BI

OCTOBER 2026

OpenBI Studio

Business intelligence for the age of agents. Free on Windows and Mac.

BI Patricio Lobos · Norway Analytics · www.openbi.no

AGENDA

Today

01 Start with the Studio

02 What OpenBI is: Studio, Server, Gateway, SDK

03 Why we need it, and why C

04 Inside the Studio

05 Studio and Power BI, side by side

06 The market: Gartner's 2026 quadrant

07 Who is European

08 Next steps

01 · START WITH THE STUDIO

Start with the Studio on every laptop.

That is a complete BI tool on each laptop. You start today, at no cost. A server can come later.



ON EVERY LAPTOP

Windows and Mac

One signed installer, no licence key. The engine runs on the laptop's own cores.

NO SERVER NEEDED

All of it, locally

Models, reports, OAX, notebooks, Excel and the agent all work in the Studio alone.

YOUR DATA STAYS PUT

Nothing leaves

Nothing leaves the machine unless someone shares it. We host nothing.

02 · WHAT OPENBI STUDIO IS

A BI engine and studio in one install.

SEMANTIC MODEL

Measures you can trust

Measures, relationships, roles and calendars, written once, as text in git.

REPORTS

51 visuals

Charts, maps, matrices and statements as finance prints them. Dark mode too.

ENGINES

OAX, Open Query, SQL

OpenBI's own engines, written in C, with DuckDB inside for SQL.

NOTEBOOKS

Beyond dashboards

Prediction, optimisation, finance and networks, on the same model.

EXCEL

PivotTables and formulas

Analyze in Excel, and OpenBI's own add-in on Windows and Mac.

AGENTS

Any agent, one model

Claude, ChatGPT, Grok or your own, over MCP.

51
visuals, from ledgers and Sankey diagrams to routes on a map

98
tools for agents over MCP

2,549
queries from Power BI run in OAX and checked against Power BI's own answers. 0 failures

1
signed installer. No Python, no R, nothing to install beside it

02 · WHAT OPENBI IS

Studio, Server, Gateway and SDK

WHERE YOU BUILD

Studio

Available · free · 0.3.67

Model, reports, OAX, Open Query, notebooks, Excel, and any agent over MCP. Windows and Mac, free to download.

WHERE PEOPLE USE IT

Server

Ready · through Querex

Reports in the browser and Excel under your own address, on your own machines. Sign-in, workspaces and roles, row-level security, refresh, alerts, a failover cluster. $1 per user a month.

DATA BEHIND A FIREWALL

Gateway

Available · 0.1.50

For a server outside the network your data is in: a small service inside it connects out, so nothing opens in the firewall and passwords stay put. A server inside your network needs none.

MAKE IT YOURS

SDK

Available · free

Plug-ins in .NET 10, built on Windows, macOS or Linux: new tools for the agent, new tabs in the Studio, the model's data through OAX. Two free plug-ins: Clay ERP and Customer Service.

Your data → Gateway, when needed → **Server** ← publish ← **Studio** + SDK plug-ins → **People and agents** browser, Excel, MCP

03 · WHY WE NEED IT

The work moved from clicking to asking.

01

Exact answers for agents

Ask in words; the agent writes the query; the engine checks it against the model. A name that doesn't exist gets a no, not a guess.

02

One engine, no stack

OAX, SQL, Open Query, LightGBM, OR-Tools, QuantLib and igraph run inside one engine written in C.

03

No compute bill

It runs on the laptops and servers you already own. Nothing rented, nothing metered.

04

Yours

Your machines, your data, open formats: Power BI's own project format and TMDL in git. Made in Norway.

> **“The fastest dependency is the one you never installed.”**
>
> From www.openbi.no: Python and R were made for people at a keyboard. An agent needs one engine that answers in milliseconds.

Why C? Latency compounds.



Relative speeds for CPU-bound work, as public benchmarks typically show them; Python here about 30× slower than C, often 10–100× depending on the task. The counters are round trips since the slide opened.

03 · WHY WE NEED IT · WHY WE ARE FAST

One engine. No hops. Every core.

01

One process

OAX, SQL, Open Query and the machine learning run inside one engine. No hops between programs or interpreters.

02

C all the way down

No interpreter and no garbage collector pausing it. The data laid out in columns, the way the processor reads fastest.

03

Built for round trips

Answers in milliseconds, and kept, so a page or an agent's next question comes back at once.

04

Every core you have

Many users at once, spread over the processor's cores; on a Mac, tuned for Apple silicon.

