCoach 2000	−0.12M (−11.9%)	−0.10M (−9.6%)	−0.04M (−7.9%)
Game Station	−0.06M (−11.6%)	−0.07M (−12.0%)	−0.03M (−9.8%)

- The largest single gaps are PocketFun ES in EMEA and in AMERICAS, about −0.35M to −0.37M each.
- The weakest margin is MaxiFun 2000 in EMEA, at 6.9% (7.5% last year).
- PocketFun ES margin is down in AMERICAS (5.7% vs 7.2%) and EMEA (5.2% vs 6.1%), and up in APAC (7.1% vs 6.7%).

Plan profit is derived as Revenue (Plan) minus fixed and variable plan costs, the same method as before.



How we are doing?

What is happening behind the scenes?

Used oac-mcp-connect integration, ran 2 commands ▾

OA:Describe Data >

OA:Execute Logical SQL SELECT "OA Boocamp Subject Area"."D Billing Date"."Year" AS llm_0, "OA Booc...

Working out year-to-date figures from the monthly data.

OA:Execute Logical SQL SELECT "OA Boocamp Subject Area"."D Billing Date"."Month" AS llm_0, "OA Bo...

Investigating unexpected month shift in a Year-level time calculation.

OA:Execute Logical SQL SELECT "OA Boocamp Subject Area"."D Billing Date"."Month" AS llm_0, "OA Bo...

Ran a command >

Working out planned profit from revenue and cost assumptions.

OA:Describe Data >

OA:Execute Logical SQL SELECT "OA Boocamp Subject Area"."D Geography"."Region" AS llm_0, "OA Bo...

OA:Execute Logical SQL SELECT "OA Boocamp Subject Area"."D Products"."LOB" AS llm_0, "OA Boocam...

Ran a command >

Working out profit using a clear revenue-cost breakdown.

Request

```
{ "query": "SELECT \"OA Boocamp Subject Area\".\"D Billing Date\".\"Year\" AS llm_0, \"OA Boocamp Subject Area\".\"D Billing Date\".\"Month\" AS llm_1, \"OA Boocamp Subject Area\".\"Revenue Metrics\".\"Revenue\" AS llm_2, \"OA Boocamp Subject Area\".\"F Sales Plan\".\"Revenue (Plan)\" AS llm_3, MAX(\"OA Boocamp Subject Area\".\"D Billing Date\".\"Day\") AS llm_4 FROM \"OA Boocamp Subject Area\" ORDER BY llm_1 DESC FETCH FIRST 30 ROWS ONLY", "maxRows": 30 }
```

Response

```
{ "metadata": { "requestId": "e7281d33-165a-4491-bd33-0203373f34ce", "batchSize": 1000, "startTime": 1791648434900 }, "batches": { { "complete": true, "cursorId": "325dc379-1c36-4aed-9021-9b8286eba1b8", "batchNumber": 1, "data": { { "llm_2": null, "llm_3": 8537660.21, "llm_4": "2026-12-01 00:00:00.0", "llm_0": "2026", "llm_1": "2026 / 12" }, { "llm_2": null, "llm_3": 8673151.31, "llm_4": "2026-11-01 00:00:00.0", "llm_0": "2026", "llm_1": "2026 / 11" }, { "llm_2": null, "llm_3": 7691697.15, "llm_4": "2026-10-01 00:00:00.0", "llm_0": "2026", "llm_1": "2026 / 10" }, { "llm_2": 8155409.05, "llm_3": 7687076.15, "llm_4": "2026-09-01 00:00:00.0", "llm_0": "2026", "llm_1": "2026 / 09" }, ... { "llm_2": 7220046.62, "llm_3": 7675183.6, "llm_4": "2024-07-01 00:00:00.0", "llm_0": "2024", "llm_1": "2024 / 07" } }, "hasMore": false, "totalRecordsStreamed": 30, "isComplete": true, "recordsInBatch": 30, "timestamp": 1791648434904 }, "status": { "result": "success", "error": false, "message": "Streaming completed successfully", "summary": { "completed": true, "totalBatches": 1, "totalRecords": 30, "endTime": 1791648434906, "durationMs": 6 } }
```

How we are doing?

