



Infor Business Intelligence Analyzer

User Guide

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Contents

Contacting Infor.....	5
Chapter 1: Analyzer.....	7
Chapter 2: Getting started.....	9
Chapter 3: Selecting elements.....	11
Selecting elements from filter dimensions.....	11
Selecting elements from vertical and horizontal dimensions.....	11
Chapter 4: Ad-hoc Analysis.....	13
Chapter 5: Navigation analysis.....	17
Description.....	17
Linked analyses.....	17
Options.....	17
Chapter 6: Ranking.....	19
Description.....	19
Linked analyses.....	19
Options.....	20
Chapter 7: ABC analysis.....	21
Chapter 8: Complexity analysis.....	23
Chapter 9: Distribution analysis.....	25
Chapter 10: Portfolio analysis.....	27
Description.....	27
Linked analyses.....	27
Options.....	27
Chapter 11: Time series analysis.....	29
Chapter 12: Trend analysis.....	33
Description.....	33
Linked analyses.....	33

Options.....34

Contacting Infor

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If we update this document after the product release, we will post the new version on this website. We recommend that you check this website periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Infor BI Analyzer is a suite of analyses which enable you to expose relationships and trends in data. The analyses are connected by context. That is, within each analysis are options to navigate to others which, as you do so, inherit the selections of the previous analysis. In this way you can explore your data, from a variety of starting points, without stopping to change or reselect parameters.

The only prerequisites are that the data must be cube-based, have a time dimension, a measure dimension, and at least one further dimension.

Each analysis is a view of the cube selected on the Analyzer Home page. With the exception of Navigation analysis, all analyses are similar to Microsoft Pivot Tables, with a horizontal and vertical dimension and a number of filter dimensions. You can change your view of the data by selecting different elements from the dimensions. Any dimension can be used in any position. In some analyses, you can use two or more vertical or horizontal dimensions at one time: for example to report on sales, by region, by point of sale.

Change your view of the data by using different dimensions as the horizontal, vertical, and filter dimensions, and by selecting different elements from the dimensions. You can select single elements from each filter dimension. Elements from the vertical and horizontal dimensions form the row and column headings. You can select single or multiple elements from the vertical and horizontal dimensions.

See "Selecting elements" on page 11.

You can rearrange the dimensions by drag and drop.

If an element in a column or row is a consolidated element, you can drill down or expand its hierarchy. A consolidated element is an element that has one or more child elements. Expanding maintains the hierarchical view of the dimension. That is, as you display elements at lower levels, the elements at the higher levels and their values remain visible. Drilling down displays all the elements and values at the next level down, without displaying the parents. In the Options dialog of some analyses you can specify whether the element hierarchy drills down or expands when you click a consolidated element.

Elements in the columns and rows of an analysis have these right-click options:

- Drill down: Available regardless of whether drill down or expand is specified in the Options dialog.
- Roll up: Reverses the previous drill down.
- Show top level elements: Reverses all drill downs to display only the top level elements. Examples of top level elements are, for example, the All Regions consolidated element in a Location dimension or the All Years element in a Time dimension.

- Level: Select a level of the hierarchy to display all elements at that level. The top level element in a hierarchy is at Level 1.
- Descendants on level. Display all child elements of a hierarchy at a selected level.
- Hide element.

On right-click, elements in some analyses display a selection of the analyses you are most likely to access next. Accessed in this way, the focus of the next analysis is on the element from which you selected it. Alternatively, you can jump to any other analysis from the Navigate menu in the toolbar. In both cases, the context of the current analysis is passed to the next. But, when accessed from the Navigate menu there is no focus on a particular element.

In each analysis there is a toolbar with these options:

- Home: Return to the Analyzer Home page.
- Select data: By default, this also returns you to the AnalyzerHome page but can be configured as required.
- Navigate: Select an analysis to go to.
- Open: Open a saved analysis.
- Save: Save an analysis.
- Export to Excel: View or save the analysis in Excel (.xml format). Values are exported but not the formulas from which they are derived.
- Export to PDF: View or save the analysis in PDF format.
- Options: Display options specific to the current analysis. For example, in some analyses you can specify whether a chart is displayed, and its type; or whether zero values are suppressed.