18.4
report pages a second on one 16-core server. Microsoft's Analysis Services, same server: 16.8

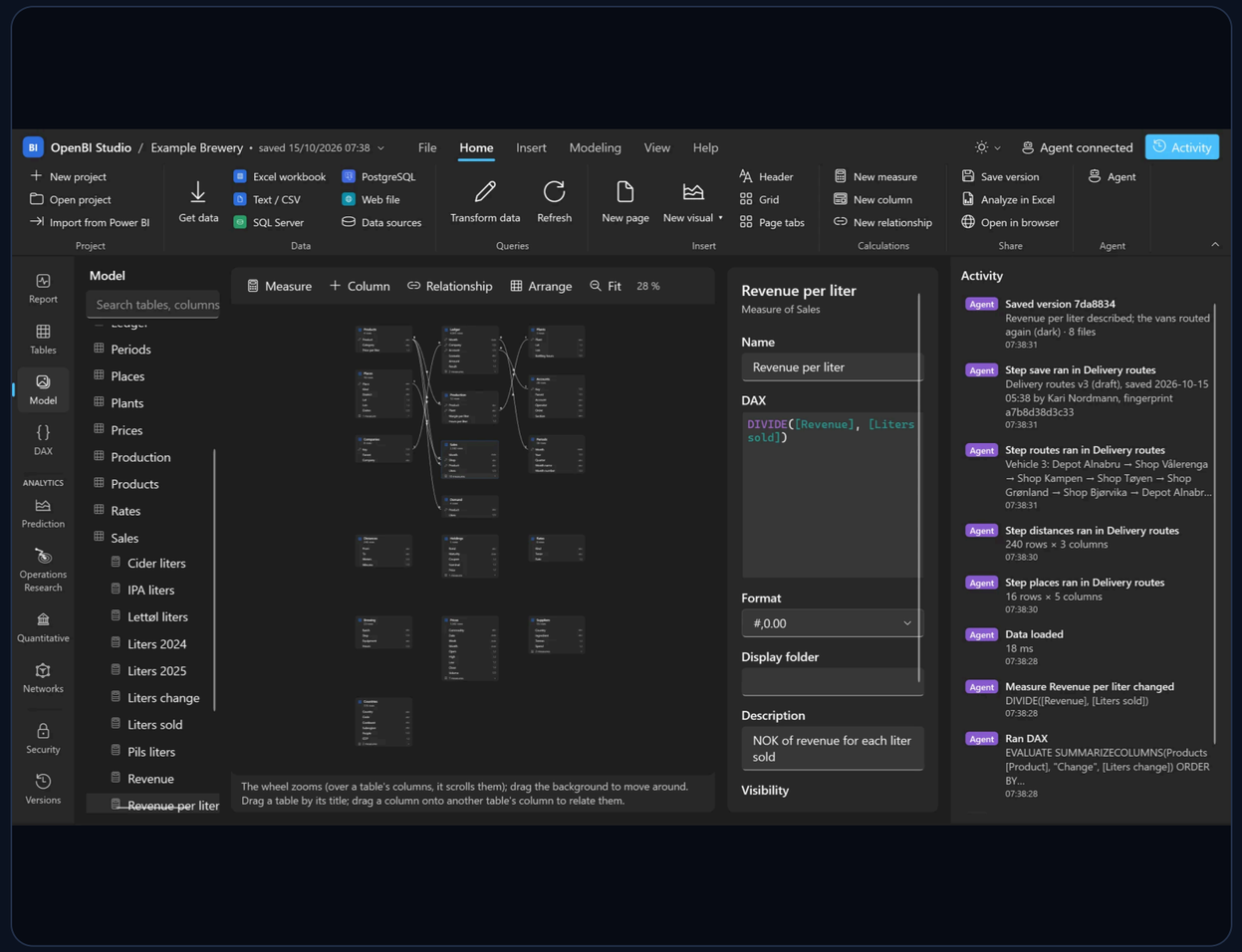
0
errors, from 2 up to 512 simulated users

3.1 s
to read a live model's 3.4 million rows. Microsoft's MSOLAP: 10.9 s

0.6 ms
for a measure on the example model: [Revenue per liter]

Load test 24 Oct 2026 (openbi.no/performance); live read 28 Oct 2026 against Analysis Services, the same rows from both clients.

Your wingman, on a leash you can read.



Any agent over MCP

Claude, ChatGPT, Grok or your own. One button connects Claude.

Answers from the model

The measures your people defined, never numbers made up.

