

Profitbase AS

Profitbase Planner

Configuration and Operation Sales Forecast module

Profitbase

12.10.2020

Version 1.0

Content

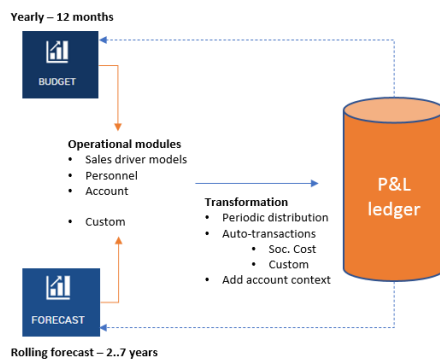
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| | | | |
| | | | |

1 Abstract, intended audience and pre-requisites

The Profitbase Planner Configuration and Operation series consist of several documents dealing with the configuration and operation of individual Planner modules and functions.

Planner modules are operational input modules that contributors to the Budget and/or Forecast processes use to prepare the Profit & Loss (P&L) of their respective areas of responsibility. Different modules will typically cover parts of the P&L such as sales, personnel, cost, etc.



The modules are typically accessed from the Budget and Forecast summary workbooks and the input provided by the contributors are transformed into P&L transactions and fed back to the summary workbooks resulting in a P&L work-in-progress report summary.

The intended audience of this document is implementation partners configuring the solution initially and solution administrators responsible for operating it thereafter.

This document assumes that a Profitbase Planner solution has been deployed and that access to this solution is given to the reader.

The Sales forecast module is included as a standard Profitbase Planner module and is specific to the Forecast process.

2 Common functionality

Changes made to input sheets are not saved automatically. To save changes, click the “Save” button. The “Save” button will remain disabled until a change has been made.

To undo all unsaved changes, click the “Refresh” button.

To undo the last of a series of unsaved changes, click the Ctrl and Z keys simultaneously.

To insert new rows to an input sheet, right-click in the sheet and select one of the available options:

- Insert row
- Insert row below
- Insert copy of row

To delete a row from an input sheet, right-click the row in question and select:

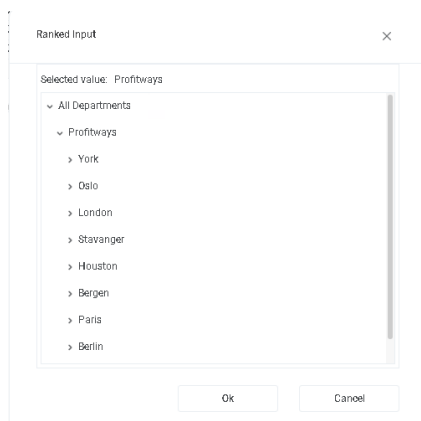
- Delete row

Please note, that although the row is no longer visible in the input sheet, the change must be committed using the “Save” button or undone using the “Refresh” button.

In input sheets, editable fields are distinguished from non-editable fields by fill color, editable fields have by default a white fill color.

In setting tables, a so-called ranked input concept is often used for the dimensional context. Ranked input allows for a high-level selection of dimensional nodes and gives the opportunity to alter the rank or specificity between rows.

A ranked input cell can be set through the ranked input selector by clicking the cell value (cell will display 3 dots if no value is set):



The ranked input selector will display the dimensional hierarchy and allows for the selection of a high-level dimensional node. The selection of a high-level node implies that the setting applies to all sub-ordinate nodes.

Select node and click “OK”.

Click “Cancel” to leave the selector without selecting.

In a table containing multiple rows, the rank or specificity of individual rows can be altered by moving the row up (decrease specificity) or down (increase specificity) by right-click the row in question and selecting:

- Move up
- Move down

The less specific the setting is, row should be high up in the table. The more specific the setting is, the further down in the table the row should reside.

3 Principle of operation

Diver based models

The sales forecast module uses a driver-based principle.

Multiple models consisting of measures may be defined. Common to all models is the definition of one of the measures as the driving measure for that model.

| 1 | Total | Product | Market | Measure | Fct | Act.12M | Act.YTD 2020 | For.YTD 2020 | 2020 | Jan 20 | Feb 20 | Mar 20 | Apr 20 | May 20 | Jun 20 | Jul 20 | Aug 20 | Sep 20 | Oct 20 | Nov 20 | Dec 20 |
|---|-------|-----------------------------|----------------|-----------|-----|---------|--------------|--------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2 | Total | Profitways Division Core | Norway | Sales qty | \$ | 652 | 562 | 578 | 1 140 | 120 | 111 | 108 | 123 | 100 | 0 | 0 | 0 | 273 | 307 | 171 | 205 |
| 3 | | Profitways DIVision Core | European Union | Sales qty | \$ | 23 | 23 | 377 | 400 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 108 | 121 | 67 | 81 |
| 4 | | Profitways EDM ³ | Norway | Sales qty | \$ | 35 | 35 | 0 | 35 | 0 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | | Profitways EDM ³ | European Union | Sales qty | \$ | 56 | 56 | 0 | 56 | 0 | 0 | 0 | 0 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | | Profitways OutBack | Norway | Sales qty | \$ | 78 | 78 | 0 | 78 | 0 | 0 | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | | Profitways OutBack | European Union | Sales qty | \$ | 89 | 89 | 0 | 89 | 0 | 0 | 0 | 0 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | | Profitways OutBack | U.S.A. | Sales qty | \$ | 4 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Examples of driving measures may be Sales quantity, Sales volume, FTE (Full Time Equivalent) and so on.

Click the icon to view the P&L transactions generated from the row in question.

Additional measures make up the detail model and may take direct input, be lookups to assumptions and calculations of other measures.

Click the icon for the row in question to view the detailed model.

