Training guide
Odoo 19

Analytic accounts in Odoo

The second ledger that answers "for what?": projects, cost centres and budgets, explained for a finance manager who knows floating Tafsil.

General ledger

What kind of amount is it?

Salaries	200
Repairs and installation	100
Purchases of components	80
Rent	40
Total costs	**420**

Analytic ledger

What was it for?

Tabriz Warehouse project	190
Tehran Office project	50
No project: overheads	180
Total costs	**420**

The same 420 million rial, read two ways. Functional and technical, with a worked example and the Iranian equivalents side by side.

Powered by **Amir Akbari**

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The short version

The chart of accounts says what an amount is. Analytic accounts say what it was for. Odoo keeps the two apart, as two ledgers fed by one posting.

Every accounting system has to answer two questions about the same amount. "200 of salaries" is the first answer. "40 of it for the Tabriz project, 80 for the production department" is the second. Iranian software answers the second question with floating detail accounts تفصیلی شناور, cost centres مرکز هزینه and projects, written on the voucher line as levels four, five and six of the account. Odoo answers it with **analytic accounts**, written beside the line.

In an Iranian system	In Odoo	Analytic?
Floating detail: cost centre مرکز هزینه	An analytic plan "Departments" and its analytic accounts	**Yes**
Floating detail: project, contract پروژه، قرارداد	An analytic plan "Projects" and its analytic accounts	**Yes**
Floating detail: persons اشخاص	The partner on the journal item	No
Floating detail: banks, cash boxes	One account and one journal each	No
Allocation of one amount تسهیم	The analytic distribution, in percentages	**Yes**
"This Moein requires a cost centre"	Applicability of a plan: optional, mandatory, unavailable	**Yes**
Detail turnover and detail balance گردش و تراز تفصیلی	Analytic items and analytic reports	**Yes**
Budget per cost centre or project	Analytic budget	**Yes**

> **The one difference to keep in mind**
>
> In an Iranian system the detail code is *part of the account* on the voucher line, so the detail ledger always agrees with the general ledger. In Odoo the analytic side is a *second ledger*: it agrees with the general ledger exactly as far as you make it compulsory. Sections 4, 5 and 7 show how to make it agree, and how to prove it each month.

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Scope: Odoo 19, Community and Enterprise; where an edition matters the text says so. Written for a finance manager who knows accounting and Iranian accounting software well and is new to Odoo. Iranian packages differ from each other, so the Iranian side is described as the common pattern, not as any one product. The examples continue with the invented company of this series, Sahand Industrial Co.; all names and figures are made up, and amounts are in **million rial**. Colours: account codes as before 8 1 0 5, plan Projects with its accounts Tabriz Warehouse, plan Departments with its accounts Installation.

1 The problem analytic accounting solves

One list of accounts cannot answer two questions. Every accounting system has had to find a way around that.

The chart of accounts is built by *nature*: salaries, rent, purchases, sales. That is what the law, the tax return and the financial statements ask for. Management asks something else: what did the Tabriz project cost, is the installation department within budget, which contract made money. Those are questions of *purpose*, and the same salary account is spread over all of them.

Three ways to answer the second question

	Approach	How it works	What goes wrong, or right
1	**More accounts**	"Salaries, Tabriz project", "Salaries, Tehran project", "Rent, sales department"...	The chart multiplies, and every new project means new accounts. Splitting one bill over two projects needs two lines.
2	**Detail levels on the account** the Iranian way	The voucher line carries the Moein plus one or more floating detail codes: a cost centre, a project, a person.	The chart stays small and the detail ledger ties to the general ledger. The number of levels is fixed by the software, and one line holds one combination.
3	**A second ledger beside the first** Odoo's way	The journal item keeps its account. A separate record says how the amount is shared over projects and departments.	Any number of dimensions, split by percentage, changeable without touching the books. It ties to the general ledger only where you require it.

Why approach 1 fails: the arithmetic

Take a mid-sized contractor with 40 expense accounts, 12 running projects and 6 departments.

Everything in the chart of accounts

40 × 12 × 6

accounts projects departments

2,880 accounts

and 240 more for every new project

Nature and purpose kept apart

40 + 12 + 6

accounts projects departments

58 records

and 1 more for every new project

Approaches 2 and 3 both reach the right-hand box. They differ in where the second and third lists are written, and that is the subject of sections 3 and 4.

What a finance manager needs from the answer

- One amount shared over several projects or departments.
- More than one dimension at once: project *and* department.
- Rules that stop a cost being recorded without its cost centre.
- Defaults, so that users do not type the same thing all day.
- A profit and loss per project, a cost statement per department, and the two crossed.
- Budget against actual, including what is ordered and not yet invoiced.
- A proof that the management figures agree with the books.

Odoo's analytic accounting covers each of these points. The rest of this guide takes them one by one.

2 The four building blocks

Analytic accounting in Odoo is made of four things. Two are set up once, one is filled in on each line, and one is produced by Odoo.