Generated interactive „How we are doing?“ dashboard

How are we doing?

Live from Oracle Analytics - OA Boocamp Subject Area - January–September 2026

Updated 18:47

Refresh

January–September: revenue **66.28M** is **−0.3%** vs plan and **−1.5%** vs last year. Profit **4.6M** is ahead of plan (**+3.5%**) and ahead of last year (**+6.0%**), at a **6.9%** margin.

Focus **All** Region **AMERICAS** **EMEA** **APAC** Line of business **Games** **Communication** **Digital** **Electronics**

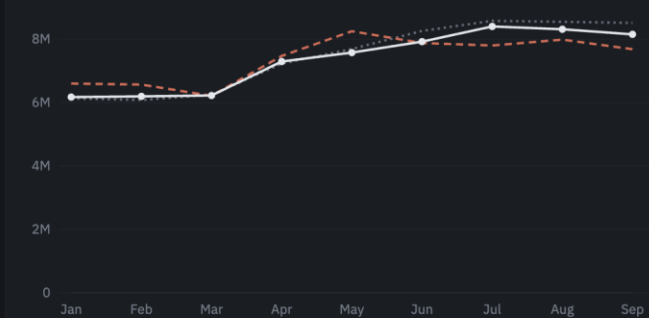
Revenue	Profit	Profit margin
66.28M	4.6M	6.9%
vs plan −0.3%	vs plan +3.5%	vs plan +0.3 pp
vs last year −1.5%	vs last year +6.0%	vs last year +0.5 pp

Month by month

Each completed month: actual against plan and the same month last year.

Revenue Profit Margin %

— Actual - - - Plan Last year

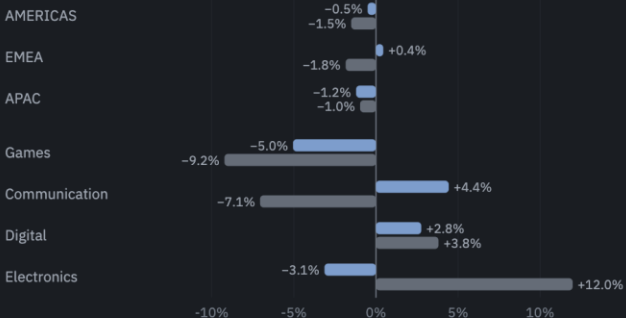


Where the gaps are

Year-to-date variance by region and line of business. Click a bar to focus on it.

Revenue % Profit % Margin pp

■ vs plan ■ vs last year



Scorecard

Year to date. Click a row to focus the page on it.

Segment	Revenue	vs plan	vs LY	Profit	vs plan	vs LY	Margin	vs plan	vs LY
Total	66.28M	−0.3%	−1.5%	4.6M	+3.5%	+6.0%	6.9%	+0.3 pp	+0.5 pp
Regions									
AMERICAS	26.89M	−0.5%	−1.5%	2.05M	+0.3%	+0.8%	7.6%	+0.1 pp	+0.2 pp
EMEA	25.27M	+0.4%	−1.8%	1.52M	+5.8%	+8.3%	6.0%	+0.3 pp	+0.6 pp
APAC	14.12M	−1.2%	−1.0%	1.03M	+6.8%	+14.3%	7.3%	+0.6 pp	+1.0 pp
Lines of business									
Games	17.86M	−5.0%	−9.2%	1.45M	−9.3%	−16.0%	8.1%	−0.4 pp	−0.7 pp
Communication	17.41M	+4.4%	−7.1%	1.26M	+30.0%	−13.0%	7.3%	+1.4 pp	−0.5 pp
Digital	17.16M	+2.8%	+3.8%	976.26K	+12.0%	+57.0%	5.7%	+0.5 pp	+1.9 pp
Electronics	13.85M	−3.1%	+12.0%	911.24K	−9.1%	+68.8%	6.6%	−0.4 pp	+2.2 pp

Products

Year to date vs last year by product and region, biggest declines first. Plan is set only at line of business × region, so products have no plan comparison.