Available databases are listed on the Analyzer home page. Select a database to analyze. The cubes within the selected database are listed. Select a cube to analyze. If the selected cube does not have a time dimension, a message is displayed.

You can save analyses. Any previously saved reports are listed and can be opened from the Load Personal Report pane on the Analyzer home page.

After selecting a valid database and cube, you can select any category or sub-category of analysis.

The Analyzer offers three broad categories of analysis and six sub-categories. You can start from any analysis but, typically, you start from a category and navigate down to the sub-categories. On the Analyzer home page, the categories are headed "Find your Data" and the sub-categories headed "Analyze your Data".

The categories are:

Ad-hoc analysis

For slicing and dicing.

See: "Ad-hoc Analysis" on page 13

Navigation analysis

To display values in all dimensions simultaneously.

See: "Navigation Analysis" on page 17

Ranking

To find the best and worst performers.

See: "Ranking" on page 19

The sub-categories are:

ABC

ABC analysis is frequently used in inventory management, where it is usually impracticable to devote equal resources (management resources, for example) to each item. It assumes that, in any inventory, a small number of items will be vital to an organization's success and a majority will be relatively unimportant. ABC analysis classifies items into A, B and C categories according to their importance - as measured by a criterion such as annual dollar usage (value per unit multiplied by annual usage rate). It identifies what proportion of a whole is contributed by the members of each category.

ABC analysis can expose risk and help to control costs. For example, if sales of a small number of products account for the majority of your profits, any problem with those products will have a larger

impact than a problem with some other products. Similarly, the majority of customer support calls might result from a small number of recurring issues. Resources devoted to solving those issues could bring large benefits.

See: "ABC Analysis" on page 21.

Complexity

ABC analysis is limited by its dependence on one measurement criterion - typically annual dollar usage. So, Complexity analysis extends ABC analysis by adding a second measurement criterion, such as order size. The two measurement criteria are referred to as Coverage and Quantity. In effect, Complexity analysis combines two ABC analyses and highlights values at the intersection of the two measures. This could be used, for example, to determine which customers buy small quantities of products with low annual dollar usage. For these orders, handling costs will be greater than for fewer orders of large quantities.

See: "Complexity Analysis" on page 23.

Distribution

Distribution analysis sorts data by value and divides it into ranges.

See: "Distribution Analysis" on page 25.

Portfolio

Portfolio analysis displays circles of varying sizes within the X and Y axes of a chart. The areas of the circles represent the magnitude of the values displayed. So, both the size of the circles and their relative positions within the X and Y axes describe the data which they represent. For example, the X Axis might represent Net Revenue, the Y Axis Units Sold, and the size of the circles the Cost of Sales. In this case, large circles at the bottom left of the chart would represent low revenue, low unit sales and high costs.

See: "Portfolio Analysis" on page 27.

Time Series

Time series analysis uses a line chart to plot values of one or more measures over time. In particular, spikes or troughs in the line can highlight areas for investigation. For example, to investigate a sudden fall in Gross Margin you might add further measures and note that the fall in Gross Margin is mirrored by a rise in Discounts.

See: "Time Series Analysis" on page 29.

Trend

Trend analysis compares the performance of a selected element over a number of periods. It helps to forecast future events or to explain past events.

See: "Trend Analysis" on page 33.

You can change your view of the data in an analysis by selecting different elements from the filter, horizontal and vertical dimensions. The procedure to select elements differs according to whether the dimension is a filter dimension, or a vertical or horizontal dimension.

You can select single elements from a filter dimension. The element can be a consolidated element or a base element. Consolidated elements are those which contain one or more child elements. For example, Year is typically a consolidated element, with children which are also consolidated elements, such as Quarters, Months, and Weeks. Base elements are those with no children, or with no parent and no children. In this example, Day would typically be a base element.

You can select single or multiple elements from the vertical and horizontal dimensions. The elements can be consolidated or base elements, or your selection can include both.

Selecting elements from filter dimensions

To select an element from a filter dimension:

- 1 Click the dimension name or its currently selected element.
The Select Element dialog is displayed. The dialog displays the top-level elements of the dimension. Consolidated elements can be expanded to display their children.
- 2 Double-click an element to select it.
You can search for elements.

Selecting elements from vertical and horizontal dimensions

To select elements from a vertical or horizontal dimension:

- 1 Click the dimension name.