Analytic plan
a dimension

One way of cutting the figures: Projects, Departments. A company has as many plans as it has questions of this kind.

`account.analytic.plan`

Analytic account
a value in a dimension

One project, one department. It belongs to exactly one plan. Despite the name it is not part of double entry: it collects amounts.

`account.analytic.account`

Analytic distribution
the instruction on a line

Written on a journal item: "70% to Tabriz, 30% to Tehran Office, all of it to Installation".

`analytic_distribution`

Analytic item
the result

When the entry is posted, Odoo writes one analytic item for each share: one signed amount, with the project and the department it belongs to.

`account.analytic.line`

One posting, two ledgers

A subcontractor bills Sahand 100 for installation work, 70% on one project and 30% on another. Posting the bill writes to both ledgers at once:

General ledger: three journal items

Account	Debit	Credit
8105 Repairs and Installation	100	
1601 Input VAT	10	
3101 Accounts Payable		110

Analytic ledger: two analytic items, from the first line only

Project	Department	Amount
Tabriz Warehouse	Installation	−70
Tehran Office	Installation	−30

	General ledger	Analytic ledger
Unit	Journal item	Analytic item
Amount	Debit and credit	One signed figure: income positive, cost negative
Must it balance?	Yes, debit equals credit in every entry	No. It is a list of amounts, not double entry
Structure	Chart of accounts: Group, Kol, Moein	Plans and analytic accounts
Who requires it	The law, the tax office, the auditors	Management
Year end	Income and expense start again from zero	Nothing closes. A project keeps its total across years
After posting	Changed only by reversing	The distribution can be corrected; the books are not touched

> **A word on the name.** "Analytic account" suggests something like a ledger account. It is closer to a label with a running total. If "account" confuses your team, read it as "analytic object": a project, a cost centre, a contract.

3 The Iranian equivalent: floating Tafsil

A finance manager who has worked with floating detail accounts already knows most of analytic accounting. The vocabulary changes, and one structural choice.

The Iranian pattern in four sentences

The account code has fixed upper levels: Group, Kol and Moein. Below the Moein come detail levels, usually numbered four, five and six. A floating detail تفصیلی شناور is defined once, in a group such as persons, cost centres, projects or banks, and can then be used under any Moein that accepts its group. A voucher line is therefore a Moein plus up to three detail codes, and each detail has its own debit, credit and balance.

The same bill, written both ways

Iranian system **Four voucher lines**

Moein	Detail 4	Detail 5	Dr	Cr
Repairs and Installation	Installation	Tabriz Warehouse	70	
Repairs and Installation	Installation	Tehran Office	30	
Input VAT			10	
Accounts Payable	Pars Electric Co.			110

The expense is split into two lines because one line carries one combination of details. The vendor is a detail of the same kind as the cost centre.

Odoo **Three journal items**

Account	Partner	Analytic	Dr	Cr
Repairs and Installation	Pars Electric	70% / 30%	100	
Input VAT	Pars Electric		10	
Accounts Payable	Pars Electric			110

The expense stays one line of 100, as on the vendor's invoice. The split is a percentage table beside it. The vendor is the partner, a field of its own.

Term by term

Iranian term	Odoo	Remark
Detail level سطح تفصیلی	Analytic plan	Each level you use for cost centres or projects becomes a plan.
Detail group گروه تفصیلی	Analytic plan, or sub-plan	"Cost centres" and "Projects" are two plans.
Floating detail تفصیلی شناور	Analytic account	Only for details that describe purpose. See the next table.
Cost centre tree درخت مراکز هزینه	Sub-plans under one plan	Factory and head office as sub-plans of Departments.
Moein accepts a detail group	Applicability of the plan	By account prefix, document type or product category.
Allocation تسهیم	Analytic distribution	Percentages on the line, not extra voucher lines.
Detail turnover گردش تفصیلی	Analytic items	One row per share of a journal item.
Detail trial balance تراز تفصیلی	Analytic report; pivot of analytic items	A result per project or department, not debit and credit columns.
Budget per cost centre بودجه	Analytic budget	With budgeted, committed and achieved amounts.

Not every floating detail becomes an analytic account

This is the point most often missed when a company moves to Odoo. In an Iranian system one mechanism, the floating detail, serves many purposes. Odoo has a different tool for each.

Floating detail group in the old system	Becomes in Odoo	Why
Persons: customers, vendors اشخاص	Partners	Open items, due dates, statements and reminders all work per partner.
Employees کارکنان	Partners, linked to the employee record	Advances and loans are followed per partner.
Banks and cash boxes	One account and one journal each	Each must be reconciled against its own statement or count.
Cost centres مراکز هزینه	**Analytic plan**	A question of purpose.
Projects, contracts پروژه‌ها، قراردادها	**Analytic plan**	A question of purpose, and it links to the Project app.
Import orders ثبت سفارش	**Analytic plan**	Collects every cost of one shipment.
Fixed assets	Asset records	Depreciation is computed per asset.
Products, warehouses	Products and locations in Inventory	Quantities and valuation live there.
Cheques	Payments in a bank journal	See the journals guide of this series.