Every step in the activity log

Queries, changed measures, saved versions, with the time.

Versions you name

Any change, yours or the agent's, undone in one click.

Never sees a password

When a source needs signing in, the Studio asks you.

See the model. Time every query.

The model as text

TMDL in git: a change reads like a sentence, and going back is one click.

OAX, timed

Each query with its server timings, query plan and model analyzer.

Open Query, run by OpenBI

The M language, as in Power Query, in OpenBI's own engine, folded to DuckDB.

Roles and "see as"

Row-level security in the model; see exactly what each reader sees.



Reports that read like a page.



51 visuals, nine themes. Charts, maps, matrices; ggplot looks to boardroom ones; dark mode.

Statements as finance prints them. Parent-child accounts, budget and last year, comments; Excel with formulas or a typeset PDF.

Slides from any report. Present it, or save it as PDF or PowerPoint.

Every question, a notebook. No compute bill.



PREDICTION · LIGHTGBM

Liters ahead

2 % off

over six months held back; a simple rule was 3 % off.

FINANCE · QUANTLIB

Bond portfolio

VaR 3.79 M

99 %, one day, on a market value of 884.94 M.

PLANNING · OR-TOOLS

Delivery routes

65.7 km

three vans, sixteen shops; the longest round 26.9 km.

NETWORKS · IGRAPH

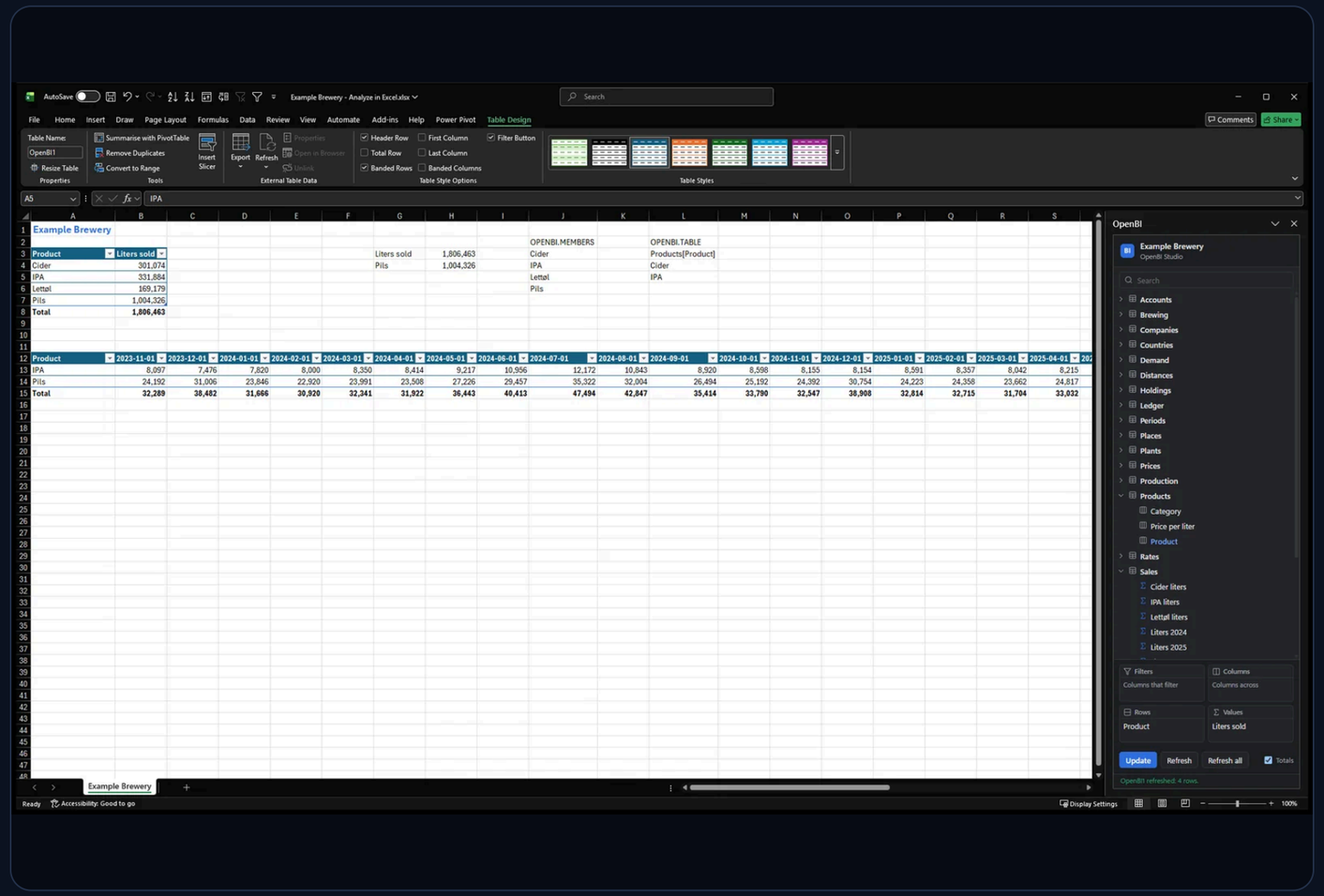
Who buys what

2 communities

Pils, IPA and Cider tie the shops together.

Results from OpenBI's example project, run on a laptop: 0 kr in compute. A person approves a model before it is used.

Love Excel? So do we.



Windows: Analyze in Excel

The classic PivotTable and field list, live on the model.