Measures will render as rows of the model, for example:

| 1 | Measure | Fct | Act.12M | Act.YTD 2020 | For.YTD 2020 | 2020 | Jan 20 | Feb 20 | Mar 20 | Apr 20 | May 20 | Jun 20 | Jul 20 | Aug 20 | Sep 20 | Oct 20 | Nov 20 | Dec 20 | Comment |
|----|---------------------------|-----|---------|--------------|--------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|------------|------------|------------|---------|
| 2 | Sales qty | | 652 | 562 | 578 | 1 140 | 120 | 111 | 108 | 123 | 100 | 0 | 0 | 0 | 165 | 186 | 103 | 124 | |
| 3 | Sales price | | 0 | 0 | 185 000 | 185 000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 180 000 | 180 000 | 190 000 | 190 000 | |
| 4 | Incoming freight per unit | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5 | Incoming Freight | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 6 | Commission % | | 0 | 0 | 1.6 % | 1.6 % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 % | 1.0 % | 1.0 % | 1.0 % | |
| 7 | Commission | | 0 | 0 | 1 063 107 | 1 063 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 297 257 | 334 414 | 194 107 | 235 529 | |
| 8 | Sales Income | | 0 | 0 | 107 373 821 | 107 373 821 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 822 971 | 33 775 843 | 19 804 821 | 23 748 186 | |
| 9 | CoGS % | | 0 | 0 | 67.0 % | 67.0 % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67.0 % | 67.0 % | 67.0 % | 67.0 % | |
| 10 | CoGS | | 0 | 0 | 71 940 460 | 71 940 460 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 115 391 | 22 629 815 | 13 270 570 | 15 924 684 | |
| 11 | Outgoing Freight | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 12 | Discount % | | 0 | 0 | 2.0 % | 2.0 % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 % | 2.0 % | 2.0 % | 2.0 % | |
| 13 | Discount | | 0 | 0 | -2 126 214 | -2 126 214 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -594 514 | -668 829 | -392 214 | -470 657 | |
| 14 | Gross margin | | 0 | 0 | 33 367 147 | 33 367 147 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 313 066 | 10 477 200 | 6 144 037 | 7 372 844 | |

For details on how to set up a model, refer to [Define models](#).

Measures to which a **distribution function** is associated is identified by the icon.

Note that it is possible to click the icon to view the distribution and any default distribution if it exists.

| Distribution key | | | | | | | | | | | | | × | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|-------------|-------|
| Sales qty (Profitways DIVision Core - Norway) | | | | | | | | | | | | | | |
| Default value | | | | | | | | | | | | | | |
| Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | | | |
| 6.7 % | 6.7 % | 8.3 % | 10.0 % | 10.0 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | | | |
| Effective value | | | | | | | | | | | | | | |
| Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | Source | | |
| 6.7 % | 6.7 % | 8.3 % | 10.0 % | 10.0 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | 8.3 % | Default | | |
| | | | | | | | | | | | | | Use default | Close |

A year-total input is automatically spread to the plan months of that particular year. The total is spread according to the monthly distribution function tied to the product and market as follows:

- If a specific monthly input has been made by the user, the distribution inherent in the monthly values is used as a distribution key.
- If not, then if a central distribution key is tied to the account, this distribution will be used
- If none of the above applies, the total is spread evenly over the plan months

Please refer to [Distribution keys](#) for details on distribution keys.

Measures that are **lookup to assumptions** are identified by the  icon.

Note that it is possible to click the icon to view the assumption values and to override the assumption values and reset to the default if overridden if the model allows.

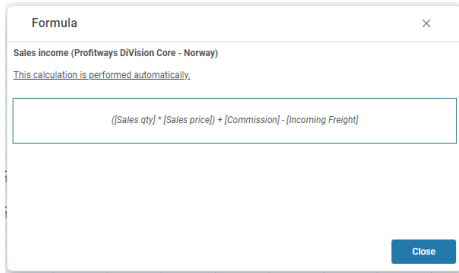
| Assumption | | | | | | | | | | | | | × | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------------|-------|
| Sales price (Profitways DIVision Core - Norway) | | | | | | | | | | | | | | | |
| Default value | | | | | | | | | | | | | | | |
| 2021 | Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | | | |
| 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | | | |
| Effective value | | | | | | | | | | | | | | | |
| 2021 | Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | Source | | |
| 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | Default | | |
| | | | | | | | | | | | | | Override | Use default | Close |


An overridden assumption is marked by a blue left border indication: 

Please refer to [Assumptions](#) for details on assumptions.

Measures that are **calculations** are identified by the  icon.

Note that it is possible to click the icon to reveal the formula and a formula description if set:



A formula that is not executed automatically but requires the click on the “Recalculate” button is marked with a red left border indication: 

Please refer to [Define calculations](#) for details on calculations.

Dimensionality

The basic dimensionality of the sales forecast module is department, product, and market. Extra dimensionality may be added:

- Supplier
- Dimensions Dim1 to Dim4

For details on defining dimensionality, refer to [Define dimensionality](#).

Historical references

The models are preset with the last 12 months of actuals.

In addition to the above, up to 5 historic reference columns may be added as needed.

For details on defining historical reference columns, refer to [Define historical reference columns](#).

Long-term forecast

For forecasting, a long-term horizon can be extended to a maximum of 5 years beyond the default horizon that comprises of this year and next year.

The long-term plan allows for a year-total input only. When saving the forecast, the long-term year-totals are automatically distributed to months using whatever distribution that is relevant to the next year forecast.

For details on setting up long-term forecasts, refer to [Define long-term forecast](#).

Forecast roll forward actions

1.1.1 Source data

The input module will be updated with source data when rolling forward.

Any new combinations that exist in the sales forecast source fact data will automatically be processed into the input module and their last 12 months actuals updated.

Please refer to [Data management](#) for details.

1.1.2 Long term forecast

If long-term forecasting is enabled, the year-total forecast for next-year+1 will be distributed to monthly values using next-year’s distribution when rolling over to a new year.

4 Model configuration

Sales forecast models are configured in the “Sales Forecast Setup” workbook and the “Sales forecast setup” page.

Multiple input models can be created and published to users. Select a model in the filter-list on the far left to activate buttons and display content.

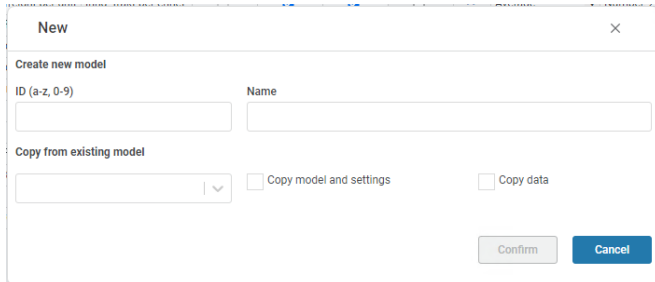
Input models

Select the “Input model” tab.

1.1.3 Create a new input model

To create a new model, click the “New ...” button.

In the following dialogue, enter a model id and a model default name.