4 Where the two models differ

Twelve differences, each with what it means in daily work. None is a defect of either model; they are consequences of one choice: inside the account, or beside it.

Topic	Iranian system Floating Tafsil	Odoo Analytic	What it means for you
Where it lives	In the voucher line, as part of the account.	In separate analytic items, linked to the journal item.	Two ledgers to read, and one extra check to run each month.
Agreement with the books	Automatic. A detail balance is a slice of its Moein.	Only where the plan is mandatory and filled to 100%.	Make plans mandatory on the accounts that matter.
Form of the amount	Debit, credit and balance per detail.	One signed amount per analytic item.	Reports show results, not debit and credit columns.
Balance sheet accounts	Details everywhere: receivables, banks, assets.	Built for income and costs. Receivables are followed per partner.	Do not look for a "balance sheet per cost centre".
Splitting one amount	One voucher line per combination.	One line, with a table of percentages.	Documents stay as short as the paper they copy.
Number of dimensions	Fixed by the software, typically three levels.	As many plans as you create.	Room for a fourth question later, without redesign.
Hierarchy	Levels, sometimes in a fixed order.	Plans are independent; sub-plans give a tree inside one plan.	Project and department never compete for "level 5".
Making it compulsory	Set on the Moein: which groups it accepts.	Set on the plan: by account prefix, document type, product category.	One rule covers a whole range of accounts.
Defaults	Mostly typed by the user.	Proposed by rules on partner, product or account.	Most lines arrive already filled.
Correcting a mistake	Edit or reverse the voucher.	Change the distribution on the posted item.	Management figures can be repaired after the period is reported.
Beyond accounting	The detail exists on vouchers only.	The same analytic account is on quotations, purchase orders, timesheets and expenses.	Costs are visible when they are committed, before any invoice.
Year end	Detail balances close and reopen with the books.	Analytic items never close.	A three-year project shows its full total at any time.

Reading the table as a finance manager

What you gain: freedom in dimensions, percentage splits, defaults, and cost visibility before invoicing. What you give up: the automatic agreement between detail and general ledger. Odoo hands you the means to get that agreement back (mandatory plans) and this guide gives you the check that proves it (section 5). Decide at the start which accounts must always carry which plan, and the difference disappears in practice.

5 Worked example: October at Sahand Industrial

Six documents, thirteen analytic items, three management reports, and the check that ties them to the general ledger.

The set-up

Sahand makes electrical panels and installs them on customers' sites. Management wants a result per project and a cost per department, so there are two plans:

Plan	Analytic accounts	Rule
Projects	Tabriz Warehouse · Tehran Office	Mandatory on income accounts (codes starting with 6). Optional elsewhere.
Departments	Production · Installation · Sales · Administration	Mandatory on cost accounts (codes starting with 7 and 8). Optional elsewhere.

The six documents

Only income and cost lines carry a distribution. VAT, receivable and payable lines carry none: they are not income or cost, and the partner already says whose they are.

BILL BILL/2026/10/00002 4 Oct 2026 · Pars Electric Co. **Installation work by a subcontractor, on two projects** — Vendor bill

Account	Analytic distribution	Debit	Credit
8105 Repairs and Installation	Tabriz Warehouse · Installation 70%; Tehran Office · Installation 30%	100	
1601 Input VAT		10	
3101 Accounts Payable			110
Total		**110**	**110**

INV INV/2026/00042 10 Oct 2026 · Alborz Trading Co. **Progress invoice for the Tabriz Warehouse project** — Customer invoice

Account	Analytic distribution	Debit	Credit
1301 Accounts Receivable		385	
6101 Sales	Tabriz Warehouse 100%		350
3301 Output VAT			35
Total		**385**	**385**

INV INV/2026/00043 15 Oct 2026 · Damavand Holding **Progress invoice for the Tehran Office project** — Customer invoice

Account	Analytic distribution	Debit	Credit
1301 Accounts Receivable		132	
6101 Sales	Tehran Office 100%		120
3301 Output VAT			12
Total		**132**	**132**

BILL **BILL/2026/10/00003** 20 Oct 2026 · Pars Electric Co. **Components bought for the Tabriz project** — Vendor bill

Account	Analytic distribution	Debit	Credit
7105 Purchases of Components	Tabriz Warehouse, Production 100%	80	
1601 Input VAT		8	
3101 Accounts Payable			88
Total		**88**	**88**

BILL **BILL/2026/10/00004** 25 Oct 2026 · Arman Property **Rent of the building, shared by three departments** — Vendor bill

Account	Analytic distribution	Debit	Credit
8201 Rent	Production 50%, Sales 20%, Administration 30%	40	
3101 Accounts Payable			40
Total		**40**	**40**

MISC **MISC/2026/10/00001** 30 Oct 2026 **Salaries of the month** — Journal entry

Account	Analytic distribution	Debit	Credit
8101 Salaries	Production 40% Tabriz Warehouse, Installation 20% Tehran Office, Installation 10%, Sales 15% Administration 15%	200	
3201 Salaries Payable			200
Total		**200**	**200**

Three things to notice. The subcontractor's bill is one line shared over two projects. The rent has no project at all, only departments, and that is allowed because Projects is optional on cost accounts. The salary line carries five shares, two of which name both a project and a department.