Windows and Mac: OpenBI's add-in

A pane with tables and pivots from the open model.

=OPENBI formulas

OPENBI.VALUE, OPENBI.TABLE and OPENBI.MEMBERS in any cell.

Statements to .xlsx

With their formulas, when you'd rather have a file.

Bring your Power BI models along.

1

Import in one click

A .pbip project, a semantic model folder or TMDL becomes an OpenBI project: tables, measures, roles, and its Power Query as Open Query.

2

Or read it live

Power BI and Fabric models, and Analysis Services, read live. On Windows, and on the Mac since 0.3.67.

3

OAX answers the same

2,549 queries from Power BI's engine: 2,318 identical, 220 refused by both, 11 documented differences.

4

The agent rebuilds pages

Report pages are HTML in your project, so the agent writes them, and you review them in git.

Power BI Desktop runs on Windows only. OpenBI Studio brings the same models to your Macs.

05 · SIDE BY SIDE · BUILDING

OpenBI Studio and Power BI

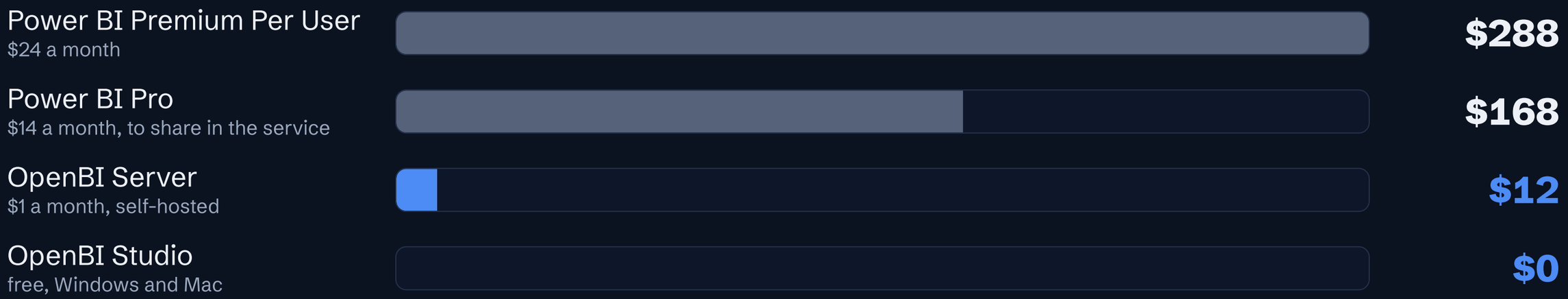
	OPENBI STUDIO	POWER BI
To build	Free	Power BI Desktop: free
Runs on	Windows and Mac (Apple silicon)	Windows only Mac users work in the browser
Engine	OpenBI's own, in C: OAX, Open Query (M), SQL (DuckDB)	VertiPaq and Power Query
Power BI models	Import a .pbip in one click, or read Power BI and Analysis Services models live	Native
Model format	TMDL text in git, versions you name	.pbix, or a PBIP project with TMDL
AI	Any agent over MCP: Claude, ChatGPT, Grok, your own; 98 tools	Copilot on a paid Fabric capacity
Advanced analytics	Built in: LightGBM, OR-Tools, QuantLib, igraph; on your own cores	Fabric notebooks (Spark, Python) billed as capacity

