Performing Assisted Discovery

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Overview

Assisted Discovery allows Yellowfin to automatically generate charts and insights through the report builder. The feature is activated using the Smart Analysis button on the report builder toolbar when the required data is added to the columns fields. An Insight Wizard helps provide the context for the analysis, and uses that information to generate charts and explanations, as opposed to a manual data discovery process.

The Insight Wizard contains the following options:

Option	Description
Explain Metric	Select this option to better explain a single metric. Yellowfin will identify related data that influences the chosen metric. Select your metric of interest from the next dropdown.
Compare Metrics	Select this option to compare the values and drivers of two chosen metrics. For example, comparing Actual Revenue (metric) to Planned Revenue (metric).
Compare Dates	 Select this option to compare a single metric across two time periods. You will need to configure the following information using the dropdown menus: The specific date field that represents the time period. The metric you want to compare. The two time periods you want to compare.
	For example, comparing Actual Revenue (metric) for Sales Date (date field) from this year to last year (time periods).
Compare Dimensions	 Select this option to compare a metric across two dimensions. You will need to configure the following information using the dropdown menus: The metric you are comparing. The specific values of the dimension.
	For example, comparing Invoiced Amount (metric) between Regions (dimension) Asia and Europe (dimension values).
Higher values are	Select whether higher numeric values are 'good' or 'bad' for the analysis result. For example, a higher profit margin value is typically good, but a high cost value is typically bad.
Fields to Analyze	Select or deselect specific fields to narrow down the analysis. For example, remove any fields that are not likely to be relevant, such as Date of Birth. Removing fields can help to improve the processing time of your analysis.
Number of unique values allowed in a field	Set the maximum number of values for Yellowfin to include in the analysis. For example, setting the value at 500 for will only include the first 500 values for the selected fields.

Assisted Discovery must be configured at the view level by an admin before making it available to users.

Assisted Discovery can only be performed on standard reports with at least one metric and 2 dimensions. Cross-tab reports, sub query reports, and reports containing only dimensions are not supported. When building a report for Assisted Insights, only add values to the columns section.

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Using Assisted Discovery

This guide outlines how to perform Assisted Discovery when building reports.

1. Click the Create button and click Report to create a new report

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2. Use your mouse to drag your data from the left panel to the Columns fields

button on the report builder toolbar 3. Click on the Smart Analysis The Insight Wizard dialog box will appear allowing you to customize your discovery

The Insight Wizard	dialog box will appear,	allowing you to customize	e your discovery

Insight Wizard				\times
l want to	Explain Metric	\checkmark	Select Metric	
			Advanced settings ↓	
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- From the left dropdown, select Explain Metric as the type of analysis you would like to perform Selecting this option will allow Yellowfin to discover the drivers for a single metric, or compare metrics and dimensions to understand differences

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5. Expand the **Advanced Settings** option The Insight Wizard allows you to apply additional preferences to your chart

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- 6. Click the Higher values are dropdown, and select Good to provide the context for Yellowfin that higher values in your data are considered to be desirable
- 7. Select all fields within the Fields to Analyze box you would like Yellowfin to analyze
- You can deselect or select any fields you to wish to either narrow down or expand the scope of the analysis

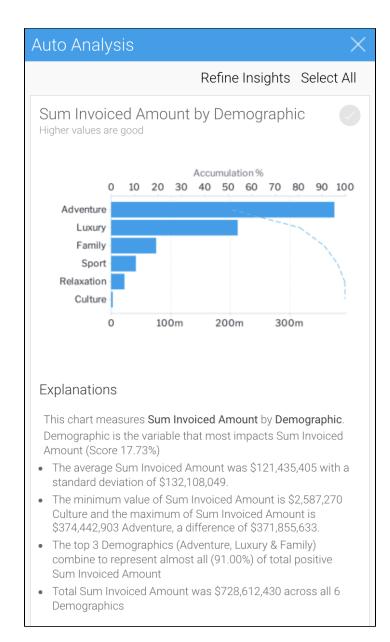
8.	Set the maximum number of unique values allowed in the fields
	In this case, we only want the first 500 unique field values included in the analysis
	Number of unique values allowed in a field 500

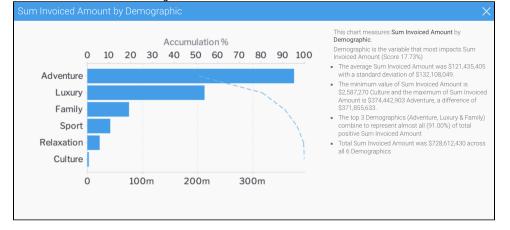
Number of unique values allowed in a field 500	
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- 9. Click on the **Continue** button to perform the analysis
 - The Auto Analysis panel will appear in the report builder on the right-hand side of the screen, displaying the results of the analysis