The screenshot shows a dialog box titled "New" with a close button (X) in the top right corner. The dialog is titled "Create new model". It contains two input fields: "ID (a-z, 0-9)" and "Name". Below these fields is a section titled "Copy from existing model" which includes a dropdown menu and two checkboxes: "Copy model and settings" and "Copy data". At the bottom of the dialog are two buttons: "Confirm" and "Cancel".

If relevant, select an existing model to copy from and select whether to copy only the model and settings or the input data as well.

Click “Confirm”.

The new model is created and displays in the filter list at the far left.

1.1.4 Process an input model

Processing a model will re-generate any P&L transactions from the model. This should be done if changes have been made to the model, its assumptions or output processing definitions such as account mapping.

Processing is done by clicking the “Process” button.

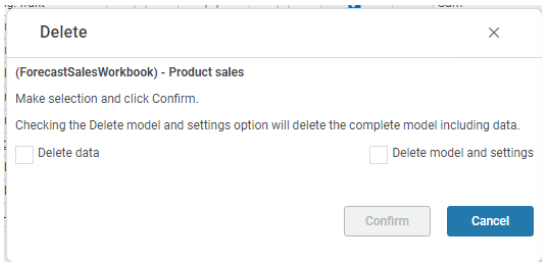
Note that processing is a potentially time-consuming operation depending on the amount of input data associated with the model.

1.1.5 Delete an existing input model

An input model can be deleted by clicking the “Delete ...” button.

In the following dialogue, select from the following options:

- “Delete data” - deletes any input data associated with the model
- “Delete model and settings” – deletes the complete model, its settings, and any associated input data.



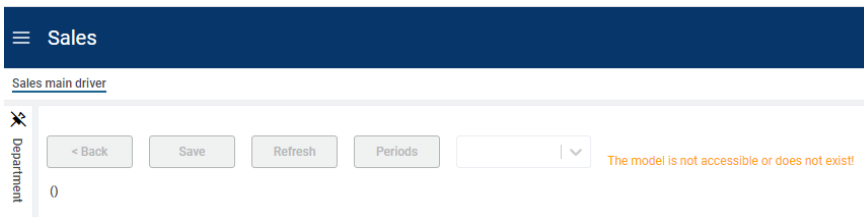
Note that deleting a model is a potentially time-consuming operation depending on the amount of input data associated with the model and the model will be processed to delete any associated P&L transactions.

1.1.6 Publish an input model

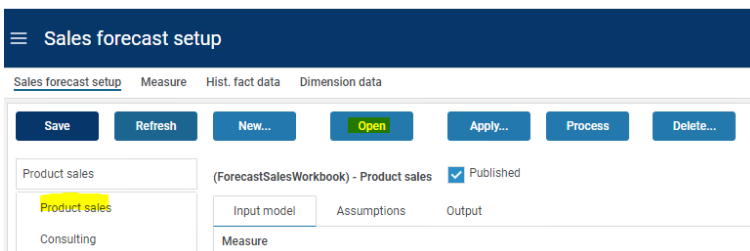
To publish a model, check the “Published” checkbox and click the “Save” button.

Conversely, to set a model offline, uncheck the “Published” checkbox and click the “Save” button.

A model that is not published, will not be editable by users accessing the model from the “Forecast Summary” workbook.



It is, however, possible to open an unpublished model from the “Open” button:



1.1.7 Edit input model properties

Select the model to edit in the filter list at the far left.

The input models are defined in the following screen:

Sales forecast setup profitbase

Sales forecast setup Measure Sales forecast facts Dimension data

Save Refresh New... Open Apply... Process Delete... Check calc.

Consulting (Sales2) - Consulting Published

Product sales Consulting

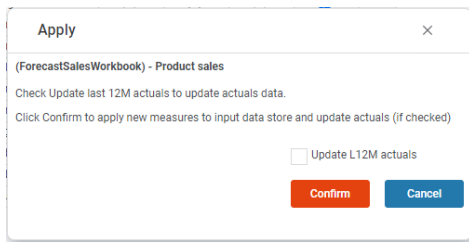
| Measure | Description | Description EN | Description NO | Driver | Input | Assumption | Calc. | Set | Calc. order | Total across periods | Rollup | Format | Style | Sorting |
|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------|----------------------|---------|-----------------------|-------------------|---------|
| 1 FTE | FTE | FTE | Antall hoder | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Sum | Number, 2 decimals | | 10 |
| 2 AvailableHours | Available hours | Available hours | Tilg, timer | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | | 20 |
| 3 InvoicedPct | Invoiced % | Invoiced % | Faktureringsgrad % | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Percentage, 1 decimal | | 23 |
| 4 InvoicedHours | Invoiced hours | Invoiced hours | Fakturerte timer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | Bold/Overline | 24 |
| 5 SalesUnitPrice | Hourly rate | Hourly rate | Timeneste | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Number, no decimals | | 25 |
| 6 Sales | Gross consulting revenue | Gross consulting revenue | Brutto konsulentsalget | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | Bold/Underline | 29 |
| 7 InvoiceTargetPct | Invoiced % TARGET | Invoiced % TARGET | Faktureringsgrad % MÅL | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Percentage, 1 decimal | Background/Yellow | 30 |
| 8 Bonus | Bonus 15% | Bonus 15% | Bonus 15% | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | Bold/Underline | 34 |
| 9 ITAndTelecomPerFTE | IT & Telecoms per FTE | IT & Telecoms per FTE | IT & Telefon per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Number, no decimals | | 40 |
| 10 TrainingPerFTE | Training per FTE | Training per FTE | Opplæring per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Number, no decimals | | 50 |
| 11 TravelExpensesPerFTE | Travel exp. per FTE | Travel exp. per FTE | Reiseutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Number, no decimals | | 60 |
| 12 OfficeSuppliesPerFTE | Office supplies per FTE | Office supplies per FTE | Kontorutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Average | Average | Number, no decimals | | 65 |
| 13 OtherExpenses | Other direct expenses | Other direct expenses | Andre direkte utgifter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | | 66 |
| 14 Expense | Direct expenses | Direct expenses | Direkte konsulentsalget | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | Bold/Overline | 70 |
| 15 NetConsultingIncome | Net consulting revenue | Net consulting revenue | Netto konsulentsalget | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | Sum | Sum | Number, no decimals | Bold/Underline | 80 |