OpenBI Studio and Power BI

	OPENBI	POWER BI
Sharing	From the Studio: the model file, PDF, Excel, slides OpenBI Server when you want browsers	The Power BI service, in Microsoft's cloud
Price to share	OpenBI Server: $1 per user a month self-hosted, no capacity fees	Pro $14, Premium Per User $24, per user a month Free viewers need Fabric F64: about $5,000 a month reserved, $8,400 pay-as-you-go
Where data lives	Your laptops, and your own server	Microsoft's cloud, in your tenant
Excel	Analyze in Excel (Windows) and OpenBI's add-in (Windows and Mac)	Analyze in Excel (Windows) Mac: Excel for the web
Maturity	New versions every week projects are files in git; any version comes back	Mature: 30 million monthly users, a large ecosystem
Made by	Norway Analytics, Norway	Microsoft, USA

05 · SIDE BY SIDE · COST

Per person, per year, at list prices.



For 25 people: Power BI Pro $4,200 a year; Premium Per User $7,200; OpenBI Server $300; OpenBI Studio $0.

Fair to add: Power BI's price includes Microsoft's hosting. OpenBI Server runs on a machine you own or rent. List prices in US dollars, before VAT.

05 · SIDE BY SIDE · HOW BIG A MODEL

How big a model can you have?

FABRIC CAPACITY	MEMORY FOR ONE MODEL	A MONTH
F64	**25 GB**	$8,410
F128	**50 GB**	$16,819
F256	**100 GB**	$33,638
F512	**200 GB**	$67,277
F1024	**400 GB**	$134,554
F2048	**400 GB**	$269,107
F4096	**400 GB**	$538,214
F8192 the largest: still 400 GB	**400 GB**	$1,076,429
Mac Studio M5 Ultra, 512 GB	**512 GB**	$22,299 once

Fabric: Microsoft's maximum memory for one semantic model, and pay-as-you-go prices in US West 2 ($0.18 a capacity unit an hour); a year's reservation is about 41 % less. Mac Studio: Apple's US price for the 512 GB M5 Ultra, on sale since 28 October 2026.



A Mac Studio. Photo: Yasu, CC BY-SA 3.0, Wikimedia Commons (a 2022 model).