Product	Region	Line of business	Revenue	Revenue LY	vs LY	Profit	Margin	vs LY
CompCell RX3	AMERICAS	Communication	4.01M	4.46M	−10.1%	385.54K	9.6%	−1.5 pp
CompCell RX3	EMEA	Communication	3.77M	4.19M	−10.1%	265.55K	7.0%	−3.0 pp
PocketFun ES	EMEA	Games	4.38M	4.75M	−7.8%	227.94K	5.2%	−0.9 pp
PocketFun ES	AMERICAS	Games	4.86M	5.21M	−6.8%	277.02K	5.7%	−1.5 pp
PocketFun ES	APAC	Games	2.44M	2.72M	−10.1%	172.55K	7.1%	+0.4 pp
CompCell RX3	APAC	Communication	2.01M	2.25M	−10.4%	218.68K	10.9%	+2.3 pp
MaxiFun 2000	AMERICAS	Games	1.07M	1.23M	−13.3%	121.49K	11.4%	+0.3 pp
MaxiFun 2000	EMEA	Games	1M	1.16M	−14.0%	68.92K	6.9%	−0.6 pp
HomeCoach 2000	AMERICAS	Games	914.58K	1.04M	−11.9%	134.36K	14.7%	+2.2 pp
HomeCoach 2000	EMEA	Games	905.09K	1M	−9.6%	104.06K	11.5%	−1.0 pp
MaxiFun 2000	APAC	Games	568.61K	639.1K	−11.0%	94.19K	16.6%	+0.7 pp
Touch-Screen T5	EMEA	Communication	1.37M	1.44M	−4.7%	71.65K	5.2%	+1.9 pp
Game Station	EMEA	Games	480.41K	545.7K	−12.0%	82.52K	17.2%	−1.0 pp
Game Station	AMERICAS	Games	479.81K	542.57K	−11.6%	67.33K	14.0%	−0.8 pp

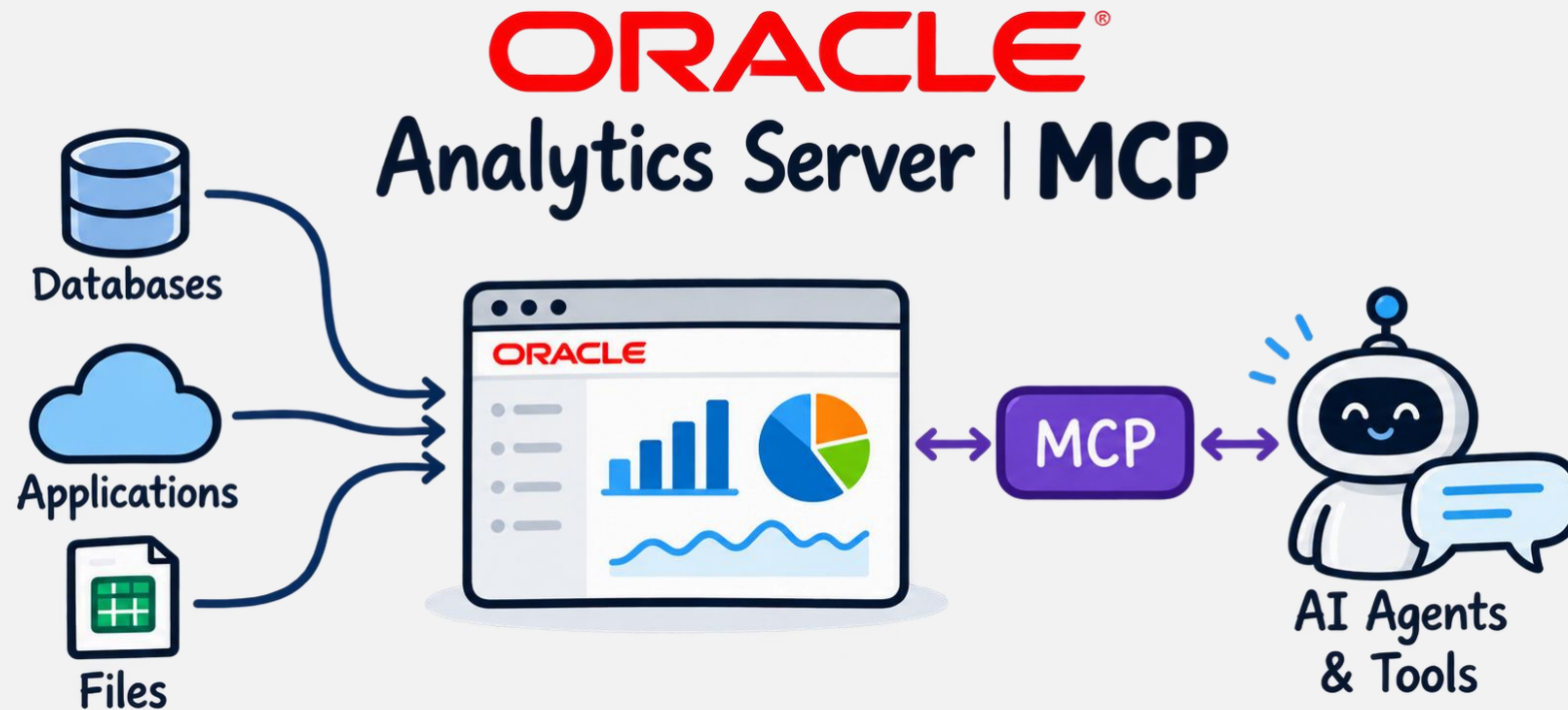
05.