What Odoo wrote in the analytic ledger

Each share of each line became one analytic item. Costs are negative, income is positive.

#	Date	From journal item	General account	Projects	Departments	Amount
1	4 Oct	BILL/2026/10/00002	8105 Repairs and Installation	Tabriz Warehouse	Installation	−70
2	4 Oct	BILL/2026/10/00002	8105 Repairs and Installation	Tehran Office	Installation	−30
3	10 Oct	INV/2026/00042	6101 Sales	Tabriz Warehouse		350
4	15 Oct	INV/2026/00043	6101 Sales	Tehran Office		120
5	20 Oct	BILL/2026/10/00003	7105 Purchases of Components	Tabriz Warehouse	Production	−80
6	25 Oct	BILL/2026/10/00004	8201 Rent		Production	−20
7	25 Oct	BILL/2026/10/00004	8201 Rent		Sales	−8
8	25 Oct	BILL/2026/10/00004	8201 Rent		Administration	−12
9	30 Oct	MISC/2026/10/00001	8101 Salaries		Production	−80
10	30 Oct	MISC/2026/10/00001	8101 Salaries	Tabriz Warehouse	Installation	−40
11	30 Oct	MISC/2026/10/00001	8101 Salaries	Tehran Office	Installation	−20
12	30 Oct	MISC/2026/10/00001	8101 Salaries		Sales	−30
13	30 Oct	MISC/2026/10/00001	8101 Salaries		Administration	−30
	Total of all analytic items					**50**

The total of 50 is October's profit: income of 470 less costs of 420. The analytic ledger reaches the same figure as the profit and loss, because every income and cost line was distributed in full.

Report 1: result per project

The analytic items, grouped by project and by general account. This is the report the detail trial balance of a project gives in an Iranian system, in the form of a small profit and loss.

Line	Tabriz Warehouse	Tehran Office	No project	Total
6101 Sales	350	120	·	470
8105 Repairs and Installation	−70	−30	·	−100
7105 Purchases of Components	−80	·	·	−80
8101 Salaries	−40	−20	−140	−200
8201 Rent	·	·	−40	−40
Total costs	**−190**	**−50**	**−180**	**−420**
Result	**160**	**70**	**−180**	**50**

Tabriz earned 160 and Tehran Office 70. The 180 without a project are the overheads: rent, and the salaries of production, sales and administration. Whether to push them onto the projects is a management decision, discussed in section 11.

Report 2: cost per department

The same items, this time grouped by the second plan. Income is left out because departments are tracked for cost only.

Department	Repairs and Installation	Purchases of Components	Salaries	Rent	Total cost
Production	·	80	80	20	**180**
Installation	100	·	60	·	**160**
Sales	·	·	30	8	**38**
Administration	·	·	30	12	**42**
Total, equal to the general ledger	**100**	**80**	**200**	**40**	**420**

Report 3: the two plans crossed

Because one analytic item can name a project *and* a department, the two can be crossed without any extra entry. In a system with fixed levels this is the report that needs level 4 and level 5 filled on the same line.

Cost of	Production	Installation	Sales	Administration	Total
Tabriz Warehouse	80	110	·	·	**190**
Tehran Office	·	50	·	·	**50**
No project	100	·	38	42	**180**
Total	**180**	**160**	**38**	**42**	**420**

The monthly check: does analytic agree with the books?

For each mandatory rule, compare the general ledger total of the accounts it covers with the analytic total of its plan. A difference means a line was posted without a full distribution, which a mandatory plan prevents.

Check	General ledger	Analytic items	Difference
Costs: accounts starting with 7 and 8, against plan Departments	420	420	**0**
Income: accounts starting with 6, against plan Projects	470	470	**0**

> **This check is the answer to "can I trust the analytic figures?"**
> In an Iranian system nobody runs it, because the detail is inside the account. In Odoo it takes two totals and one subtraction, and it turns the analytic ledger from a helpful extra into a figure you can sign.

6 Setting it up

Six steps, in this order. The first three take an afternoon. The fourth and fifth are where the design decisions of section 10 are applied.

1. **Switch it on.** Accounting › Configuration › Settings, section Analytics, tick Analytic Accounting. The Analytic Distribution column and the analytic menus appear.
2. **Create the plans.** Accounting › Configuration › Analytic Plans. One plan per question management asks: Projects, Departments. Give each a colour; it is the colour of its tags on every document. A plan can have sub-plans, which is how a tree of cost centres is built.
3. **Create the analytic accounts.** Accounting › Configuration › Analytic Accounts. For each: a name, a short reference (P-01, D-20), its plan, and for a project its customer. Every plan needs at least one account.
4. **Decide where each plan is compulsory.** On the plan: a Default Applicability, and lines in the Applicability tab that override it for a kind of document, a range of accounts or a product category (section 7).
5. **Create distribution models.** Accounting › Configuration › Analytic Distribution Models. Rules that fill the distribution by themselves: "bills from this landlord: Production 50%, Sales 20%, Administration 30%" (section 7).
6. **Add budgets, if wanted.** Accounting › Accounting › Analytic Budgets, per plan and period (section 8).