| Column | Description |
|----------------------|--|
| Measure | The MeasureID. Mandatory. Select from list. For details on adding a new measure, refer to Define measures . |
| Description | The measure's default description. |
| Description EN | The measure's English translation. |
| Description NO | The measure's Norwegian translation. |
| Driver | The measure is the driver (checked). Note that only one measure per model can be a driver. |
| Input | The measure is open for input (checked) or not (unchecked). Note that if the measure is also a lookup (checked), the measure will not be open for input until the user has chosen to override the default lookup assumption value. |
| Lookup | The measure attains its value from a lookup assumption. For details on maintain assumption settings, refer to Assumptions . Note that if the measure is also open for input (checked), the user will have the opportunity to override the default lookup assumption value. A lookup measure will be read-only if not open for input. |
| Calc | Read-only indicator that the measure is calculated (checked) or not (unchecked). A measure that is a calculation is read-only. Note that calculations are performed in the sequence indicated by the Sorting column. |
| Calc. order | For back-end (sql) calculations, the default order of calculation is the sorting, i.e. that it is assumed that no measure with a low sorting rely on a calculation with a higher sorting (further down in the model). If this is not the case, the Calc order may be used to override this sequence. |
| Set | Action link that open a calculation pop-up in which calculation formulae and optional verbal calculation explanations are maintained. For details on defining calculations, refer to Define calculations . |
| Total across periods | Defines how year-totals are calculated from the monthly values (Sum Average). Select from list. Note that the average is an arithmetic average. |
| Rollup | Defines how the measure is to be rolled up to aggregate organizational levels (Sum Average). Select from list. Note that the average is an arithmetic average. |
| Format | The number display format. Select from list. |
| Style | The style of the measure row. Select from list. |
| Sorting | Sort sequence. Controls the display order and also the default calculation sequence. |
| Comment | Optional comment. |

To delete a measure from a model, right-click the measure and select one of the options:

- Delete from data – the measure will remain in the model, but any input data associated with it will be deleted.
- Delete from model (incl data) – the measure is deleted from the model and so is the input data associated with it.

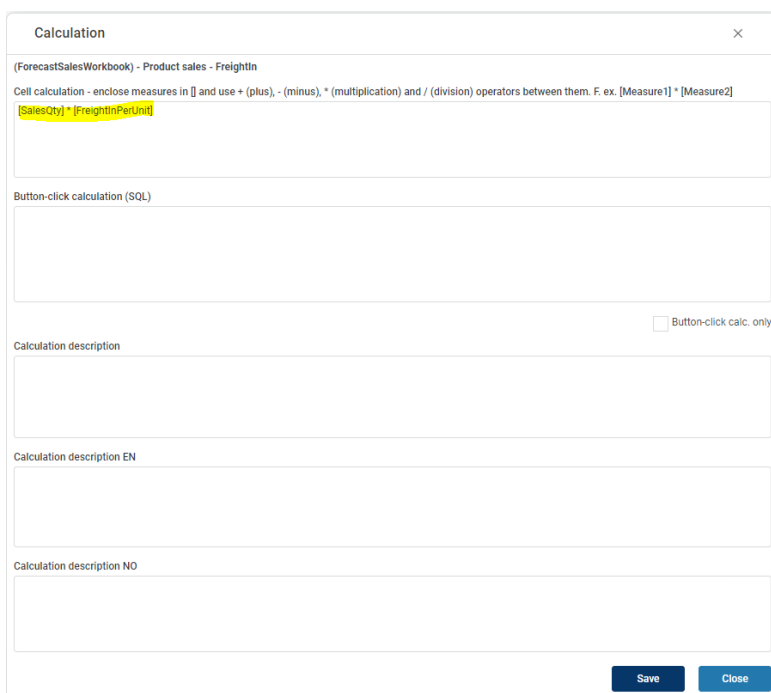
Unless the changes made are minor (change style or format), the model changes should be applied. This is done by clicking the “Apply ...” button that will reveal a dialogue in which one can opt for updating any historical reference content by checking the “Update L12M actuals”:



If the changes made also will reflect on the P&L transactions produced, the model should also be processed. This is done by clicking the “Process ...” button.

1.1.8 Define calculations

Access the calculation pop-up by clicking the “Set” action link for a measure in the input model setup to reveal the following dialogue:



There are two types of calculations:

- Cell-calculations: simple arithmetic calculations (+ - * /) between measures of a model. These calculations are performed automatically, as-you-type, when editing data in the input model.

Note that when defining the cell-calculation formula, the measures are defined by the measure id enclosed in square brackets, for example [SalesQty] * [SalesUnitPrice].

- Button-click calculations: more complex calculations involving for example conditionals. Such calculations are defined as sql statements and will not calculate automatically, as-you-type, when editing data in the input model. These calculations will require the click of a button to execute, specifically the “Recalculate” button.

In the calculation dialogue, one can also enter more elaborate descriptions using the “Calculation description” fields.

Note that the calculations that are button-click, are indicated with a red left border and that the calculation formula (cell-calculation only) and calculation description will be displayed when clicking the calculation symbol.

The screenshot shows a 'Sales details' window for 'Profiteers Division Core - Norway'. A table lists various measures over time. A 'Formula' dialog box is open, showing the formula for 'Commission %': $(Sales\ qty) * (Sales\ price) * (Commission\ \%)$. The table data includes columns for 'FctAct12M', 'Act.YTD 2020', 'For.YTD 2020', and 'Jan 20'.

1.1.9 Define dimensionality

The dimensionality of a model is defined in the following table:

The screenshot shows the 'Sales forecast setup' interface for 'Consulting'. It displays a table of measures and dimensions. The 'Measures' table lists 15 items with columns for Measure, Description, Description EN, Description NO, Driver, Input, and Lookup. The 'Dimensions' table lists 6 items with columns for DimensionColumn, Description, Description EN, Description NO, VisibleInput, and Mandatory.