What if I don't have Oracle Analytics Cloud?

OAS doesn't come with MCP functionality

Idea: why don't you write your own MCP server for OAS?



Example: my own MCP server for OAS

Key ingredients

- Oracle Analytics Server SOAP Web Services
 - get_server_info,
 - list_subject_areas,
 - describe_subject_areas and
 - execute_logical_sql
- FastMCP turns each Python function into a tool.
- Client
 - Oracle Private Agent Factory
 - Claude Desktop

```
mcp = FastMCP(  
    name="oracle-analytics-server",  
    instructions=(  
        "Tools for querying Oracle Analytics Server (OAS). Typical workflow: "  
        "1) list_subject_areas, 2) describe_subject_area to learn exact table and column names, "  
        "3) execute_logical_sql with a Logical SQL SELECT. Logical SQL references columns as "  
        '"Table"."Column" and the subject area in FROM, e.g. '  
        'SELECT "Time"."Year", "Base Facts"."Revenue" FROM "Sample Sales" '  
        "ORDER BY 1. Do not use GROUP BY – OAS aggregates measures automatically. "  
        "Use FETCH FIRST n ROWS ONLY to limit rows."  
    ),  
    host=MCP_HOST,  
    port=MCP_PORT,  
    stateless_http=True,  
    json_response=True,  
    # Host-header checks off: access is controlled by API key + OCI network rules.  
    transport_security=TransportSecuritySettings(enable_dns_rebinding_protection=False),  
)
```



Example: my own MCP server for OAS (cont.)

Testing

Can we connect?

Which data have we got?