Note: In contrast to selecting filter elements, if you click the currently selected element and that element is a consolidated element, the element hierarchy expands.

The Element Browser is displayed. The browser displays the top-level elements of the dimension. Consolidated elements can be expanded to display their children.

2 Select the elements to display.

Double-click a consolidated element to reveal the next level of its hierarchy and its elements. Or, click **Expand All** to reveal all elements at all levels of the hierarchy.

To display all elements at a particular level of a hierarchy, click **Select level** and select a level.

To select all elements, click **Select all**.

To remove all selected elements, click **Remove selected elements**.

To return to the original view of the hierarchy, click **Collapse all**.

3 Click **Keep selected elements**.

4 Click **OK**.

You can access this analysis by right-clicking an element in "Navigation analysis" on page 17.

Description

Use Ad-hoc analysis to slice and dice your data.

By default, values are divided into three value ranges. Values within the ranges are color-code by reference to the minimum and maximum values in the data table, and the difference between them. By default, values which are 95% or more of the difference are indicated by a green icon. Values which are 5% or less of the difference plus the minimum, are indicated by a red icon. Values outside these ranges have no icon.

You can specify the ranges, or turn off the color-coding, in the Options dialog.

If required, add a column to display one of these calculations:

- Sum: The sum of all values in the row.
- Minimum: The lowest value in the data table.
- Maximum: The highest value in the data table.
- Average: The average of the values in the data table.
- Dispersion range: The difference between the highest and lowest values.
- Rel. disp. range: The difference between the highest and lowest values as a percentage of the sum.

If no calculation is selected "Calculation..." is displayed after the final column. Click "Calculation..." to display the Select Element dialog. Select the calculation to display. To remove, or display a different calculation, click its column heading and select from the Select Element dialog.

Linked analyses

You can right-click any element in the vertical or horizontal dimension to select one of these analyses:

- ABC
- Distribution
- Ranking
- Time Series.

Options

Data Presentation

Select one of these options:

- Values
- Percentage of row: Express each value as a percentage of the total values in the row.
- Percentage of column: Express each value as a percentage of the total values in the column.
- Percentage of all: Express each value as a percentage of the total of all values in the table.

Chart Type

By default, no chart is displayed. If your data is presented as Values, you can display a Bar Chart or a Line Chart above the data table. You cannot display a chart if your data is presented as a percentage.

Traffic Light

To turn off color coding, clear the **Traffic Light** check box.

To change the color-coded ranges, specify a different border value. By default, the border between the ranges is 5% and the ranges are:

- 0%-5%: Red icon
- 5%-95%: No icon
- 95%-100%: Green icon

Specify a border value, between 0% and 49% to change the ranges. For example, specify a border of 15% to create these ranges: 0%-15%, 15%-85%, and 85%-100%.

Suppress

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

You can exclude columns and rows which contain only zero values or columns and rows which contain no values.

Note: Suppressing zero columns and rows also suppresses empty columns and rows. But suppressing empty columns and rows does not suppress zero values.

When you use zero suppression, any column or row which contains only zero values is hidden. If the column or row contains at least one non-zero value, the zero values in that column/row are still shown.

Sort

You can sort the values of the vertical dimension in Descending or Ascending order. You can specify the column by which the values are sorted. For example, if the vertical dimension is Time, sort the values for any of the years it contains.

An arrow in the column heading indicates whether a column is sorted.

Navigation

If the vertical or horizontal dimensions contain a hierarchy of elements, you can drill down or expand the hierarchy.

Expanding maintains the hierarchical view of the dimension. As you display elements at lower levels, the elements at the higher levels remain visible.

Drilling down displays all the elements at the next level down. Elements at higher levels are no longer visible.

Description

Navigation analysis displays values for all dimensions in the cube. The measure dimension is used to filter the values. From each dimension, Navigation analysis displays all values for a selected element. The highest value for the currently selected element from each dimension is highlighted with a green bar.

To select a different element from a dimension, click the dimension name and select from the Find Elements dialog.

Linked analyses

You can right-click any dimension name to access these key analyses:

- Ad-hoc
- ABC
- Distribution
- Ranking
- Time Series

Options

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

Use the suppression options to suppress rows which contain only zero values or only empty values.