| Measure | Measure | Description | Description EN | Description NO | Driver | Input | Lookup |
|---------|----------------------|--------------------------|--------------------------|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | FTE | FTE | FTE | Antall hoder | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | AvailableHours | Available hours | Available hours | Tilgj. timer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3 | InvoicedPct | Invoiced % | Invoiced % | Faktureringsgrad % | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4 | InvoicedHours | Invoiced hours | Invoiced hours | Fakturerte timer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | SalesUnitPrice | Hourly rate | Hourly rate | Timerate | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6 | Sales | Gross consulting revenue | Gross consulting revenue | Brutto konsulentinntekter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | InvoiceTargetPct | Invoiced % TARGET | Invoiced % TARGET | Faktureringsgrad % MÅL | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8 | Bonus | Bonus 15% | Bonus 15% | Bonus 15% | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | ITAndTelecomsPerFTE | IT & Telecoms per FTE | IT & Telecoms per FTE | IT & Telefon per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10 | TrainingPerFTE | Training per FTE | Training per FTE | Opplæring per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11 | TravelExpensesPerFTE | Travel exp. per FTE | Travel exp. per FTE | Reiseutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 12 | OfficeSuppliesPerFTE | Office supplies per FTE | Office supplies per FTE | Kontorutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13 | OtherExpense | Other direct expenses | Other diect expenses | Andre direkte utgifter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 14 | Expense | Direct expenses | Direct expenses | Direkte konsulentutgifter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 | NetConsultingIncome | Net consulting revenue | Net consulting revenue | Netto konsulentinntekter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Dimensions | DimensionColumn | Description | Description EN | Description NO | VisibleInput | Mandatory |
|------------|-----------------|--------------------|--------------------|-----------------|-------------------------------------|-------------------------------------|
| 1 | Dim1 | Employee | Employee | Ansatt | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Dim2 | Dim2Name | Dim2Name | Dim1Navn | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Dim3 | Dim3Name | Dim3Name | Dim3Navn | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Dim4 | Dim4Name | Dim4Name | Dim4Navn | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | MarketID | Market | Market | Marked | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6 | ProductID | Consultant profile | Consultant profile | Konsulentprofil | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

The Department, Product and Market dimensions are default and mandatory in any model.

| Column | Description |
|-----------------|---|
| DimensionColumn | The dimension column id. Preset. |
| Description | The measure's default description. |
| Description EN | The measure's English translation. |
| Description NO | The measure's Norwegian translation. |
| VisibleInput | Indicates whether dimension is visible (checked) or not (unchecked) in the input sheet of the model. |
| Mandatory | Indicates whether user must select a value from the dimension drop down when adding a row (checked) or not (unchecked) to the input sheet of the model. |
| Comment | Optional comment |

The dimensions are shared between models. If a dimension drop-down list of a certain model should not display a certain member, it can be excluded for that model by clicking the action link in the "DimensionColumn" column to reveal the following dialogue:

Add dimension members to excluded and click the "Save" button.

For details on dimension management, please refer to [Data management](#).

1.1.10 Define historical reference columns

The last 12 months of actuals will be included for measures where historical data exists.

There is a preset number of historical reference columns to choose from. The historic reference columns of a model is defined in the following table:

Sales forecast setup

Sales forecast setup Measure Hist. fact data Dimension data

Save Refresh New... Open Apply... Process Delete...

Consulting (Sales2) - Consulting Published

Input model Assumptions Output

| Measure | Description | Description EN | Description NO | Driver | Input | Lookup | Calc. | Set | Total across periods | Format | Style | Sorting | Comment |
|-------------------------|--------------------------|--------------------------|----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------|-----------------------|-------------------|---------|---------|
| 1 FTE | FTE | FTE | Antall hoder | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, 2 decimals | | 10 | |
| 2 AvailableHours | Available hours | Available hours | Tilg. timer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | | 20 | |
| 3 InvoicedPct | Invoiced % | Invoiced % | Faktureringsgrad % | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | | 23 | |
| 4 InvoicedHours | Invoiced hours | Invoiced hours | Fakturerte timer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverline | 24 | |
| 5 SalesPrice | Hourly rate | Hourly rate | Timerate | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 25 | |
| 6 Sales | Gross consulting revenue | Gross consulting revenue | Brutto konsulentsinntekter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverUnderline | 29 | |
| 7 InvoiceTargetPct | Invoiced % TARGET | Invoiced % TARGET | Faktureringsgrad % MÅL | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | BackgroundYellow | 30 | |
| 8 Bonus | Bonus 15% | Bonus 15% | Bonus 15% | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldUnderline | 34 | |
| 9 ITAndTelecomsPerFTE | IT & Telecoms per FTE | IT & Telecoms per FTE | IT & Telefon per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 40 | |
| 10 TrainingPerFTE | Training per FTE | Training per FTE | Opplærings per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 50 | |
| 11 TravelExpensesPerFTE | Travel exp. per FTE | Travel exp. per FTE | Reiseutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 60 | |
| 12 OfficeSuppliesPerFTE | Office supplies per FTE | Office supplies per FTE | Kontorutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 65 | |
| 13 OtherExpense | Other direct expenses | Other direct expenses | Ander direkte utgifter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | | 66 | |
| 14 Expense | Direct expenses | Direct expenses | Direkte konsulentsutgifter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverline | 70 | |
| 15 NetConsultingIncome | Net consulting revenue | Net consulting revenue | Netto konsulentsinntekter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverUnderline | 80 | |

Dimensions

| Dimension | DimensionColumn | Description | Description EN | Description NO | VisibleInput | Mandatory | Visible |
|-----------|-----------------|--------------------|--------------------|-----------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | Dim1 | Employee | Employee | Ansatt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Dim2 | Dim2Name | Dim2Name | Dim2Navn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Dim3 | Dim3Name | Dim3Name | Dim3Navn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Dim4 | Dim4Name | Dim4Name | Dim4Navn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | MarketID | Market | Market | Marked | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6 | ProductID | Consultant profile | Consultant profile | Konsulentprofil | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Historical reference columns

| ColumnName | Dataset ID | From Date | To Date | Description | Description EN | Description NO | Visible |
|------------|------------|-----------|---------|-------------|----------------|----------------|---------|
| | | | | | | | |

| Column | Description |
|----------------|--|
| Column Name | The internal historical reference column id, Historic1, Historic2, Historic3, Historic4 and Historic5. Select from the drop-down list. |
| DatasetID | The dataset origin for the historical reference data. Select from the drop-down list. |
| From Date | The start date for the historical reference data |
| To Date | The end date for the historical reference data |
| Description | The column default name |
| Description EN | The column's English translation |
| Description NO | The column's Norwegian translation |
| Visible | Indicates that the column is visible in the input sheet for the model or not (checked unchecked) |

For maintaining source fact data, please refer to [Data management](#).

Define measures

A set of measures is included when Planner is deployed. New measures may be added as needed.