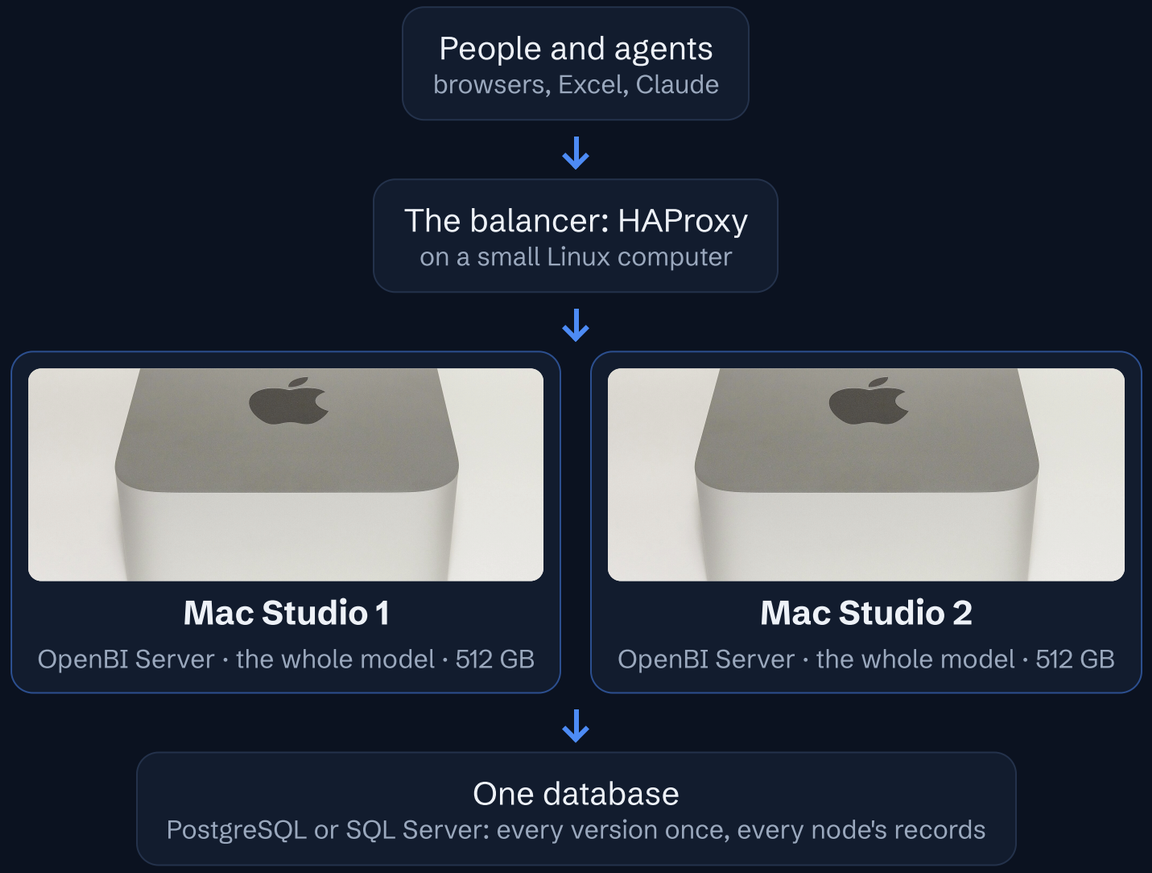
Fabric's ceilings, F64 to F8192

CAPACITY	CAPACITY UNITS	POWER BI V-CORES	MEMORY, ONE MODEL	MEMORY, ONE QUERY	A MONTH, NORWAY EAST	RESERVED A YEAR, A MONTH
F64	64	8	25 GB	10 GB	$11,213	$6,667
F128	128	16	50 GB	10 GB	$22,426	$13,333
F256	256	32	100 GB	10 GB	$44,851	$26,667
F512	512	64	200 GB	20 GB	$89,702	$53,333
F1024	1,024	128	**400 GB**	**40 GB**	$179,405	$106,667
F2048	2,048	-	**400 GB**	**40 GB**	$358,810	$213,333
F4096	4,096	-	**400 GB**	**40 GB**	$717,619	$426,667
F8192	8,192	-	**400 GB**	**40 GB**	$1,435,238	$853,333
2 × Mac Studio + OpenBI M5 Ultra, 512 GB each	**-**	**72 cores**	**up to 512 GB**	**80 % of the engine's**	**$44,598 once**	**-**

“The most important column for semantic modeling is the max memory.” Teo Lachev, Prologika, 2024. Microsoft's table today (September 2026) adds F4096 and F8192, still 400 GB. Prices: Azure's price list, Norway East, $0.24 a capacity unit an hour, $1,250 a year reserved. v-cores and Apple's cores are not the same unit.

05 · SIDE BY SIDE · TWO MAC STUDIOS

Two Mac Studios: failover and load balancing



×2	**Load balancing.** The pair serves what the two serve alone, added: 48.2 pages a second, against 30.5 and 16.8 alone.
0.07 s	**Failover.** A node killed mid-run is out of the balancer, most often within 0.07 s; everyone stays signed in.
0.20 %	of queries failed at most while a node died, with retries; back in 2.8 to 5.4 s.
29.9 s	**Jobs follow.** The other node takes over a scheduled refresh.
0	failed requests when a node is drained for maintenance.

Measured on two Mac minis (M2 Pro and M1) with Example Brewery: openbi.no/cluster. Not yet measured on Mac Studios.

05 · SIDE BY SIDE · WHEN IT GETS BUSY

Fabric throttles. OpenBI queues.

Fabric: future capacity already used, and what follows

up to 10 min	Overage protection: no throttling yet
10 min to 1 h	New interactive work waits 20 seconds
1 h to 24 h	New interactive work is refused
over 24 h	Everything is refused, until it is paid off

To stop it sooner: a bigger capacity, a pause (billed), or overage billing at three times the rate. Microsoft Learn, Fabric throttling, August 2026.

OpenBI: busy means a queue

No capacity units to run out of. Each engine runs so many queries at once; the rest wait their turn.

0 errors from 2 to 512 simulated users on one 16-core server.

At 512 the slowest 5 % of pages took 50 s: slower, never refused.

Let the agents ask day and night. The only limit is the hardware you own.

No overage bill.

A night of agents' questions costs what the Mac Studios already cost. In Fabric, overage is billed at three times the rate.

Nothing smoothed, nothing carried forward.

A busy hour today does not slow anyone down tomorrow.

05 · SIDE BY SIDE · HOW BIG A MODEL

Four Mac Studios, or one F2048?



The back of a Mac Studio: four Thunderbolt ports to link them. Photo: Paul Hudson, CC BY 2.0, Wikimedia Commons.