Run logical query

```
(venv) [opc@oas001 oas-mcp-server]$ python test_oas.py

=== 1. Logon ===
Connected as: admin

=== 2. Subject areas ===
- MCP Test Sales

OK - OAS web services work.
(venv) [opc@oas001 oas-mcp-server]$ python test_oas.py "MCP Test Sales"

=== 1. Logon ===
Connected as: admin

=== 2. Subject areas ===
- MCP Test Sales

=== 3. Describe 'MCP Test Sales' ===
[Sales Details]
CUSTOMER_SEGMENT          varchar    none
ORDER_DATE                timestamp none
PRODUCT_CATEGORY          varchar    none
REGION                    varchar    none
SALE_ID                   numeric    none
[Sales Facts]
REVENUE                   numeric    sum
QUANTITY                 numeric    sum

OK - OAS web services work.
(venv) [opc@oas001 oas-mcp-server]$ python test_oas.py --sql 'SELECT "Sales Details"."REGION", "Sales Facts"."REVENUE" FROM "MCP Test Sales" ORDER BY
2 DESC FETCH FIRST 1 ROWS ONLY'

=== 1. Logon ===
Connected as: admin

=== Logical SQL ===
{
  "columns": [
    "Sales Details.REGION",
    "Sales Facts.REVENUE"
  ],
  "rows": [
    [
      "Southern Europe",
      667.5
    ]
  ],
  "rowCount": 1,
  "truncated": false
}
(venv) [opc@oas001 oas-mcp-server]$
```



OPAF and OAS MCP Server

Create MCP Server Connection

 **Edit MCP server** ×
Update MCP server details.

Server name *

Server URL *

Authentication mode
☐ Direct ☒ Bearer Token ☐ OAuth ☐ Auth Request

Bearer token *
 

 **Test 'oas001-mcp' connection**
MCP connection successful

Cancel

Test connection

Save MCP server



OPAF and OAS MCP Server

Create custom flow

MCP server

Connect to the given MCP server URL and retrieve tools for use with agents.

MCP server

oas001-mcp

Timeout (seconds)

120

Allowed tools (optional, default: all)

subject_areas 4

- ☒ describe_subject_area
- ☒ execute_logical_sql
- ☒ get_server_info
- ☒ list_subject_areas

MCP server

Connect to the given MCP server URL and retrieve tools for use with agents.

MCP server

oas001-mcp

Timeout (seconds)

120

Allowed tools (optional, default: all)

describe_subject_area, ex 4

Agent

Select from one of your configured LLMs and interact with it as an agent.

Select LLM to use

openai.gpt-oss-120b (oci)

Tools

Sub-agents

Custom instructions

You answer questions about sales data in Oracle Analytics Server. Always call list_subject_areas and describe_subject_area first to learn exact table and column names, then use execute_logical_sql. Never invent column names. Always answer in natural language. Present data as a markdown table with clear column headings, sorted in a meaningful order (e.g. highest value first). Add a one-sentence summary of the key finding. Never return raw JSON.

Agent description

Agent OAS-MCP

Prompt

Receiving input

Temperature

0.01

Chat input

Capture user message sent in chat.

Message

Chat output

Send message to chat.

Message

Message

Agent

You answer questions about sales data in Oracle Analytics Server. Always call list_subject_areas and describe_subject_area first to learn exact table and column names, then use execute_logical_sql. Never invent column names. Always answer in natural language. Present data as a markdown table with clear column headings, sorted in a meaningful order (e.g. highest value first). Add a one-sentence summary of the key finding. Never return raw JSON.



OPAF and OAS MCP Server

Testing

+ New chat

Integration options

 ziga.vaupot@smartq.si (You) 11. 10. 2026, 10:10:11

What subject areas are available for sales data?

 OAS MCP Server Demo 11. 10. 2026, 10:10:16

The only sales-related subject area currently available in Oracle Analytics Server is **MCP Test Sales**.

 ziga.vaupot@smartq.si (You) 11. 10. 2026, 10:10:26

What is the revenue by region? Which region is the highest?

 OAS MCP Server Demo 11. 10. 2026, 10:10:32

Revenue by Region

Region	Revenue
Southern Europe	667.5
Central Europe	276
Northern Europe	135

Key finding: *Southern Europe generates the highest revenue.*

How can I help you?