Measure are defined in the "Measure" page:

Sales forecast setup

Sales forecast setup Measure Hist. fact data Dimension data

Save Refresh

| Measure (a-z, 0-9) | Description | Description EN | Description NO | In use | Is assumption | Has currency | Total across periods | Format | Comment | Owned by |
|------------------------|-------------|----------------|----------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------|-----------------------|---------|----------|
| 40 Inventory | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | | | \$System |
| 41 InvoicedHours | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | | | \$System |
| 42 InvoicedPct | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | | \$System |
| 43 InvoiceTargetPct | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | | \$System |
| 44 ITAndTelecomsPerFTE | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Average | | | \$System |

| Column | Description |
|-------------|--|
| Measure | Measure id. Mandatory. <ul style="list-style-type: none"> Attempts to use special characters when adding a new measure (non a-z, 0-9) will result in an error message. Attempts to delete a measure that is in use in models and/or assumptions and settings will result in an error message |
| Description | Default measure name. Optional. The name will typically be set when adding the measure to a model. |
| EN | English measure name. Optional. The name will typically be set when adding the measure to a model. |
| NO | Norwegian measure name. Optional. The name will typically be set when adding the measure to a model. |

| | |
|----------------------|--|
| In use | Mandatory, default checked. Indicates whether measure is in use (checked) or not (unchecked). A measure that is not in use, will not be available for selection when adding measures to a model. |
| Is assumption | Mandatory, default unchecked. Indicates whether measure is an assumption (checked) or not (unchecked). A measure that is not an assumption, will not be available for selection when defining assumptions. |
| Has currency | Mandatory, default unchecked. |
| Total across periods | Mandatory, default Sum. Select from list. The value is used for calculating rest of year and next year totals correctly for lookup values (assumptions). |
| Format | Mandatory, default "Number, no decimals". Select from list. The value is used for displaying lookup values (assumptions) in the correct format when defining assumptions. |
| Comment | Optional comment. |
| Owned by | "\$System" for measures that initially came with the system. The user id for the user that added the measure for measures added to the solution post-deployment. |

Attach module to input report

The module can be attached to the action link button of one or more report lines of the Forecast summary report:

To attach the module to a report line, go to the "Setup" page of the "Input settings and administration" workbook:

| Column | Description |
|----------------|--|
| Departm. | Source department. Ranked input. Mandatory. Through the use ranked input (high level selection), different modules may attach to a given report line for different part of the department dimension (organization). |
| Report Line ID | Report line to which input module is to attach. Select from list. Mandatory. |
| Input module | Input module to attach. Select from list. Mandatory. |

Define long-term forecast

The long-term horizon is set up in the “Input settings and administration” workbook:

| Setting ID | Value | Comment |
|------------|-------------------------------|---|
| 1 | ActualsDatasetID | ACTUAL The dataset id for the actuals dataset (default ACTUAL) |
| 2 | AlwaysIncludeAllAccounts | FALSE Should account input effect only historical data (FALSE - default) or should all accounts be included regardless of historical relevance (TRUE. A TRUE setting should be used with care, will potentially create large amounts of data) |
| 3 | Counterpart | FALSE Input field for counterpart visible (TRUE) or invisible (FALSE) |
| 4 | DistributeReportID | INPUT ReportID used for input-based reports (Budget and Forecast summary) |
| 5 | FCTLongTermPlanHorizon | 5 Forecast long term plan horizon. Number of years in addition to This Year and Next Year. Valid values: 0 1 2 3 4 5 |
| 6 | FCTYearTotalFloating | TRUE Forecast year totals float (TRUE) or remain fixed (FALSE) after rollover |
| 7 | IncludeAllowInputAccountsOnly | FALSE Limit accounts displayed in account input to those to which input is allowed (TRUE) or any account for which historical data exists (FALSE) |

5 Settings

Sales forecast models are configured in the “Sales Forecast Setup” workbook and the “Sales forecast setup” page.

| Measure | Measure | Description | Description EN | Description NO | Driver | Input | Lookup | Calc. | Set | Total across periods | Format | Style | Sorting | Comment |
|---------|----------------------|--------------------------|--------------------------|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|----------------------|-----------------------|-------------------|---------|---------|
| 1 | FTE | FTE | FTE | Antall timer | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, 2 decimals | | 10 | |
| 2 | AvailableHours | Available hours | Available hours | Tilgl. timer | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | | 20 | |
| 3 | InvoicedPct | Invoiced % | Invoiced % | Faktureringsgrad % | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | | 23 | |
| 4 | InvoicedHours | Invoiced hours | Invoiced hours | Fakturerte timer | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverline | 24 | |
| 5 | SalesUnitPrice | Hourly rate | Hourly rate | Timerate | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 25 | |
| 6 | Sales | Gross consulting revenue | Gross consulting revenue | Brutto konsulentinntekt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverUnderline | 29 | |
| 7 | InvoicedTargetPct | Invoiced % TARGET | Invoiced % TARGET | Faktureringsgrad % MÅL | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Percentage, 1 decimal | BackgroundYellow | 30 | |
| 8 | Bonus | Bonus 15% | Bonus 15% | Bonus 15% | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldUnderline | 34 | |
| 9 | ITAndTelecomsPerFTE | IT & Telecoms per FTE | IT & Telecoms per FTE | IT & Telefon per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 40 | |
| 10 | TrainingPerFTE | Training per FTE | Training per FTE | Opplærings per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 50 | |
| 11 | TravelExpensesPerFTE | Travel exp. per FTE | Travel exp. per FTE | Reiseutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 60 | |
| 12 | OfficeSuppliesPerFTE | Office supplies per FTE | Office supplies per FTE | Kontorutgifter per hode | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Average | Number, no decimals | | 65 | |
| 13 | OtherExpense | Other direct expenses | Other direct expenses | Andre direkte utgifter | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | | 66 | |
| 14 | Expense | Direct expenses | Direct expenses | Direkte konsulentutgifter | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverline | 70 | |
| 15 | NetConsultingIncome | Net consulting revenue | Net consulting revenue | Netto konsulentinntekt | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Sum | Number, no decimals | BoldOverUnderline | 80 | |

Multiple input models can be created and published to users. Select a model in the filter-list on the far left to activate buttons and display content.

Assumptions

Assumptions are lookup value and should exist for any measure that is defined as a lookup. For a measure to be eligible for assumptions, it must be defined as an assumption measure, see [Define measures](#) for details.