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	Last Name Demographic	Analysis Style	\$35.5		Culture		Adventure
	Gender						Luxury
	Date of Birth	Co-Display	\$37,5		Family		Sport
	Age at Camp	No Drill	\$62.5	582 Sub Saharan Africa	Sport		Relaxation
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	Athlete Longitude	view: ski ream	\$333.		Culture		Demographic is the variable that most impacts Sum Invoiced
	Athlete Geo Point	Active Row Limit: 10000	\$494,	551 Asia	Family		Amount (Score 17.73%) The average Sum Invoiced Amount was \$121,435,405 with a
	Athlete Geo Polygon	Show Duplicate Records:	\$638.	149 Asia	Sport		 standard deviation of \$132,108,049. The minimum value of Sum Invoiced Amount is \$2,587,270.
	Athlete Geo ISOCode		\$786,3	98 Australia	Sport		Culture and the maximum of Sum Invoiced Amount is
	Athlete Payment	Auto Refresh:	\$788,	377 North America	Culture		\$374,442,903 Adventure, a difference of \$371,855,633. The top 3 Demographics (Adventure, Luxury & Family)
	Invoiced Amount Cancellation Fee	Preview Row Limit:	\$1,326,3	20 Europe	Culture		combine to represent almost all (91.00%) of total positive Sum Invoiced Amount
	Cancellation Fee Invoice Estimate		\$3.535.0	93 North America	Luxury		 Total Sum Invoiced Amount was \$728,612,430 across all 6
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	 Invoiced (Pref Currency) 		\$4,104,3	792 Latin America	Adventure		

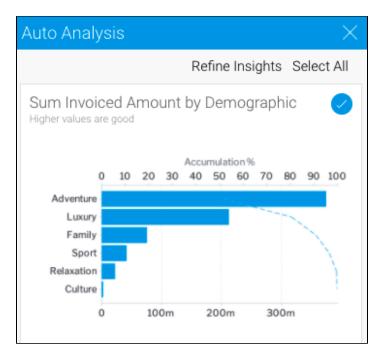
Yellowfin will generate a natural language analysis, and also display the most appropriate charts for your insights (depending on the data)





10. Click on the chart to view an enlarged versions

11. Click on the **round tick button** in the top right-hand corner to select or deselect each insight to save to the chart builder You can go back to the Insights Wizard to choose a different type of analysis option by clicking on the Refine Insights button



12. Click Charts in the toolbar to proceed to the chart builder

The chart builder will be displayed, allowing you to view and edit the charts you selected from the Auto Analysis panel

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You can view any unselected automated charts by clicking on the Insights button 7 on the right-hand side of the screen

You have now created relevant report content with a fraction of the effort it would normally take to analyze data and build reports. These charts can be used to build and publish reports in the usual way.

If you choose to re-run the Assisted Discovery process, the charts from the previous analysis will be removed from the Auto Analysis panel, but will remain in the chart builder.

On performing Assisted Insights, a report is generated by Yellowfin in the background and saved in the configuration database, which is the basis for the auto insights charts and natural language narratives. If you choose to discard the insights, the reports will not be used. The system will carry out a check for these orphan reports every 48 hours, and delete any that are unused.

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Changing the data set

Yellowfin allows you to change the data set of an Assisted Discovery report, even after insights have been created. Once a data set is altered, you have the following Assisted Discovery options:

· Perform a new Smart Analysis on the new data set, deleting all unsaved insights in the process.

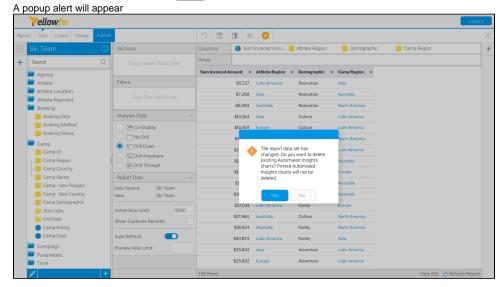
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· Don't perform a new Smart Analysis on the new data set, retaining existing insights.

Both options allow you to manually configure your data and build new charts.

The following steps describe the process of performing Assisted Discovery with a new data set.

- 1. Open a published report with Assisted Discovery auto analysis applied
- 2. Click on Data in the report builder toolbar and add or remove metrics or dimensions to the Columns field for that report
- 3. Click on the Smart Analysis button V on the report builder toolbar



- 4. Click No to retain your previous insights and cancel the Smart Analysis request, even though the data set has changed The report builder will be displayed, and previously saved insights will remain
- 5. Click the **Insights button** on the right-hand side of the screen to view previously saved insights. Note that your previous insights will remain in the Auto Analysis panel
- 6. Click the Insights button 🗡 on the right-hand side of the screen to close the Auto Analysis panel
- 7. To develop new insights from the new data set, click on the **Smart Analysis button** on the report builder toolbar A popup alert will appear

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8. Click Yes to delete the current insights and begin the process from scratch Previously saved insights from the Auto Analysis panel will remain in the chart builder, but all other insights in the panel will be deleted