What the user sees on a line



A sketch of the window that opens from the Analytic Distribution column of a bill line: one column per plan, one row per share.

Clicking the Analytic Distribution cell of a line opens a small table. Each plan is a column, each row is one share with its percentage. On the line itself the result shows as coloured tags.

The same column exists on quotation lines, purchase order lines, expenses and manual journal entries. A distribution chosen on a purchase order travels to the vendor bill made from it, so the accountant rarely types it.

Where a distribution can come from

Source	How it reaches the journal item
Typed on the invoice or bill line	Directly.
A sales or purchase order line	Copied to the invoice or bill created from the order.
A distribution model	Proposed as soon as the partner, product or account of the line matches a rule.
A project	The project has its analytic account; documents created for the project inherit it.
A timesheet	Not a journal item at all: hours logged on a project are written straight into the analytic ledger, valued at the employee's hourly cost.
An expense claim, an asset	Carried from the expense or the asset onto the entries they generate.

7 Rules, defaults and corrections

Three mechanisms keep the analytic ledger complete and cheap to maintain: applicability forces it, distribution models pre-fill it, and posted items can be corrected.

Applicability: optional, mandatory, unavailable

Each plan has a default, and any number of more specific lines. For a given journal item Odoo takes the most specific line that matches, and falls back to the default.

Plan	Domain	Financial accounts prefix	Product category	Applicability
Projects	default			Optional
Projects	Invoice	6		**Mandatory**
Departments	default			Optional
Departments	Vendor Bill	7, 8		**Mandatory**
Departments	Miscellaneous	7, 8		**Mandatory**

With these two defaults and three lines Sahand gets exactly the behaviour of section 5. A user who tries to confirm a rent bill without a department is stopped with the message "One or more lines require a 100% analytic distribution." The Iranian equivalent is the setting on a Moein that says which detail groups it requires; here one line covers every account that starts with 7 or 8.

> **Mandatory means 100%.** For a mandatory plan the shares of a line must add up to exactly 100%. For an optional plan they may add up to less: 60% to a project and the rest to none is accepted. Unavailable hides the plan on the lines it covers, which keeps users from tagging what should not be tagged. Which domains exist depends on the apps installed; invoices, vendor bills and miscellaneous entries are always there.

Distribution models: defaults by rule

A model says: when a line matches these conditions, propose this distribution. All the conditions of a model must hold. Models for different plans combine, so one rule can supply the project and another the department.

When the line has	Propose	Effect at Sahand
Partner: Arman Property	Production 50%, Sales 20%, Administration 30%	The rent bill is distributed by itself, every month.
Product category: Installation services	Installation 100%	Any installation cost lands in the right department.
Accounts prefix: 8106 (fuel)	Installation 100%	Fuel is always an installation cost.
Partner category: Tabriz site suppliers	Tabriz Warehouse 100%	Local suppliers of the Tabriz site default to that project.

A proposal is only a proposal: the user can change it on the line. Where two models for the same plan match, the one higher in the list wins, so put the specific rules above the general ones.

Correcting a distribution after posting

A bill was posted to the wrong project. In the general ledger nothing is wrong: the expense, the VAT and the payable are correct. Only the purpose is wrong, so only the analytic side needs repair.

Iranian system **Correct the voucher**

The project is part of the account on the voucher line. The line has to be edited, or the voucher reversed and re-entered, and in a closed period that means a correcting voucher in the current one.

Odoo **Correct the distribution**

Open Accounting › Review › Journal Items, select the lines, change the Analytic Distribution. Odoo deletes the old analytic items of those lines and writes new ones. The journal entry, its number and its amounts are untouched.

This freedom needs a house rule. Decide who may change distributions, and until when, so that a project report presented to the board in November still shows the same October in December.

8 Reports and budgets

The analytic ledger is read in four ways: as a list, as a pivot, as a filter on the financial statements, and against a budget.

Where	The question it answers	Iranian counterpart
Analytic items, as a list	Which amounts make up the cost of this project? Every row leads back to its journal item and document.	Detail turnover گردش تفصیلی
Analytic items, as a pivot	Any crossing: project by account, department by month, project by department. The three reports of section 5 are pivots.	Detail trial balance, crossed levels
The analytic account itself	The running total of one project or department, with a button to its items.	Balance of one detail
Financial reports with an analytic filter Enterprise	The profit and loss of one project or one plan, in the statutory layout, with plans or accounts as columns.	Profit and loss per cost centre
Budget report Enterprise	Budget against actual and committed, per analytic account.	Budget control کنترل بودجه
Project profitability	For companies using the Project app: revenues, costs and timesheets of a project on one screen.	