 Editor Mode



Claude Desktop and OAS MCP Server

Setup

- SSH tunnel

```
ssh -i ~/.ssh/oas001_key -N -L 18000:localhost:8000 opc@<oas001-public-ip>
```

- Configure Claude Desktop

```
"oas001": {  
  "command": "/usr/local/bin/npx",  
  "args": ["-y", "mcp-remote", "http://localhost:18000/mcp",  
    "--header", "Authorization:${OAS_MCP_AUTH}"],  
  "env": { "OAS_MCP_AUTH": "Bearer <MCP_API_KEY>" }  
}
```



Claude Desktop and OAS MCP Server

What data is available?

which subject areas and data are available for analysis

Used oas001 integration, loaded tools, used a tool

On your Oracle Analytics Server (oas001) there's one subject area, **OA Boocamp Subject Area**. It's a sales star schema with actuals and plan figures.

Dimensions

- **D Billing Date / D Payment Date:** Day, Week, Day of Week, Month, Quarter, Year. These are two separate time dimensions.
- **D Customers:** Customer Nr., Customer, Gender, Marital Status, Customer Segment, Customer Type, Age, Birth Date, Credit Rate.
- **D Geography:** Address ID, Address, Postal Code, City, State or Province, Country Code, Country, Area, Region, Latitude and Longitude.
- **D Orders:** Order Nr., Channel, Order Status.
- **D Products:** Product Item (with ID), Product, Product Type, LOB, Brand.

Measures

- **Revenue Metrics:** Revenue, Units, Discount Value, Revenue Year Ago, Revenue YoY, Revenue YoY %, Revenue YTD, Total Annual Revenue, and Total Annual Revenue by Customer Segment.
- **Profit Metrics:** Profit, Profit Margin %, Fixed Costs, Variable Costs, Total Costs.
- **Counts:** # of Customers, # of Orders, # of Products.
- **F Sales Plan:** Units, Revenue, Fixed Costs, Variable Costs and Discount Value, each as a plan figure. You can use these for actual-vs-plan comparisons.

There are a few quirks in the model. The **F Sales** folder is empty, and the measures sit in the metric folders. "Boocamp" and "Anual" are misspelled, and Payment Date has a column named "Day (Time Stamp))" with an extra bracket. Your Logical SQL has to use these names exactly as they're spelled.

I also tried to search the Oracle Analytics Cloud catalog for datasets and subject areas there. Your Mac didn't respond within 60 seconds, so I don't have that list. Should I run it again?



Claude Desktop and OAS MCP Server

So, how are we doing?

so, how are we doing?

Used oas001 integration, loaded tools

Revenue is on plan but slightly behind last year. Margins are improving. These figures cover January to September 2026, since October has no data loaded yet.

Jan-Sep 2026	Value	vs plan	vs Jan-Sep 2025
Revenue	€66.28M	-0.3% (plan €66.48M)	-1.5% (LY €67.31M)
Profit margin	6.9%	—	FY2025: 7.4%

What's happening

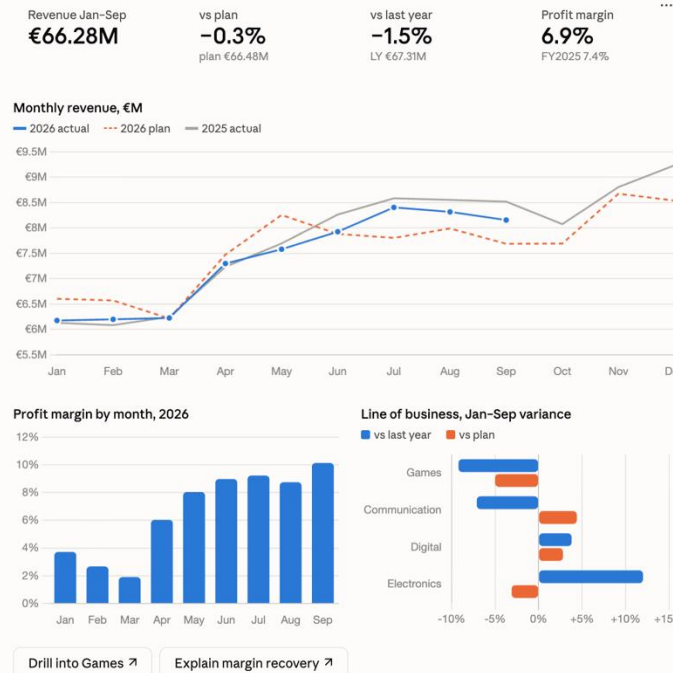
- **The first half started slowly.** From January to May, revenue roughly matched last year but came in €0.4–0.7M a month under plan. May was the weakest month, about 8% below plan.
- **Since June, we're beating plan.** June to September came in 1–8% above plan, with July (+7.7%) and September (+6.1%) the strongest. That recovered the earlier gap, which is why the year to date is level with plan.
- **We're still trailing last year from June on.** Each month since June is 2–4% below the same month in 2025. The plan seems to have expected a softer 2026, and we're beating that lower bar rather than growing.
- **Margins have improved steadily.** Profit margin rose from 1.9% in March to 10.1% in September, the best month this year. Q1 was weak at 2–4% and is what pulls the year-to-date figure under last year's 7.4%.