4 × MAC STUDIO M5 ULTRA	FABRIC F2048
2 TB	**400 GB**
of memory; 144 processor cores	at most for one model
$89,196	**$269,107**
once, and yours	a month, pay-as-you-go; about $159,000 reserved

One OpenBI cluster

Every node holds the whole model; they share the people and the agents, and keep answering when one is switched off.

Let the agents hammer it

Day and night, for an answer. No capacity units to run out of, no throttling, no meter.

Linked by Thunderbolt 5

macOS can do RDMA between Macs since 26.2. OpenBI's cluster runs over the ordinary network today.

06 · THE MARKET

Gartner's 2026 Magic Quadrant for Analytics and BI

Leaders 6

Microsoft
Power BI, Fabric · 19th year

Salesforce
Tableau · 14th year

Google
Looker

Qlik
16th year

ThoughtSpot

Amazon Web Services
Amazon Quick · new among the Leaders

Visionaries 6

ServiceNow
Pyramid Analytics · furthest in vision

Oracle
Oracle Analytics · left the Leaders

GoodData.AI

Tellius

Databricks
new in the report

IBM
Cognos Analytics

Niche players 2

Incorta
5th year

Sigma

Also in the report 5

Alibaba Cloud

Domo

SAP

SAS

Strategy

Placement not in public announcements

Gartner, Magic Quadrant for Analytics and Business Intelligence Platforms, A. Ganeshan, C. Long, E. Macari, 29 June 2026. Placements as announced by the vendors or reported by analysts; see the sources slide.

Nineteen vendors, in a line each.

Microsoft Power BI, Fabric	The default in Microsoft 365 companies; Fabric capacity; Copilot	USA
Salesforce Tableau	Visual analytics; agents through Agentforce	USA
Google Looker	LookML semantic layer on Google Cloud; Gemini	USA
Qlik Qlik Cloud	Associative engine; data integration (Talend)	USA
ThoughtSpot	Search- and AI-first analytics	USA
Amazon Amazon Quick	BI built into AWS, priced by user and session	USA
Oracle Oracle Analytics	Analytics for Oracle's databases and applications	USA
ServiceNow Pyramid Analytics	Decision intelligence, now inside ServiceNow	USA
GoodData.AI	Analytics as code, embedded in other products	USA
Tellius	Automated insights with AI	USA
Databricks AI/BI	Dashboards and Genie on the Databricks lakehouse	USA
IBM Cognos Analytics	Enterprise reporting; watsonx	USA
Incorta	Analytics straight on ERP data	USA
Sigma	Spreadsheet-like analysis on cloud warehouses	USA
SAP SAP Analytics Cloud	BI and planning for SAP landscapes	DE
SAS SAS Viya	Statistics heritage; visual analytics	USA
Strategy formerly MicroStrategy	Enterprise semantic layer and reporting	USA
Domo	Cloud BI with data apps	USA
Alibaba Cloud Quick BI	BI on Alibaba Cloud	CN
OpenBI not in the quadrant	Engine and studio in C; any agent; self-hosted	NO

07 · WHO IS EUROPEAN

Seventeen of nineteen are American.



USA 17 · Germany 1: SAP · China 1: Alibaba Cloud

SAP

The one European company

Walldorf, Germany. Its analytics serve SAP landscapes first.

3

European roots, American owners

Qlik: founded in Lund, Sweden. Pyramid: Amsterdam, part of ServiceNow since March 2026. GoodData: Czech founders, San Francisco.

17

American companies

Including all six Leaders. Most sell through their own cloud.

BI

OpenBI is Norwegian: made by Norway Analytics, in Norway.

We host nothing. Your data and your people stay on your own machines, under your own domain.

08 · NEXT STEPS

Start today, for free.

1 Download, open a model

Free at www.openbi.no, for Windows and Mac. Import a Power BI project, or read your Power BI models live.

2 Connect Claude

One button in the Studio. Ask in words; the answers come from your measures.

3 Share without a server

The model file, a PDF, Excel with formulas, or slides from a report.

4 Later: a server

When you want reports in a browser: OpenBI Server on your own machine, through Querex, $1 per user a month.

Updates: the Studio tells you when a new version is out. The release history is at www.openbi.no/releases/.

Questions and feedback: support@norwayanalytics.no. The first rowers' feedback sets the course.

How do you get OpenBI Server?

1

The server is ready

On Windows Server or a Mac, under your own address, such as bi.yourcompany.no. Your sign-in, workspaces with Power BI's four roles, row-level security, scheduled refresh, alerts, Analyze in Excel, and a failover cluster.