Analytic budgets

A budget has a name, a period, a type and lines. Each line names an analytic account, in the column of its plan, and a budgeted amount. Once the budget is opened, Odoo fills the other columns by itself. For the Tabriz project in October, with a cost budget of 200:

Analytic account	Budgeted	Achieved	Committed	Reading
Tabriz Warehouse	200	190	205	Posted costs are within budget. A confirmed purchase order of 15, not yet billed, will take the project 5 over.

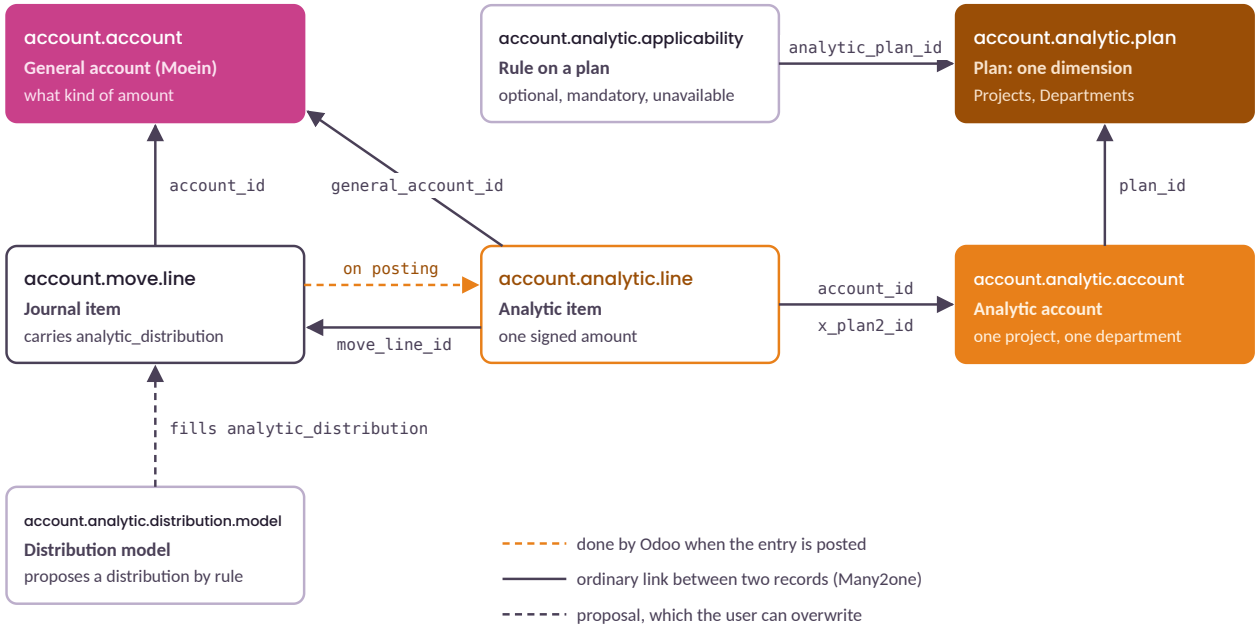
Column	Meaning
Budgeted	The amount you entered.
Achieved	The total of the analytic items from posted journal entries.
Committed	Achieved, plus confirmed purchase orders that have not been billed yet.
Theoretical	What should have been spent by today if the budget were used evenly over the period.

The Committed column is the practical gain over a voucher-based budget. A cost appears against the budget on the day the purchase order is confirmed, which is when it can still be stopped. A budget can be revised: Odoo keeps the original and creates a new version beside it.

> **Editions.** Plans, analytic accounts, distributions, applicability, distribution models, analytic items and their pivot are in both editions. Budgets and the analytic filter on financial reports belong to Enterprise. In Community the pivot of analytic items, exported to a spreadsheet when needed, does the reporting.

9 Under the hood: the technical side

For the consultant and the developer: which records exist, what is stored on the journal item, and what Odoo does at the moment of posting.



The general ledger is on the left, the analytic ledger in the middle and on the right. The only bridge is the journal item: it stores the distribution, and each analytic item points back to it.

The models

Model	Main fields	Role
`account.analytic.plan`	`name`, `parent_id`, `default_applicability`, `applicability_ids`, `color`	A dimension. A plan without a parent is a root plan.
`account.analytic.applicability`	`business_domain`, `account_prefix`, `product_categ_id`, `applicability`	One rule of a plan. The best-matching rule wins; otherwise the plan's default.
`account.analytic.account`	`name`, `code`, `plan_id`, `partner_id`, `company_id`	One project, one department.
`analytic.mixin`	`analytic_distribution` (JSON), `analytic_precision`	Gives the distribution field to journal items, order lines and other documents.
`account.analytic.line`	`date`, `amount`, `unit_amount`, `account_id`, `x_planN_id`, `general_account_id`, `move_line_id`, `partner_id`	One analytic item.
`account.analytic.distribution.model`	`partner_id`, `partner_category_id`, `account_prefix`, `product_id`, `product_categ_id`, `sequence`, `analytic_distribution`	A default rule.