Assumptions are maintained in the “Assumptions” tab:

Sales forecast setup

Sales forecast setup Measure Hist. fact data Dimension data

Save Refresh New... Open Apply... Process Delete...

Product sales (ForecastSalesWorkbook) - Product sales Published

Product sales Input model Assumptions Output

Consulting SalesUnitPrice X | v

| | Measure | Legal Entity | Product | Market | Currency | Sep 20 | Oct 20 | Nov 20 | Dec 20 | Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 |
|---|----------------|--------------|------------------------------|-------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | SalesUnitPrice | Profittways | Profittways Division Core | All Markets | NOK | 180 000 | 180 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 | 190 000 |
| 2 | SalesUnitPrice | Profittways | Profittways OutBack | All Markets | NOK | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | SalesUnitPrice | Profittways | Profittways EDM [®] | All Markets | NOK | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 | 150 000 |
| 4 | SalesUnitPrice | Profittways | Project Manager | All Markets | NOK | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 | 1 625 |
| 5 | SalesUnitPrice | Profittways | Project Manager | Oil & Gas | NOK | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 | 2 300 |
| 6 | SalesUnitPrice | Profittways | Senior Consultant | All Markets | NOK | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 | 1 350 |
| 7 | SalesUnitPrice | Profittways | Junior Consultant | All Markets | NOK | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 | 1 100 |
| 8 | SalesUnitPrice | Profittways | Trainee | All Markets | NOK | 1 000 | 1 000 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 | 1 025 |

Select a measure from the dropdown list. The currently existing assumptions will display. Maintain assumption values as needed. To see the effect of any change, click Save and the Process for the model in question.

Assumptions are common across models.

| Column | Description |
|------------------------------|---|
| Measure | Measure to which the assumption is attached. Automatically set based on filter dropdown selection. Mandatory. |
| Legal entity | Source legal entity. Ranked input. Mandatory. |
| Product | Source product. Ranked input. Mandatory. |
| Market | Source market. Ranked input. Mandatory. |
| Currency | Currency for assumption values. Mandatory for measures that have currency, see Define measures for details. Note that if there exist legal entities having different home currencies, assumptions must exist for each of the currencies, i.e. there will be no currency conversion when the lookup is done. For legal entity A with home currency EUR, it is expected that an assumption set with currency EUR exists for the lookup to return values. |
| Monthly period columns | Numeric lookup values for individual months. Column headings will be dynamic and will change as forecast rolls forward. |
| NY Plus 1– NY Plus 5 columns | Numeric lookup values for years beyond next year. Column headings will be dynamic and will change as forecast rolls forward. Applicable if long-term forecasting is used. |

Please note that the assumption table will roll forward in time in accordance with the forecast rolling forward.

Distribution keys

Distribution keys are specified by the combination of the department, product, and market dimensions.

The dimensional values are selected using the ranked input selector. For details on using the ranked input selector and making rank changes between rows, please refer to [Common functionality](#) for details.

As a general rule-of-thumb, it is advisable not to use too specific distribution keys.

Distribution keys are maintained in the “Output” tab:

Sales forecast setup

Sales forecast setup Measure Hist. fact data Dimension data

Save Refresh New... Open Apply... Process Delete...

Product sales (ForecastSalesWorkbook) - Product sales Published

Product sales Input model Assumptions Output

Consulting Distribution keys

| | Departm. | Product | Market | Measure | Sep 20 | Oct 20 | Nov 20 | Dec 20 | Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | Jan 22 | Feb 22 |
|---|-----------------|-------------|-------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | All aendeliger | All Product | All Markets | Sales qty | 8 | 9 | 5 | 6 | 4 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 2 | All Departments | All Product | All Markets | Outgoing Freight | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

| Column | Description |
|---|---|
| Department | Source department. Ranked input. Mandatory. |
| Product | Source product. Ranked input. Mandatory. |
| Market | Source market. Ranked input. Mandatory. |
| Measure | Source measure. Select from list. Mandatory. |
| Monthly distribution key weight (heading dynamic) | Numeric values. Mandatory. When distributing a year-total value over monthly periods, the weight given to a specific month is its distribution key weight divided by the sum of the distribution key weights for all the months for that year. |
| Comments | Optional comment. Note that if a comment is added, the contributor will see the comment when viewing the distribution key of an input row. |

Measure to account mapping

For every model, any measure that is expected to generate a P&L transaction must be mapped to an account.

The measure to account mapping is maintained in the “output” tab:

| Column | Description |
|------------|---|
| Department | Source department. Ranked input. Mandatory. |
| Product | Source product. Ranked input. Mandatory. |
| Market | Source market. Ranked input. Mandatory. |
| Measure | Source measure. Select from list. Mandatory. |
| Account | The target account, i.e. that account that the generated P&L transaction will be tied to. |
| Comment | Optional comment |

Auto transactions (optional)

Auto-transactions mapping may be used to trigger additional transactions based on user input. For example, the input to a certain account should always generate an additional transaction to another account amounting to 10% of the input or source transaction.

The target department will always be the same as the input or source department.

The auto transactions are maintained in the “Output” tab:

Sales forecast setup

Sales forecast setup | Measure | Hist. fact data | Dimension data

Save | Refresh | New... | Open | Apply... | Process | Delete...

Product sales (ForecastSalesWorkbook) - Product sales Published

Input model Assumptions **Output**

Consulting

Distribution keys

| | Departm. | Product | Market | Measure | Sep 20 | Oct 20 | Nov 20 | Dec 20 | Jan 21 | Feb 21 | Mar 21 | Apr 21 | May 21 | Jun 21 | Jul 21 | Aug 21 | Sep 21 | Oct 21 | Nov 21 | Dec 21 | Jan 22 | Feb 22 |
|---|-----------------|-------------|-------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | All evoelinger | All Product | All Markets | Sales qty | 8 | 9 | 5 | 6 | 4 | 4 | 5 | 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 2 | All Departments | All Product | All Markets | Outgoing Freight | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

Account mapping

| | Department | Product | Market | Measure | Account | Comment |
|---|----------------|-------------|-------------|------------------|---------------------------------------|---------|
| 1 | All evoelinger | All Product | All Markets | Sales income | 3010 - Income Spareparts | |
| 2 | All evoelinger | All Product | All Markets | Cogs | 4510 - Cost of Spareparts Sold | |
| 3 | All evoelinger | All Product | All Markets | Commission | 3075 - Rebillied advertising expenses | |
| 4 | All evoelinger | All Product | All Markets | Outgoing Freight | 4090 - Freight cost on goods sold | |
| 5 | All evoelinger | All Product | All Markets | Incoming Freight | 4290 - Freight, Customs, etc. | |
| 6 | All evoelinger | All Product | All Markets | Discount | 3080 - Discounts | |