2

Through Querex

QUEREX

Querex AS, OpenBI's Enterprise Partner, distributes it and sets it up on your own machines. Querex is setting up the payment: seats, licences and invoices.

3

Today MCP, tomorrow the server

Querex's MCP servers already work in your agents. OpenBI Server comes the same way.

`Power BI` `Quant Finance` `OR-Tools` `LightGBM` `Statistical Analysis` `igraph` `Nordic statistics` `Mistral OCR` `Lean` `Arbor`

$1 per user a month — No capacity fees · servers and cluster nodes included · we host nothing: it runs on your machines

SOURCES AND NOTES

Gartner. Gartner, Magic Quadrant for Analytics and Business Intelligence Platforms, Anirudh Ganeshan, Christopher Long, Edgar Macari, 29 June 2026 (gartner.com/en/documents/8062933). The report is behind Gartner's subscription; the quadrant picture is not reproduced here.

Placements, as announced. Microsoft (19th year as a Leader), Salesforce/Tableau (14th), Qlik (16th, BusinessWire 29 June 2026), ThoughtSpot, Oracle (Visionary, blogs.oracle.com), Pyramid Analytics from ServiceNow (Visionary, furthest in vision), GoodData.AI (Visionary, 2 July 2026), Tellius (Visionary), Incorta (Niche Player, 5th year).

Placements, as reported by analysts. Google (Looker) and AWS as Leaders, Databricks and IBM as Visionaries, Sigma as a Niche Player, Oracle leaving the Leaders, Sisense leaving the report: Concord (concordusa.com), Super Data Blog (superdatablog.substack.com), Joulyan (joulyan.com), Querio (querio.ai). Alibaba Cloud, Domo, SAP, SAS and Strategy are in the report; their placement was not in the public sources we found.

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Power BI prices. Microsoft's list prices since April 2025: Pro $14 and Premium Per User $24 per user a month, billed yearly. Fabric F64: about $5,000 a month reserved for a year, about $8,400 pay-as-you-go. Check Microsoft's pricing page before budgeting.

How big a model. Fabric's maximum memory for one semantic model and one query per capacity, F2 to F8192: Microsoft Learn, What is Power BI Premium (updated September 2026); Prologika (Teo Lachev), Fabric Capacity Limits, 14 August 2024. Throttling stages: Microsoft Learn, Understand capacity throttling and smoothing (August 2026). Fabric prices from Azure's retail price list (prices.azure.com, 29 October 2026): $0.18 per capacity unit an hour in US West 2 and $0.24 in Norway East, pay-as-you-go; $938 and $1,250 per capacity unit a year reserved; overage at three times the rate. A month = 730 hours. OpenBI Server's defaults: one engine a quarter of the machine's memory, all engines half, a query 80 % of its engine's (configurable). Cluster figures: openbi.no/cluster, two Mac minis. Mac Studio M5 Ultra with 512 GB: $22,299 in Apple's US store, orders open since 28 October 2026 (MacRumors, Appleosophy). RDMA over Thunderbolt 5: macOS Tahoe 26.2. Photos of the Mac Studio: Yasu, CC BY-SA 3.0 (creativecommons.org/licenses/by-sa/3.0), and Paul Hudson, CC BY 2.0 (creativecommons.org/licenses/by/2.0), Wikimedia Commons; Mac Studio is a trademark of Apple.

Excel for Mac. Microsoft Learn, Analyze in Excel for Power BI: Mac users use Excel for the web.

OpenBI. Figures from www.openbi.no for OpenBI 0.3.67 (51 visuals, 98 agent tools, 2,549 queries from Power BI's engine run in OAX). Notebook results are OpenBI's example project. Speed: the load test of 24 October 2026, OpenBI 0.1.21 against SQL Server 2025 Analysis Services on the same 16-core server, both fenced to the same 8 threads (openbi.no/performance); the live read of 28 October 2026, OpenBI's own XMLA client against Microsoft's MSOLAP, the same 3.4 million rows from Analysis Services. Language speeds on the "why C" slide: typical public CPU-bound benchmarks, not our measurement. 30 million monthly Power BI users: Microsoft's figure, from its 2025 recap.

Trademarks. Power BI, Fabric and Excel are trademarks of Microsoft; OpenBI is not affiliated with Microsoft. Other names are trademarks of their owners. Pictures: OpenBI Studio with its example projects, rendered with Blender.

THANK YOU

Q&A

Patricio Lobos · www.openbi.no

support@norwayanalytics.no · Ro! Norwegian for “row”: together, in time.

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