What is stored on the journal item

The distribution is one JSON field on `account.move.line`. Each key is one share: the ids of the analytic accounts of that share, joined by commas, one per plan. Each value is its percentage. For the subcontractor's bill of section 5, where Tabriz Warehouse has id 7, Tehran Office 8 and Installation 22:

```
# account.move.line  ·  account 8105  ·  debit 100
analytic_distribution = {"7,22": 70.0, "8,22": 30.0}
```

Storing the split as data on the line, not as extra lines, is the technical form of the difference described in section 3.

What happens on posting

1. **Validation.** For every line, Odoo finds the plans that are mandatory for it and checks that their shares add up to 100%. If not, the entry is refused.
2. **One analytic item per key.** For each key of the JSON an `account.analytic.line` is created with `amount = −balance × percentage ÷ 100`. A debit of 100 at 70% gives −70; a credit gives a positive amount.
3. **One column per plan.** The analytic account of each plan goes into that plan's own column on the item: `account_id` for the project plan, `x_plan2_id` for the plan with id 2, and so on. Odoo adds a column to the table whenever a root plan is created.
4. **Links.** The item keeps `move_line_id` (where it came from), `general_account_id` (the Moein), the partner, the product and the quantity.
5. **Later changes.** If the distribution of a posted line is edited, the line's analytic items are deleted and created again from the new JSON.

Reading it from the database

```
-- report 3 of section 5: cost per project and department, October 2026
SELECT p.code AS project, d.code AS department, -SUM(l.amount) AS cost
  FROM account_analytic_line l
  LEFT JOIN account_analytic_account p ON p.id = l.account_id    -- column of the project plan
  JOIN account_analytic_account d      ON d.id = l.x_plan2_id    -- column of the Departments plan
 WHERE l.date BETWEEN '2026-10-01' AND '2026-10-31'
   AND l.amount < 0
 GROUP BY p.code, d.code;
```

Notes for developers. Which plan uses the plain `account_id` column is set by the system parameter `analytic.project_plan`. Timesheets, expenses and manufacturing write to the same `account.analytic.line` table, with their own `category`. The JSON field has a database index on its keys, so searching journal items by analytic account stays fast. Sub-plans do not get a column of their own: they group the accounts of their root plan.

10 Design decisions and migration

The software allows almost anything. The design work is deciding which tool carries which piece of information, and keeping the number of plans small.

Which tool for which information

You want to know	Use	Not
What kind of cost or income it is	The account (Moein)	An analytic account called "Rent"
Who owes us, whom we owe	The partner	An analytic account per customer
Which bank account the money is in	A journal with its account	An analytic account per bank
Which project or contract it was for	**Analytic plan** Projects	A Moein per project
Which department bears the cost	**Analytic plan** Departments	A journal per department
Which shipment an import cost belongs to	**Analytic plan** Import orders	A product per shipment
Which salesperson or team sold it	Salesperson and sales team on the invoice	A plan, unless costs are also tracked per team
Which product line earns the margin	Product category; a plan if costs without a product must be included	
Results of a legally separate unit	A company, or a branch	A plan: a plan gives no balance sheet

How many plans?

The rule

One plan per independent question. Two things belong in different plans when a single amount can have both at once: a cost has a project *and* a department. They belong in the same plan when they exclude each other: an amount is for the Tabriz project *or* the Tehran one.

The limit

Every mandatory plan is one more thing each user fills on each line. Two plans are comfortable, three are workable with good distribution models, and beyond that the data gets worse faster than the reports get better.

Moving from an Iranian system

1. **List the detail groups** of the old system and the Moeins that use each one.
2. **Sort them with the table in section 3.** Persons to partners, banks to journals, cost centres and projects to analytic plans. Expect most detail records to be persons, and only a small share to become analytic accounts.
3. **Turn each remaining group into a plan,** and each cost-centre tree into sub-plans. Keep the old codes as the Reference of the analytic account, so that users recognise them.
4. **Translate the "requires detail" settings** of the Moeins into applicability lines by account prefix.
5. **Decide the opening position.** Cost and income need no opening balance. For projects that run across the go-live date, load the costs and income to date as analytic items dated before go-live, so that project totals are complete.
6. **Agree the monthly check** of section 5 with the accountants before the first month end.

11 Questions a finance manager asks

The questions that come up in the first meeting, with straight answers.