Looking ahead: the plan expects €24.9M in Q4. If the June–September trend holds, the year should end slightly above its €91.4M plan, but around 2–3% below 2025's €93.4M.

I left out the product-line view. The OAS query compared this year's January–September revenue with last year's full-year figures and full-year plan, which makes every product line look about 30% down. I can run it again for January to September only to see which lines are driving the gap to last year.

show and visualize

Loaded tools, loaded a skill, used oas001 integration



The product-line chart shows something the earlier summary didn't:

- **Games and Communication** account for the gap to last year, at -9.2% and -7.1%. Games is also 5% under plan, so it's the weakest line. Communication is 4.4% over plan, so its plan already expected a weaker year.
- **Electronics** grew 12% on last year but is still 3% under plan. **Digital** is ahead of both last year and plan.

The buttons under the charts open follow-up analyses on Games and on the margin recovery.

What drove the margin recovery from March to September?

Used oas001 integration

Most of the recovery came from variable costs falling as a share of revenue. Fixed costs grew much more slowly than sales, which explains the rest. Profit margin went from 1.9% in March to 10.1% in September, a gain of 8.2 points, and it splits like this:

Cost as % of revenue	March	September	Gain to margin
Variable costs	75.4%	70.6%	+4.9 pts
Fixed costs	22.7%	19.3%	+3.4 pts
Margin	1.9%	10.1%	+8.2 pts

1. Revenue per unit rose faster than cost per unit. This added 4.9 points.

- Units went up only 10% between March and September, while revenue went up 31%.
- Revenue per unit rose from €69 to €82 (+19%), but variable cost per unit only from €52 to €58 (+11%).
- The jump happened in June, when revenue per unit went from about €69 to €81 in one month and stayed there. A step like that usually means the product mix shifted toward higher-value items, not a broad price rise. I haven't confirmed this at product level.
- May helped differently. Revenue per unit stayed flat but variable cost per unit fell to €49, the year's low.

2. Fixed costs grew far less than revenue. This added 3.4 points.

- Fixed costs rose 12% (€1.41M → €1.58M) while revenue rose 31%.
- Fixed costs stayed close to plan, around €1.55M a month. The margin gain came from higher volume spreading those costs, not from cutting them.

3. All four product lines improved, but two of them made most of the gain.

Line of business	Margin, March	Margin, September	Extra monthly profit
Communication	-3.1%	8.1%	+€238K
Games	4.5%	13.2%	+€236K
Digital	2.6%	9.4%	+€138K
Electronics	3.7%	9.4%	+€96K

Communication and Games account for two-thirds of the €708K increase in monthly profit. These are also the two lines furthest behind last year's revenue, so their margins are improving even though their sales are below 2025.

Discounts don't explain it. They were 4.0% of revenue in March and fell to about 2.2% in April–June, but were back at 3.3% by August–September, and the margin held anyway.

To test the product-mix explanation, I can break revenue per unit down by Product Type and Brand for May versus June. That would show which items drove the jump.

99.

Discussion & Closure