Note: Suppressing zero rows also suppresses empty rows. But suppressing empty rows does not suppress zero values.

You can access this analysis by right-clicking an element in:

Ad-hoc Analysis

Navigation analysis

Description

Ranking displays a subset of values. These are the available subsets:

- Top count
- Top percent
- Top sum
- Bottom count
- Bottom percent
- Bottom sum

To use a different subset, click the currently selected subset to open the Select Element dialog.

Use Top count or Bottom count to display, for example, the 5 regions in which the most or least revenue was earned. Or specify a value and use Top sum or Bottom sum to display the sales persons whose combined sales equaled or exceeded that value. Or specify a percentage and use Top percent or Bottom percent to display the products that contribute up 30% of the total turnover.

Linked analyses

You can right-click any element in the vertical or horizontal dimension to select one of these analyses:

- ABC
- Distribution
- Time Series

Options

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

You can exclude columns and rows which contain only zero values or columns and rows which contain no values.

Note: Suppressing zero columns and rows also suppresses empty columns and rows. But suppressing empty columns and rows does not suppress zero values.

When you use zero suppression, any column or row which contains only zero values is hidden. If the column or row contains at least one non-zero value, the zero values in that column/row are still shown.

You can access this analysis by right-clicking an element in:

- Ad-hoc analysis
- Navigation analysis
- Ranking
- Time Series analysis
- Trend analysis
- Complexity analysis
- Distribution analysis

Description

ABC analysis displays, in descending order, values which have been classified A, B, or C by reference to a criterion such as annual dollar usage. It also displays the percentage of the total value which each value represents, and cumulative values and percentages. A bar chart represents the descending values. The chart is color-coded with three colors to represent categories A, B and C.

Typically, a small number of values account for a large percentage of the total value. For example, 20% of products might account for 80% of total revenue.

Linked analyses

ABC has no linked analyses.

Options

Borders

Specify the A, B and C ranges by changing the borders of the A and B ranges. By default, range A contains all values which, individually account for up to 50% of the total value. Range B contains values which account for 50% to 80% of the total. Range C contains all values which are not in A or B.

Suppression

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

Use the suppression options to suppress rows which contain only zero values or only empty cells.

Description

Complexity analysis combines two ABC analyses. In ABC analysis you group elements into three categories. For example, you might classify products which yield more than a specified amount of revenue each year as A products, and products which yield less than a certain amount as C products. B products are those which yield less than A products but more than C products. Similarly, you might classify customers who buy the most units as A customers and those who buy least as C customers.

Complexity analysis compares two categories, such as products and customers against two measures. The measures are referred to as Coverage and Quantity. So, a complexity analysis of products and customers where Coverage=Revenue and Quantity=Units identifies the customers from which you earn least revenue who also buy the fewest units.

Linked analyses

You can right-click any element in the vertical or horizontal dimension to select one of these analyses:

- ABC
- Distribution
- Ranking
- Time Series

Options

Borders

Specify the A, B and C ranges by changing the borders of the A and B ranges. By default, range A contains all values which, individually account for up to 50% of the total value. Range B contains values which account for 50% to 80% of the total. Range C contains all values which are not in A or B.

Suppression

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

Use the suppression options to suppress rows which contain only zero values or only empty cells.

You can access this analysis by right-clicking an element in:

Ad-hoc analysis

Distribution analysis

Ranking

Complexity analysis

Description

Distribution analysis sorts the values in a specified dimension and divides them into a specified number of intervals or ranges. It displays column chart in which each column represents the values in an interval. The chart and data table display the bounds of the intervals and the number of values in each interval. The bounds of the intervals are calculated automatically by reference to the difference between the minimum and maximum values in the data table and the number of intervals required. It also displays statistics for the data such as maximum and minimum values, standard deviation, and average.

Linked analyses

Distribution has no linked analyses.

Options

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

Use the suppression options to suppress rows which contain only zero values or only empty cells.

Description

Portfolio analysis displays circles of varying diameters within the X and Y axes of a chart. The areas of the circles represent the magnitude of the values displayed. So, both the size of the circles and their relative positions within the X and Y axes describe the data which they represent.

You might use Portfolio analysis in risk assessment, for example, by comparing profit and cost for a number of possible projects, where each circle represents an individual project and its size represents an estimate of its likelihood of success.

Linked analyses

Portfolio analysis has no linked analyses.

Options

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

Use the suppression options to suppress rows which contain only zero values or only empty cells.

You can access this analysis by right-clicking an element in:

Ad-hoc analysis

Navigation analysis

Ranking

Complexity analysis

Description

Time Series analysis displays a line chart.

If required, add a column to display one of these calculations:

- Sum: The sum of all values in the row.
- Minimum: The lowest value in the data table.
- Maximum: The highest value in the data table.
- Average: The average of the values in the data table.
- Dispersion range: The difference between the highest and lowest values.
- Rel. disp. range: The difference between the highest and lowest values as a percentage of the sum.

If no calculation is selected "Calculation..." is displayed after the final column. Click "Calculation..." to display the Select Element dialog. Select the calculation to display. To remove, or display a different calculation, click its column heading and select from the Select Element dialog.

Linked analyses

You can right-click any element in the vertical or horizontal dimension to select one of these analyses:

- ABC
- Distribution
- Ranking

Options

Data Presentation

Select one of these options:

- Values
- Percentage of row: Express each value as a percentage of the total values in the row.
- Percentage of column: Express each value as a percentage of the total values in the column.
- Percentage of all: Express each value as a percentage of the total of all values in the table.

Chart Type

By default, no chart is displayed. If your data is presented as Values, you can display a Bar Chart or a Line Chart above the data table. You cannot display a chart if your data is presented as a percentage.

Traffic Light

To turn off color coding, clear the **Traffic Light** check box.

To change the color-coded ranges, specify a different border value. By default, the border between the ranges is 5% and the ranges are:

- 0%-5%: Red icon
- 5%-95%: No icon
- 95%-100%: Green icon

Specify a border value, between 0% and 49% to change the ranges. For example, specify a border of 15% to create these ranges: 0%-15%, 15%-85%, and 85%-100%.

Suppress

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

You can exclude columns and rows which contain only zero values or columns and rows which contain no values.

Note: Suppressing zero columns and rows also suppresses empty columns and rows. But suppressing empty columns and rows does not suppress zero values.

When you use zero suppression, any column or row which contains only zero values is hidden. If the column or row contains at least one non-zero value, the zero values in that column/row are still shown.

Sort

You can sort the values of the vertical dimension in Descending or Ascending order. You can specify the column by which the values are sorted. For example, if the vertical dimension is Time, sort the values for any of the years it contains.

An arrow in the column heading indicates whether a column is sorted.

Navigation

If the vertical or horizontal dimensions contain a hierarchy of elements, you can drill down or expand the hierarchy.

Expanding maintains the hierarchical view of the dimension. As you display elements at lower levels, the elements at the higher levels remain visible.

Drilling down displays all the elements at the next level down. Elements at higher levels are no longer visible.

Description

Trend analysis displays a table of values, and their percentages of the total table value. The values in each column are in descending order. It is typically used to compare how an element, such as a product, performed over a number of periods - with Time on the horizontal axis and the elements to be compared on the vertical. The names of the elements form the row headers and, typically, each column represents a period. A line chart displays the information graphically.

Click any row element, or any value in the table, to highlight the values for that element in each column. Because each column is individually ranked in descending order, the values for a selected element are not necessarily in adjacent cells across the width of the row. For example, here, Model C was ranked third in 2009, second in 2010 but had fallen to fourth in 2011:

Product	2009	2010	2011
Model A	5706297	5340973	4163360
Model B	5240979	3969414	3629639
Model C	3591655	3800370	3190824
Model D	3320565	3463649	2527710

Linked analyses

You can right-click any element in the vertical or horizontal dimension to select one of these analyses:

- ABC
- Distribution
- Ranking
- Time Series

Options

A common feature of multidimensional databases is that they are "hypersparse". For many combinations of rows and columns, there is no data and reports can contain a large number of empty cells, or zero values.

You can exclude columns and rows which contain only zero values or columns and rows which contain no values.

Note: Suppressing zero columns and rows also suppresses empty columns and rows. But suppressing empty columns and rows does not suppress zero values.

When you use zero suppression, any column or row which contains only zero values is hidden. If the column or row contains at least one non-zero value, the zero values in that column/row are still shown.