Question	Answer
Will the analytic total agree with my general ledger?	Yes, on every range of accounts where a plan is mandatory, because Odoo refuses a line that is not distributed in full. Outside those ranges it will not, by design. Run the check of section 5 monthly.
Can I print a trial balance per cost centre?	Not with debit and credit columns. You get a result per analytic account by general account, which carries the same information for income and costs. In Enterprise the profit and loss can be filtered by plan or analytic account.
Can one amount go to two projects and one department at the same time?	Yes. That is one line with two shares, each naming a project and the department.
What about receivables and payables per project?	The receivable line belongs to the partner. To follow what a project's customer still owes, use the open invoices of the project. Do not make customers analytic accounts.
How do I allocate overheads at month end تسهیم?	Either distribute at the source with percentages, as the rent in section 5, or collect on a department and re-allocate. A re-allocation is a miscellaneous entry that debits and credits the same expense account with different distributions: nothing changes in the general ledger, and the cost moves in the analytic one. Standard Odoo has no multi-step allocation run.
Do analytic accounts close at year end?	No. A project keeps accumulating until it is archived. Reports are limited by date when a single year is wanted.

Question	Answer
Can users change figures after I have reported them?	They can change distributions on posted items, not amounts. Limit who has the right, and lock your reporting routine around it.
Does it need the Enterprise edition?	The mechanism does not. Budgets and analytic filters on the financial reports do.
Is it only for accounting?	No, and this is the main gain. The same project is on the quotation, the purchase order, the timesheet and the expense claim, so costs are seen when they are committed.

12 Common mistakes

Most of them come from carrying the floating-detail habit over unchanged.

Mistake	What you see	Remedy
Every old floating detail imported as an analytic account.	Thousands of analytic accounts, most of them customers and vendors.	Persons are partners. Only purpose goes to analytic.
A plan left optional on cost accounts.	Project reports that do not add up to the profit and loss; nobody trusts them.	Mandatory by account prefix, and the monthly check.
An analytic account per expense type: "Rent", "Fuel".	The analytic ledger repeats the chart of accounts.	Nature is the account. Analytic is purpose.
Projects and departments in one plan.	A cost can have a project or a department, never both; the crossed report is impossible.	Two plans.
Too many mandatory plans.	Users pick anything to get past the screen.	Two or three, with distribution models doing the typing.
Distribution put on VAT, receivable or payable lines.	Analytic totals larger than income and costs.	Distribute income and cost lines only.
Distributions changed after management reports were issued.	October looks different in December.	A rule on who may change, and until when.
No distribution models.	Complaints about typing; errors on recurring bills.	A model for each recurring vendor and product category.
Using a plan to separate legal entities.	A profit and loss per unit, and no balance sheet.	Companies or branches.

13 Cheat sheet, glossary and self-check

Where things are, what they are called in Persian, and six questions.

Where is it?

To do this	Go to	Model
Switch analytic accounting on	Accounting › Configuration › Settings › Analytics	
Create a plan, set applicability	Accounting › Configuration › Analytic Plans	`account.analytic.plan`
Create a project or department	Accounting › Configuration › Analytic Accounts	`account.analytic.account`
Create a default rule	Accounting › Configuration › Analytic Distribution Models	`account.analytic.distribution.model`
Distribute a line	The Analytic Distribution column of the line	`analytic_distribution`
Correct posted lines	Accounting › Review › Journal Items	`account.move.line`
Read the analytic ledger	Analytic Items, as list or pivot	`account.analytic.line`
Budget	Accounting › Accounting › Analytic Budgets	
Budget against actual	Accounting › Reporting › Budget Report	

Persian, English, Odoo

Persian	In Odoo
حسابداری تحلیلی	Analytic accounting
تفصیلی شناور	Analytic account, for purpose; partner, for persons
سطح تفصیلی، گروه تفصیلی	Analytic plan
مرکز هزینه	Analytic account in a Departments plan
پروژه، قرارداد	Analytic account in a Projects plan
تسهیم	Analytic distribution

Persian	In Odoo
گردش تفصیلی	Analytic items
تراز تفصیلی	Pivot of analytic items; analytic report
الزام تفصیلی	Applicability: Mandatory
بودجه، کنترل بودجه	Analytic budget, budget report
بهای تمام‌شده پروژه	Costs of the project's analytic account
سربار	Costs with a department and no project

Check yourself

	Question	Answer
1	A bill of 100 is split 70/30 over two projects. How many journal items and how many analytic items does the expense produce?	One journal item and two analytic items, of −70 and −30.
2	The old system has 3,000 floating details, 2,700 of them persons. How many analytic accounts do you expect?	At most 300. The persons become partners.
3	The project report shows total costs of 400; the profit and loss shows 420. Where do you look?	Cost lines without a full distribution. The plan was optional on some cost account; make it mandatory.
4	A posted bill went to the wrong project. Do you reverse it?	No. Change the distribution on its journal item; the entry is untouched.
5	Should "project" and "department" be one plan or two?	Two. One amount can have both, and you want to cross them.
6	A purchase order of 15 for a project is confirmed, not yet billed. Where does it show?	In the Committed column of the project's budget, not yet in Achieved.

The whole guide in two lines. Analytic accounting is Odoo's floating Tafsil for purpose: projects and cost centres, written beside the journal item as percentages, in as many dimensions as you need. It agrees with the general ledger wherever you make it mandatory, and one monthly check proves it.