Auto transaction

| | Department | Product | Market | Measure | Value | Operator | Condition | Account | Comment |
|--|------------|---------|--------|---------|-------|----------|-----------|---------|---------|
|--|------------|---------|--------|---------|-------|----------|-----------|---------|---------|

| Column | Description |
|------------|--|
| Department | Source department. Ranked input. Mandatory |
| Product | Source product. Ranked input. Mandatory. |
| Market | Source market. Ranked input. Mandatory. |
| Measure | Source measure. Mandatory. Select from list. |
| Value | The value and the operator define how the amount of the target transaction will be calculated. In the example above, the amount of the target transaction will be 10% o Numeric value. Mandatory. |
| Operator | Select from list. Mandatory. |
| Condition | Optional. Special condition to apply when validating whether to execute the rule or not. For example: <ul style="list-style-type: none"> - Month() > 6 indicating that rule will be executed only for transactions with a transaction date with month number greater than 6 (June) - CurrentPeriodValue() > 1000 indicating that rule will be executed if value currently processed is greater than 1000 Operators: <ul style="list-style-type: none"> - Equality: == - Greater than or equal to: >= Greater than: > - Less than or equal to: <= Less than: < - Logical and: && - Logical or: |
| Account | Mandatory. The account that the target transaction will have. |
| Comment | Optional comment. |

6 Data management

Data management comprises of dimension management and source fact data management.

The sales forecast module uses the department, product, and market dimensions with the optional addition of extra dimensions supplier and dim1 to dim4.

The sales forecast source fact data contains the historical data per measure for relevant dimension combinations.

Dimensions

For the Product, Market and Supplier dimensions, a simple data input is available in the “Dimension data” tab:

| Product Internal Source | | | Market Internal Source | | | Supplier Internal Source | | |
|-------------------------|----------------|--------------------------|------------------------|---------------|----------------|--------------------------|-----------------|---------------|
| Product | ProductID_Name | ProductGroup | Market | MarketID_Name | MarketGroup | SupplierID | SupplierID_Name | SupplierGroup |
| 1 | A | Proftrways Division Core | 1 | A | Norway | 1 | A | Microposh |
| 2 | B | Proftrways EDMP | 2 | B | European Union | 2 | B | Megaposh |
| 3 | C | Proftrways OutBack | 3 | C | U.S.A. | | | |
| 4 | D | Project Manager | 4 | D | Oil & Gas | | | |
| 5 | E | Senior Consultant | 5 | E | Public sector | | | |
| 6 | F | Junior Consultant | 6 | F | Healthcare | | | |
| 7 | G | Trainee | | | | | | |

This gives the opportunity of entering dimension data locally.

To do this, add data rows as required and click the “Save” button followed by the “Publish” button.

Please note that deleting dimension members for which input data exists will render those input rows without descriptions.

The dimensions are by default set up with a group level – column XYZGroup for XYZ dimension – this renders as a group level the dimension hierarchy.

| Column | Description |
|------------|----------------------------------|
| XYZGroup | The group level |
| XYZID | The XYZ dimension ID. Mandatory. |
| XYZID_Name | The XYZ dimension ID name. |

More dimensions are available in the Dimensions and Currency Exchange rates workbook:

| SupplierGroup | SupplierID | SupplierID_Name | Last changed | ChangedBy | Modify Type |
|---------------|------------|-----------------|--------------|-----------------|-------------|
| 1 | A | Microposh | 07/31/2020 | Trygve Nordstam | Inserted |
| 2 | B | Megaposh | 08/02/2020 | Trygve Nordstam | Changed |

Maintain as appropriate, save the changes, and then click the “Publish” button to publish. The currently published dimension is rendered the tree view display in the right-most part of the screen.

Source fact data

A simple input tool for maintaining historical data is available in the “Hist. fact data” page:

| Dataset | Departm. | Product | Market | SupplierID | Dim1 | Dim2 | Dim3 | Dim4 | Cp LegalEntity | Measure | Value 0..9 | Year yyyy | Month 1-12 |
|---------|----------|-----------|--------------------------|----------------|------|------|------|------|----------------|----------|------------|-----------|------------|
| 1 | Actual | Stavanger | Proftrways Division Core | European Union | | | | | | SalesQty | 19.20 | 2020 | 7 |
| 2 | Actual | Stavanger | Project Manager | European Union | | | | | | SalesQty | 17 | 2020 | 7 |

Select a value in the “Dataset” and “Measure” filter at the top and click the “Refresh” button to enable the save button.

Add new rows as needed or paste selection. When pasting data, make sure to paste dimension **ids**. A dropdown will evaluate the id against the corresponding dimension and render the dimension **description**. If no description is rendered, just the id, this indicates that the id does not exist in the dimension.

| Column | Description |
|-----------------|--|
| DepartmentID | Department id. Mandatory. |
| ProductID | Product id. Mandatory. |
| MarketID | Market id. Mandatory. |
| SupplierID | Supplier id. Optional. If no value is provided, the default value # is set |
| Dim1 | Dim1 id. Optional. If no value is provided, the default value # is set |
| Dim2 | Dim2 id. Optional. If no value is provided, the default value # is set |
| Dim3 | Dim3 id. Optional. If no value is provided, the default value # is set |
| Dim4 | Dim4 id. Optional. If no value is provided, the default value # is set |
| CPLegalEntityID | Counterpart legal entity id. Optional. If no value is provided, the default value # is set |
| Value | Numeric |
| Year yyyy | 4-digit year, for example 2020. Mandatory |
| Month 1-12 | Month number, 1-12. Mandatory |

Department, Product, Market, Year and Month are mandatory columns.

Any amounts must be given in the home currency.

Value will default to 0 if no value is provided.

Dimension combinations found in the source and not in the input module for either the last 12 months actuals or any of the (optional) historical reference columns, will automatically be processed into the module on forecast rollover.

The module can also be updated manually by clicking the “Apply...” button in the “Sales Forecast Setup” page of the “Sales Forecast Setup” workbook.

The fact source data is also available in the “Source fact data” workbook:

