Dapresy Pro 2019

April Release

Index

1 - Introduction

This document describes new and improved features in the Dapresy Pro 2019 April Release.

If you would like to know more about these features, please contact Dapresy Global Support at: support@dapresy.com and they will be able to assist you.

Best Regards,

Dapresy Team

Email: support@dapresy.com

2 - Overview

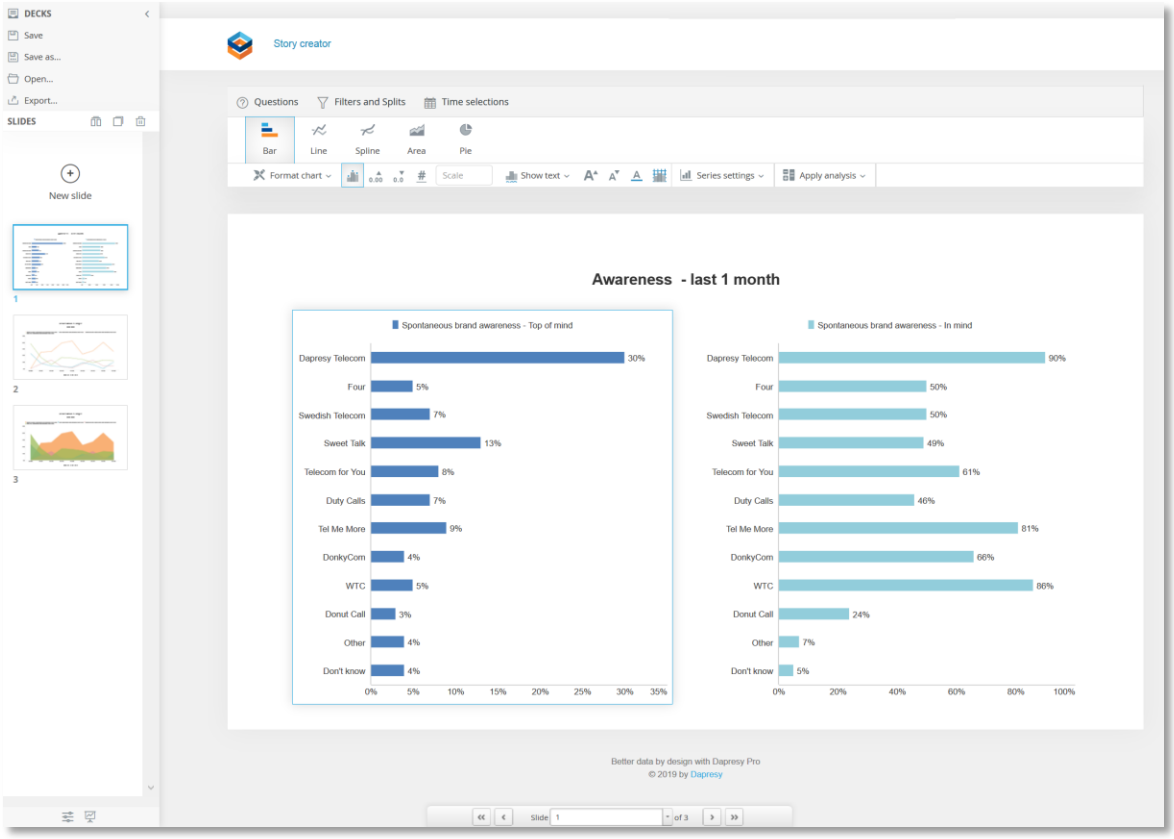
The Dapresy Pro 2019 April update contains a wide range of improvements in different areas to help you with new functionality and produce with greater efficiency, here is a summary:

Story Creator – a new module

- The Story creator is a new tool where both the Administrator- and the Report users can perform ad-hoc analyses by slicing and dicing the data and visualize the result in charts. The users can also create complete decks with multiple slides, and multiple charts per slide, including basic text boxes for entering slide headers, sub headers, footers etc.

  The created decks can be exported, to PPT, PDF and Excel, and also be saved as personal favorites for future usage. By for example using “floating time periods” in the charts the decks will include new data automatically as soon as new data has been loaded to the project, so, the tool is perfect for use in both ad-hoc and tracker projects

  Here we see the Story creator tool.



Storyteller improvements

- **Benchmark calculations across series:** Benchmark calculations can now be made across series in charts and tables which makes it possible for more advanced comparisons. As an example, you can now compare result of different types, like a percentage value with a numeric value, which is common when comparing survey results to external benchmark/norm/target values.

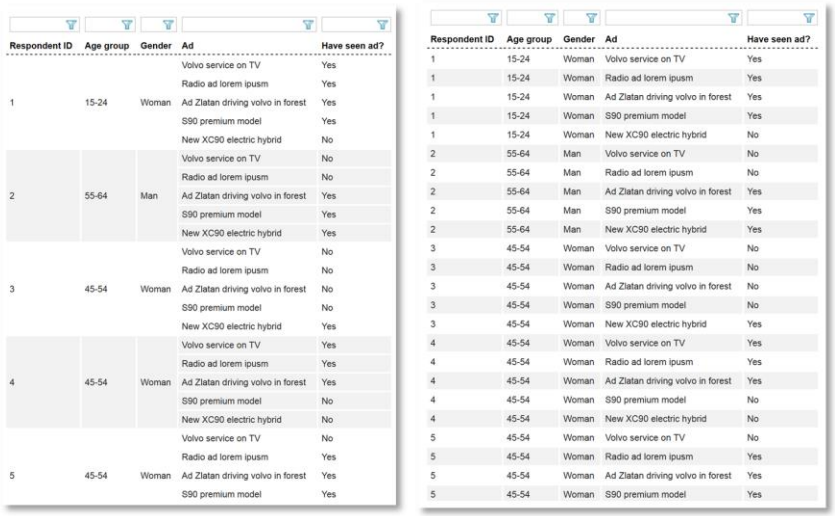
- **Support for applying multiple weight variables in a chart/table**: A chart/table could previously use one weight variable in the calculations only but now you can apply different weight variables when applying filter compares, each compare series can be calculated with a unique weight variable.

- **Improved dynamic weighting in Optional filters:** The Dynamic weighting, in Optional filters, can now also be applied to optional compare filters and not only to optional filters. With this support a chart/table can use a unique weight variable per compare filter.

- **Sorting of Optional filters:** The filter options, within an Optional filter, were previously sorted by the defined sort order in the answer block but the sort order can now also be alphabetically when needed. Sorting the filter options alphabetically is great in trackers when new filter options continuously are added, by sorting these options alphabetically you always get a relevant sort order without any manual job when the new filter options are added.

- **Improved default settings in Optional filters:** when setting up the Optional filters you can now select to set all the current and future filter options to default selected when the user enters the report. By using this new option manual work is eliminated in cases where all options always shall be default selected in projects where new options are added continuously.

- **Respondent tables with stacked data**: In projects with Stacked data you can now select if the non-stacked variable cells should be merged or not to remove repeated information. The left table below shows the merged layout and the right table a non-merged layout.



Respondent ID	Age group	Gender	Ad	Have seen ad?
			Volvo service on TV	Yes
			Radio ad lorem ipusm	Yes
1	15-24	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes
			New XC90 electric hybrid	No
			Volvo service on TV	No
			Radio ad lorem ipusm	No
2	55-64	Man	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes
			New XC90 electric hybrid	Yes
			Volvo service on TV	No
			Radio ad lorem ipusm	No
3	45-54	Woman	Ad Zlatan driving volvo in forest	No
			S90 premium model	No
			New XC90 electric hybrid	Yes
			Volvo service on TV	Yes
			Radio ad lorem ipusm	Yes
4	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	No
			New XC90 electric hybrid	No
			Volvo service on TV	No
			Radio ad lorem ipusm	Yes
5	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes

Respondent ID	Age group	Gender	Ad	Have seen ad?
1	15-24	Woman	Volvo service on TV	Yes
1	15-24	Woman	Radio ad lorem ipusm	Yes
1	15-24	Woman	Ad Zlatan driving volvo in forest	Yes
1	15-24	Woman	S90 premium model	Yes
1	15-24	Woman	New XC90 electric hybrid	No
2	55-64	Man	Volvo service on TV	No
2	55-64	Man	Radio ad lorem ipusm	No
2	55-64	Man	Ad Zlatan driving volvo in forest	Yes
2	55-64	Man	S90 premium model	Yes
2	55-64	Man	New XC90 electric hybrid	Yes
3	45-54	Woman	Volvo service on TV	No
3	45-54	Woman	Radio ad lorem ipusm	No
3	45-54	Woman	Ad Zlatan driving volvo in forest	No
3	45-54	Woman	S90 premium model	No
3	45-54	Woman	New XC90 electric hybrid	Yes
4	45-54	Woman	Volvo service on TV	Yes
4	45-54	Woman	Radio ad lorem ipusm	Yes
4	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
4	45-54	Woman	S90 premium model	No
4	45-54	Woman	New XC90 electric hybrid	No
5	45-54	Woman	Volvo service on TV	No
5	45-54	Woman	Radio ad lorem ipusm	Yes
5	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
5	45-54	Woman	S90 premium model	Yes

Cross table tool improvements

- **Static filters:** It is now supported to apply “static filters” to the Cross table tool. A static filter is always applied to the calculations and cannot be turned off by the users. Static filters are useful when having respondents in the database that the users of the Cross table tool shall not be able to include in the calculations for different reasons. It could for example be “incompletes” in project where both completed and incompleted interviews are imported. Another common use case is to provide the users with data for completed months only, even if data is loaded to the project on a daily level, that can now easily be achieved by applying static filter to the Cross table tool.

- **Turn off the ability to share Favorites:** It is now also supported to turn off the ability to share Favorites in the Cross table tool. When this setting is applied the users can still save their own favorites but not share those with other users

Data import improvements

- **New option for ignoring new meta data:** A new data import option supports importing data files with new meta data and relevant case data that will be ignored during the import process, not imported and have no impact on the import. This new setting is great to use in projects, that for example, uses daily scheduled imports where only case data is imported as the import

process will be successful even if the data file contains new questions/answers, with the current logic the import process stops in this scenario and no data is imported.

- **Create and edit Meta data transformations in Import scheduler page:** You can now create, and edit, meta data transformations directly in the Import scheduler page which streamlines the process as you do not need to first make an manual import to be able to create the meta data transformation. This new option makes the process much more efficient, especially, in projects where the data source is a third party system and not a file transfer as you now can select which variables to be imported to your project, recode open ended questions to categorical questions etc. directly during the import by creating a Meta data transformation.

Performance improvements

- **Calculations:** The calculation speed is now faster in projects with non-stacked data. The improvement is significant in projects with large numbers of respondents but has a positive impact on all sizes of projects.

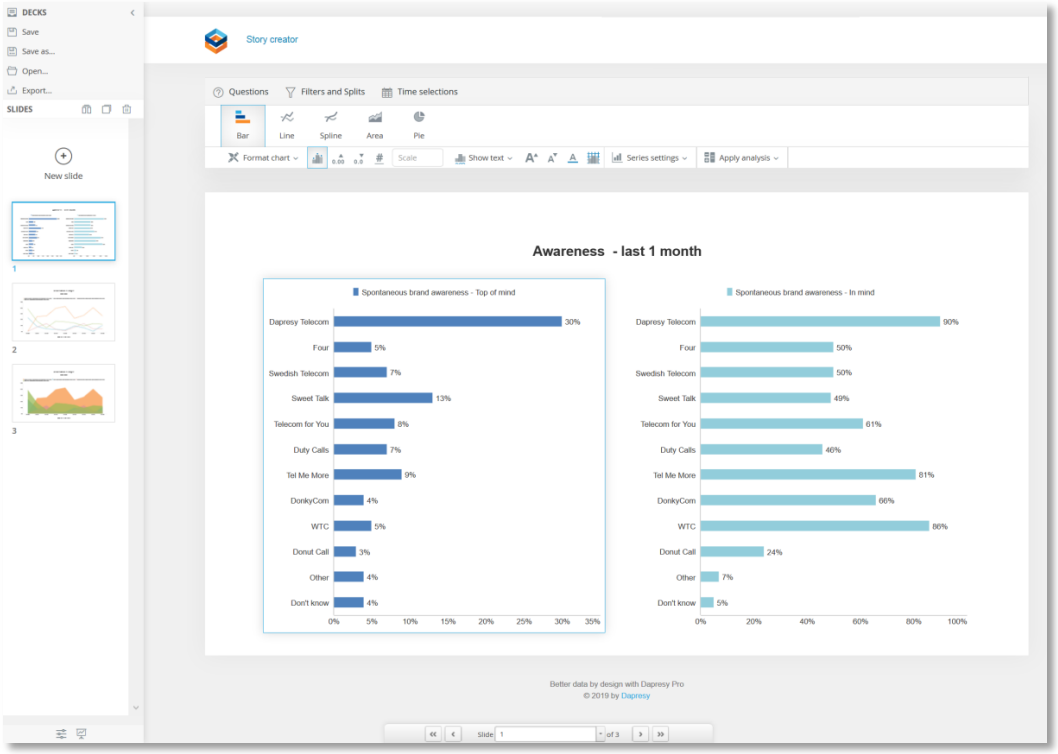
- **Enfesys, Input variables:** The Input variables used in the Enfesys process can from now on be stored in the in-memory data model for significantly faster calculations of results based on Input data.

- **Respondent table performance**: the Respondent table object is now using the in-memory data model which results in better performance. How much faster the respondent tables load depends on multiple factors but it is many times faster than before. The bigger the project and respondent table is, in terms of data, the bigger impact the new logic has. Note; the new logic is not turned on by default yet, the administrator must activate the option in project settings.

3 Story creator – a new module

The Story creator is a tool where both the Administrator- and the Report users can perform ad-hoc analyses by slicing and dicing the data and visualize the result in charts. The users can also create complete decks with multiple slides, and multiple charts per slide, including basic text boxes for entering slide headers, sub headers, footers etc.

Here we see the Story creator interface.



The created decks can be exported to PPT, PDF and Excel. When exporting to PPT the charts are exported as images, when exporting to Excel the data behind the charts is exported as tables.

The users can also save the created decks as personal favorites for future usage. By for example using “floating time periods” in the charts the decks will include new data automatically as soon as new data has been loaded to the project, so, the tool is perfect for use in both ad-hoc and tracker projects.

If the project uses My stories, and if the user has access to the My Stories report, the user can also save Story creator slides into My Stories in the same way as Storyteller slides can be saved to My Stories. A story can contain a mix of slides from any Storyteller and the Story Creator.

The Story Creator also includes smart logic which are artificial intelligence functions applied to key areas in the Story Creator functions to make the creation of a chart easier and more efficient. The smart functions are designed to make the best selections based on rules defined within the system. You will see this in the suggestions made for chart type, series colors and in the application of where items such as questions and answers should go in the axis and legend. It is always possible to override the smart function if required.

The Administrator has the ability to limit the content in the Story creator in the same way as the content can be limited in the Cross table tool. The Administrator user defines which questions and filters that will be available in the tool but also which features are available to the user. As an example, the Administrator can remove the ability for the Report users to select between weighted and unweighted data, remove the ability to break down the data on a daily level or remove the ability to perform significance testing, etc.

Static limits for hiding result due too low base size or limits to warn for low base sizes can also be pre-set so the users of the Story creator do not analyses results with a too low base size . The purpose of limiting the content in the Story Creator and setting predefined limits is to provide the Report users with a governed and easy to use tool that fits the need of the respective project and the skill level of the users.

The level of data filtering each user can apply to the charts in the Story Creator can also be limited by setting access rights to filters and hierarchical filters on a user level. Except from access rights to filters the users can also get access to different set of questions and answers by applying Variable subsets and setting appropriate access rights to these.

Multi language support of the interface (buttons, information messages, headers etc.) is not supported, it is always displayed in English, but the meta data (question texts, answer texts, filters) is displayed in the language selected by the user.

Chapter 3.1 described how to use the Story creator form a Report User perspective and chapter 3.2 how to set up the Story creator from an Administrator perspective.

3.1 Report user view

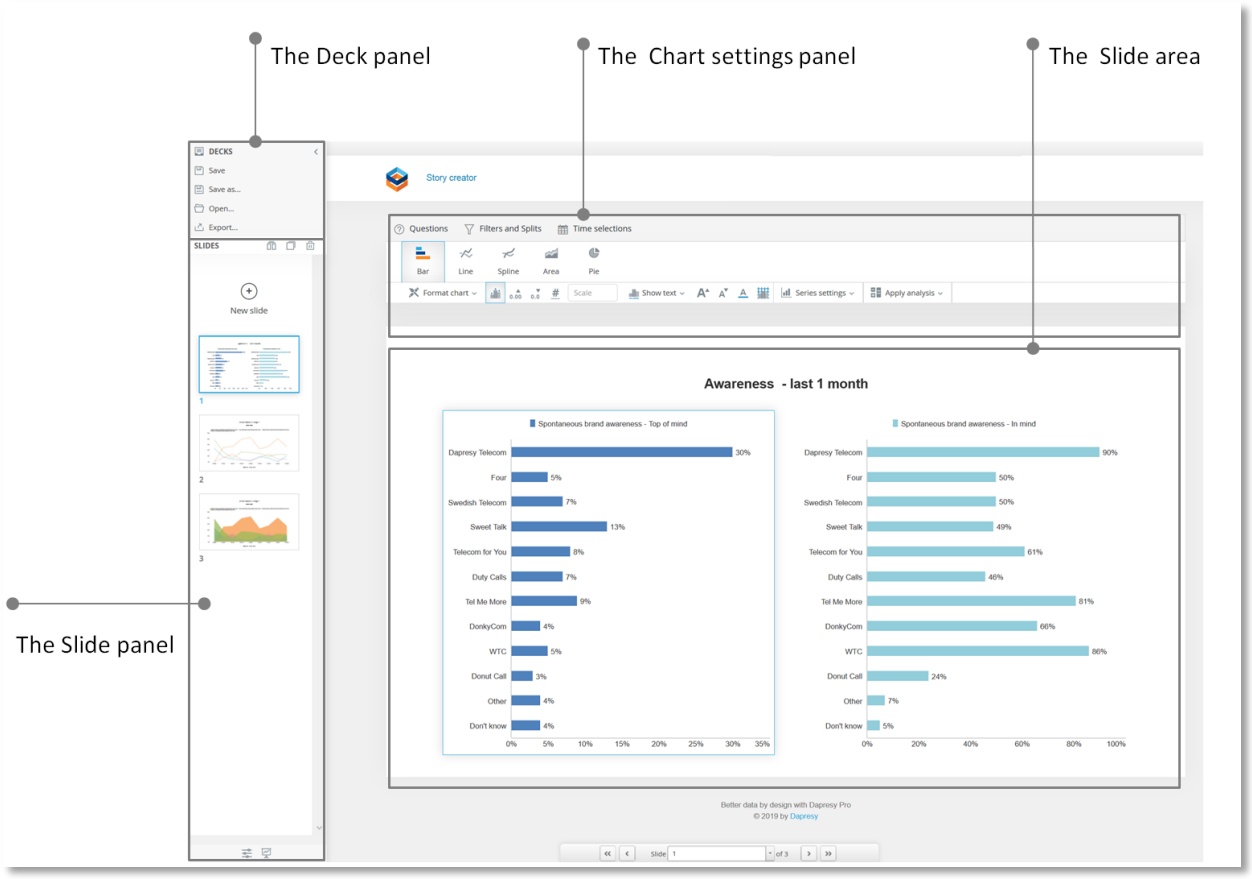
The Report user creates reports in the Story Creator based on their needs and they can do the following during the report creation:

- Define the content of the charts by for example
    - selecting the calculation type to be applied to the chart (percentage shares, means, counts etc.)
    - selecting which questions and answers to be displayed in the chart
    - applying filtering to the calculations based on categorical filter variables or time period filters
    - applying intervals to trend charts such as weeks, months, quarters and also applying moving average calculations
    - selecting visualization type (bars, columns, lines, splines, areas, pies, donut, gauges, polar etc.)
    - selecting if data should be weighted or unweighted
    - applying additional calculations such as significance testing
    - applying base size warning or hide result with a low base size
    - etc.
- Define the content of the text boxes
- Create multiple slides and define multiple charts per slide
- Export all the slides to PPT, PDF and Excel
- Export the data table behind a single chart to Excel
- Export a single chart as a PNG image
- Save the slides as a Deck for future usage
- Save slides into My Stories

Note the following limitations: a chart in the Story creator can contain a maximum of 4 000 data points and a deck can contain a maximum of 200 charts.

The image below is a quick guide of the user interface, as shown the tool is divided into four different main areas; the Decks panel, the Slide panel, the Slide area and the Chart settings panel.

Here we see Story Creator interface and the four different main areas.

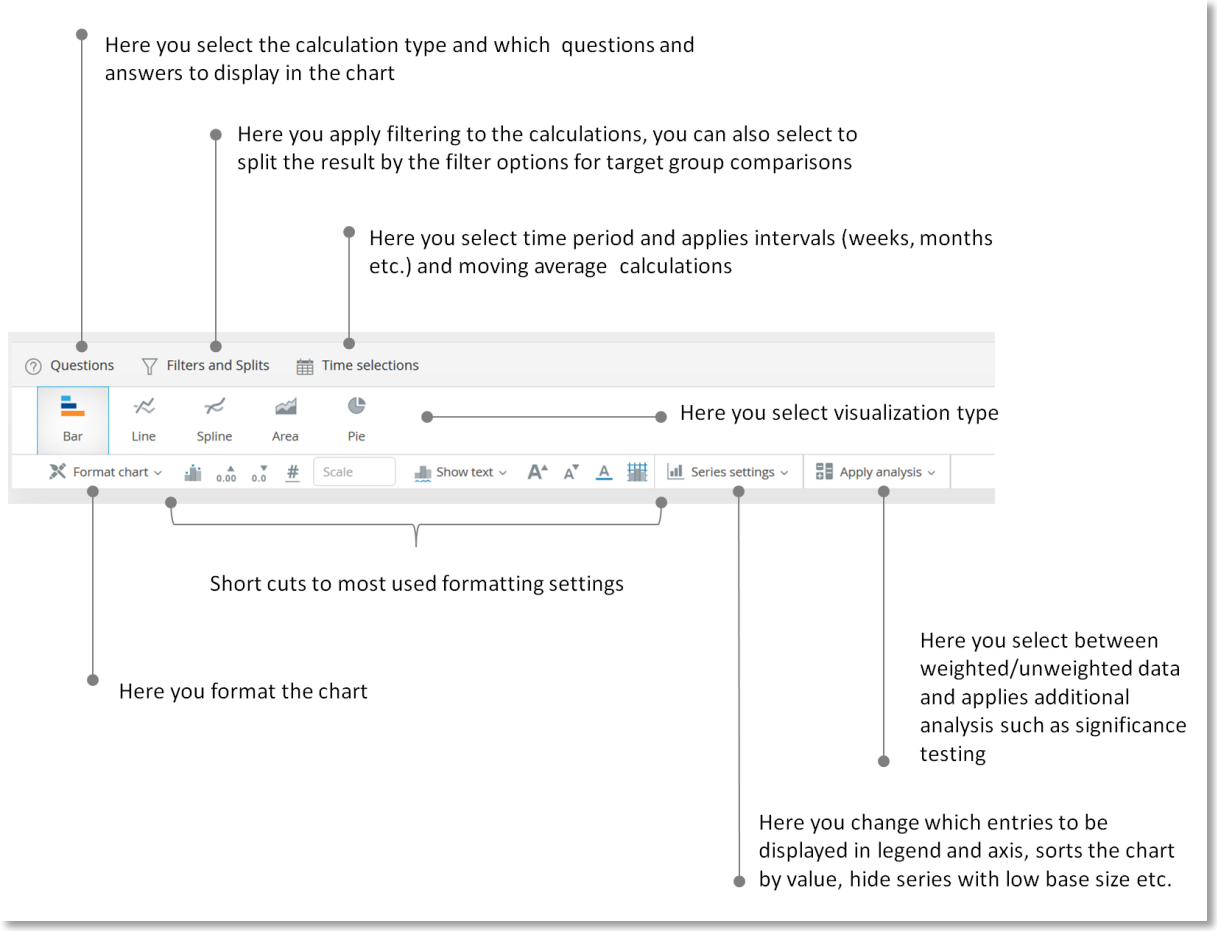


Further down you find a short introduction to each area, more detailed information come in later chapters.

Chart settings panel

In the Chart settings area you define the content of the selected chart. You select which questions and answers to be displayed, if any filters or specific time periods shall be applied and what type of visualization to use and related formatting settings. In this area you can also select to apply additional calculations to the result like for example significance tests or benchmark calculations.

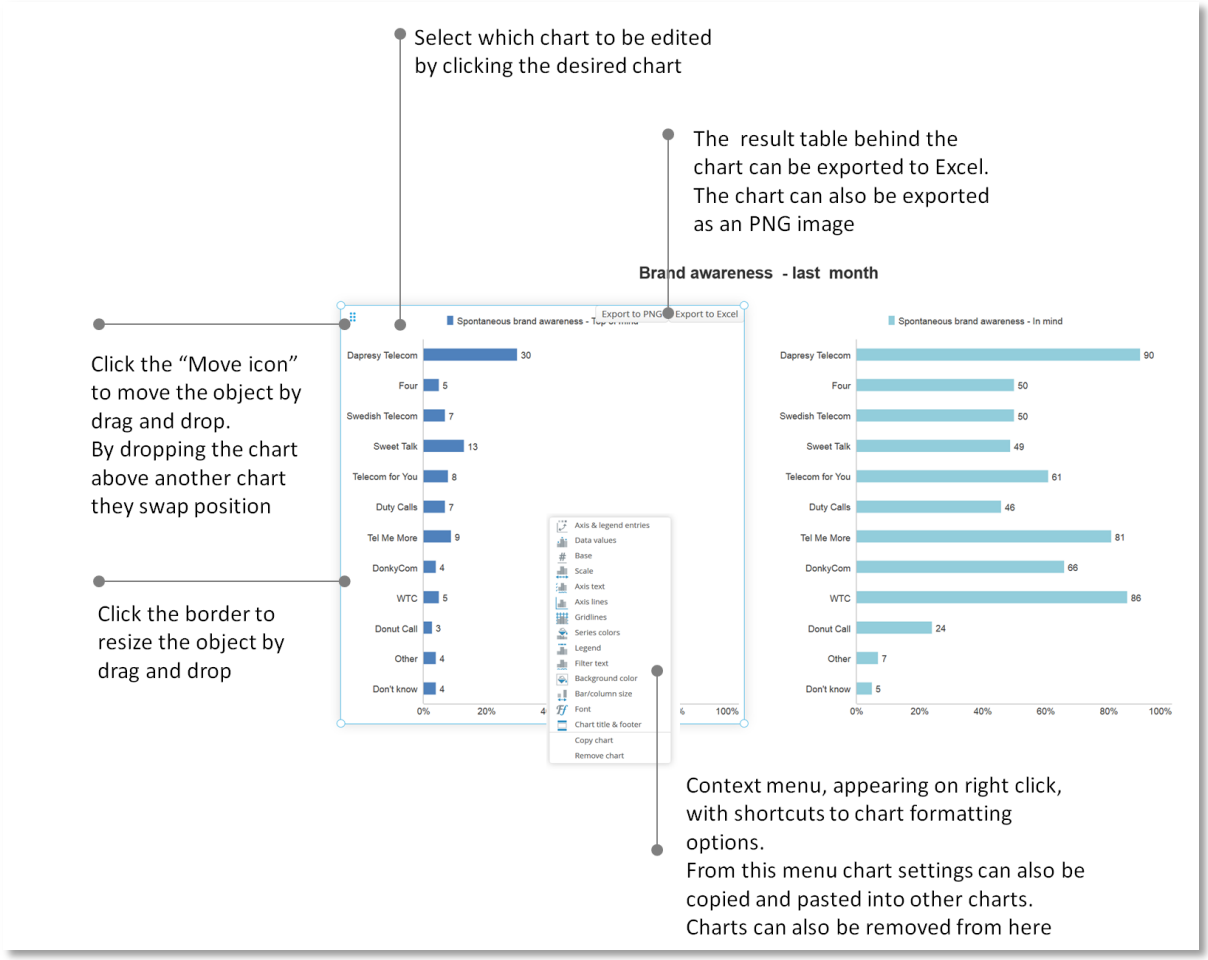
Here we see the Chart settings panel.



Slide area

The slide area displays the charts and text boxes of the slide. The number of charts and text boxes (including their size and position) comes from the used Slide layout. The size and position of all the objects can be changed by drag and drop.

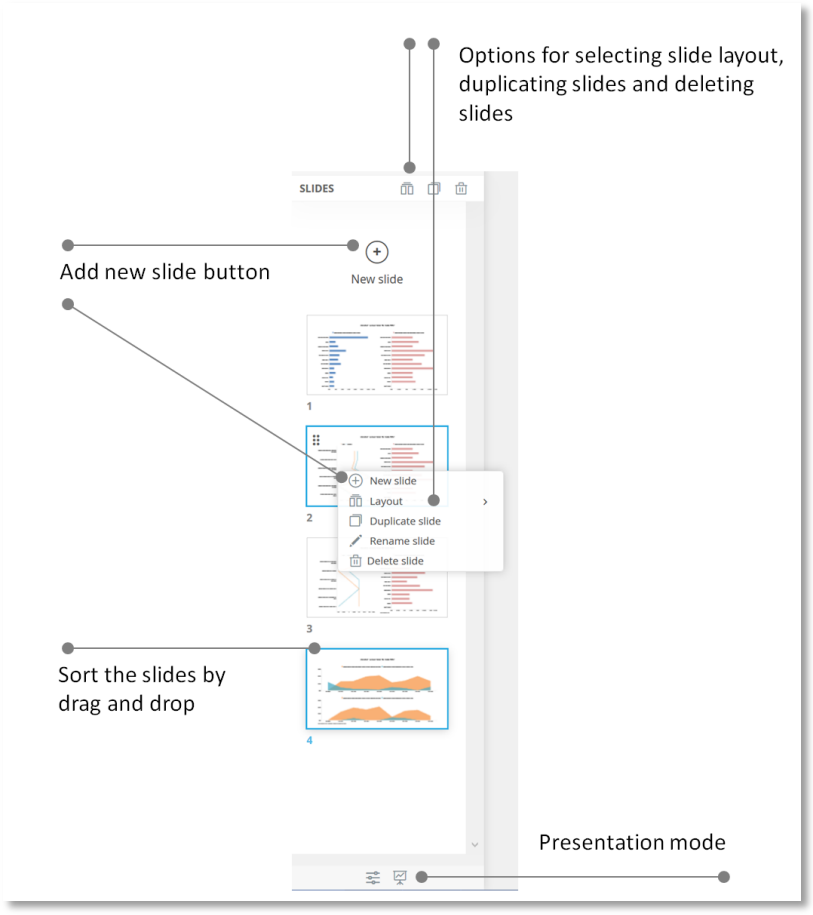
Here we see Slide area.



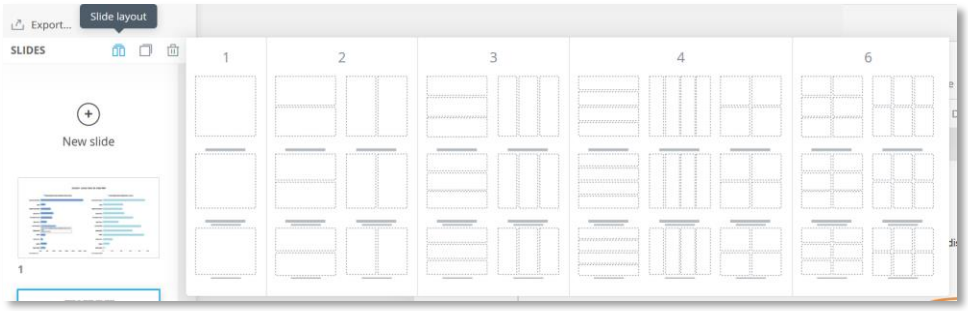
Slide panel

The Slide panel displays all the slides in the current deck and here you can rearrange the slides by drag and drop, add new slides, duplicate slides, delete slides, select which layout to apply to a slide etc. As shown in the first image below a context menu appears on right click which includes in the same options as shown in the top of the Slide panel.

Here we see the Slide panel and the context menu appearing on right click.

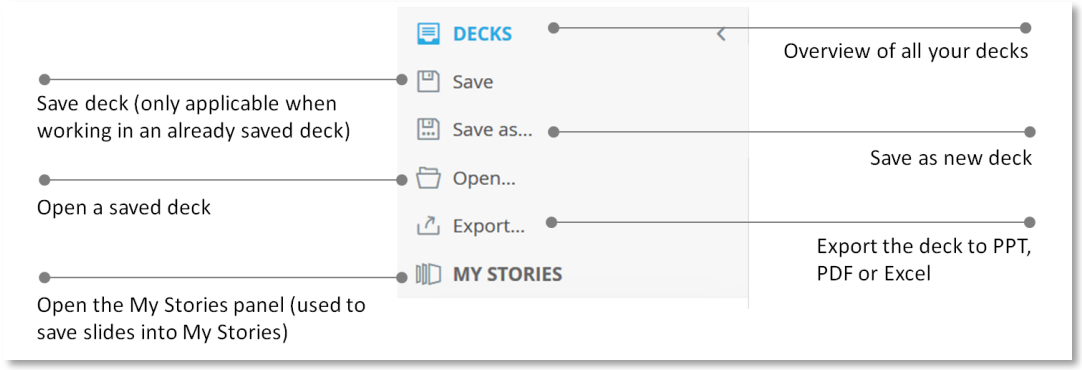


Here we see the Layout selection menu, you can select among layouts with different number of charts and text boxes.



The Decks panel

In the Decks panel you can save the reports you build and load saved reports. From this panel you can also export your report deck to for example PPT or Excel.

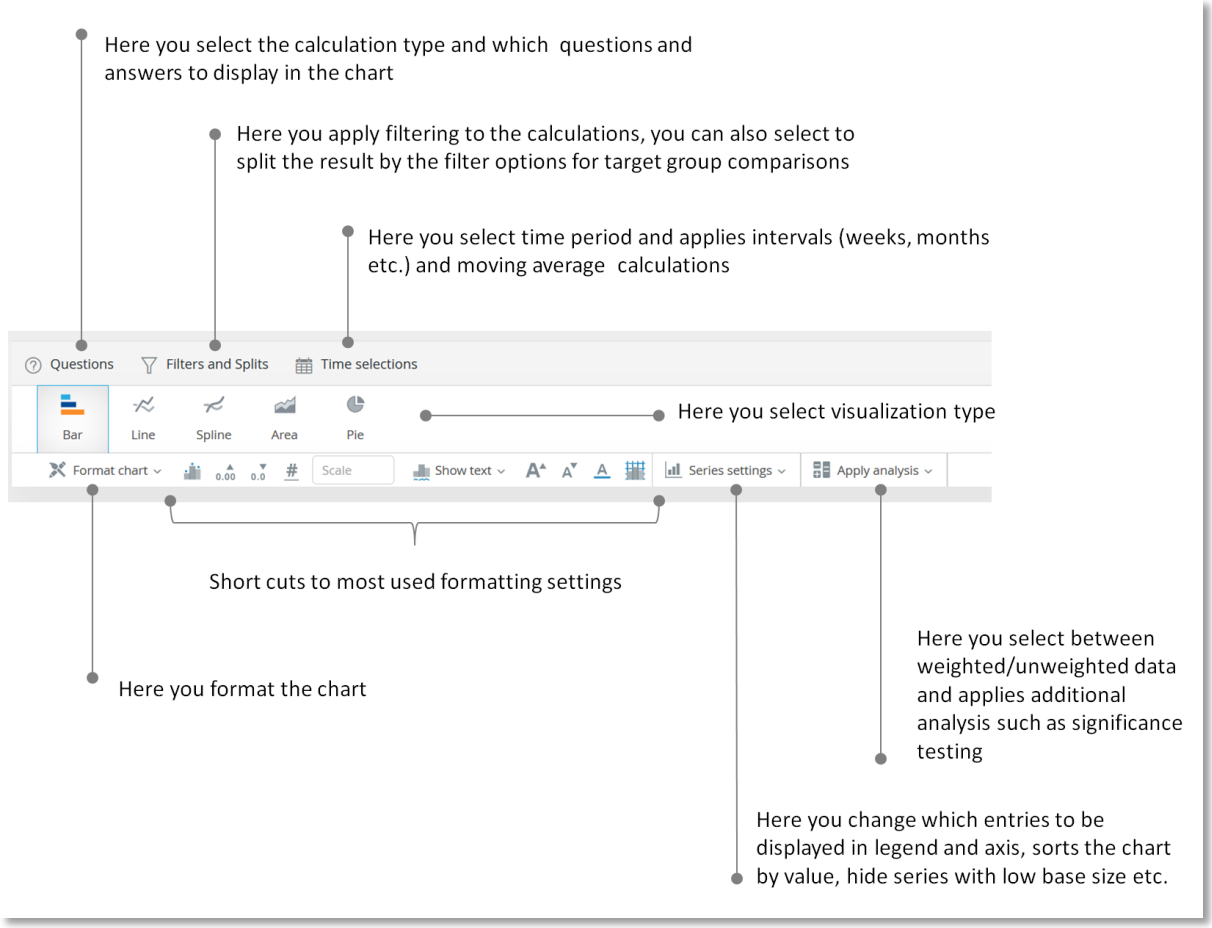


Chapter 3.1.1- 3.1.3 describes all the features in the chart settings, slide panel and the deck areas in more details.

3.1.1 Chart settings

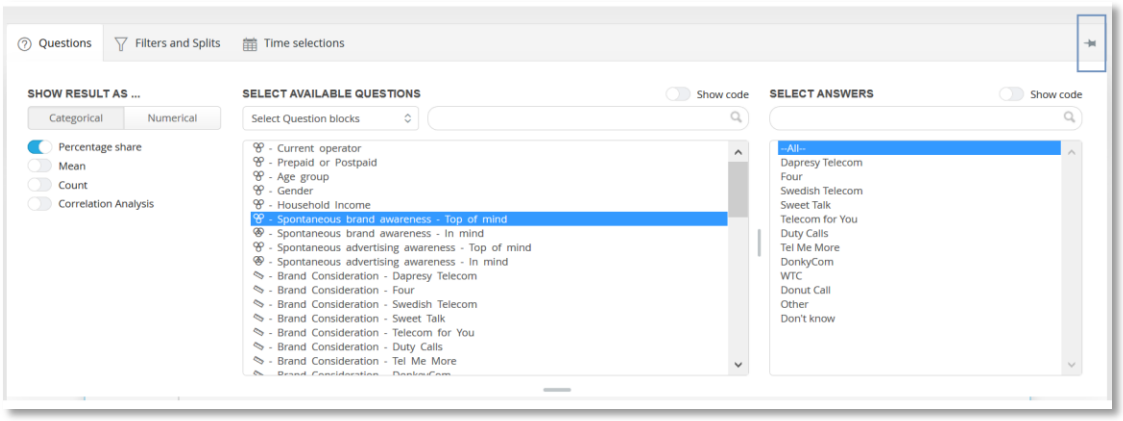
The Chart settings area is divided into different sections as shown in the image below, the content of each of these are described further down.

Here we see an overview of the chart settings area.



Tip when working with the chart setup: the Questions, Filters and Time selection panels collapses automatically when the result of chart is calculated, use the Pin option in top right corner to keep this panel expanded all the time.

Here we see the Pin button in top right corner, click this button if you want the top panel to always be expanded.



3.1.1.1 Questions tab

In the Questions tab you select which calculation type to be applied and which questions and answers to be displayed in the chart.

The calculation selection is made in top left corner and is divided into two different categories, Categorical and Numeric calculations.

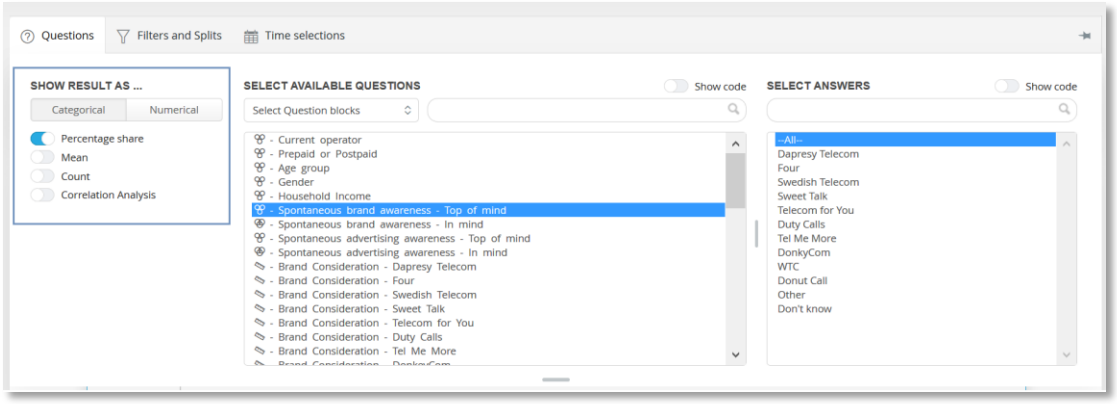
The following Categorical calculation types are supported:

- Percentage share
- Mean
- Count
- Correlation analyses

The following Numeric calculation types are supported:

- Sum
- Mean
- Median
- Min
- Max
- Percentile
- Correlation analyses

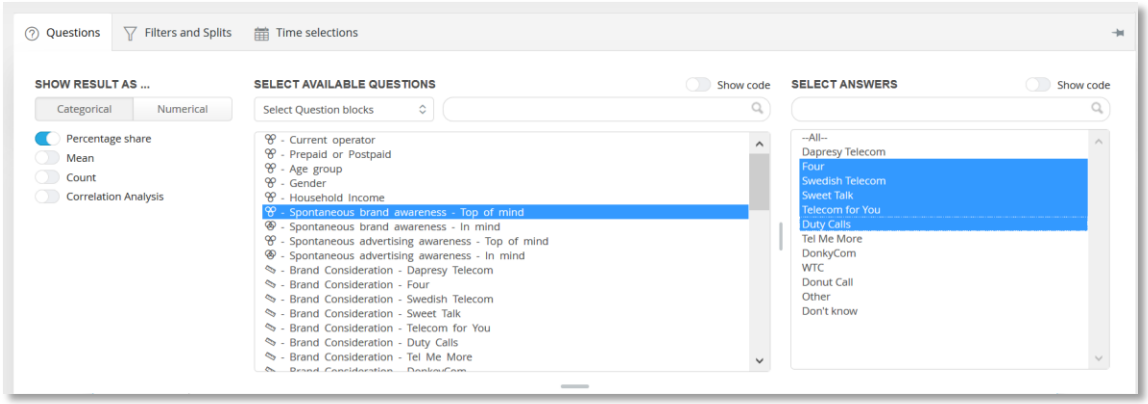
Here we see where to select calculation type.



In the Question selection list you select the questions to be displayed in the chart. The list contains the variables that match the selected calculation type only.

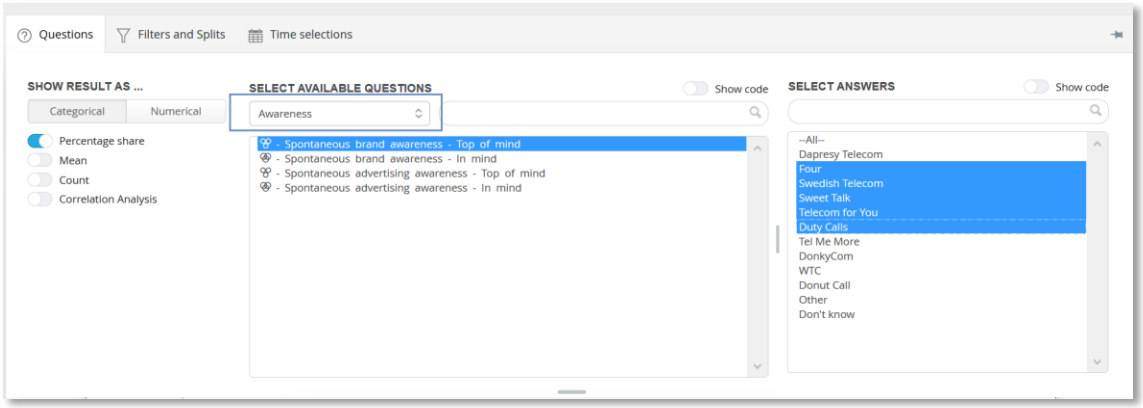
In the Answer selection list you select the answers to be displayed in the chart if the selected calculation type is Count or Percentage share. The Answer list displays the answers of the selected Questions only.

Here we see an example of calculation, question and answer selections.



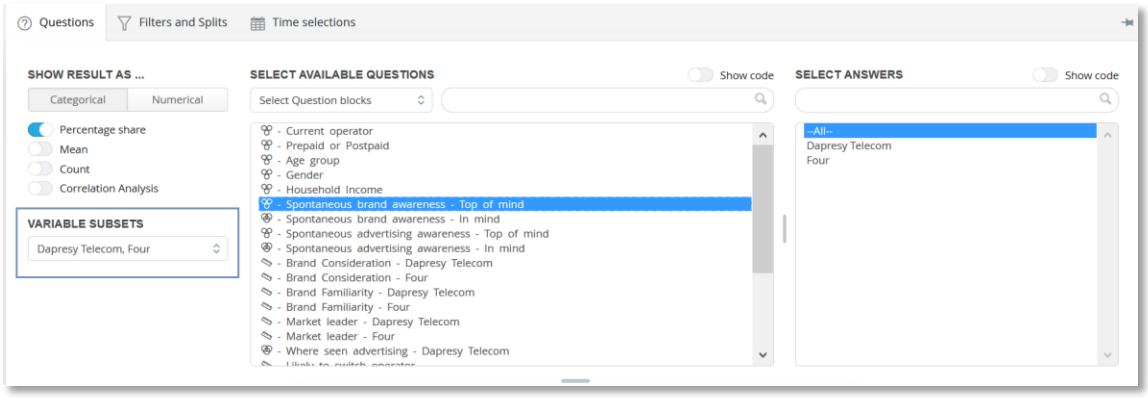
If Question blocks are present you can filter the Question list by one or multiple Question blocks, the Question block selection list is located just above the Question selection list as shown in the image below.

Here we see an example of the Question block filtering, the Awareness block has been selected so awareness related questions are listed only in the Question selection list.



If the Story creator contains variable subsets, used to limit the content in the question and answer lists the Variable subset selection list appears to the left of the question and answer selections as shown in the image below. The logged in user sees only the Variable subsets he/she has access to. If the user has access to one (1) variable subset only, or if the Story creator contains one Variable subset only, this control is hidden but the only Variable subset is still applied and is filtering the content in the question and answer lists.

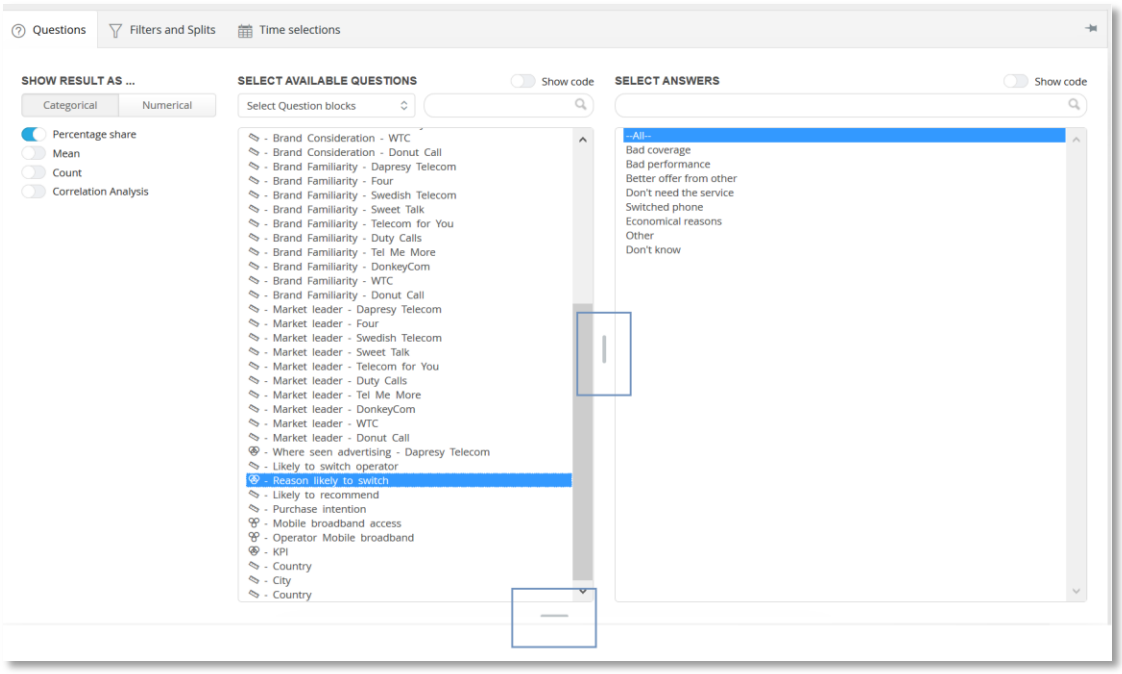
Here we see a Story Creator with the Variable subsets selection list present.



Note: Variable subsets are not filtering the content in the Filter tab. For limiting filter options, per user, apply “access to filters” in project settings page and give the users relevant access rights.

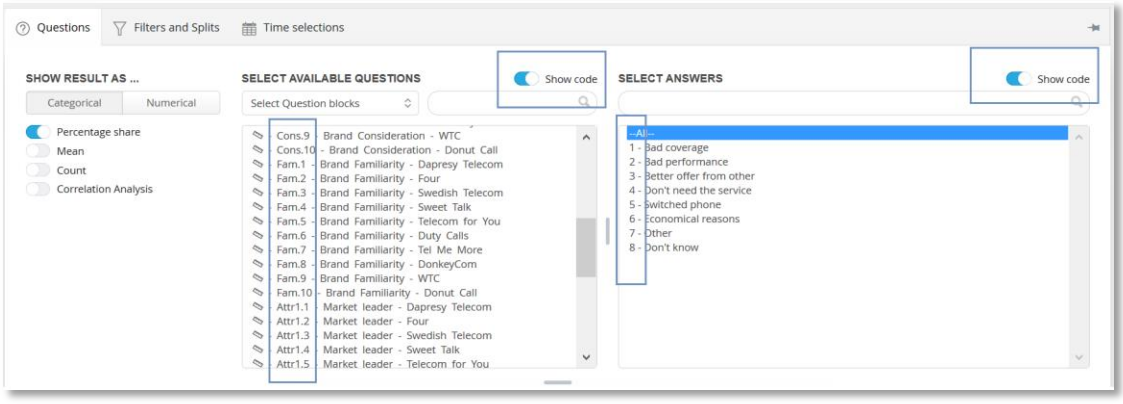
Tip 1: You can resize the panel by drag and drop via the handles highlighted in the image below, as an example you can make the panel higher to see more questions/answers without having to scroll, you can also make the answer selection box wider to see longer answer texts.

Here we see an example, the panel has been made higher and the answer box more wide compared to the default view.



Tip 2: If you are aware of the question and answer codes in the questionnaire you can display these codes in the question and answer selection lists, by ticking the Show code option, to make it easier to find the relevant items.

Here we see an example of displayed question and answer codes.

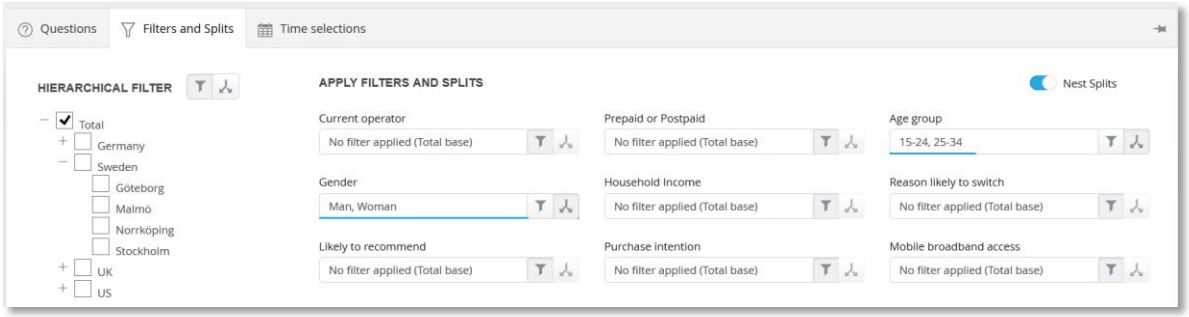


Tip 3: Use the search fields above the Questions and Answers selection lists to find the desired items faster.

3.1.1.2 Filters and Splits tab

In the Filters and Splits tab you can apply filters to the chart. Which filters that are available to choose from depends on the setup by the Administrator and the access of the user. Regular filters are displayed in dropdown lists and the Hierarchical filters are displayed in a tree structure as shown in the image below.

Here we see the Filter and splits tab, in this example the both hierarchical and normal filters are available.

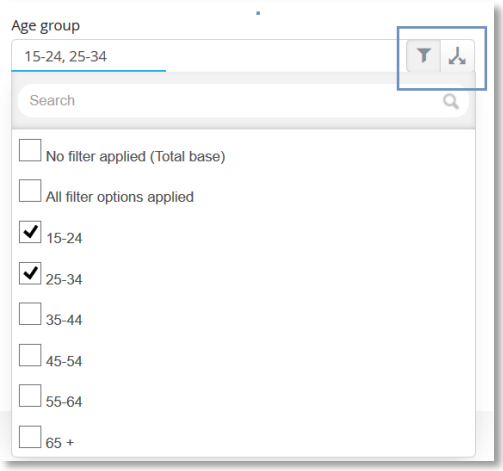


Note 1; In the hierarchical filter tree only the nodes that the user has access to are enabled and possible to select.

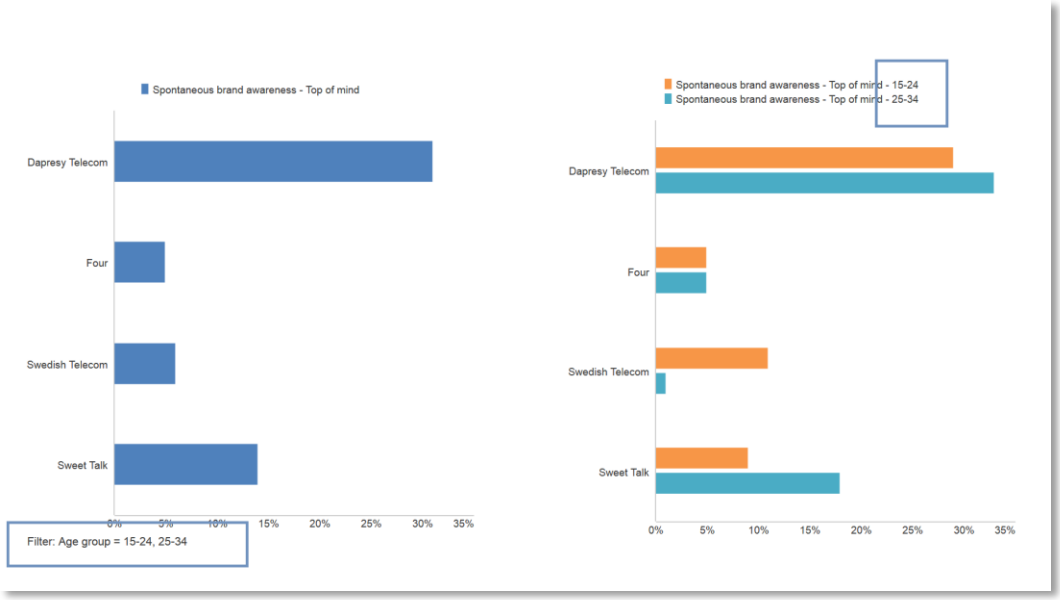
Note 2; If access right to “regular “filters is applied (a project level setting) the Report user sees only the filters he/she has access to, if the user only have access to a single filter option, within a filter variable, the filter list becomes hidden and the data is always filtered by the hidden filter.

The selected filter options can either be applied as filters to the calculation or used to split the result by the filter options (where each filter appears as a separate series in the chart). In the first image below you see where to make the selection between a split and filter and in the second image you see the difference between both these options.

Here we see the controls for defining if the filter options should be applied as filters or as splits. The left buttons is used to filter the data and the right to split the data by the selected filter options.



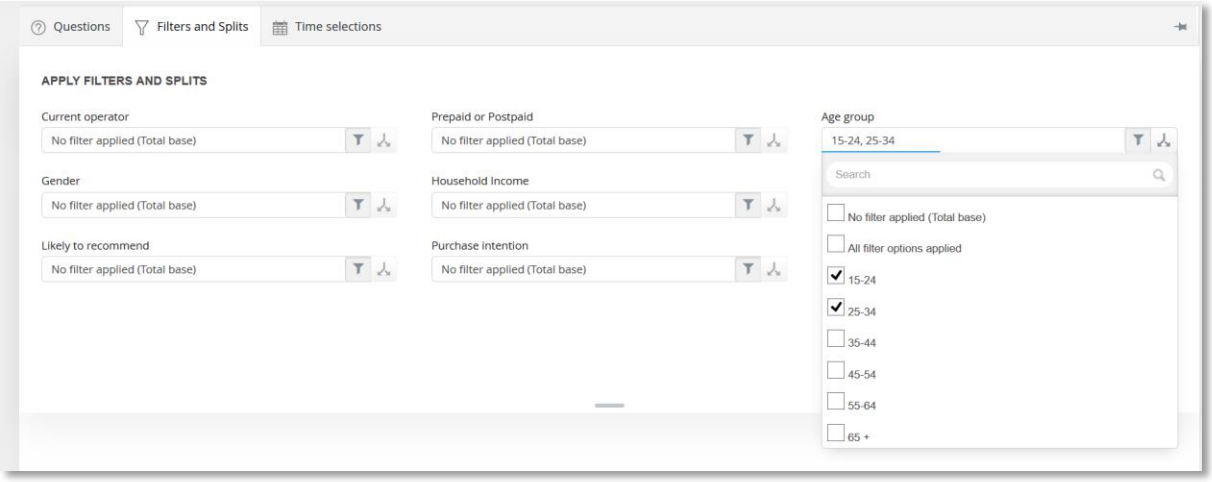
Here we see two examples based on the above filter option selection (the age groups 15-24 and 25-34 are selected), in the left chart the age groups are used as filters and in the right chart the age groups as used as splits.



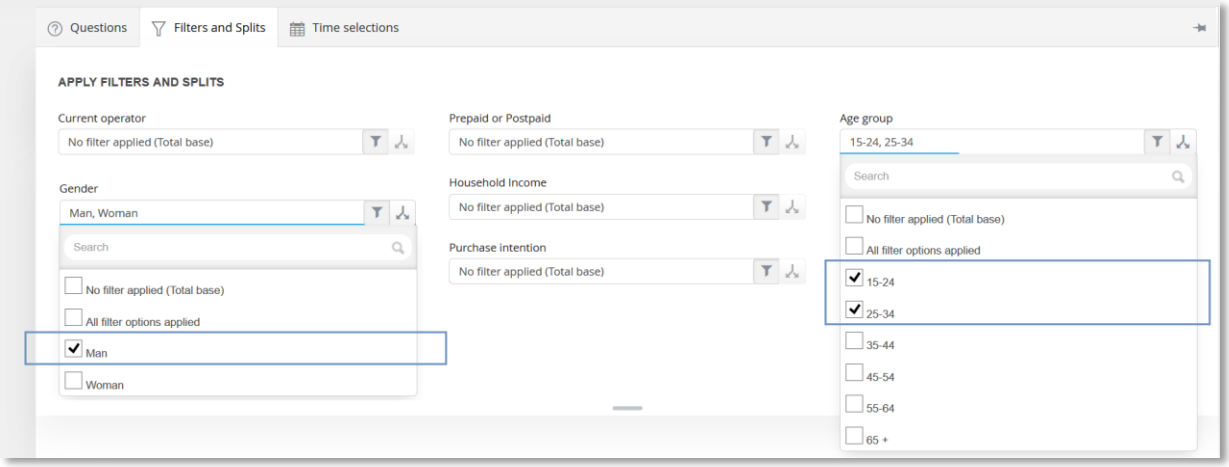
If applying the selected options as filters (not as splits) and selecting multiple options within a filter variable, like in the first example below, these are treated as “OR”. If selections have been made in

multiple filter variables, like in the second example below, these are treated as “AND” between the variables.

Here we see an example of multiple selections within a single filter variable, this selection will include all the respondents that are either 15-24 or 25-34.

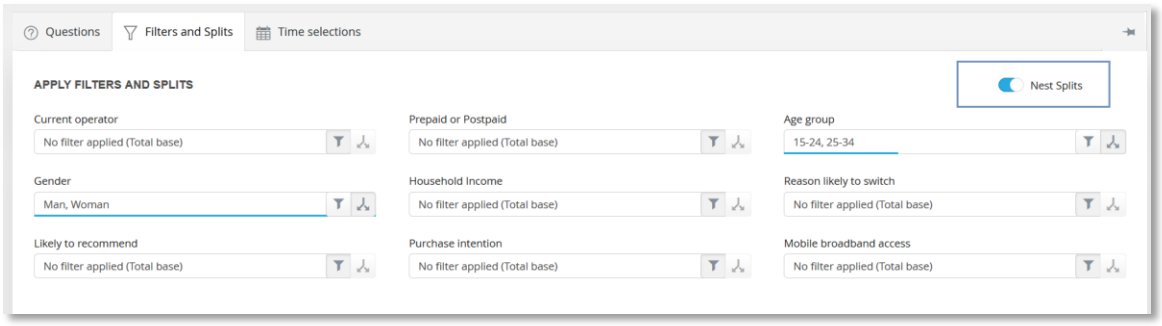


Here we see an example of selection in multiple filter variables, this selection will include all the respondents that are either “Man and 15-24” or “Man and 25-34”.

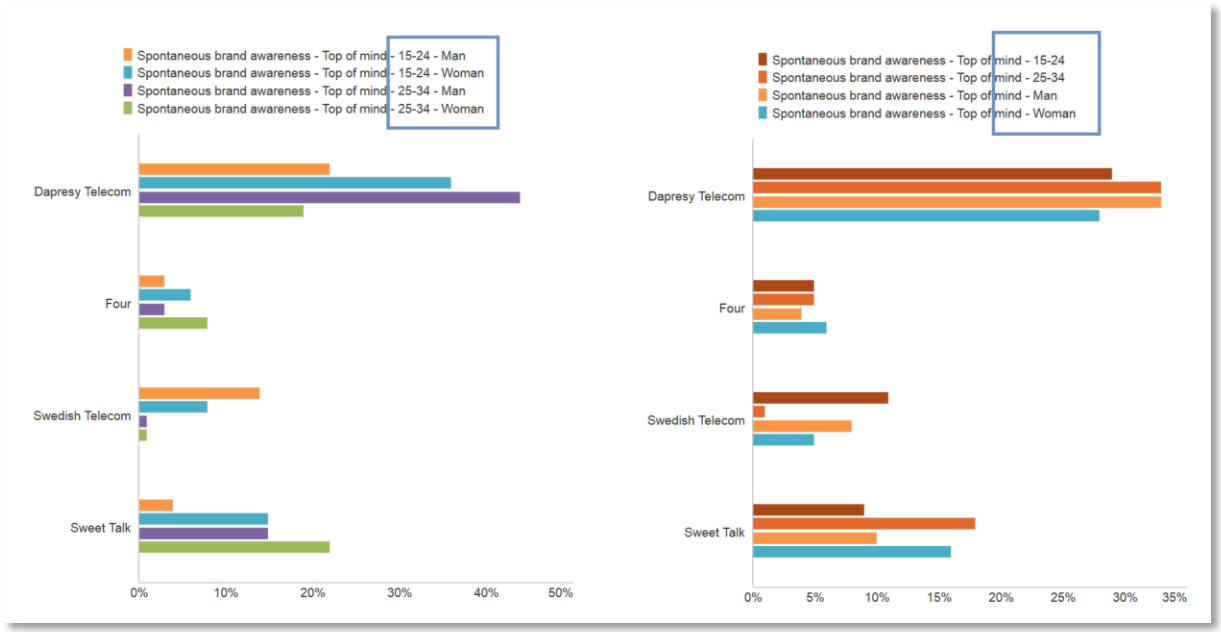


If applying the filter options as splits and having options selected in multiple filter variables these becomes nested by default but these can also non-nested. In the first image below you see where to turn the nesting on/off and in the second image you see an example with nested and non-nested Splits.

Here we see the setting for turning the nesting logic on and off (note: the setting is only appearing if split is applied to two or more filter variables).



Here we see an example of nested and non-nested splits based on the selections above (Man and Woman is selected in the gender filter variable and 15-25 and 25-34 in the age group filter variable). The left chart shows the nested result and the right the non-nested result.

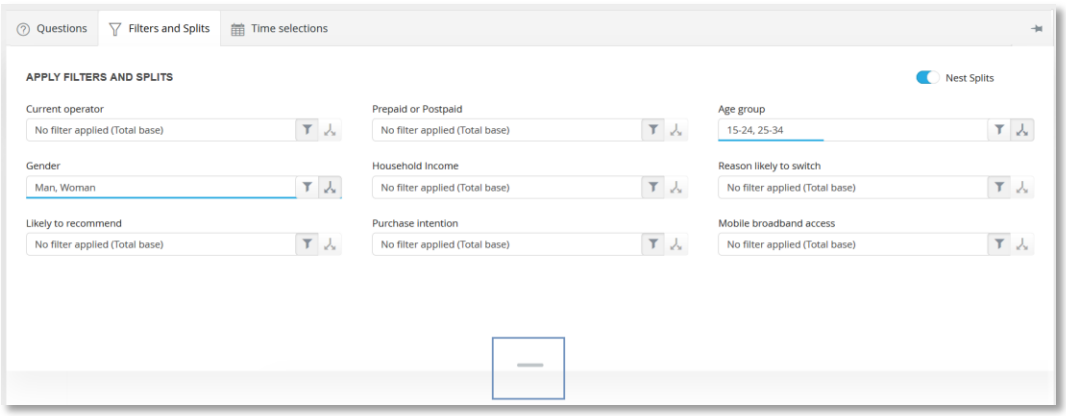


Note: If Hierarchical filters are used these are always nested with the other selected

Tip 1: use the search field within the filter lists to find the options you are looking for faster

Tip 2: use the handle in the bottom of the panel to resize the Filter tab if you have a lot of filter variables.

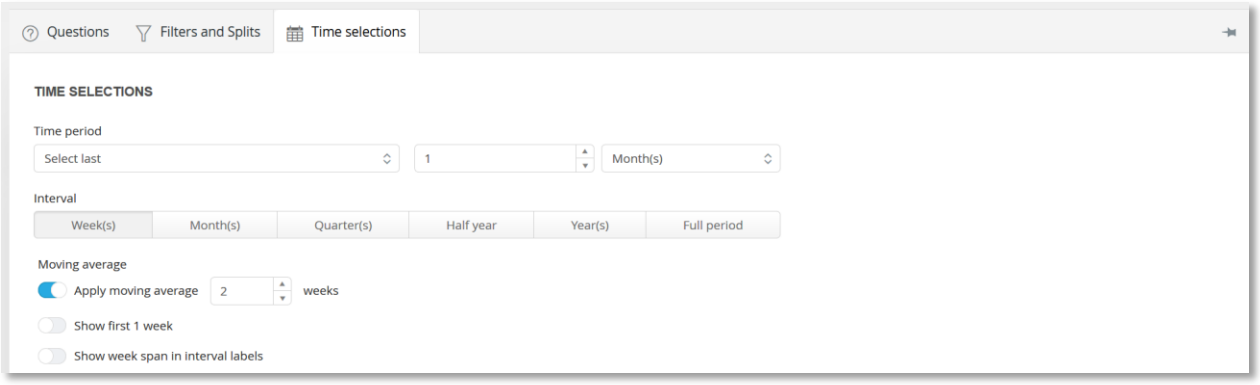
Here we see an example, the panel has been made higher which is useful of the many filter variables are available.



3.1.1.3 Time selection tab

In the Time selections tab you filter the respondents used in the calculation by selecting a specific time period. You can also apply intervals such as weeks, months and quarters etc. to the charts. If intervals have been applied you can also turn on moving averages calculations from this tab.

Here we see the Time selection tab.



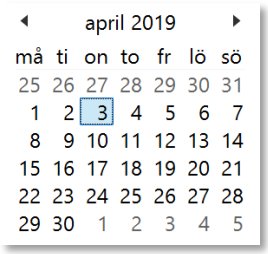
3.1.1.3.1 Time period

To select a Time period select any of the options below in the Time period list.

- Select start and stop date: use this option to set a fixed date range
- Year to Date: use this option to include all respondents from the current year
- Full period: use this option to include all the respondents

- Select last: use this option to select all respondents from the last X number of days, weeks, months etc.

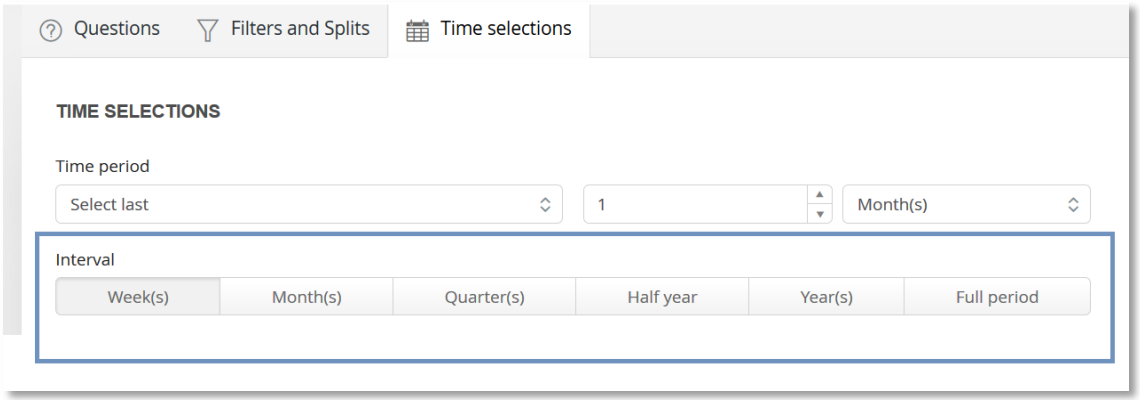
Note: the last option above, “Select Last” is based on the highest interview date in the project and not the current date. If the highest interview date is the 3rd of April 2019 the option “Last 1 week” will include all interviews from that week which means all interviews from 1st of April (see calendar in the image below), it will not include the respondents from the last 7 from either the 3rd of April or the current date. The same goes for the other options so “Last 2 years” will for example include all respondents from 1st of January 2018 if the highest interview date is 3rd of April 2019.



3.1.1.3.2 Intervals

To split the data by intervals such as weeks, months and quarters select the desired interval in the Interval selection control. Full period means that no interval is applied.

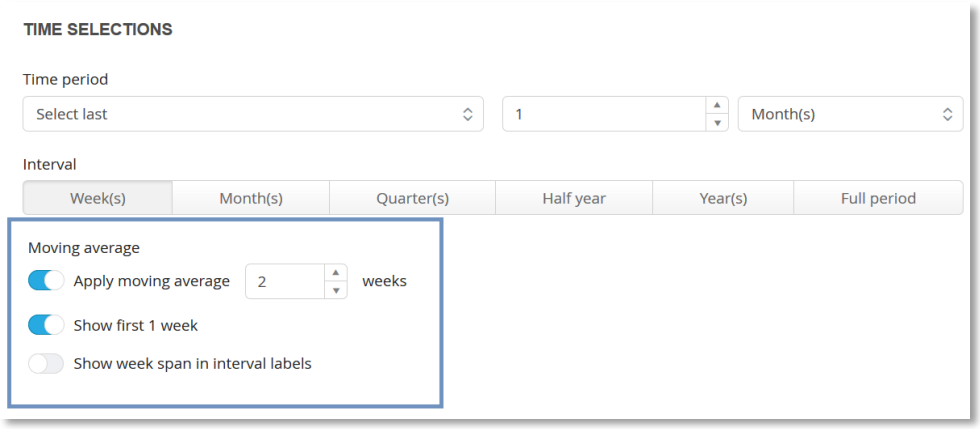
Here we see the Interval selection control.



3.1.1.3.3 Moving average

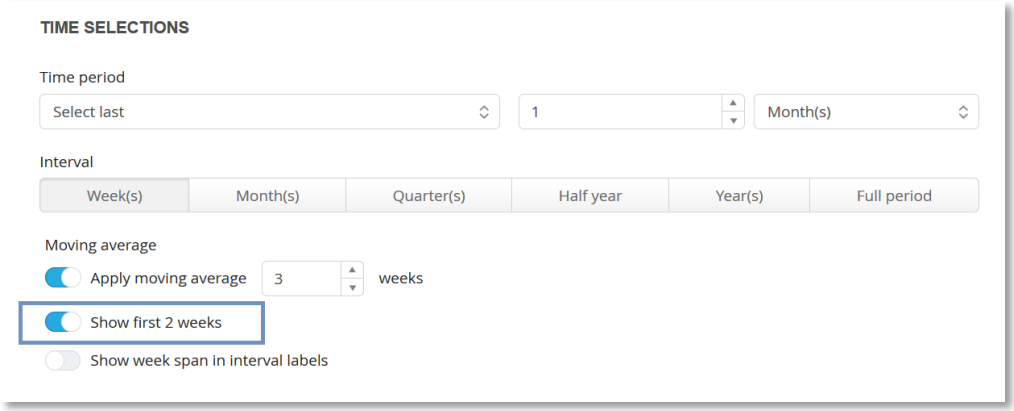
If an interval is applied to the chart you can also so apply a moving average calculation.

Here we see the Moving averages controls that appears when turning on Moving average.



To apply a moving average you have to define the number of periods to base the moving average on, like for example a 2 weeks moving average as shown in the image above.

When applying a Moving average calculation the initial intervals that do not have enough data points are hidden automatically. If the chart, for example, shows data for Week 1, Week 2, Week 3…. Week 20 and a 3 weeks Moving average is applied the first two weeks will be removed from the chart as these do not have 3 weeks data. You can though select to show these “incomplete” weeks by ticking the option shown in the image below.



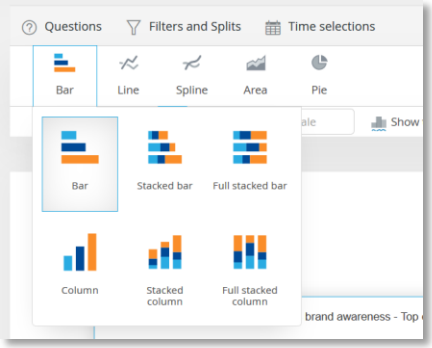
3.1.1.4 Chart type

In the Chart type area you select which chart type to visualize the result in. The chart types are divided into the following main groups:

- Bars

- Lines
- Splines
- Areas
- Pies

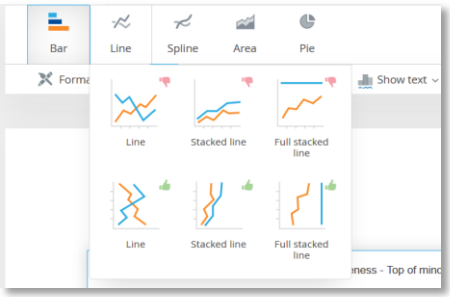
Here we see the chart type selection list.



If the Story Creator uses the “smart logic for recommending chart type”, chart types with a good fit to visualize the current data are highlighted with a green thumb up and the less suitable chart types are highlighted with a red thumbs down. The logic used to recommend chart types is based on the selected calculation type, number of questions, number of answers, number of filter compare series and time interval for the chart.

As an example, full stacked charts, pie charts and donuts are not recommended when the selected calculation type is not count or percentage shares, horizontal line charts are not recommended if no interval is present and so on.

Here we see an example of the recommendation icons appearing in the chart thumbnails.



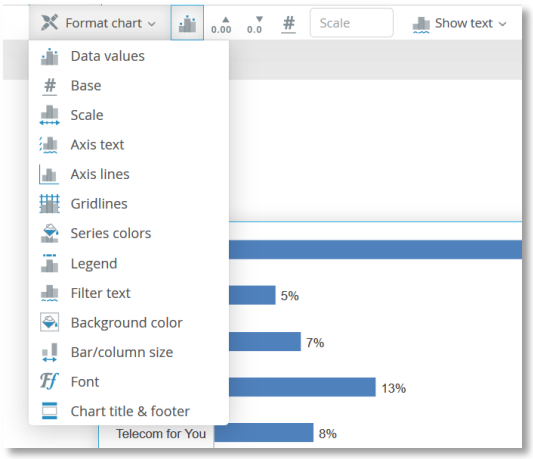
Note: There will always be edge cases that cannot be covered with smart logic so the recommendations should be treated as suggestions and not strict rules.

Note 2: The Administrator decides if this smart logic will be applied or not to the chart selection in the Story creator during the setup of the tool.

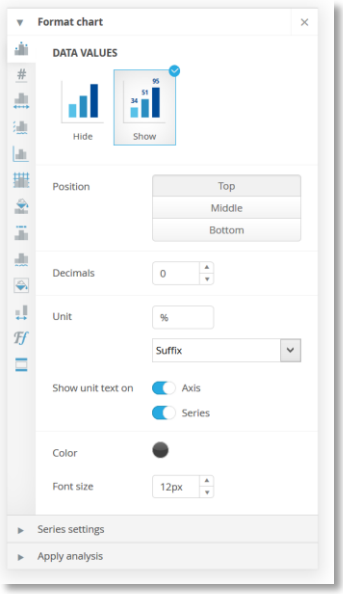
3.1.1.5 Format Chart settings

The Format chart panel is used to style the chart. To open the Format chart panel click any of the options in Format chart menu.

Here we see the Format chart menu, click any of these options to open the full panel.

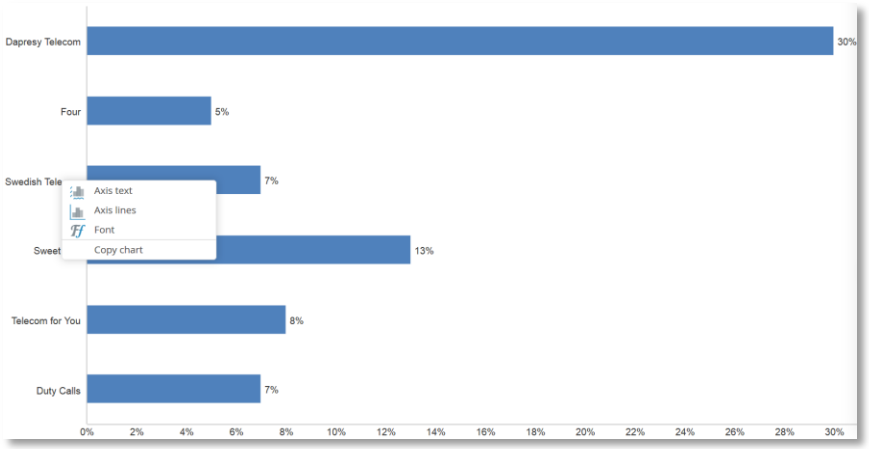


Here we see the Format chart panel. The panel can be moved on the screen by "drag and drop".



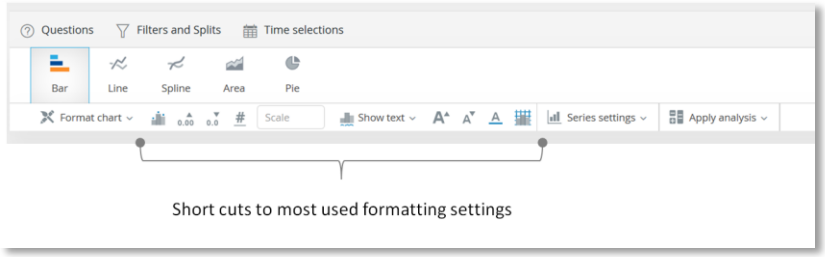
Tip 1: You can also open the Style panel by right clicking in the chart as shown in the image below. Depending on where in the chart you right click the context menu shows the relevant options only which makes it easier to directly find the relevant styling options.

Here we see that short cuts to the styling menu appear when right clicking in the chart.



Tip 2: the most commonly used formatting options are available as toggle short cuts just next to the Format chart menu (see the image below). If you don't find what you are looking for in the short cuts menu use the Format chart panel to get access to all the formatting settings.

Here we see the short cuts with the most used options. For the full set of formatting functionality you have to open the Format chart panel.



Below you can read more about the options that are available in the Styles panel.

Data values

Here you select if the Data values shall be displayed or not and the styling of these.

Base size

Here you select if the Base size shall be displayed or not. If the result is weighted you can also select to show the weighted or the unweighted base size.

Scale

Here you select the Min and Max scale in the chart, by leaving the fields empty the scale will automatically be adjusted to the result in the chart.

The scale steps can also be defined, by default these are set to Auto which means that these are calculated automatically based on the size of the chart and the defined min and max scale.

Note: the defined min and max scale cannot always be achieved as systems also must be considered the defined scale steps when rendering the chart, if the max scale for example is set to 28 and the scale steps to 10 the max scale will become 30.

Axis text

Here you select if the axis texts will be displayed or not and also the styling of the texts.

Axis lines

Here you select if the axis lines will be displayed or not and also the styling of lines.

Grid lines

Here you select if gridlines will be displayed or not and also the styling of the grid lines.

Series color source

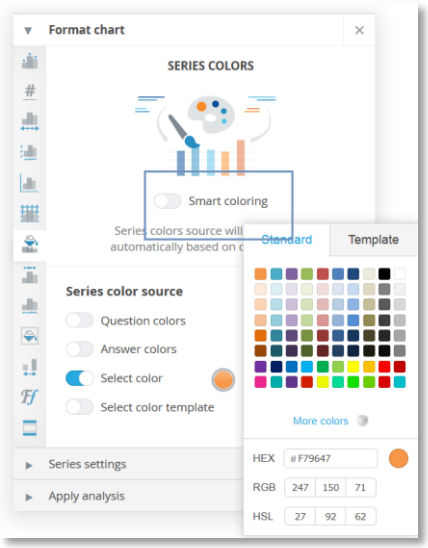
Here you select the color of the series in the chart. A smart coloring logic is applied by default so the

colors of the series come from either the questions, answers or the filter splits depending on what is displayed in the chart and where (axis or legend) each item is positioned.

By turning off the smart coloring logic you can select which color source you want to apply or select a single color which is set for all series.

Note: The colors connected to each question, answer and filter split cannot be adjusted in the Story Creator, it can only be adjusted by the Administration as these colors effect all the reports in the current project.

Here we see the option for tuning off the Smart coloring logic which makes it possible to set an own color source.



Legend

Here you select the position and style of the legend. You can also select to remove the legend form the chart.

Filter text

Here you select the style of Filter text in the chart, you can also select to hide the filter text.

This panel appears only when Filters are applied to the chart.

Background

Here you select the color of the chart background and the grid area. If “No background color” is applied to the grid area the grid area gets the same color as the chart background.

Series line and markers

Here you define the line width and the line style (solid, dotted, dashed etc.) in line, spline and area charts. You can also apply markers to the chart.

This panel appears only when the selected chart type is a line, spline or area chart.

Bar and Column size

Here you define the width of columns and bars. You can define the space between groups of columns/bars and also the space within a group of columns/bars.

This panel appears only when the selected chart type is a bar or column.

Donut

Here you define the inner radius of the Donut chart, the hole in the center of the chart.

This panel appears only when the selected chart type is a Donut.

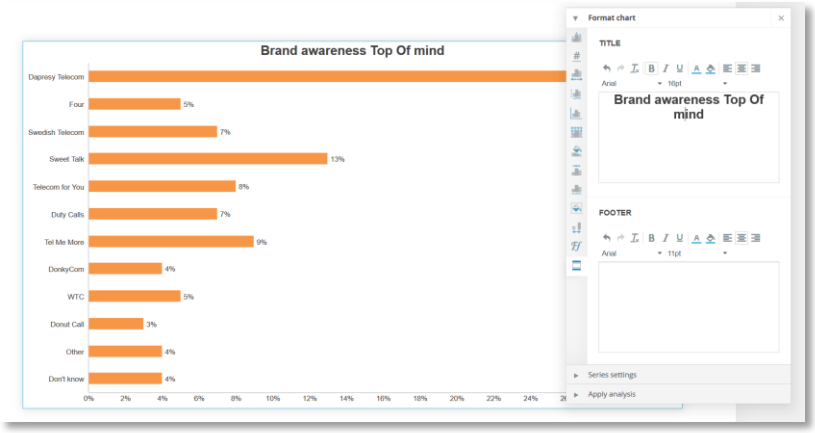
Font

Here you select the font to be applied to the chart, all labels in the chart are affected by this selection.

Chart title and Footer

Here you can add, and style, a title and a footer to the chart.

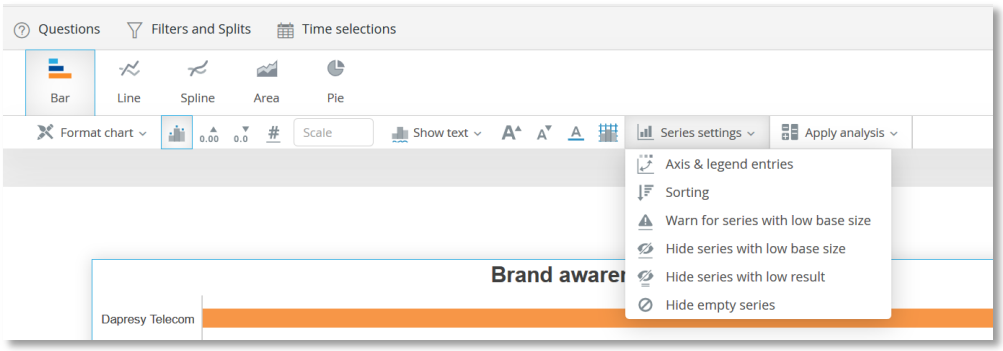
Here we see an example of a chart title.



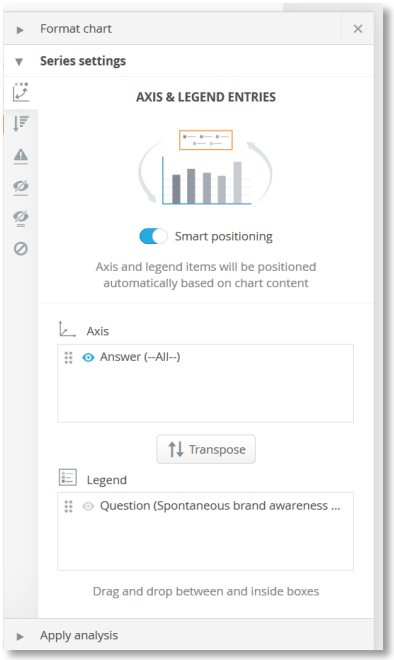
3.1.1.6 Series settings

Use the Series settings panel to define the axis and legend entries, sort the series (by for example value), hide results due to low base size, add warnings to result with low bases size etc. To open the Series settings panel click any of the options in Series settings menu.

Here we see the Series settings menu, click any of these options to open the full Series settings panel.



Here we see the Series settings panel. The panel can be moved on the screen by drag and drop.

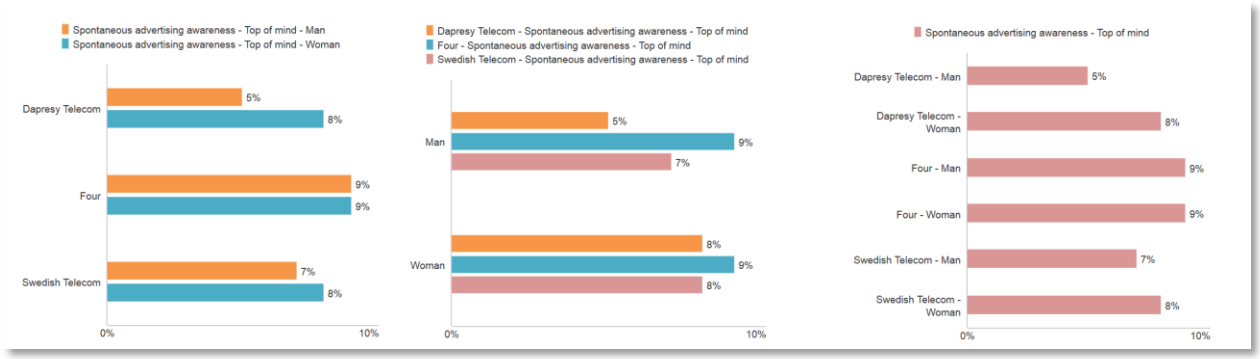


Below you can read more about the options that are available in the Data settings panel.

Axis and Legend entries

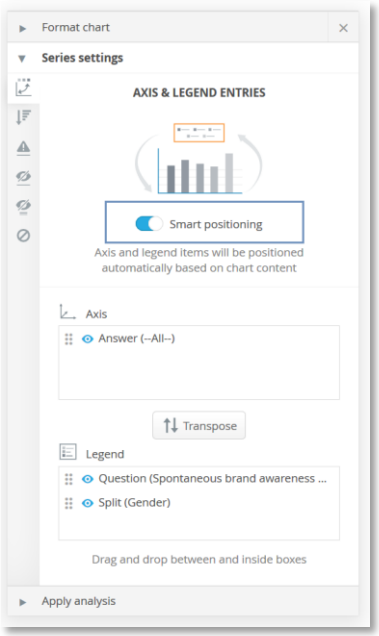
Here you select where each type of item (questions, answers, splits, intervals) shall be displayed in chart, either in legend or in axis. The legend can be thought of as the series and axis as the categories. The position, axis or legend, of each item does not impact the result, it is only the layout of chart that differs when changing the position of the items.

Here we three different examples, in all these charts the same question, answers and filter split is used but they are positioned differently in each chart. The result is though the same in each chart as the Axis and Legend entries only effects the layout and not the calculations.



A smart positioning logic is applied by default which positions all the items automatically based on what is shown in the chart. The algorithm is based on number of questions, answers, filter splits, if interval is applied or not and selected chart type. If you want to set your own position of the items just turn off the smart logic and move the items between and within the legend and axis box by drag and drop.

Here we see the Axis and Legend entries, the Smart logic is used by default but can be turned off.



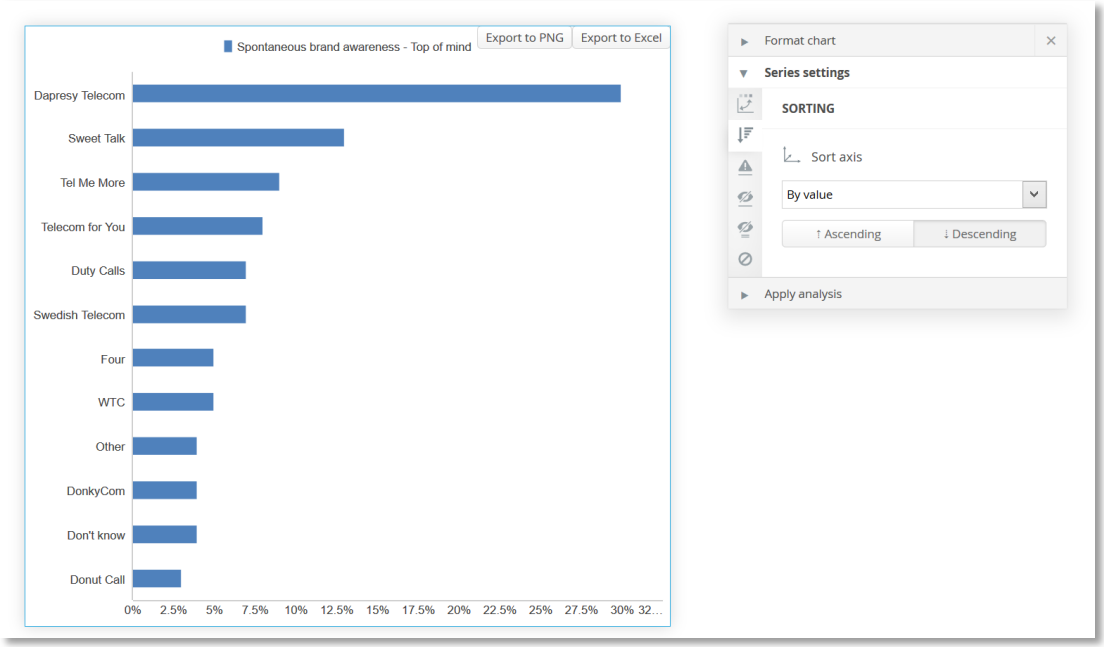
Tip: click the eye icons in the legend and axis boxes to turn labels in the chart on and off.

Sorting

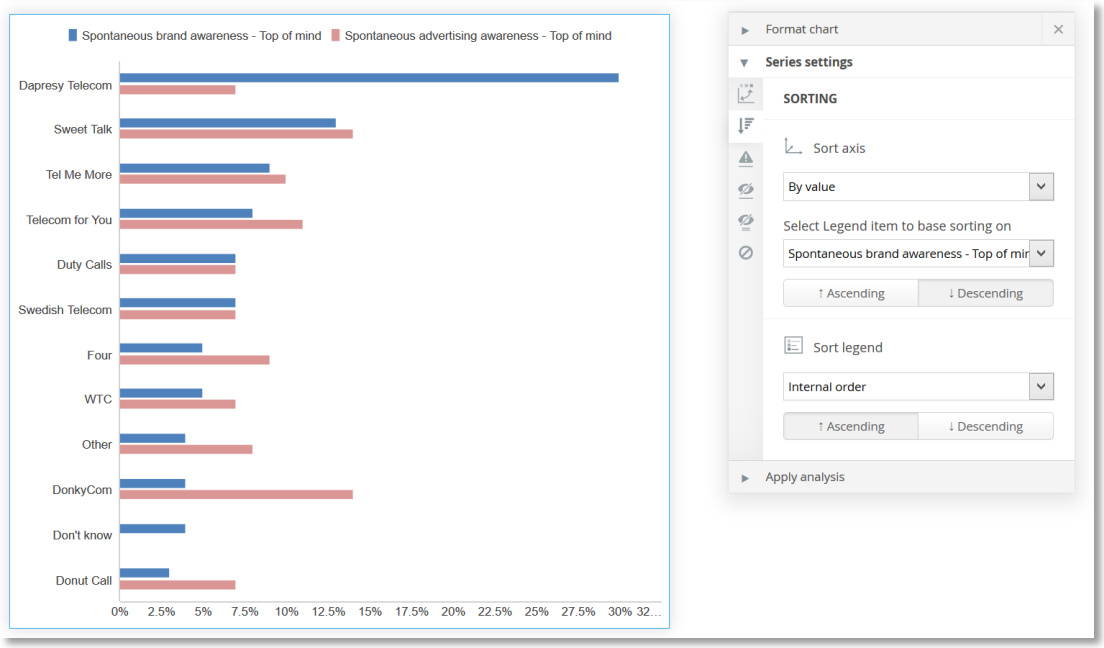
Here you select to sort the series in the chart by value, alphabetically or by the internal value (the predefined sort order of all the questions and answers) sort order.

The sorting can be adjusted in both the legend and in the axis. The sorting interface depends on the items shown in the chart, if the legend contains one item only, no sorting controls appear for the legend, the same goes for the axis.

Example 1: in the example below the chart has one question in the legend and multiple answers in the series axis. As no sorting can be applied to the legend the sorting interface shows sorting controls for the axis only.



Example 2: in the example below two questions are shown in the legend and multiple answers in the series axis. As the sorting now can be adjusted in both the axis and the legend the sorting controls appear for both these areas.



Note: in the example above the axis items are sorted by value, as the legend in this example contains two items an additional list named “Select legend item to base sorting on” appears where it is defined which of the series that the sorting will be based on.

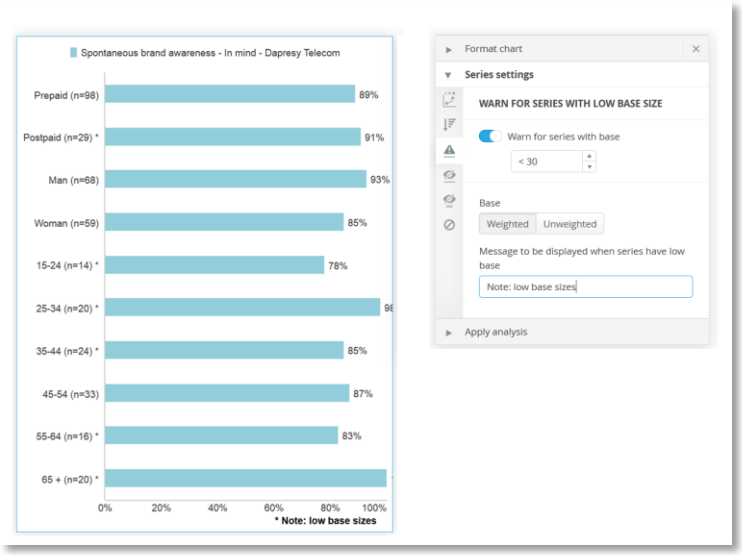
Warn for series with low base

Here you can select to add warnings to series with a low base size by applying a low base size limit.

If the result is weighted, and if the user of the Story creator can use both weighted and unweighted data through access rights defined by the administrator, it is also supported to define if the low base size check shall be based on the weighted or the unweighted base size.

An information text to be displayed in the footer of the chart can also be entered, the text appears only if any series in the chart has a low base size.

Here we see an example, the limit is set to 30 so all series with a base below 30 has a low base size warning.



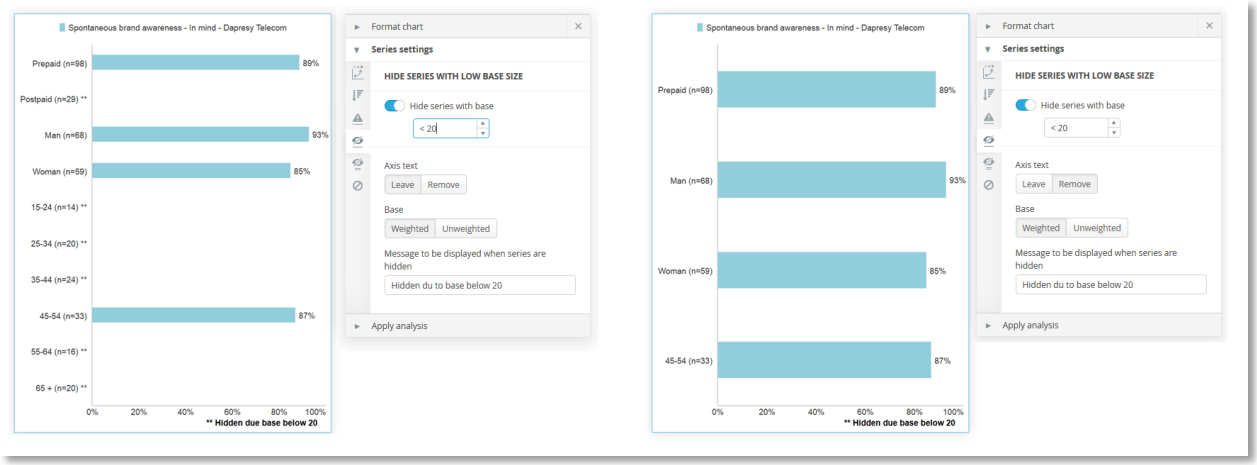
Hide series with too low base values

Here you can select to hide series due to low base sizes by applying a base size limit, all the series that do not meet the limit will be hidden.

If the result is weighted, and if the user of the Story creator is permitted to use both weighted and unweighted data, it is also supported to define if the low base size check shall be based on the weighted or the unweighted base size.

An information text to be displayed in the footer of the chart can also be entered, the text appears only if any series in the chart has become hidden.

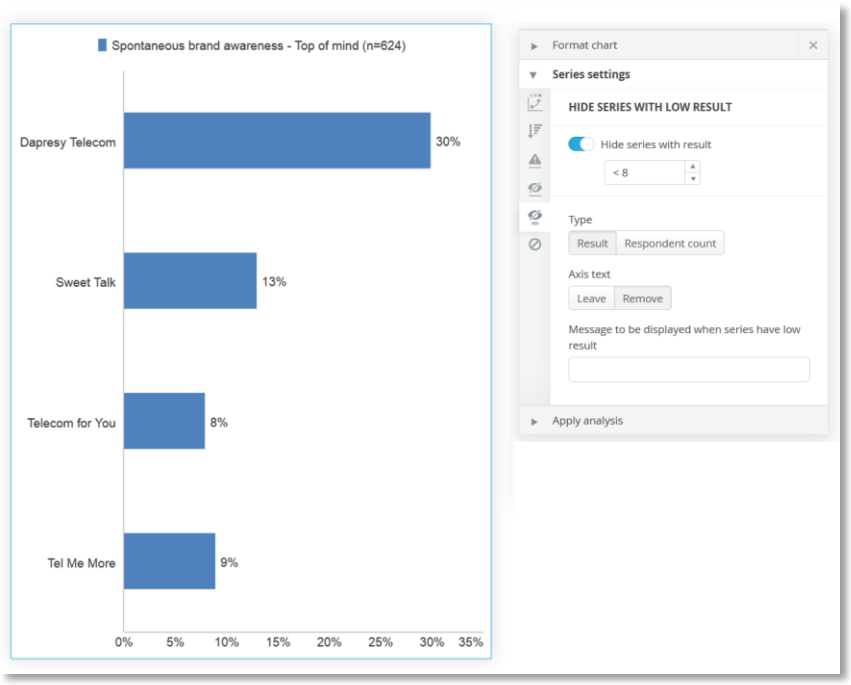
Here we see an example of an active low base size limit, the limit is set to 30 so all series with a base below 30 are hidden. In the example to the left the axis text of the hidden series are kept and in the example to the right the texts of the hidden series are removed from the chart.



Hide series with too low Result

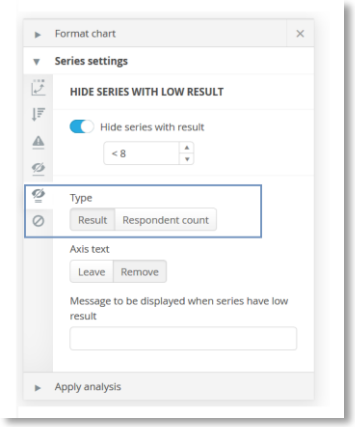
Here you can select to hide series with a low result by applying a limit, all the series that do not meet the limit will become hidden.

Here we see an example where all the series with a result below 8 have been hidden.



Note: if the selected calculation type is a percentage share you can also select to hide the result based on the count instead of the actual % value.

Here we see where to select if the limit shall be applied to the count or the result.

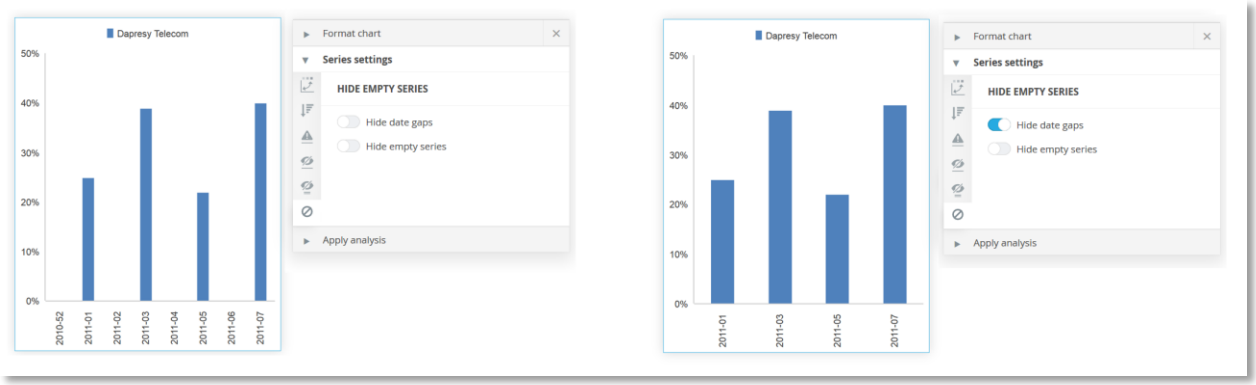


Hide empty series

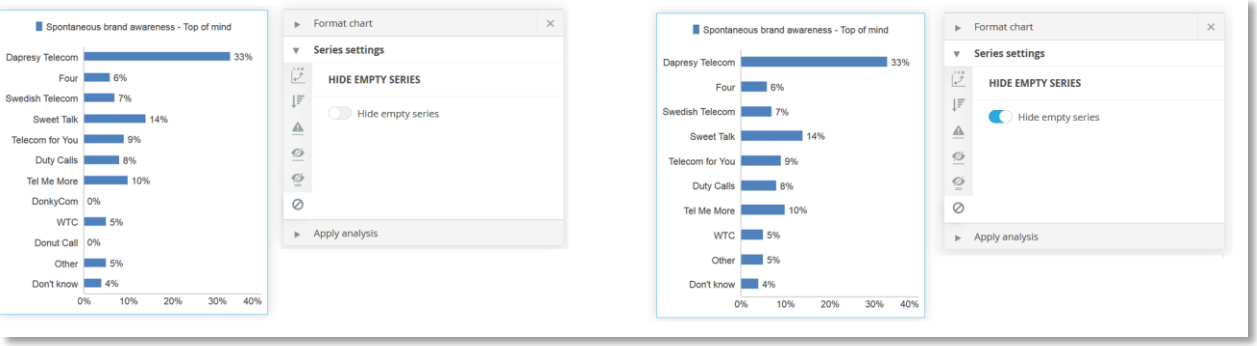
Here you can hide series without data/results. The following three options are available. They can be used simultaneously if needed.

- **Hide date gaps**: Use this option to remove intervals (weeks, months, etc.) without data (the option is only available when the chart contains Intervals). See example 1 below.
- **Hide empty series**: Use this option to remove splits without data, and answer options with a count = 0. See example 2 below.
- **Hide splits with No Data**: Use this option to remove a split option which without data (the options is only available when filter splits are applied to the charts). See example 3 below.

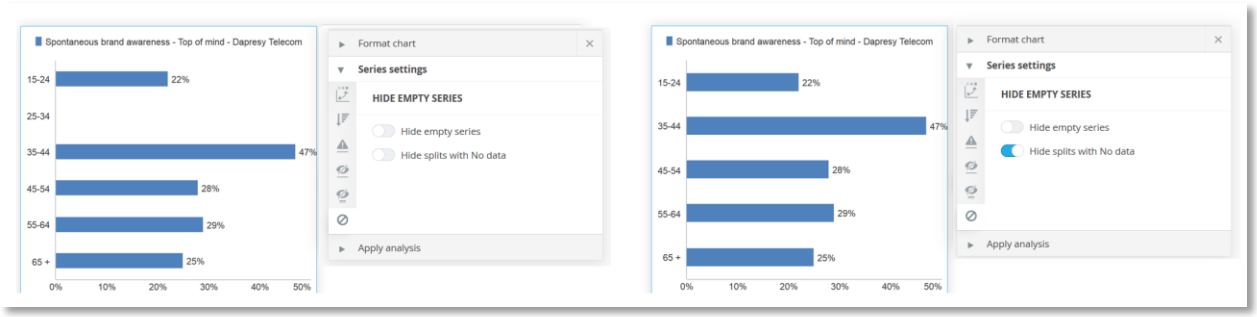
Example 1: The example chart below shows interval on the x-axis and every second interval is empty. In the left chart the "Hide date gaps" is not enabled so the intervals without data are still shown but in the right chart these become hidden as the "Hide date gaps" is enabled.



Example 2: The result for some of the answers in the chart is 0%. In the left chart the "Hide empty series" is not enabled so the series with 0% are still shown but in the right chart these become hidden as the "Hide empty series"" is enabled.



Example 3: The Age group is applied as Filter splits and the age group 25-34 does not contain any respondents. In the left chart the "Hide splits with No data" is not enabled so the series 25-34 is still displayed but in the right chart it becomes hidden as the "Hide splits with No data" is enabled.

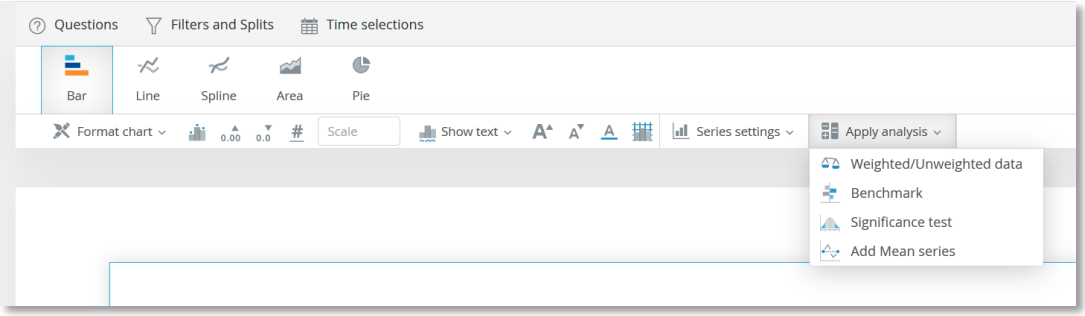


3.1.1.7 Analysis

In the Apply analysis panel you can select if the calculations shall be based on weighted or unweighted data, apply significance testing calculations, apply benchmark calculations and add Mean series to the chart.

To open the Apply analysis panel click any of the options in Apply analyses menu.

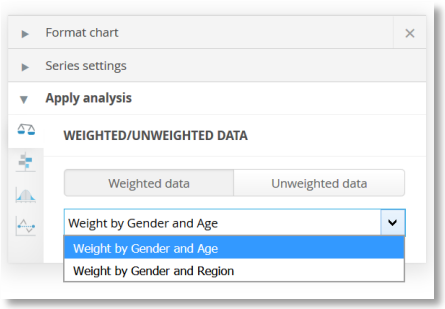
Here we see the Apply analysis menu, click any of these options to open the full Analysis panel.



Weighted/Unweighted data

Here you select if the base sizes and counts used in the calculations should be weighted or unweighted. In case of having multiple weight variables you can also select which of the weight variables to be applied to the calculation.

Here we see the Weight/Unweighted data panel, the dropdown list for selecting weight variable appears only if more than one weight variable is present.



Benchmark calculations

In the Benchmark panel you can benchmark one result against other results. Three types of benchmark calculations are available; Units, Percentage share and Index/Conversion rate. See explanations to each of these calculation types below.

Units

The Unit calculation is used to get the difference in units between two results.

Formula: X-Y

Example: X=50, Y=80 → 50-80=-30

Percentage share

The Percentage share calculation is used to get the difference between two results in a percentage share.

Formula: (X-Y)/Y * 100

Example: X=50, Y=80 → (50-80)/80*100 = -37,5%

Index/Conversion rate

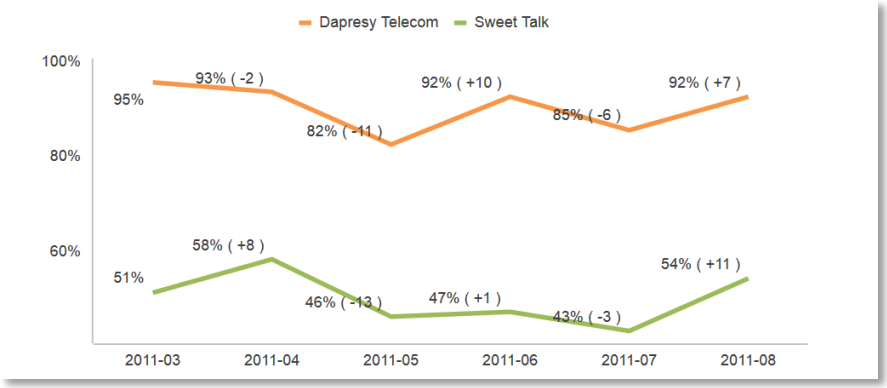
The Index/Conversion rate calculation is used to get the conversion rate, in percentage, between two results.

Formula: X/Y * 100

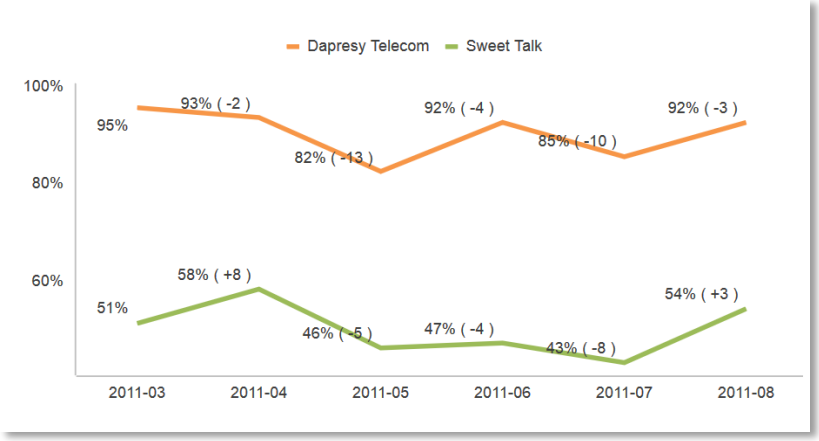
Example: X=50, Y=80 → 50/80*100 = 62,5%

The benchmark calculations can be made across the items in the legend or across the items in the axis. You can also select how the comparison should be made, a data point can be compared to the first data point in the chart, the previous data point in the chart, the last data point in the chart etc. to meet different use cases. See a few different examples of different comparisons below.

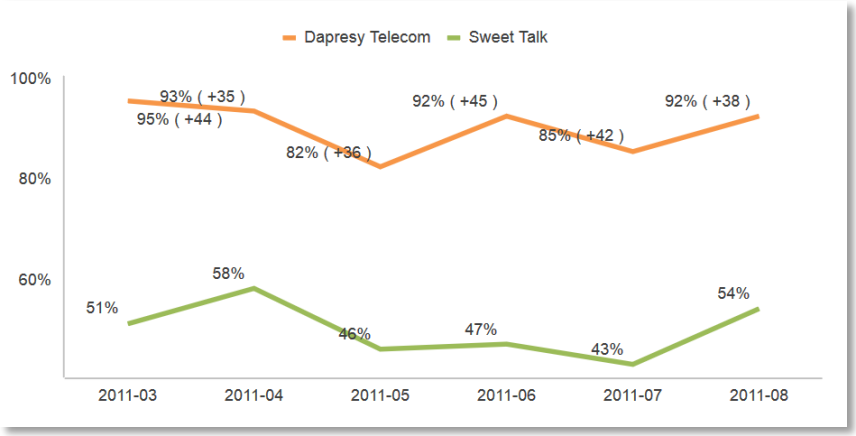
*Example 1, the benchmark is made across the intervals (the axis items) and each data point is compared to **the previous data point,** a Unit calculation is applied. In this example the benchmark value displays how the result for each brand has changed, in percentage units, from the previous week.*



*Example 2, the benchmark is made across the intervals (the axis items) and each data point is compared to **the first data point,** a Unit calculation is applied. In this example the benchmark value displays how the result for each brand has changed, in percentage units, since the first week (2011-03 in this example).*

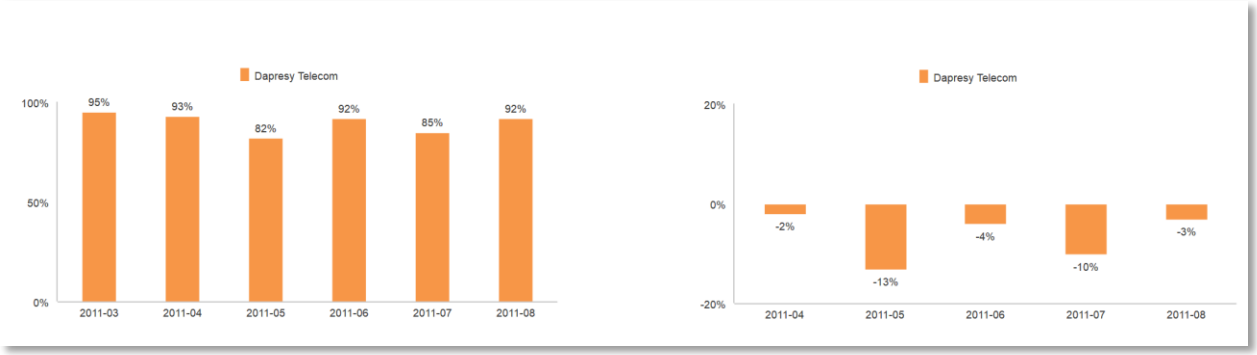


*Example 3, the benchmark is made across the brands (the legend items) and each data point is compared to **the next data point,** a Unit calculation is applied. In this example the benchmark value displays how the result of Dapresy Telecom is performing compared to Sweet Talk.*



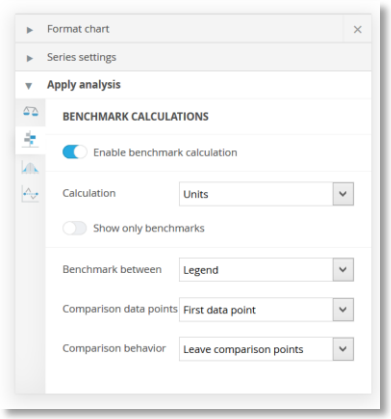
In all the examples above the series of the chart displays the original value, the benchmark value is displayed in the data values label only, but it is also possible to display the benchmark values only in the chart as shown in the example below. In these cases, the comparison data point becomes hidden automatically.

Example, the chart to the left is the original chart, without any benchmark calculations applied. In the chart to the right the benchmark calculations are made across the intervals (weeks) and each data point (week) is compared to the first data point (first week). The "Show only benchmark" setting is enabled so the series of the chart displays the benchmark value instead of the original values. In this example the bars displays the difference for Dapresy Telecom for each week compared to the first week (2011-03).



The Benchmark calculation panel looks like the image below, see setup instructions further down.

Here we see the Benchmark calculation panel



To apply a benchmark calculation to your chart:

1. Select calculation type (Units, Percentage share or Index/Conversion rate) in the “Calculation list”
2. Select if the original results shall be hidden or displayed together with the benchmark result. By ticking the “Show only benchmarks” setting the original values becomes hidden
3. Select if the benchmark calculation shall be made across the legend or the axis items in the “Benchmark between” list. Note, this list appears only if the chart contains items that make it possible to perform benchmark calculations in both the legend and the axis. If the chart, for example, contain items that makes it possible to perform benchmark calculations in the Axis only the “Benchmark between” list is not appearing.
4. Select the comparison data point in the “Comparison data point(s)” list
5. Select if the comparison data point should be hidden or not in the “Comparison behavior” list Note: the comparison data point is always hidden if the setting “Show only benchmark” is enabled.

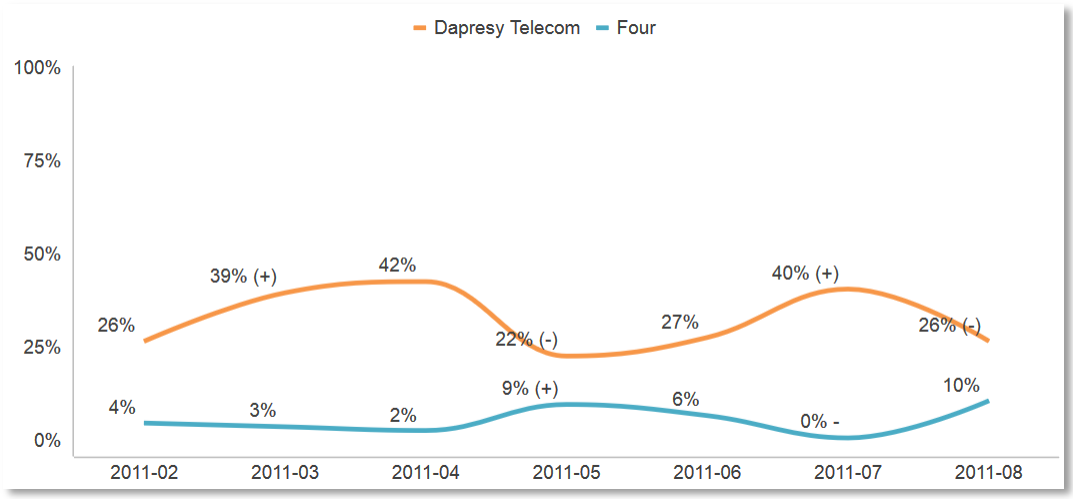
Significance testing

In the Significance testing panel you can test the results to each other to see if there are any significant differences between them. The significance testing can be applied to percentage shares and mean values of categorical questions, it cannot be applied to any of the numerical calculations.

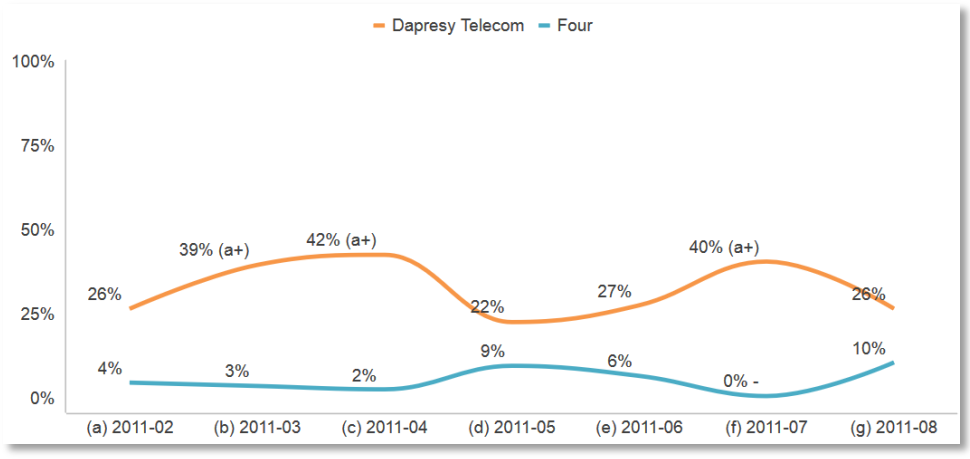
The significance testing can be made across the items in the legend or across the items in the axis. You can also select how the comparison should be made; a data point can be tested to the first data point in

the chart, the previous data point in the chart, the last data point in the chart or all the other data points. See a few different examples of different significance testing below.

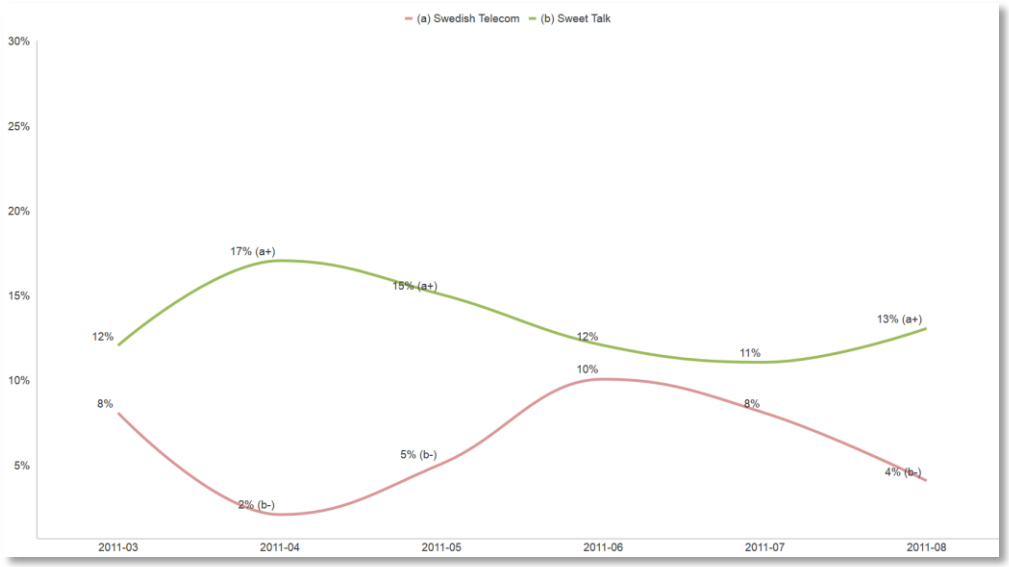
*Example 1, the significance testing is made across the intervals (the axis items) and each data point is compared to **the previous data point.** In this example the significance testing indicates if it is a significant difference from the previous week or not.*



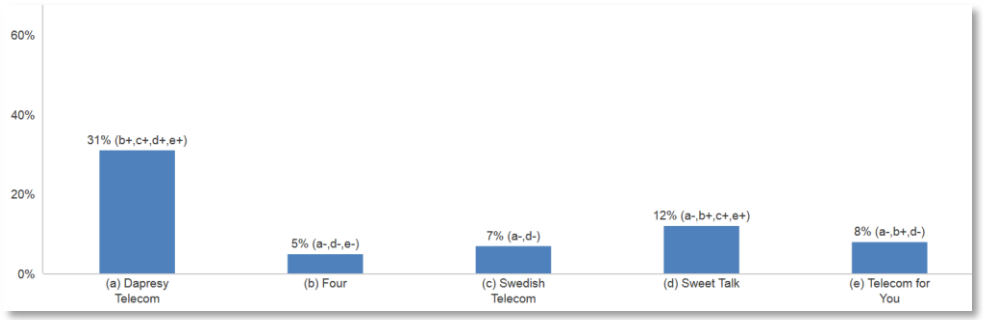
*Example 2, the significance testing is made across the intervals (the axis items) and each data point is compared to **the first data point.** In this example the significance testing indicates if there is a significant difference from the first week or not.*



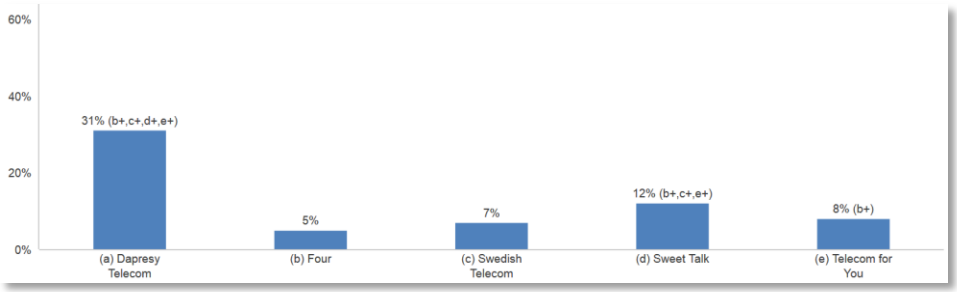
Example 3, the significance testing is made across the brands (the legend items) and both brands are tested against each other. In this example the significance testing indicates if there is a significant difference between the brands for each of the weeks.



*Example 4, the significance testing is made across the brands (the axis items) and each data point is compared to **all other data points.** In this example the significance testing indicates if there is a significant difference between any of the brands.*

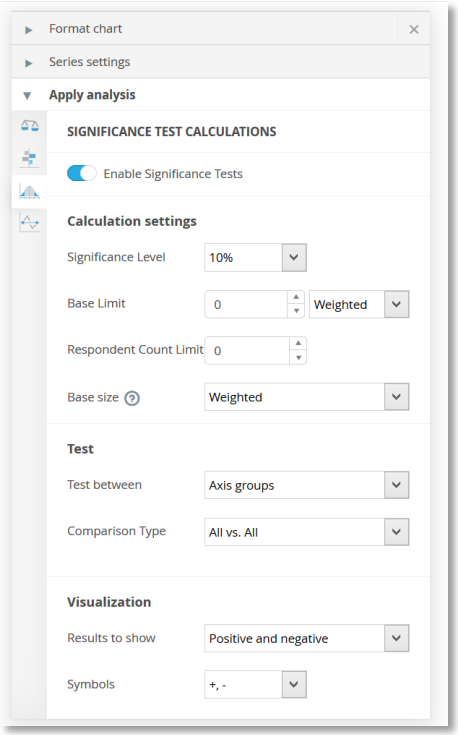


Example 5, the same chart as above but in this case only the positive significance differences are displayed.



The setup panel of the Significance testing is divided into three different sections (Calculation settings, Test and Visualization) as shown in the image below and each of these are described in detail further down.

Here we see the significance testing panel.



Calculation settings

In the Calculation section you define the following:

- Select the significance testing level to be used (1%, 5% or 10%) in the “Significance level” list

- Select if any base size limit must be fulfilled to perform the test in the “base limit” input field. If the data is weighted you can select if the base size limit shall be based on the unweighted count, the weighted count or the effective count of respondents
- Select if any Respondent count limit shall be applied in the “Respondent count limit” input field
- Select which base size option to apply to the calculation. This option is only appearing if the result is weighted. If the result is unweighted, then an unweighted base is always used in the calculations.

Test

In the Calculation section you define the following:

- Select if the test will be made across Axis groups or Legend items in the “Test between” list. Note, this list appears only if the chart contains items that make it possible to perform significance testing in both the legend and the axis. If the chart, for example, contain items that makes it possible to perform significance testing in the Axis only the “Test between” list is not appearing.
- Select if all data points will be tested against each other or if the test will be made against the first, last, previous or next data point in the “Comparison type list”
- Select if the comparison data point should be hidden or not in the “Comparison behavior” list Note: this option is not appearing if “All vs All” is selected in the “Comparison type list”.

Visualization

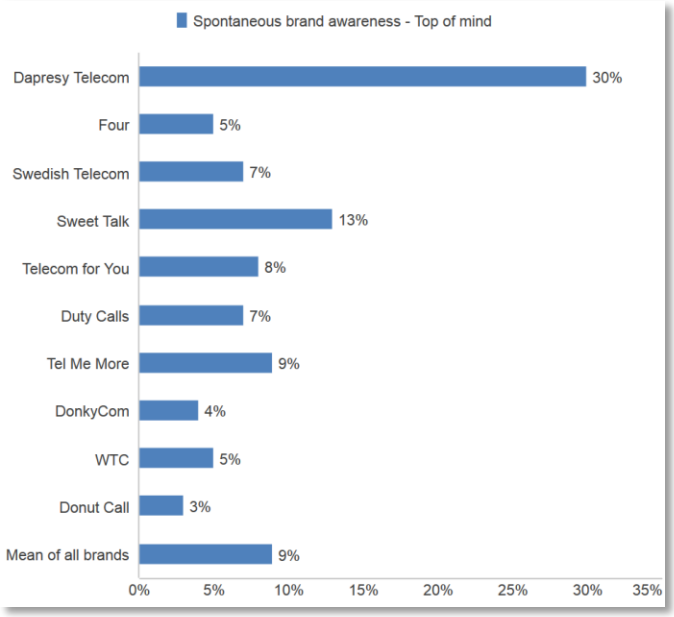
In the Visualization section you define the following:

- If “All vs All” is selected in the “Comparison behavior” list you can select which significance test result to be displayed (positive only, negative only or both) in the “Result to show list”.
- Select which symbols to be used to indicate the significance differences in the “Symbols” list

Add mean value series

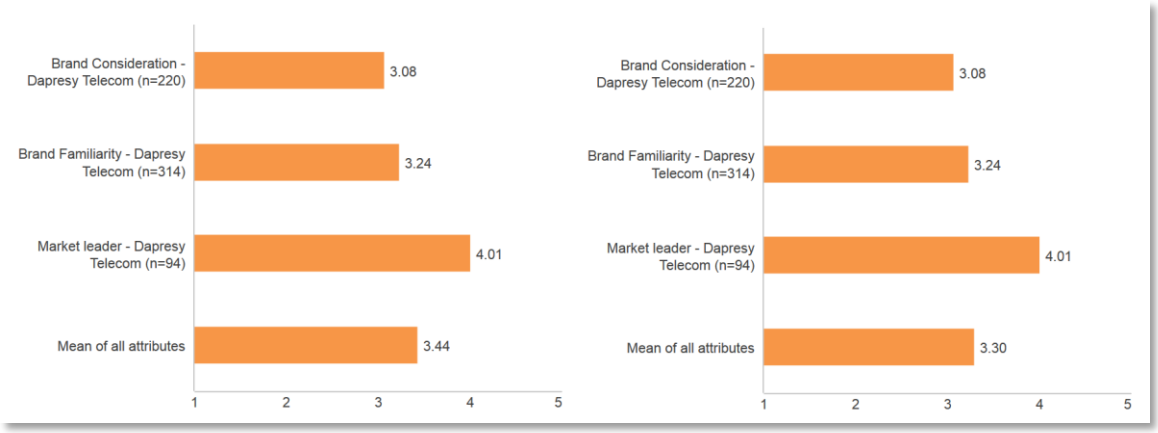
In the Add Mean value series panel you can add a series that displays the mean value of the result in the chart.

Here we see a basic example of an added Mean value series (the bar in the bottom of the chart). In this example the mean value series displays the mean result of all the brands in the chart.



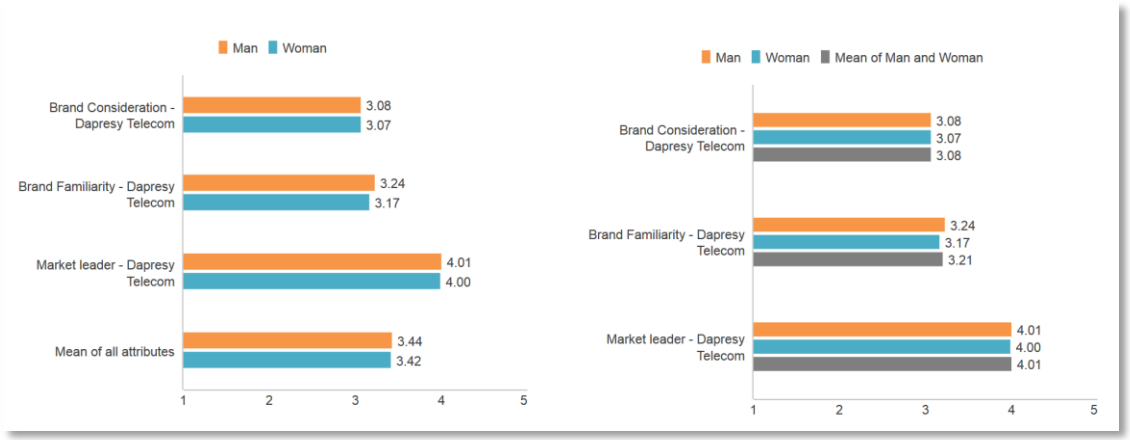
In cases where the mean value series is based on series with different base sizes you can select if the base sizes should be considered or not when calculating the mean value result, see an example of this below.

*Example: Both the charts below displays the same three attributes, as shown the base size is different for each attribute. The Mean value series in the **left chart is not considering the base size** which means that the Mean value series is a straight mean of the three attributes.*
*The Men value series in the **right chart is considering the base sizes** of the ingoing attributes so the attribute with most respondents effects the Mean value series result the most and the attribute with fewest respondents effects the Mean value series result the least.*



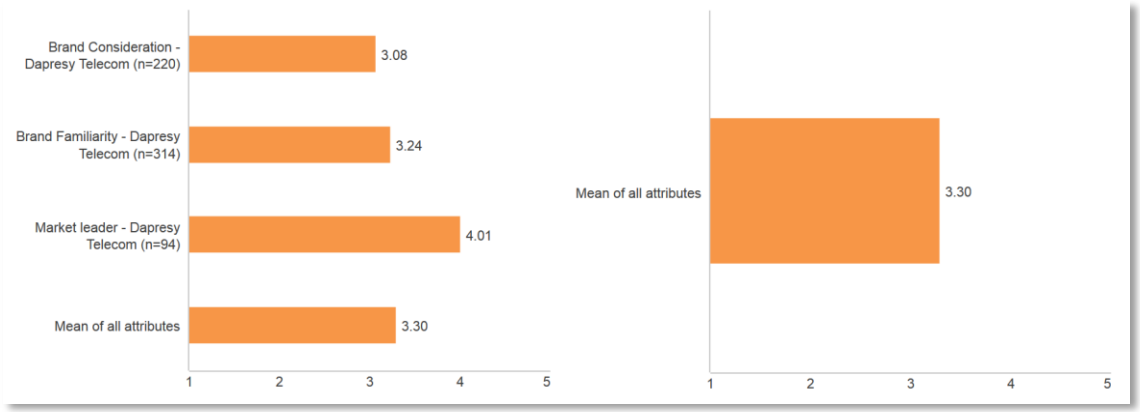
In the examples above the Mean value series has been added to the axis but it can also be added the legend. If the chart contains items which makes it possible to add a mean value series to both the legend and the axis you must select where the mean value series should be positioned (in legend or in axis), see examples of this scenario below.

Here we see a chart with multiple items in both the axis and in the legend, in the chart to the left the mean value series has been added to the axis so it displays the mean of all attributes for Man and Woman.
In the chart to the right the mean value series has been added to the legend so it displays the mean of Man and Woman for each attribute.



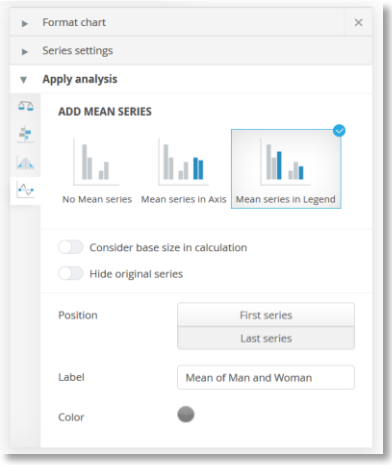
When adding a mean value series, you can also select if the original values shall be hidden or not, see example of that below.

Example, in the left chart the mean value series is displayed together with the original series and in the right chart the mean value series is displayed only.



The Mean value series panel looks like the image below, see setup instructions further down.

Here we see the Mean value series panel.



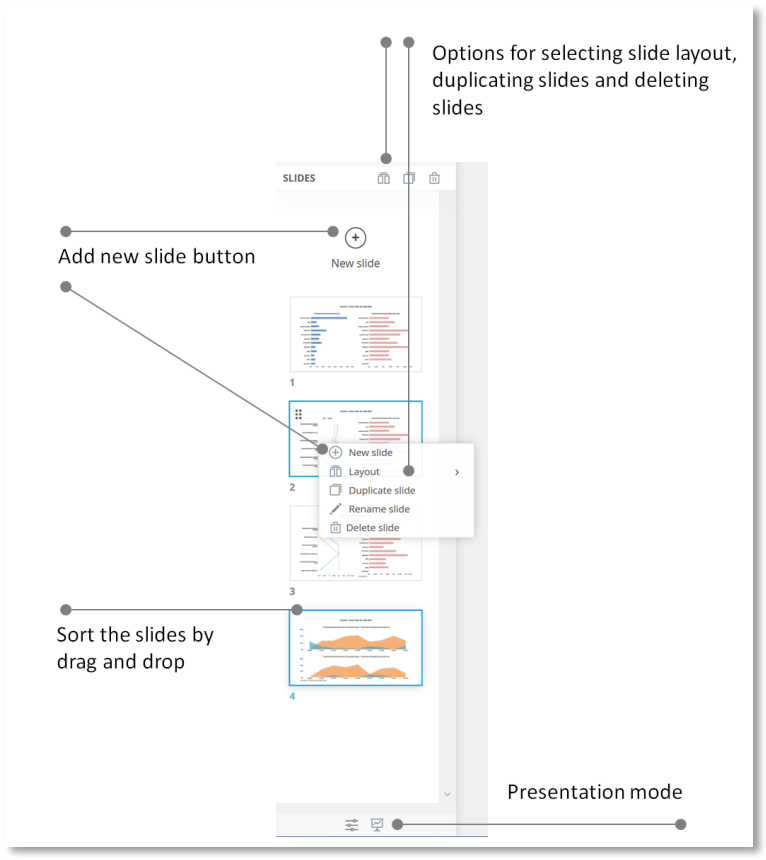
To add a mean value series to your chart:

1. Use the thumbnails to select if the mean value series should be added to the Axis or Legend (note; the Legend option is not shown if multiple items are not displayed in the legend as in this case it make no sense to add a mean series to the legend, the same goes for the Axis)
2. Select if the base sizes should be considered or not
3. Select of if the original series will be hidden or not
4. Select the position of the mean value series, it can be displayed as the first or the last series
5. Enter the label of the mean value series, the label is “Mean” by default
6. If the mean value series has been added to the legend you have to select the color of the mean value series.

3.1.2 Slide panel

The Slide panel displays all the slides in the current deck and here you can rearrange the slides by drag and drop, add new slides, duplicate slides, delete slides, select which layout to apply to a slide etc. As shown in the first image below a context menu appears on right click which includes in the same options as shown in the top of the Slide panel.

Here we see the Slide panel and the context menu appearing on right click.

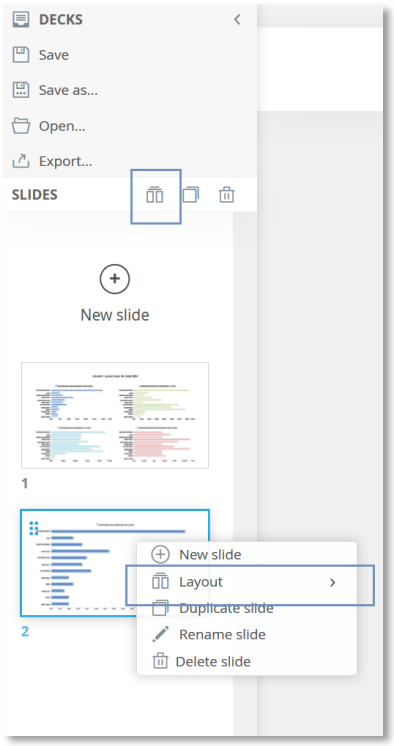


Select slide layout

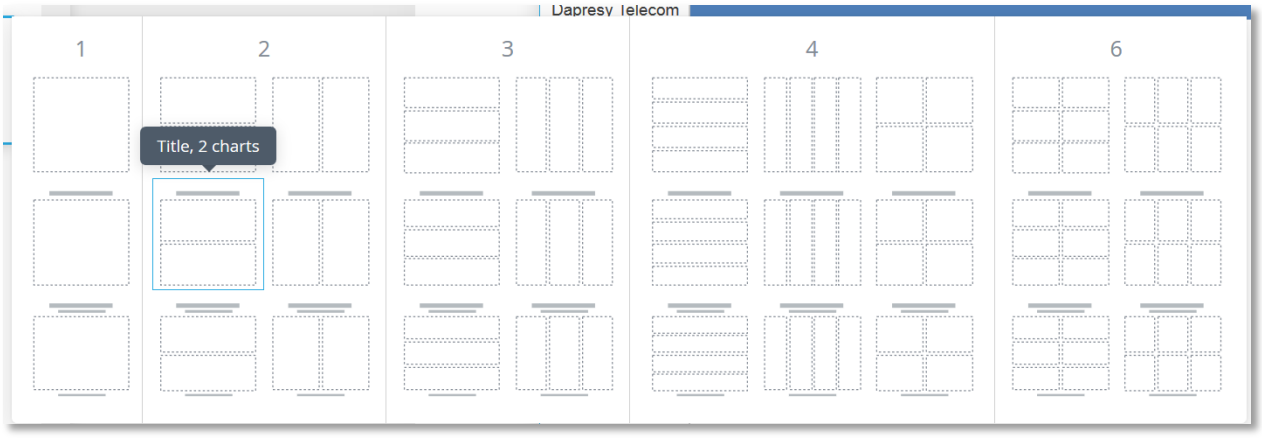
The Slide Layouts is used to select the number of charts to be displayed in the slide, and their shape and size, and if text boxes for slide header, slide sub header and slide footer shall be available.

To select the layout to be applied to the current slide click any of the Layout buttons highlighted in the image below and the Layout selection panel opens.

Here we see where to click to open the Layout panel.

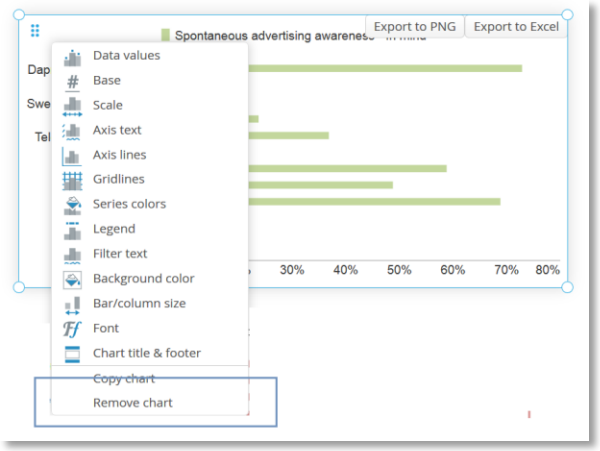


Here we see the Layout panel.



Note: if the current slide contains more charts, or text boxes, than the selected Layout you will lose objects in your slide when applying the new layout. If the slide, for example, contains 4 charts and the selected layout contains 2 charts only the first two charts in the slide are kept and the last 2 removed. If you would like to keep two specific charts you can, before selecting the new layout template, remove the unwanted charts manually and then select the new slide layout.

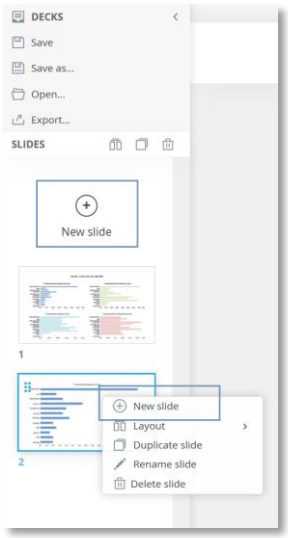
Here we see the Remove chart option, it is located in the context menu appearing on right click in the chart.



Add new slide

A new slide is inserted by clicking any of the options highlighted in the image below. The new slide is inserted after the current selected slide.

Here we see the New slides buttons

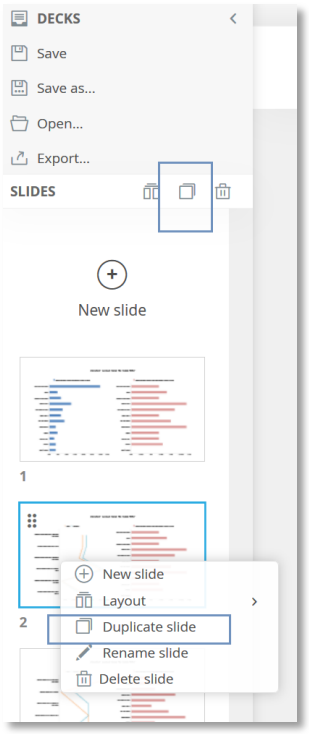


Duplicate slide

An existing slide can be duplicated which makes is efficient to produce many similar slides. Click any of

the options highlighted in the image below to duplicate the selected slide. The new slide is inserted after the copied slide.

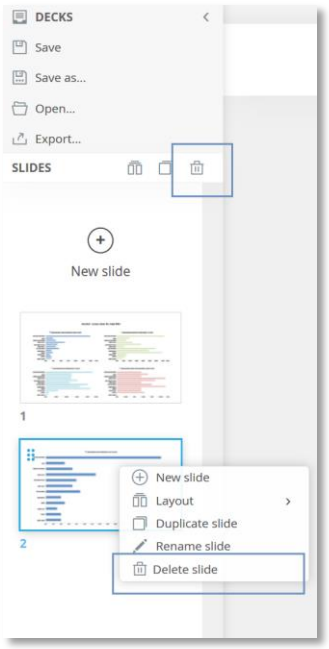
Here we see the Duplicate slide buttons



Delete a slide

To delete a slide click any of the delete options highlighted in the image below.

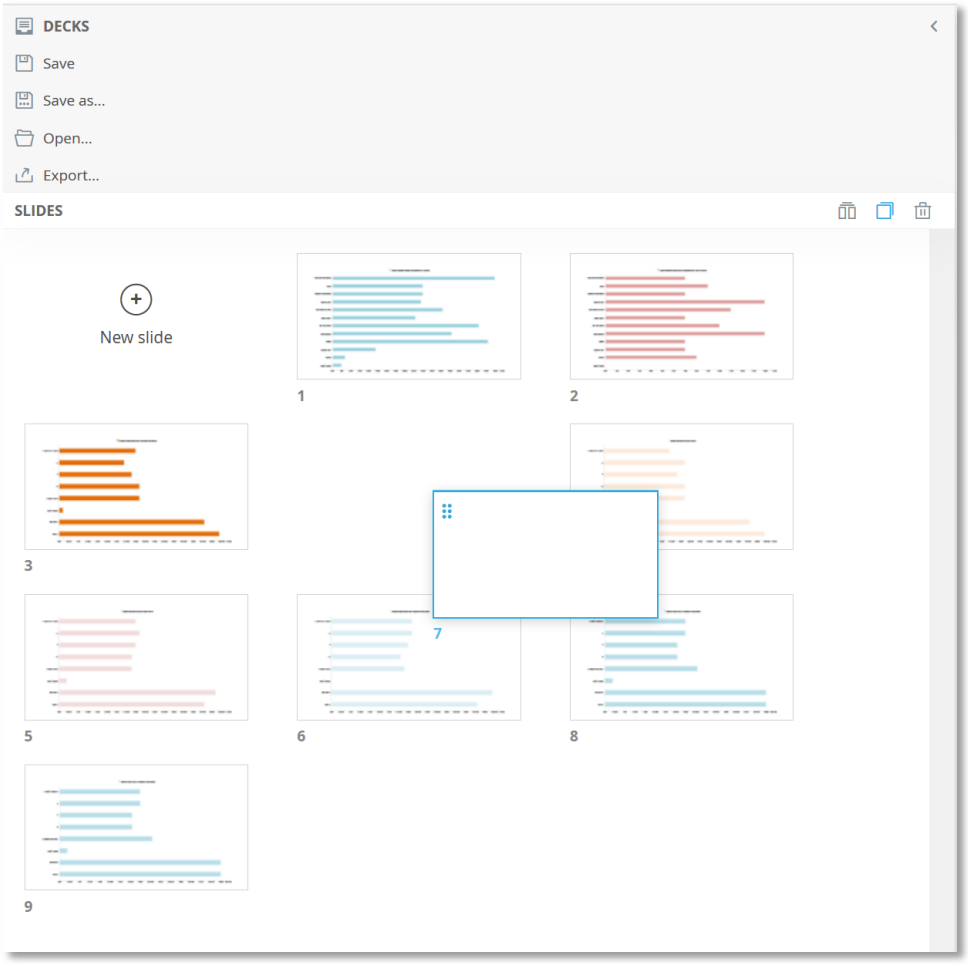
Here we see where to click to delete a slide.



Rearrange slides

The sort order of the slides can be edited via drag and drop. If the deck contains a lot of slides you can preferably make the slide panel wider to get a better overview of all the slides, the panel is made wider by drag and drop.

Here we see an example of the slide panel where drag and drop is used to edit the sort order of the slides. In this example the panel has been made wider for getting a better overview of all the slides.



Name slides

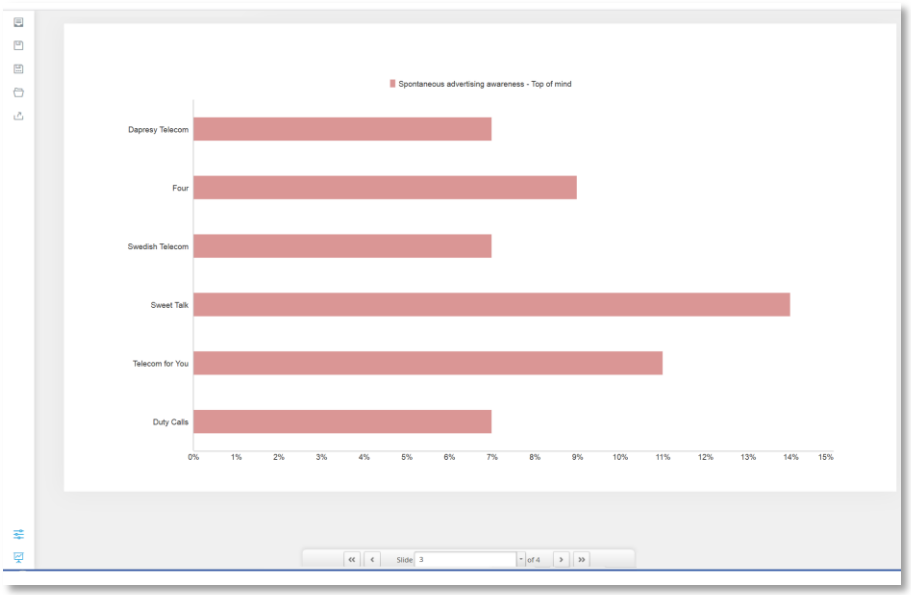
The slides can be named to give a better overview in the slide panel when there are many slides. To name a slide: double click the slide number of the slide or use the Rename slide option in the context menu appearing on right click.

Here we see examples of named slides and the Rename slide option in the context menu.

Presentation mode

A Presentation mode is available, in this mode the slide area is shown only, the chart settings area and the slide panel are hidden.

Here we see examples of the Presentation mode, to navigate between the slides in presentation mode use the keyboard arrows or the slide navigation panel below the slide area.

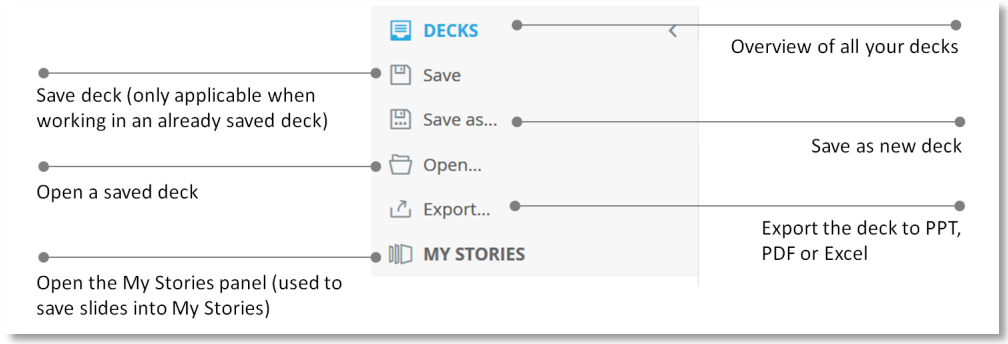


Here we see the option to click to open the deck in the Presentation mode.

3.1.3 Decks

In the Decks panel you can save and load the reports you build. From this panel you can also export your report deck to, for example, PPT or Excel.

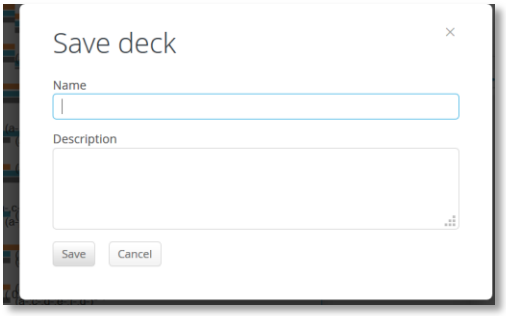
Here we see an overview of the Decks panel.



Save Deck

To save your report as a new deck use the “Save as” button in the Deck panel. In the popup panel you enter the name and a description of the deck, the description is optional

Here we see the Save deck panel.

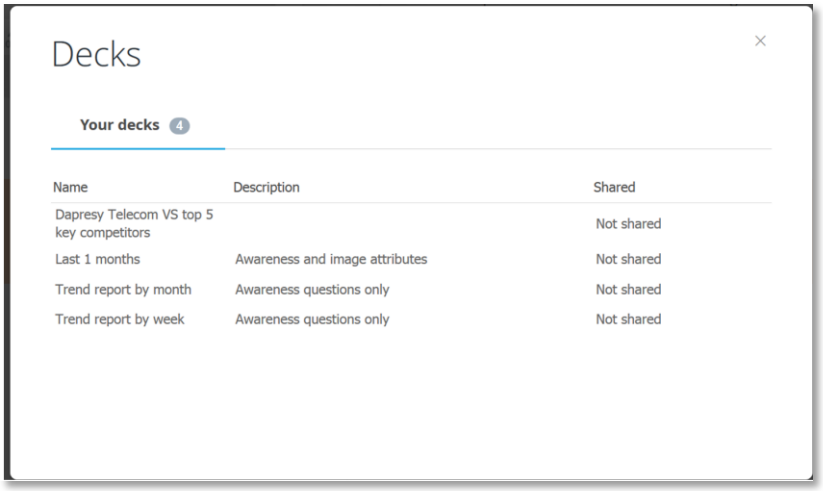


Tip: If you are working in an already saved deck, or have opened an existing deck, and want to save the latest changes use the “Save” button instead of “Save as”, it saves the deck in the same name automatically.

Open a saved deck

To open an existing deck click the Open option in the Deck panel. In the popup panel you will see your own decks, to load any of these reports click the name of the one to be opened.

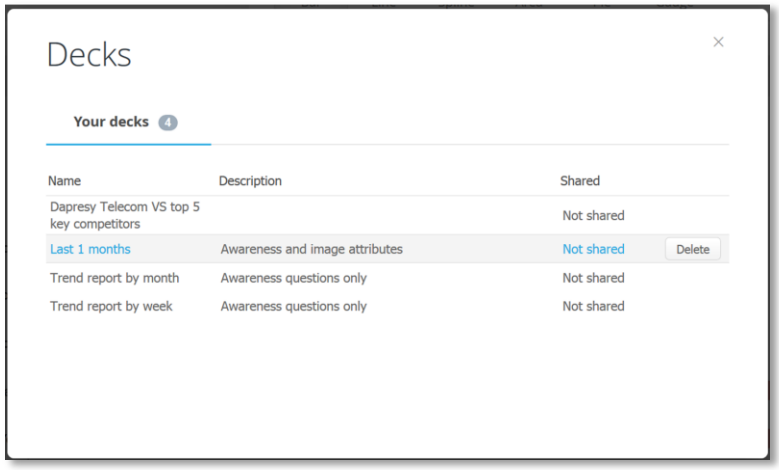
Here we see the Open panel, just click the deck to be loaded.



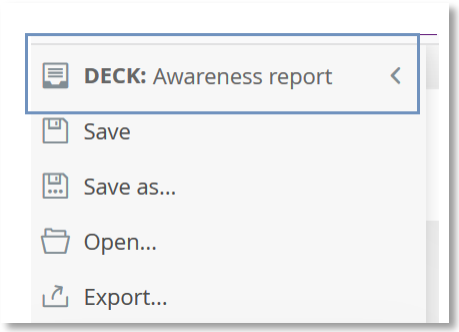
Delete a deck

A deck can be deleted from the deck overview panel. You reach this panel by clicking the first option named Decks in the Decks panel. In the appearing popup panel the delete option appears when hovering over a deck as shown in the image below.

Here we see how to delete a deck.



Here we see Deck option in the Deck panel, click here to open an overview of all your decks, from here you can delete a deck but also load decks.



Export

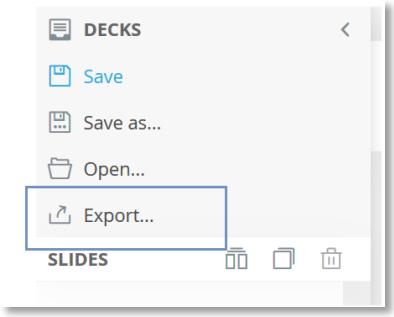
The current open deck can be exported to PPT, PDF and Excel from the deck panel.

When exporting to PPT the charts are exported as images but the text boxes are exported as native PowerPoint texts boxes so these will become editable in the PPT document.

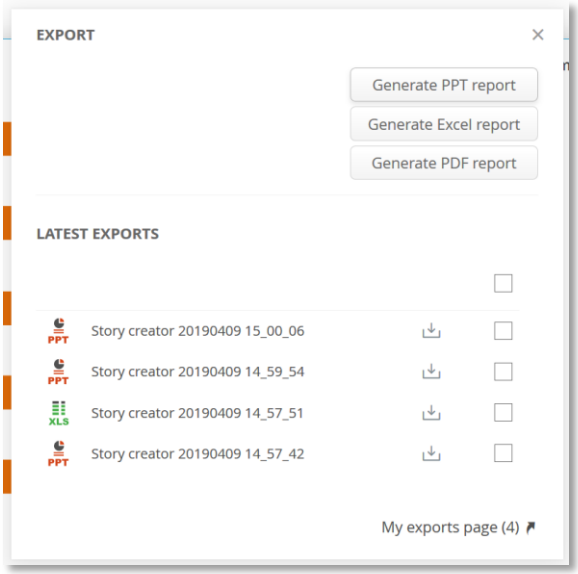
When exporting to Excel the result table of each chart is exported only, no charts will be available in the Excel document.

To make an export click the Export option in the Deck panel and the Export panel appears. From the Export panel you start the export by clicking the appropriate generate option. After clicking generate the report is generated in a background process so you can continue to work while waiting for the download link to appear. To download the report, after it has been generated successfully, either click in the notification message or open the export panel as the export panel contains download links to your previous exports.

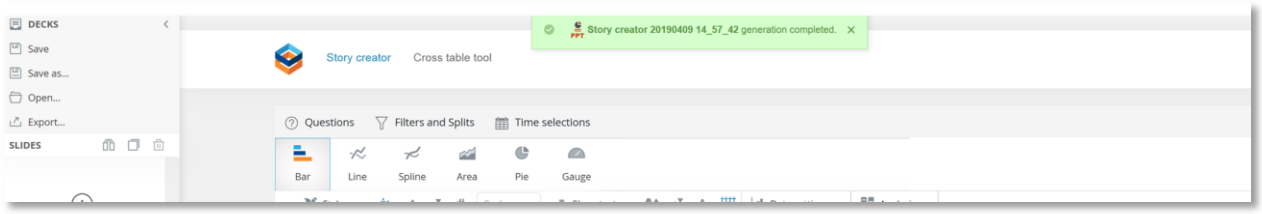
Here we see the export button, click this button to open the export panel.



Here we see the export panel. In the top of the panel you start the document generation by selecting the appropriate type (PPT, PDF or Excel), in the bottom of the panel download links to the previous exports can be found.



Here we see the notification message appearing when the report is generated successfully and ready for download, click the message to download the file or download the file from the Export panel.

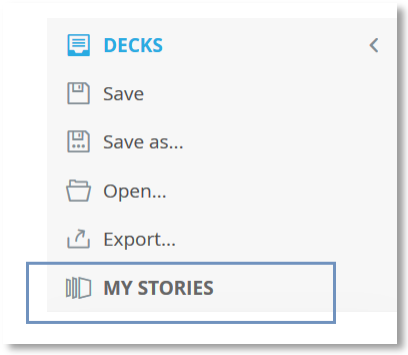


Save slides to My stories

If the project uses My stories, and if the user has access to the My Stories report, the user can save Story creator slides into My Stories in the same way as Storyteller slides can be saved to My Stories. A story can contain a mix of slides from any Storyteller and the Story Creator.

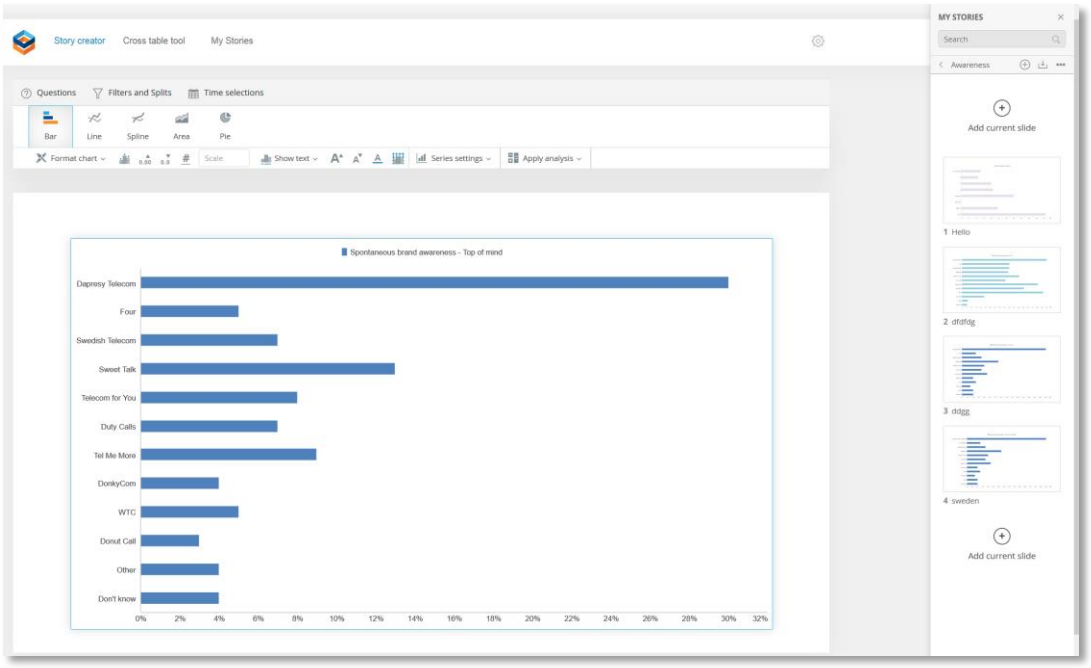
To open the My stories panel click the My Stories link in the Deck panel.

Here we see where the link to My Stories appears if it is available in the project and if the user has access to it.



The My stories panel, used to save slides into a story, appears as a panel to the right in the same way as the My stories panel appears in the Storyteller.

Here we see the My Stories panel in the Story creator.



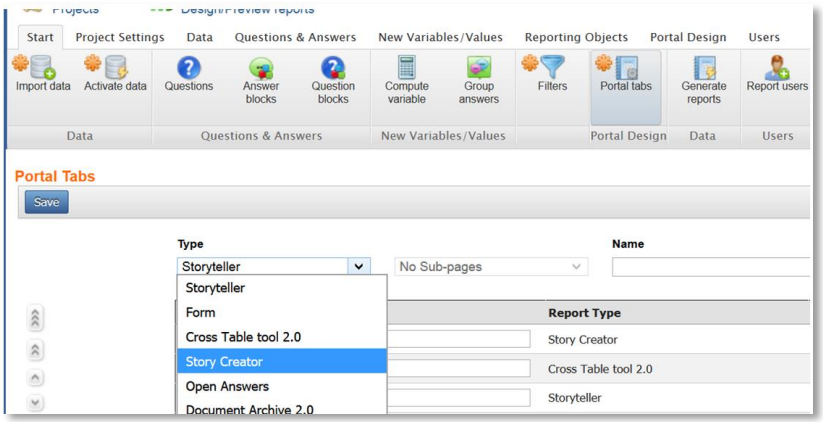
3.2 Setup of Story creator

The setup of the Storyteller, by the Administrator, is done in two steps. First, the Story Creator tool needs to be added as a portal tab. Secondly, the content of the Story creator needs to be defined, e.g. which questions will be shown, which calculation types will be present, etc.

3.2.1 Add Story Creator as a portal tab

The new Story Creator can be added to the portal in the “Portal tabs” page, as shown in the image below. A project can contain multiple Story creators.

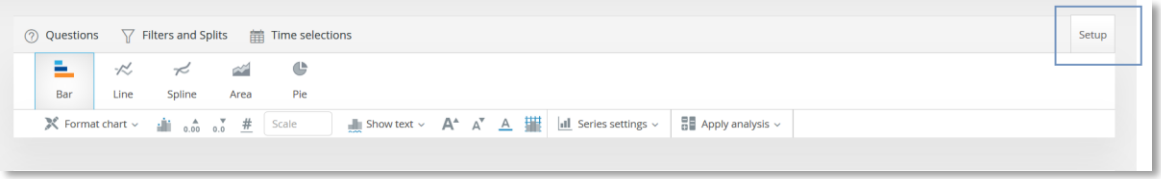
Here we see the option for adding a Story creator.



3.2.2 Setup the content of the Story creator

In the setup panels you can define which questions, filters, calculation type, export formats etc. that shall be available in the Story creator report.

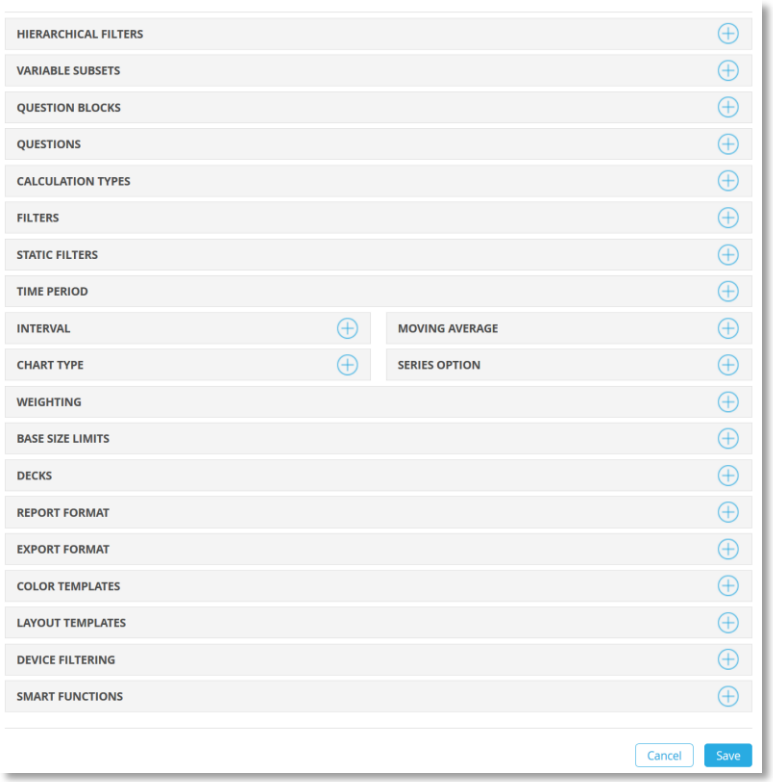
To setup the content in the Story creator, simply click the "Setup" button, and a setup window will appear. This button is only displayed for Administrator users.



The setup window is divided into the following panels (each panel is described in detail further down):

- Hierarchical Filter (the panel is only shown if the project has a hierarchical filter)
- Variable subsets (the panel is only shown if the project has Variable subsets defined)
- Question blocks (the panel is only shown if the project has a Question blocks defined)
- Questions
- Calculation types
- Filters
- Static Filters
- Time period
- Moving averages
- Intervals
- Chart types
- Weighting
- Base size limits
- Decks
- Report format
- Export format
- Color templates
- Layout templates
- Device filtering
- Smart functions

The image below shows the Setup window.

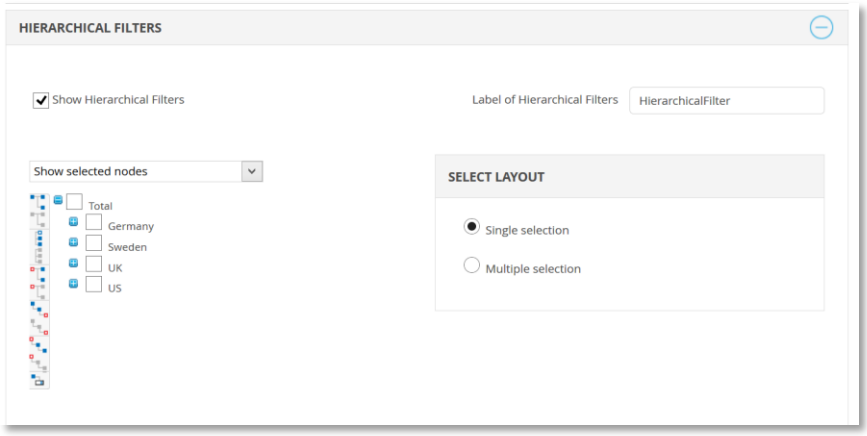


3.2.2.1 Hierarchical filters

In the hierarchical filter panel the following settings can be made:

- The hierarchical filters can be turned on and off
- The label of the hierarchical filter can be defined
- You can define which hierarchical filter nodes will be shown
- You can limit the selections to single selection or allow multiple selections in the hierarchical filter tree

The image below shows the setup of the Hierarchical Filters.

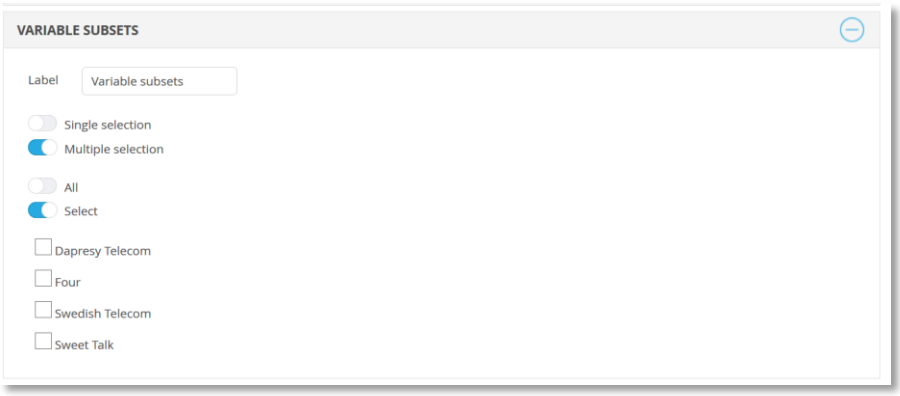


3.2.2.2 Variable subsets

In the Variable subset panel the following settings can be made:

- The Variable subsets can be turned on and off
- The label of the Variable subset list can be defined
- You can limit the selections to single or multi selection

The image below shows the setup of the Variable subsets. The Variable subsets you wish to show shall be ticked.

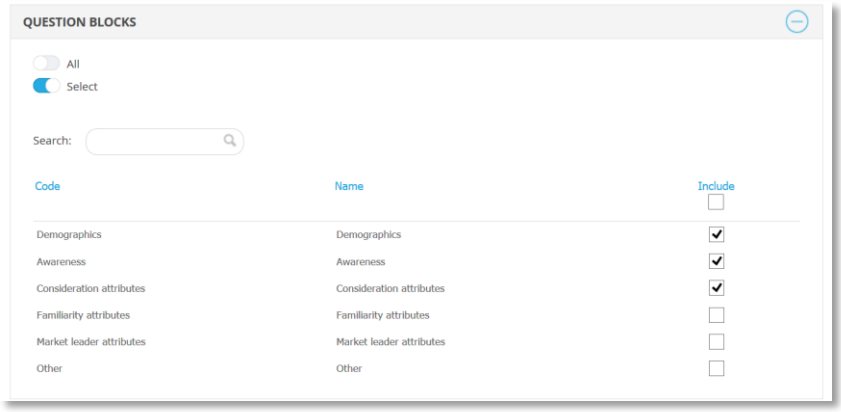


Note: Variable subsets are used to limit the content in the question and answer lists so the logged in user only sees the Variable subsets he/she has access to. Variable subsets are not filtering the content in the Filter tab. For limiting filter options, per user, apply “access to filters” in project settings page and give the users relevant access rights.

3.2.2.3 Question blocks

Here is where you select which question blocks will be shown in the Story creator. By default, the option "All" is selected. This means that all question blocks are shown, even those which are created after the setup of the cross table tool. To limit the content, choose "Select" and then you can select which question blocks you would like to show in the cross table tool.

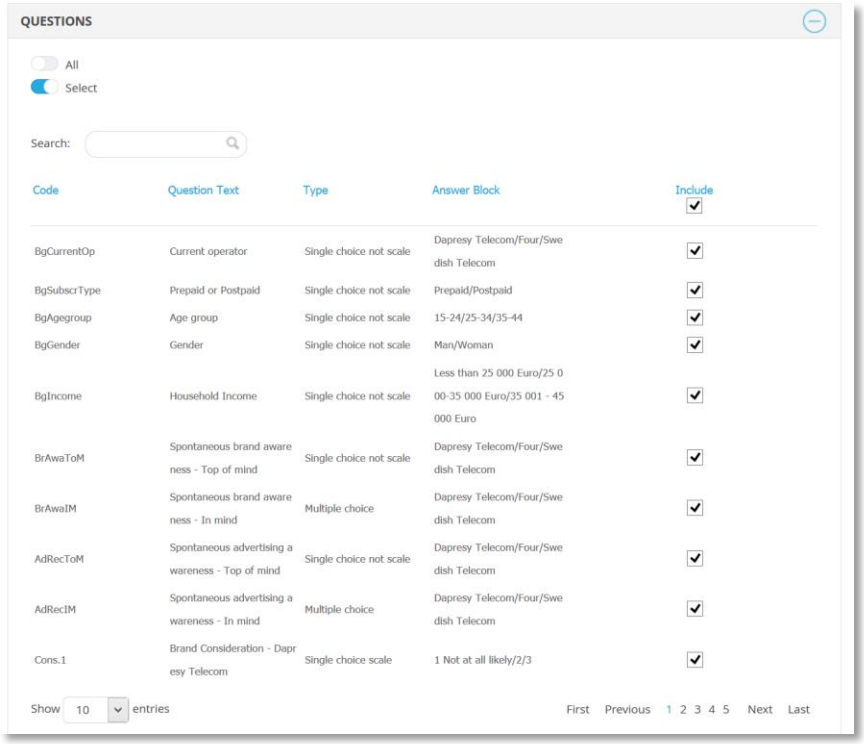
The image below shows the setup of the Question Blocks. The "All" option is selected by default. If "Select" is enabled, then the desired question blocks you wish to show shall be ticked. The non-ticked question blocks will not be shown.



3.2.2.4 Questions

Here is where you select the questions to be shown in the Story creator. By default, the option "All" is selected. This means that all questions are shown, even those which are created after the setup of the Story creator. To limit the content, choose "Select" and then you can select which questions to be shown in the tool.

The image below shows the setup of the questions. The "All" option is chosen by default. If "Select" is enabled, then you can choose which questions from the list will be shown. The non-ticked questions will not be shown.

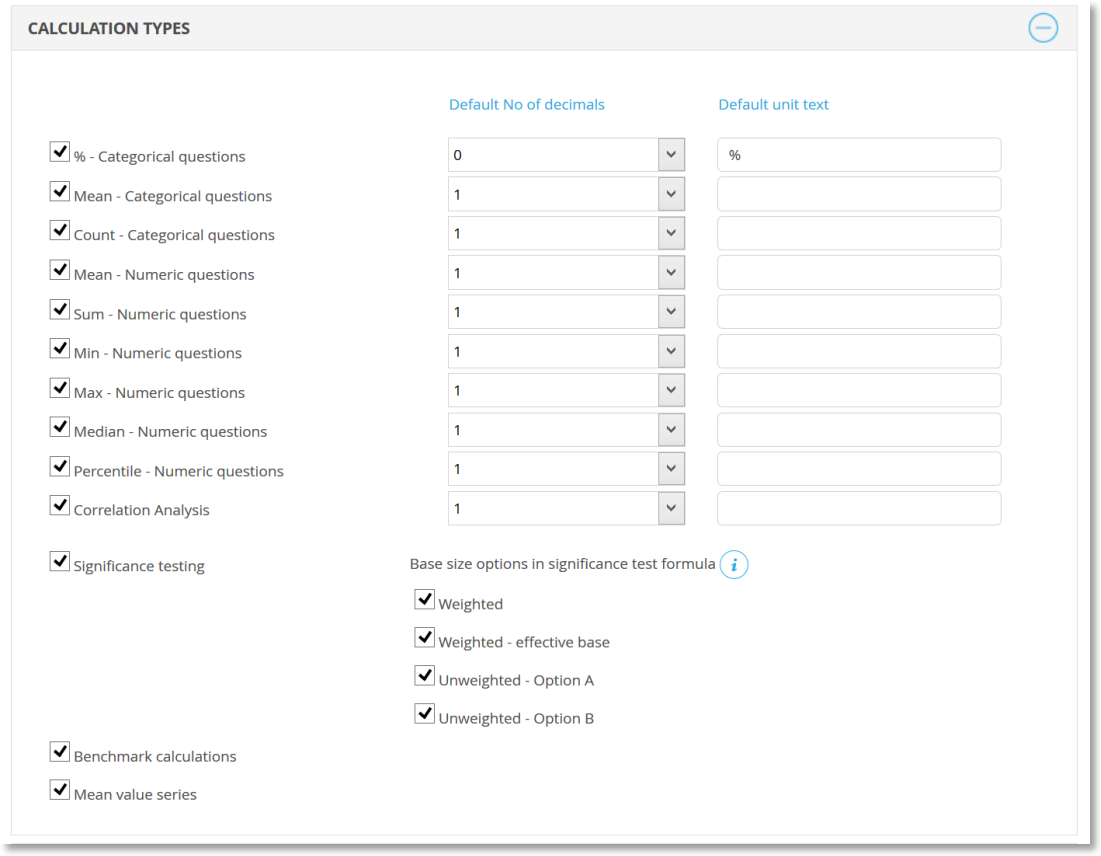


Note: questions belonging to any question blocks, selected in the Question block panel, will appear in the Story Creator even if these are not ticked in the Questions panel.

3.3.2.5 Calculation Types

In the calculation panel, you can select which calculation options will be shown in the Story creator. By default, all calculation types are enabled. For each of the calculation types you can also set a default unit text and the default number of decimals the result will be displayed in.

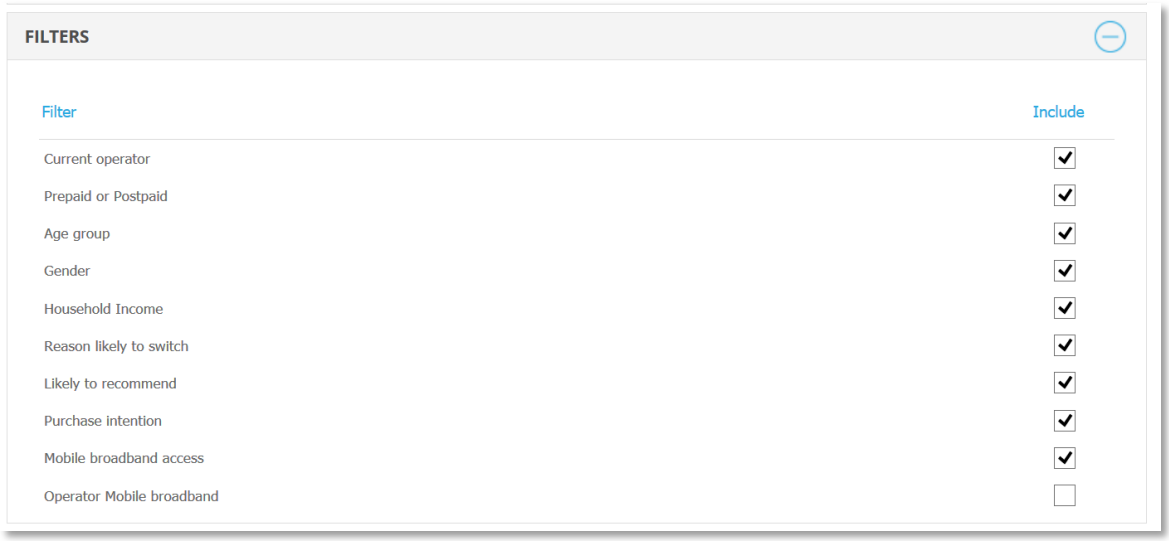
The image below shows the setup of the calculations. The ticked options will be shown for the report users.



3.2.2.6 Filters

Here is where you select the filters to be shown in the Story creator. The ticked filters will be shown for the report users.

The image below shows the setup of the Filters

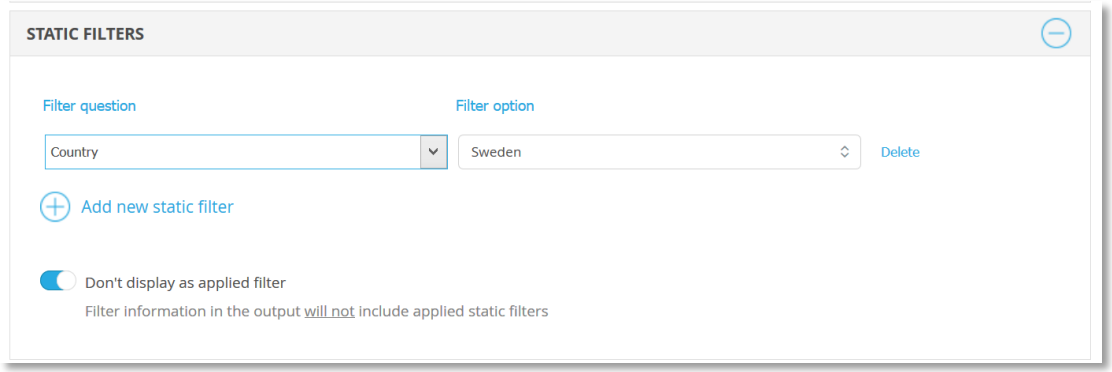


3.2.2.7 Static Filters

In the Static Filter panel you can apply static filters to the Story creator. A static filter filters always the data, the users cannot turn this filter off.

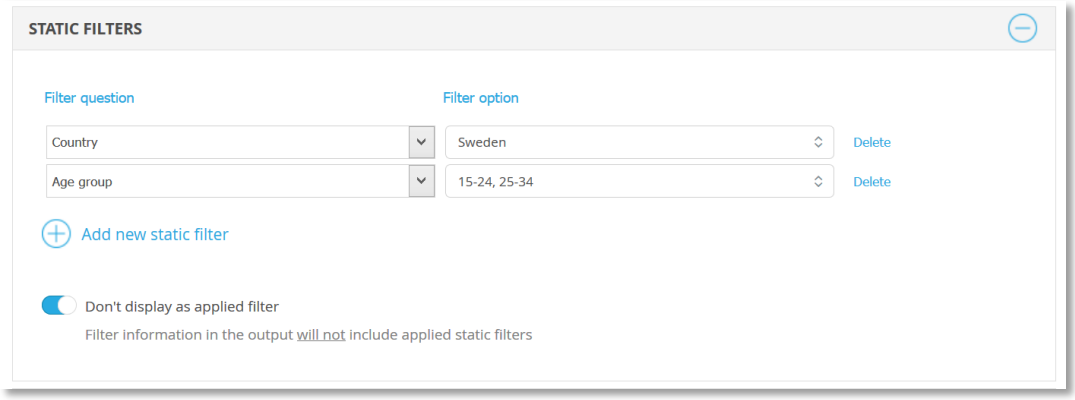
Except from applying a static filter, you can also select if the filter information, displayed in the bottom of the chart, shall include the static filter or not.

Here we see the Static Filter panel, in this example the result in the Story creator is always filtered by Swedish respondents.



Note: If selecting multiple options within a filter variable these are treated as “OR”. If selections have been made in multiple filter variables these are treated as “AND” between the variables.

Here we see an example of multi selection in the Static filter setup, in this case the static filter will include all Swedish respondents that are either 15-24 or 25-34.



Note; a filter variable applied as a static filter will not be available as a regular filter in the Story cretaor, it becomes hidden in the Filter tab automatically.

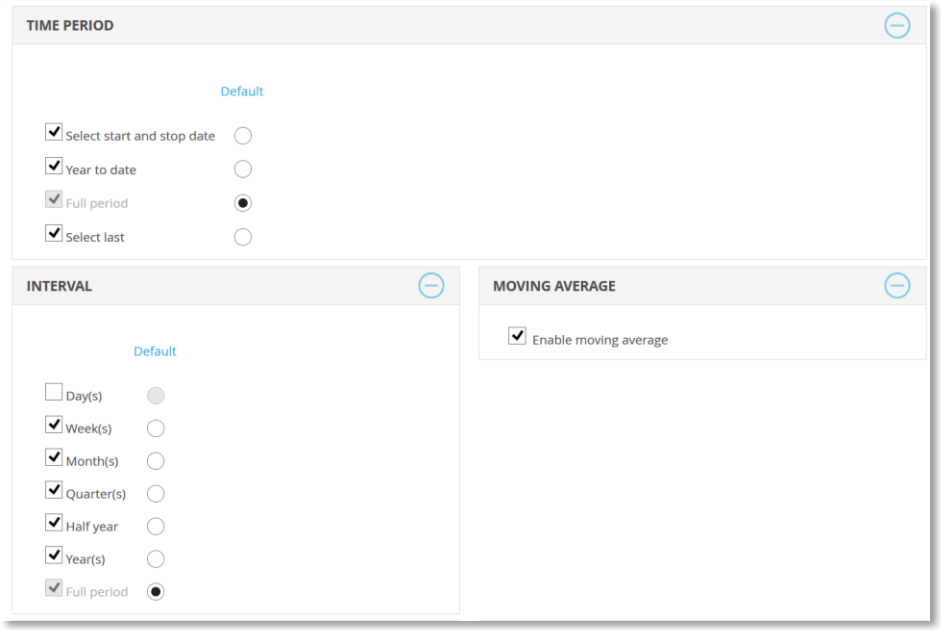
3.2.2.8 Time Period, Moving Average, Interval

In the Time period panel you select which time period option the user will be able to use. The “Full period” is the default option for the report users, so the Full period cannot be disabled (see image further down).

In the moving average panel, you can turn the ability to use moving average calculations on and off (see image further down).

In the interval panel, you can limit the interval options (see image further down).

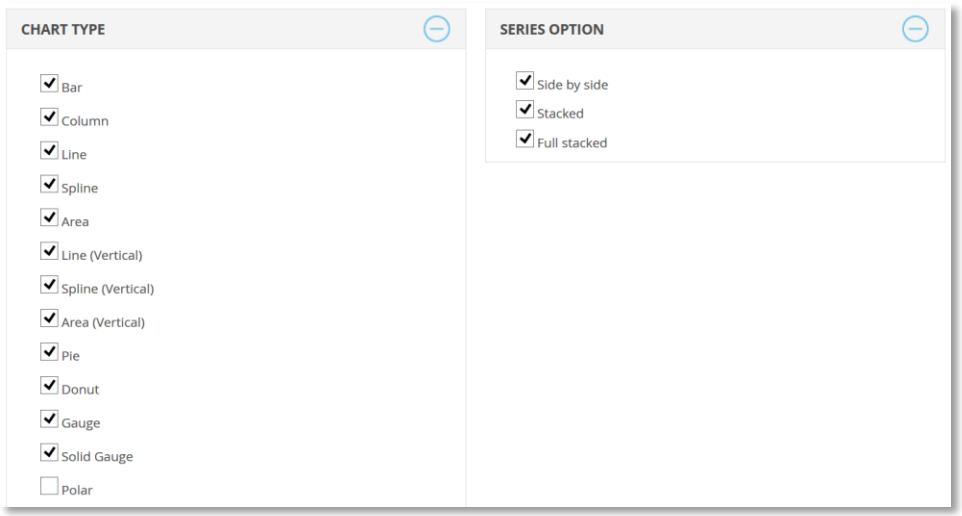
The image below shows the setup of the Time period, Moving average and Interval. The ticked options will be shown for the report users.



3.2.2.9 Chart types and series options

In the Chart type panel you select which chart types the user will be able to use and in the series option you will be able to select which series types that can be applied to each chart (side by side, stacked and full stacked).

The image below shows the setup of the chart types and the related series options.

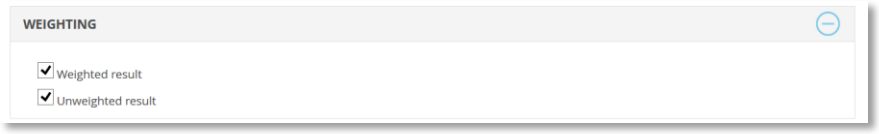


3.2.2.10 Weighting

In the weighting panel, you can select if the user will be able to view the result based on weighed data, un-weighed data or if they will be able to select between weighted and un-weighted results. If the user can select, then the result is weighted by the default.

Note: A minimum of 1 option must be selected.

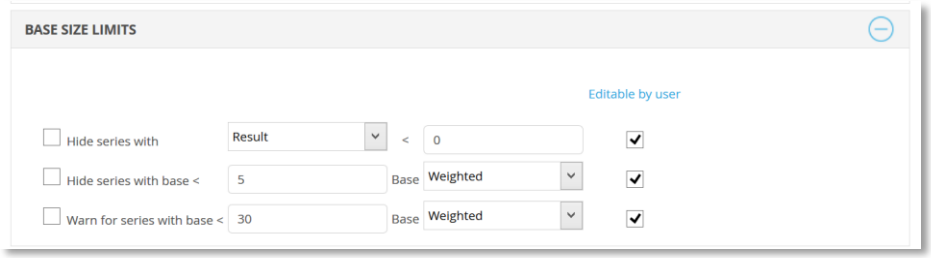
The image below shows the setup of the weighting options. The report users will see the ticked options.



3.2.2.11 Base size limits

In the base size panel, you can select if any specific limits will be set to default when it comes to hide or warn for low base sizes. You can also apply default limits and hide the controls so that the report user cannot change the limits. This is useful when a result will not appear if the base size is below a certain number. In those cases, the desired limit is set as default and the option “Editable by user” is disabled.

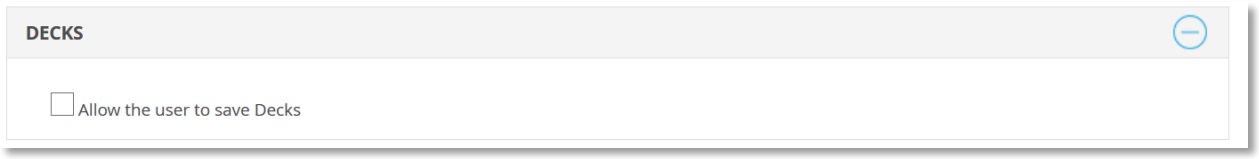
The image below shows the setup of the base size limit options.



3.2.2.12 Decks

In the Deck panel you select if the users should be able to save their decks for future usage or not. The users are allowed to save their decks by default and it is recommended to keep it like that unless you have a project where the same user account is used by multiple persons via a shared SSO link. In these cases the ability to save decks should be removed as the decks will not be personal and hence to that be edited and deleted by anyone with access to the SSO link.

Here we see the Decks panel.



3.2.2.13 Report format

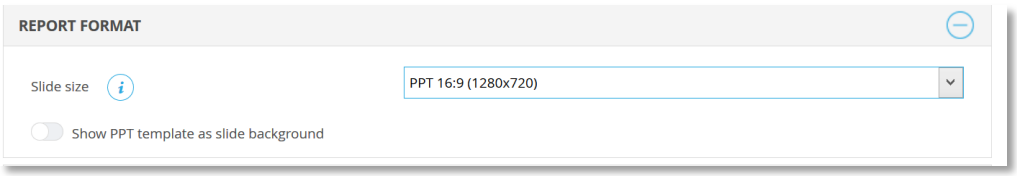
The slide size of the Story creator is adjusted in the Report Format panel. Any of the standard formats can be used, or you can enter a custom slide size. The following standard sizes are supported:

- PPT 4:3 (960x720)
- PPT 16:9 (1280x720)
- A4 landscape (1123x796)
- A4 portrait (796x1123)

Note: No matter what format you are using, the same report functions and behavior are applied to all. The only exception is the ability to make PPT exports, these are only available if any of the PPT formats are used.

In the Report format panel you can also activate to show the PPT template as slide background in the Story creator.

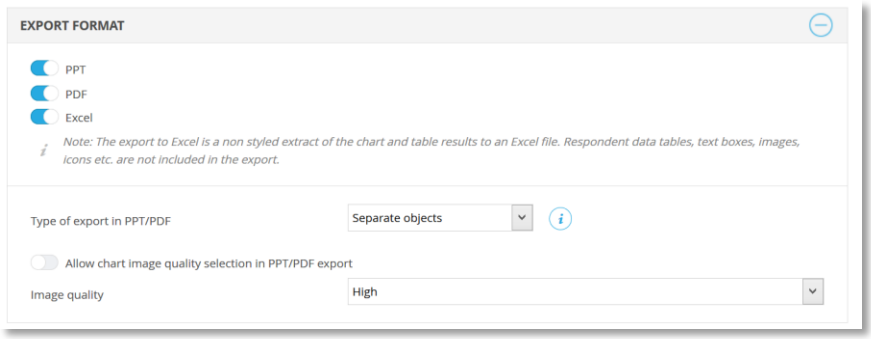
Here we see the Report Format panel.



3.2.2.14 Export format

In the Export panel you can select which export options that shall be available, PPT, PDF and Excel are supported.

The image below shows Export format panel.



Note 1: The PPT option is only available if the slide size formats are PPT 4:3 or PPT 16:9 (see previous chapter for setting slide size).

Note 2: When exporting to PPT, the PPT .pot or .potx (template) file defined by the project theme is always used. This adds a first page, header, footer, and a last page. This is different from the PDF export, because the PDF is just an export of what is shown online and does not contain any additional first/last page or footers.

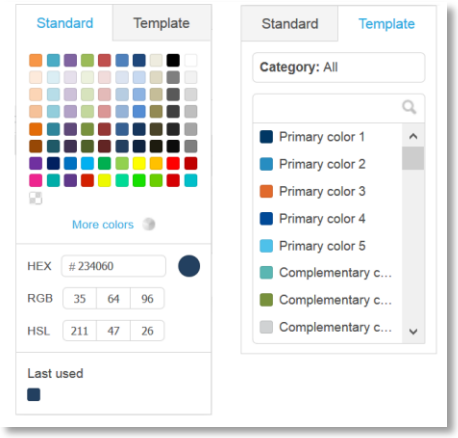
Note 3: The export to Excel is a non-styled extract of the chart and table results to an Excel file, the results are exported as tables and not as charts

3.2.2.15 Color templates

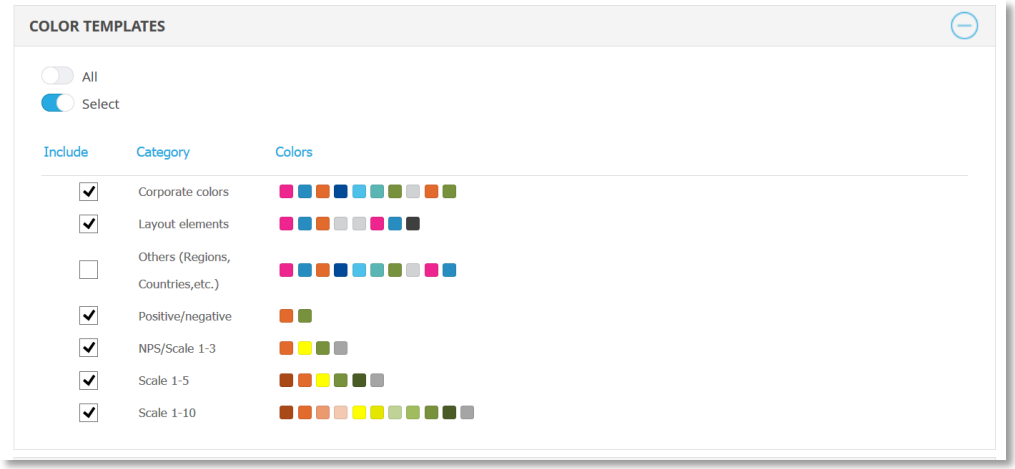
When setting colors on texts, series in charts, gridlines, chart background etc. a color picker is used. The color picker can consist of two tabs, a tab for selecting among a set of standard colors and a tab for selecting a template color. If applying a template color to an item it gets connected to the color template, if the color template is updated the color of the item becomes updated automatically.

In the Color Template panel you can define if Color templates shall be available or not, you can either turn off all templates or tick the templates to be available for the users. If the “All” option is used all the existing but also all future added color templates becomes available to use.

Here we see the two tabs in the color picker



Here we see the Color template panel for limiting which templates to be available to use in the Template tab in the color picker.



3.2.2.16 Layout templates

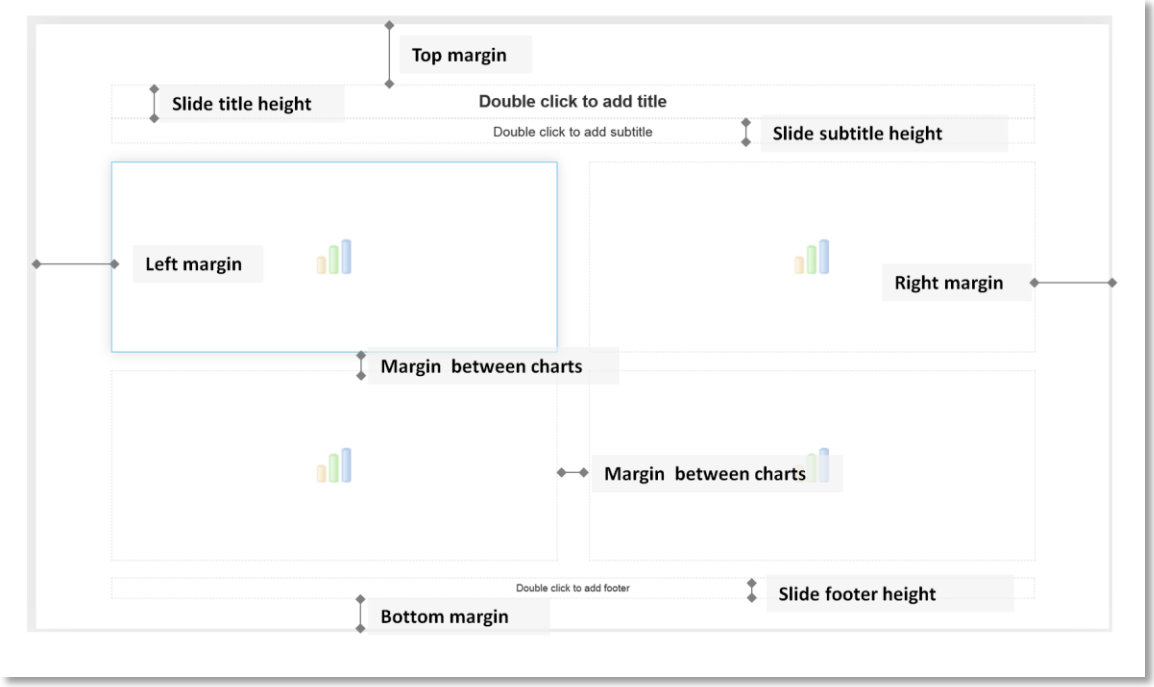
In the Layout template panel you adjust the margins to be used to determine the size of charts and text boxes added to the slide when a Layout template is selected. You can define the top, bottom, left and right margin but also the margin between charts.

Except from defining the margins you can also set the default height of the slide title, slide sub title and slide footer text boxes.

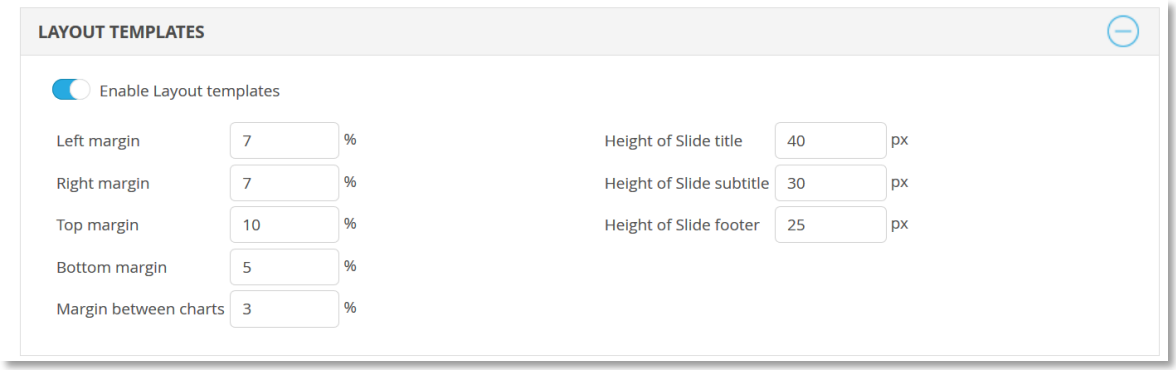
Both settings described above can, with advantage, be adjusted so the objects do not cover, for example, the slide footer or the slide header in the PPT template file.

The first image below shows the margins in a Layout template, the second image shows the Layout template panel for adjusting these margins.

Here we see the margins in a layout template.



Here we see the Layout templates setup panel. As shown the margins are defined in %, and not pixels, to fit different slide sizes like for example PPT 4:3 and PPT 16:9.



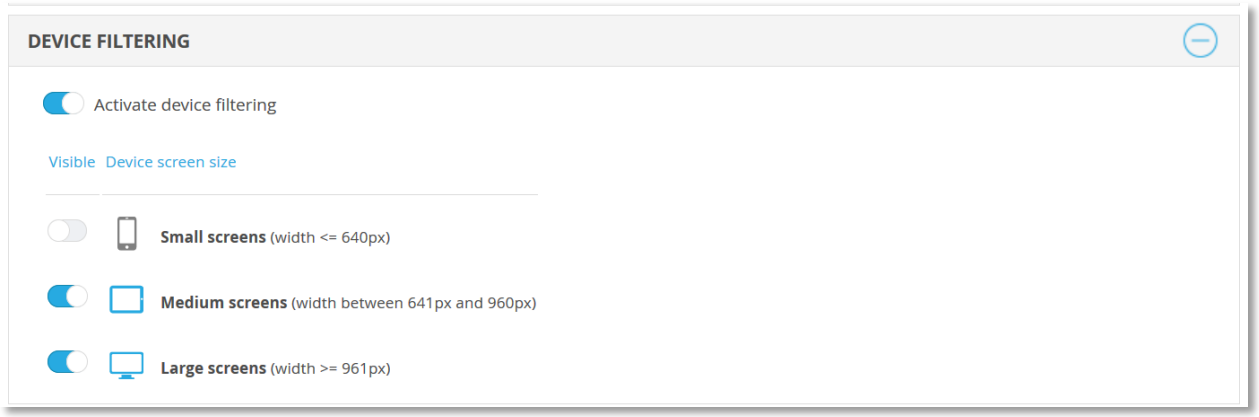
3.2.2.17 Device filtering

In the Device filtering panel you can activating device filtering which means that you for example can setup rules so the Story Creator only appears when the user uses a large screen (for example a desktop)

and not when the user uses a small screen (for example smart phone). To activate the filtering, enable the “Activate device filtering” option, as shown in the image below. When the option is enabled, you can select which screen sizes the Story creator report will be shown in.

Note: The device filtering is disabled by default. This means that a report is shown in all devices until the device filtering is activated.

The image below shows the setup of a device filter. The Story creator in the image will only appear when the user uses a medium or a large screen device (usually tablets and desktops).



3.2.2.18 Smart functions

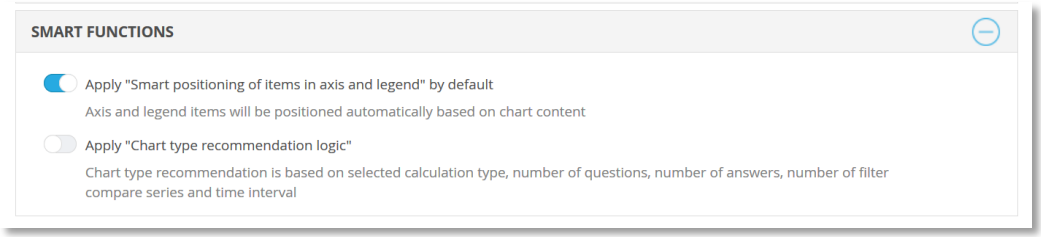
In the Smart function panel you can define if the smart positioning of items (such as questions, answers, intervals etc.) in axis and legend should be applied by default or not. The settings defines the default behavior only, the user can always turn the smart positioning on and off in the Axis and Legend entries panel.

In the same panel you can also define if the “Chart recommendation logic” shall be applied or not. If it is applied, chart types with a good fit to visualize the current data are highlighted with a green thumb up and the less suitable chart types are highlighted with a red thumbs down. The logic used to recommend chart types is based on the selected calculation type, number of questions, number of answers, number of filter compare series and time interval for the chart.

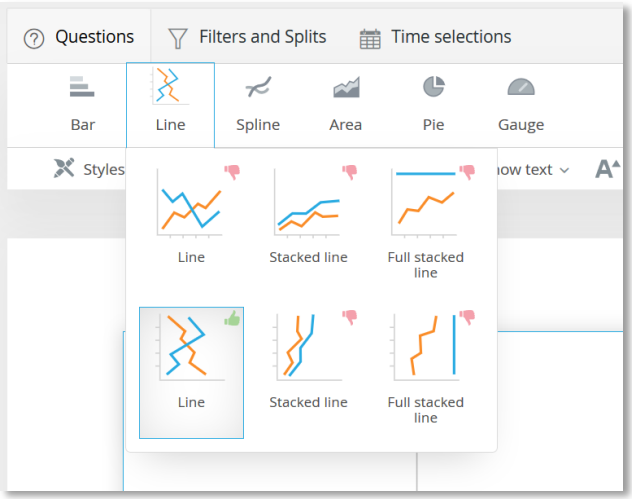
As an example, full stacked charts, pie charts and donuts are not recommended when the selected calculation type is not count or percentage shares, horizontal line charts are not recommended if no interval is present and so on.

Note: There will always be edge cases that cannot be covered with smart logic so the recommendations should be treated as suggestions and not strict rules.

The image below shows the setup of a Smart functions.



Here we see the thumb icons used to indicate which chart types that are a good fit to visualize the current data in. These "recommending" icons are only appearing if the Chart type recommendation logic has been turned on.



3.2.3 Access Rights

The access rights to the new Story creator tool work in the same way as the other portal tabs. The access right is defined when creating or editing a report user.

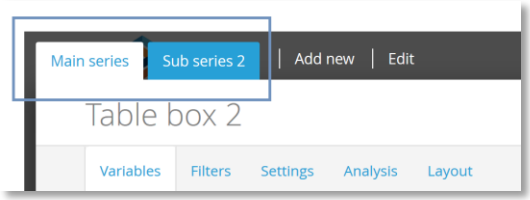
If the project contains hierarchical filters, variable subsets and normal filters then the access rights to hierarchical filter nodes are also applied to the Story creator tool.

4 Storyteller improvements

4.1 Benchmark calculations across series

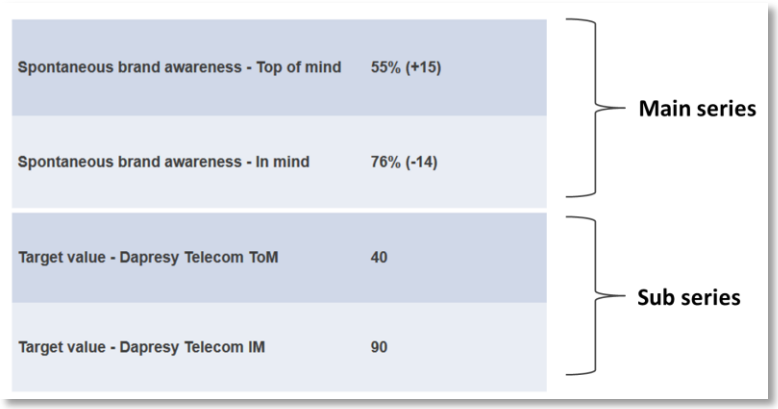
Benchmark calculations can now be made across series* in charts and tables which makes it possible for more advanced comparisons. As an example, you can now compare result of different types, like a percentage value with a numeric value, which is common when comparing survey results to external benchmark/norm/target values. Another example is that you now can compare the result of the last one month in tracker to, for example, the year to date result without having to compute additional variables.

**Series = The highlighted items in the image below.*

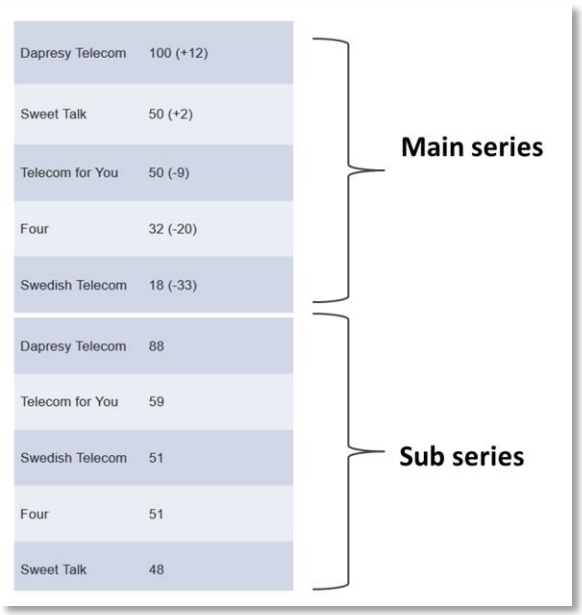


Since the structure of data can be completely different between series, the comparison can be done by the cell index (cell A1 in series 1 is compared to cell A1 in series 2, and cell A2 in series 1 is compared to cell A2 in series 2, and so on and so forth) or by using a text match between the items in the different series. Below you see use cases of both the cell index and the text match comparison.

*Here we see a basic example where the **cell index** has to be used as comparison logic. In this example the main series shows the top of mind and the in mind awareness for Dapresy Telecom and the sub series shows their target values (the target values are stored in numeric variables in this example). As no text match can be made between the series a cell index comparisons is applied, hence to that it is very important that the order of the items in both series is the same so the right values are compared to each other (cell A1 in series 1 is compared to cell A1 in series 2, and cell A2 in series 1 is compared to cell A2 in series 2).*



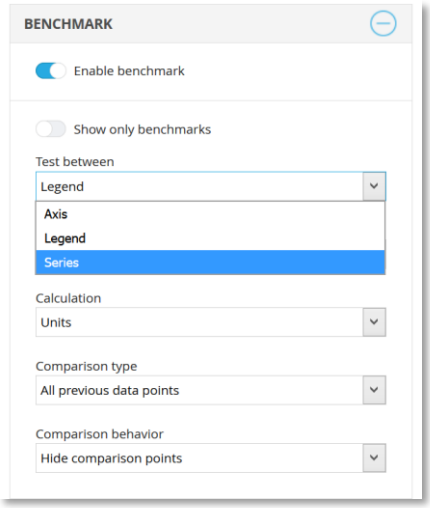
*Here we see a basic example where the **text match in rows** has to be used as comparison logic. In this example the main series shows the top of mind awareness for the latest month, the sub series shows the same awareness result but for the year to date. The brands are ordered by value so a cell index comparison cannot be applied as the brands have different positions.*



4.1.1 Setup

To setup a Benchmark calculation between two or more series, follow these two steps:

- In the section “Test between,” select the “Series” option (see image below).
  Note: This option is only available in the Main series and naturally only available if the chart/table has multiple series.



- Select, in the Match by list, if the matching between series shall be made by the cell index or by a text match
- Select calculation type (Units, percentage shares or conversion rates)
- Select how the series will be compared to each other in the “Comparison type” list. The same options that you use when doing a regular benchmark calculations within a series are available (see some examples of this logic further down):
- Select comparison behavior, should the “comparison series” be hidden or not

Below you can see an example of each “Comparison type” option. The examples are based on a chart containing three series: Series 1, Series 2 and Series 3.

Example 1: Comparison type set to “All previous series”

- Series 3 is compared to series 1 and series 2
- Series 2 is compared to series 1

Example 2: Comparison type set to “Previous series”

- Series 3 is compared to series 2
- Series 2 is compared to series 1

Example 3: Comparison type set to “Next series”

- Series 1 is compared to series 2
- Series 2 is compared to series 3

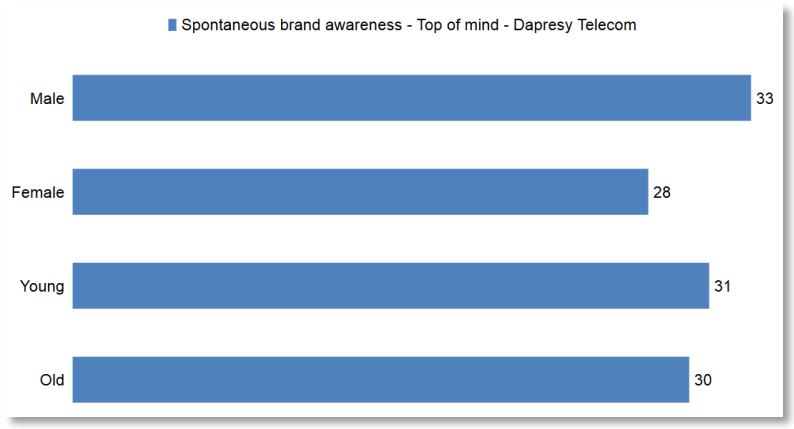
Example 4: Comparison type set to “First series”

- Series 3 is compared to series 1
- Series 3 is compared to series 2

4.2 Applying multiple weight variables in a chart/table

A chart/table could previously use one weight variable in the calculations only but now you can apply different weight variables when applying filter compares, each compare series can will then be calculated with a unique weight variable.

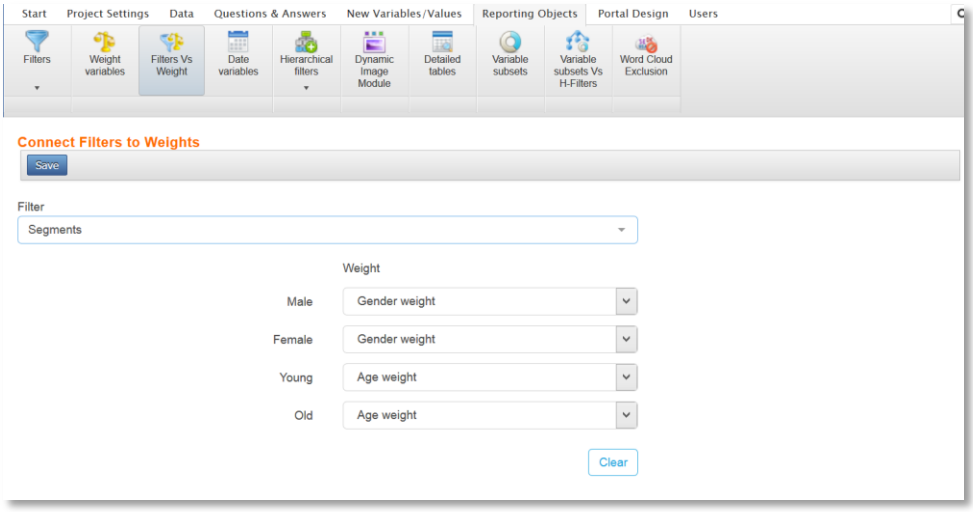
Here we see an example, the chart displays the awareness result for Dapresy Telecom for four different segments. The Male and Female result is based on a “Gender weight” while the Young and Old result is based on an “Age group weight”.



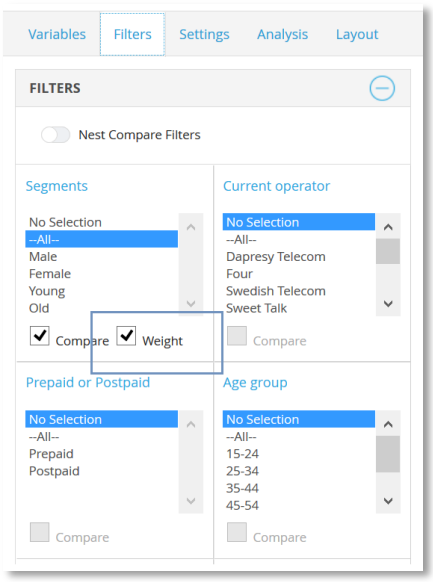
To apply a unique weight variable to each compare series the setup is done in two steps;

1) Connect the weight variables to the different Filter options in the administration screen Filter Vs Weights (see image 1 below)
2) In the chart and table setup, select to apply the weight of the compare filters, this options appears only for the Filters connected to weight variables in step 1 above if these are applied as Filter Compares in the chart/table (see image 2 below)

Here we see the screen for connecting Weight variables to Filter options, as the screen is not new you can read more about it in the online manual.

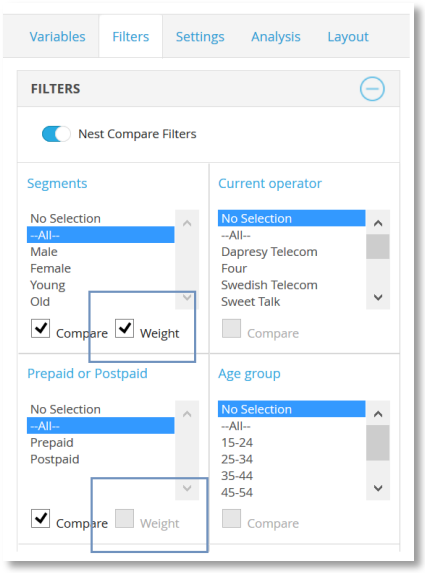


Here we see the new Weight option in charts and tables, it appears for filters connected to weight variables when they are applied as compare filters. As the Weight option is ticked, in this example, the weight variables used in each compare series will be the variables connected to each Segment option.



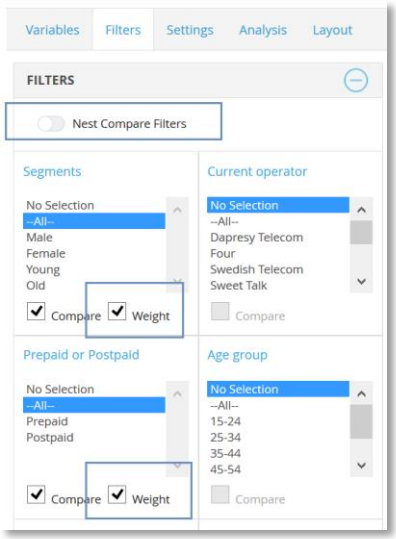
Note: as each respondent can have 1 weight per compare series you cannot apply the weight from two or more compare filters simultaneously as that would result in more than one weight per respondent and series. In these scenarios the weight option becomes disabled for the additional compare filters as soon as it has been ticked in one of these, see example of this logic in the image below.

Here we see an example of multiple filters connected to weight variables, as only one of these can be applied the Weight option in the Prepaid or Postpaid filter becomes disabled as it has been ticked in the Segment filter.



Note: if the filter compares are not nested you are able to apply the weights from multiple compare Filters as that is not resulting in more than one weight per respondent and series.

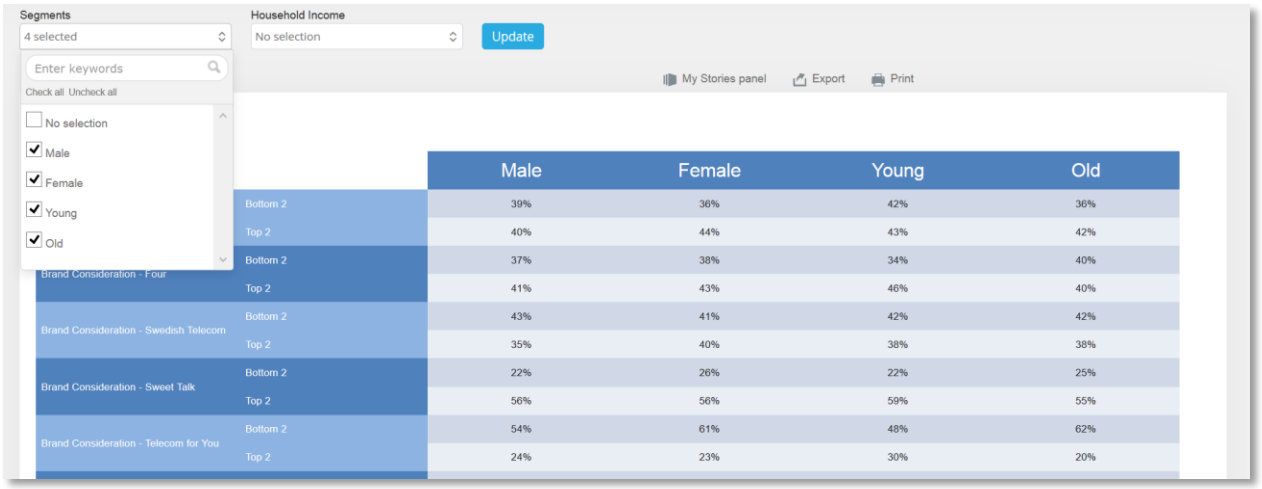
Here we see an example of non-nested compare filters, in these scenarios you can apply weights from more than one Filter variable.



4.3 Improved dynamic weighting in Optional filters

Within the Optional filter settings, you have the option to enable Dynamic Weighting which means that specific weight variables will be used depending on the selected Optional Filters. The Dynamic weighting logic, in Optional filters, can now also be applied to optional compare filters and not only to optional filters. With this support a chart/table can be using a unique weight variable per compare filter.

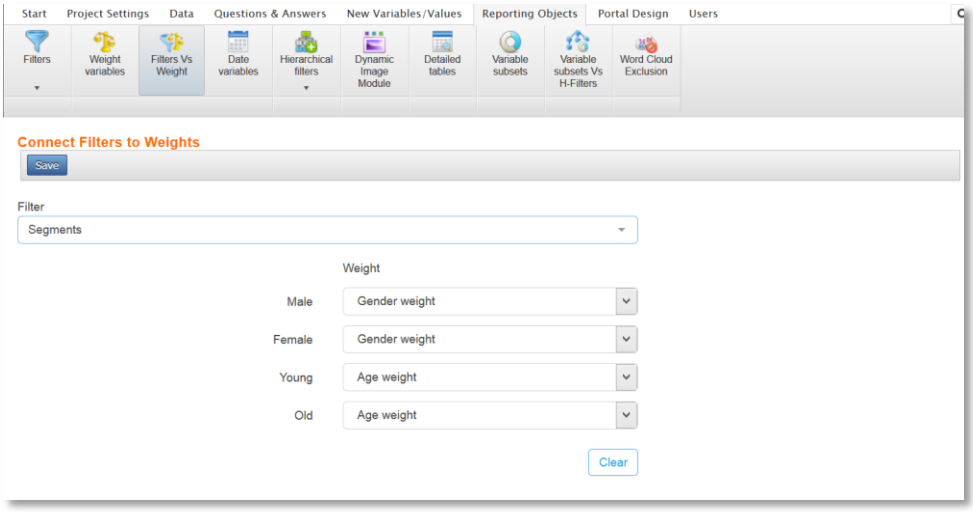
Here we see an example, the user selected four different segments which appears in columns in the table. Each of these segments are connected to different weight variables so each column is calculated with a unique weight variable.



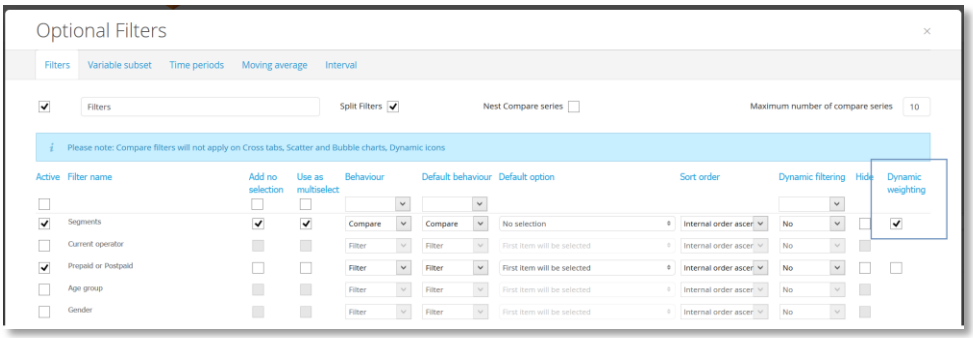
The logic for applying dynamic weighting to Optional filters works like before, below is a short summary, for more details check the online manual;

1) Connect the weight variables to the different Filter options in the administration screen Filter Vs Weights (see image 1 below)
2) In the Optional filter setup, tick the “Dynamic weighting” option for those filters that shall use Dynamic weighting. The option is only appearing for the Filters that have been connected to Weight variables. (see image 2 below)

Here we see the screen for connecting Weight variables to Filter options, as the screen is not new you can read more about it in the online manual.



Here we see the how to apply Dynamic weighting to an Optional filter.

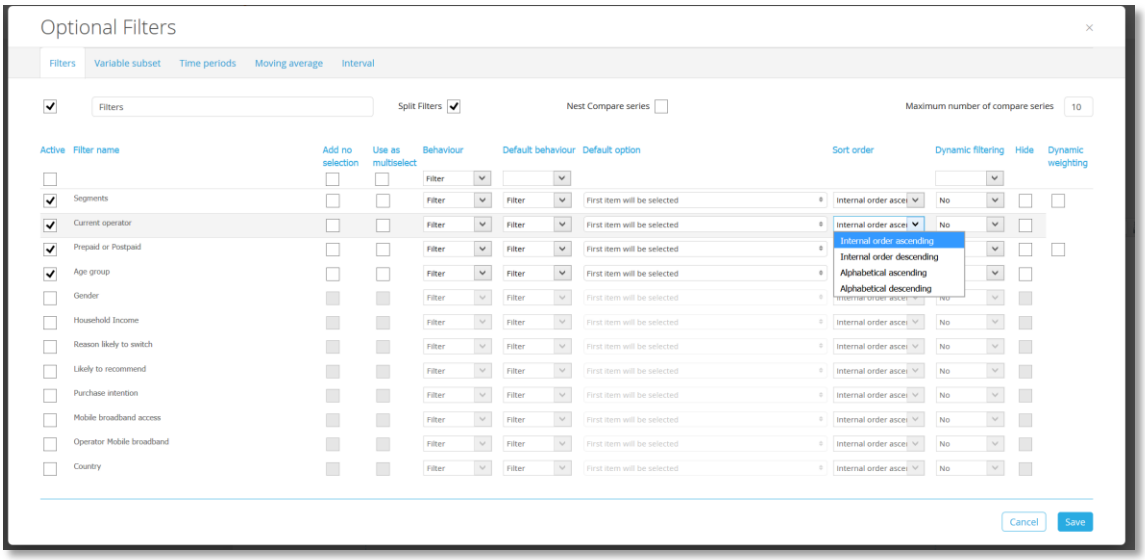


4.4 Optional filter setup improvements

4.4.1 Sorting of Optional filters

The filter options, within an Optional filter, were previously sorted by the defined sort order in the answer block but the sort order can now also be alphabetically when needed. Sorting the filter options alphabetically is great in trackers when new filter options continuously are added, by sorting these filters alphabetically you always get a relevant sort order without any manual job when the new filter options are added.

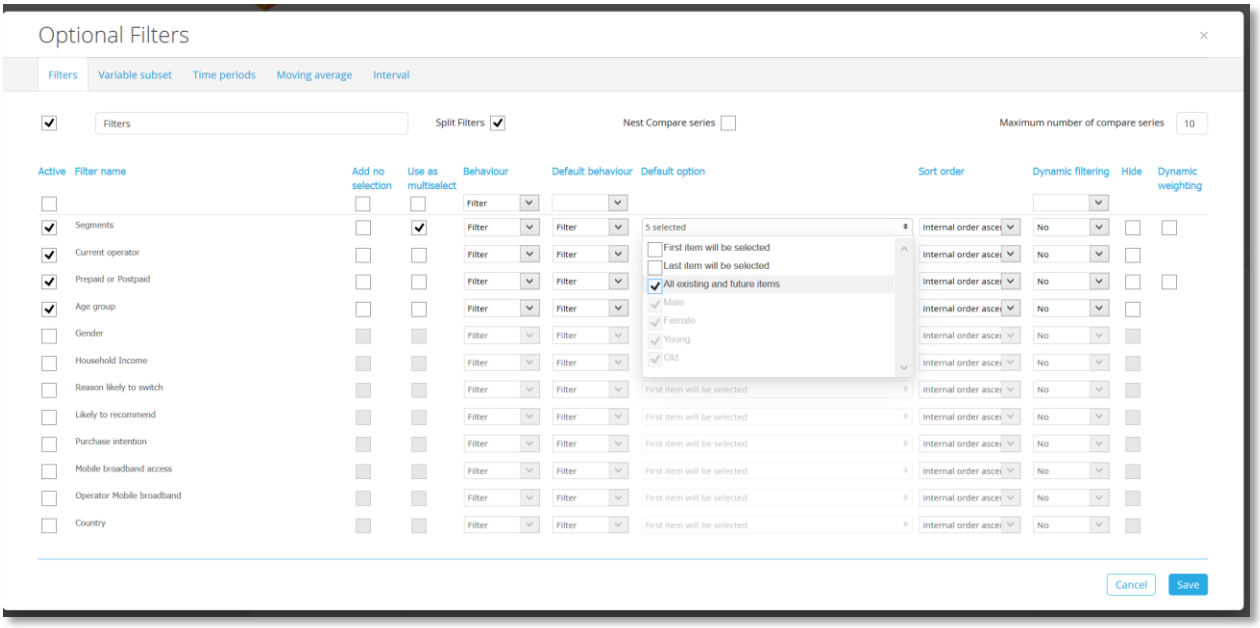
The new sorting option appears in the Optional filter setup as shown in the image below, the option "internal order ascending" is the default option so the default behavior has not changed.



4.4.2 Improved default settings in Optional filters

When setting up the Optional filters you can now select to set all the current and future filter options to default selected when the user enters the report. By using this new option manual work is eliminated in cases where all options always shall be default selected in projects where new options are added continuously.

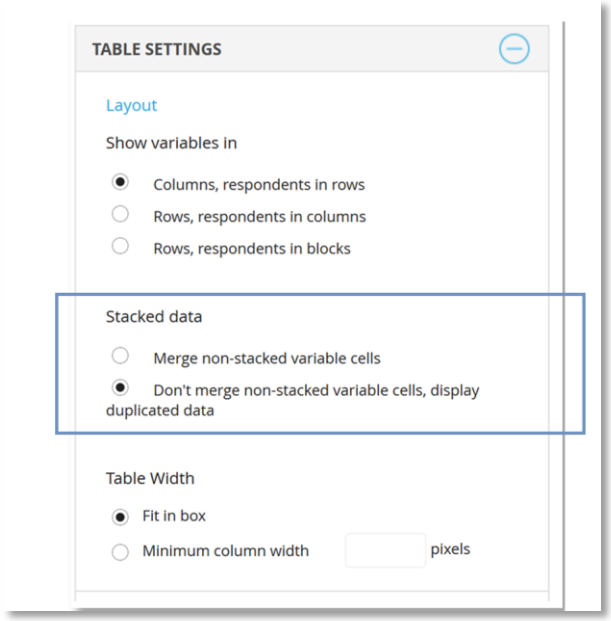
Here we see the new option in the Default option list in the Optional filter setup. The new option is appears only when multi selection is allowed in the filter.


Optional Filters
Filters
Variable subset
Time periods
Moving average
Interval
Filters
Split Filters
Nest Compare series
Maximum number of compare series
10
Active
Filter name
Add no selection
Use as multiselect
Behaviour
Default behaviour
Default option
Sort order
Dynamic filtering
Hide
Dynamic weighting
Segments
Current operator
Prepaid or Postpaid
Age group
Gender
Household Income
Reason likely to switch
Likely to recommend
Purchase intention
Mobile broadband access
Operator Mobile broadband
Country
5 selected
First item will be selected
Last item will be selected
All existing and future items
Male
Female
Young
Old
Cancel
Save

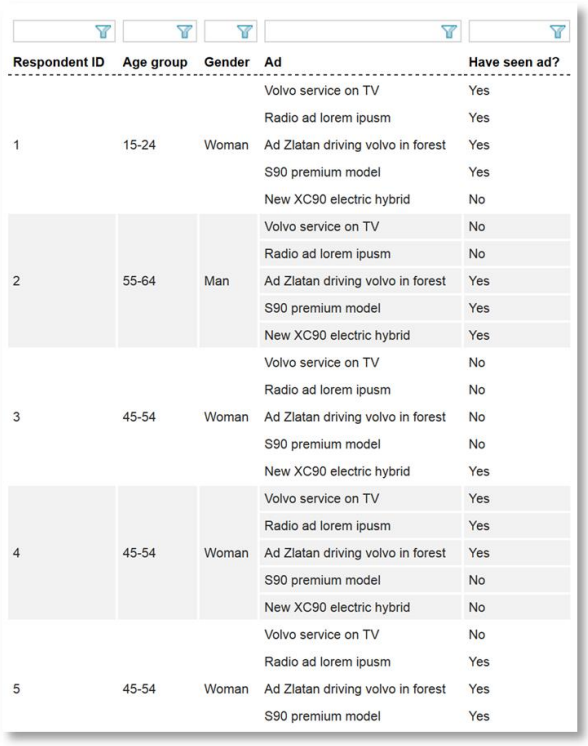
4.5 Respondent tables with stacked data

The layout of the Respondent tables, in projects with stacked data, has been improved to avoid repeated information when both stacked and non-stacked variables are displayed in the same Respondent table. You can select if the non-stacked variable cells should be merged or not. In the first image below you see the new setting for selecting which layout option to be used, the second image shows two examples, the left table shows the merged layout and the right table a non-merged layout.

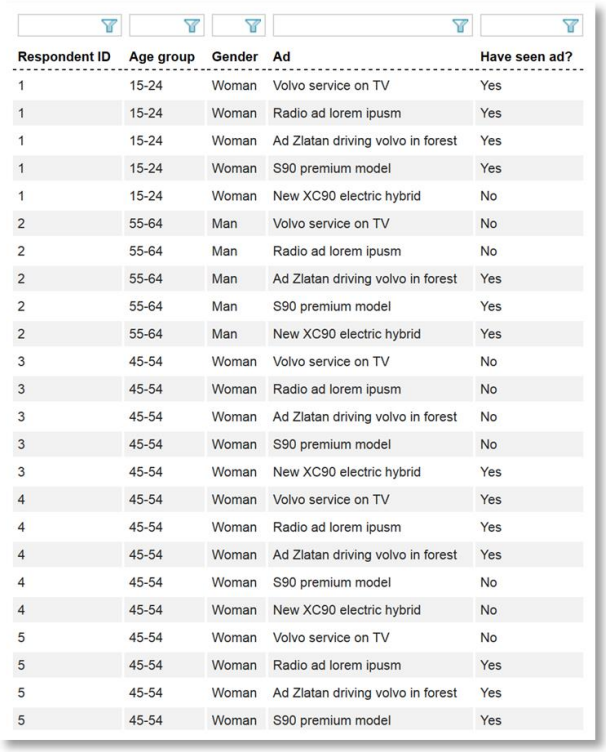
Here we see the new setting for selecting how the non-stacked variables shall be displayed in a respondent table. This new setting appears only in projects with stacked data.



Here we see the difference between the two layout options, the left table shows the merged layout and the right table a non-merged layout.



Respondent ID	Age group	Gender	Ad	Have seen ad?
			Volvo service on TV	Yes
			Radio ad lorem ipusm	Yes
1	15-24	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes
			New XC90 electric hybrid	No
			Volvo service on TV	No
			Radio ad lorem ipusm	No
2	55-64	Man	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes
			New XC90 electric hybrid	Yes
			Volvo service on TV	No
			Radio ad lorem ipusm	No
3	45-54	Woman	Ad Zlatan driving volvo in forest	No
			S90 premium model	No
			New XC90 electric hybrid	Yes
			Volvo service on TV	Yes
			Radio ad lorem ipusm	Yes
4	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	No
			New XC90 electric hybrid	No
			Volvo service on TV	No
			Radio ad lorem ipusm	Yes
5	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
			S90 premium model	Yes



Respondent ID	Age group	Gender	Ad	Have seen ad?
1	15-24	Woman	Volvo service on TV	Yes
1	15-24	Woman	Radio ad lorem ipusm	Yes
1	15-24	Woman	Ad Zlatan driving volvo in forest	Yes
1	15-24	Woman	S90 premium model	Yes
1	15-24	Woman	New XC90 electric hybrid	No
2	55-64	Man	Volvo service on TV	No
2	55-64	Man	Radio ad lorem ipusm	No
2	55-64	Man	Ad Zlatan driving volvo in forest	Yes
2	55-64	Man	S90 premium model	Yes
2	55-64	Man	New XC90 electric hybrid	Yes
3	45-54	Woman	Volvo service on TV	No
3	45-54	Woman	Radio ad lorem ipusm	No
3	45-54	Woman	Ad Zlatan driving volvo in forest	No
3	45-54	Woman	S90 premium model	No
3	45-54	Woman	New XC90 electric hybrid	Yes
4	45-54	Woman	Volvo service on TV	Yes
4	45-54	Woman	Radio ad lorem ipusm	Yes
4	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
4	45-54	Woman	S90 premium model	No
4	45-54	Woman	New XC90 electric hybrid	No
5	45-54	Woman	Volvo service on TV	No
5	45-54	Woman	Radio ad lorem ipusm	Yes
5	45-54	Woman	Ad Zlatan driving volvo in forest	Yes
5	45-54	Woman	S90 premium model	Yes

5 Cross table tool improvements

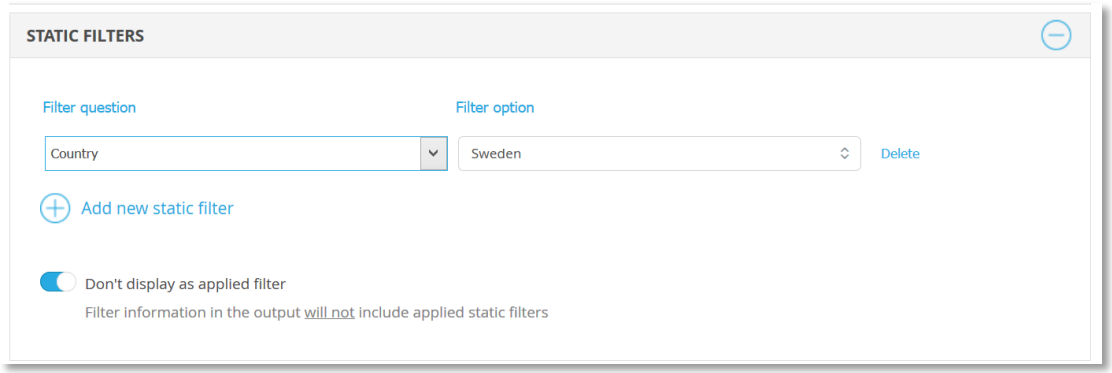
5.1 Static filters

We now support applying “static filters” to the Cross table tool. A static filter is always applied to the calculations and cannot be turned off by the users. Static filters are useful when having respondents in the database that the users of the Cross table tool should not be able to include in the calculations for different reasons. It could for example be “incompletes” in project where both completed and incompleted interviews are imported. Another common use case is to provide the users with data for completed months only, even if data is loaded to the project on a daily level, that can now easily be achieved by applying static filter to the Cross table tool.

To apply Static filters enter the Cross table tool setup and the new Static Filter panel and select the variables that shall be applied as static filters (see an example image further down).

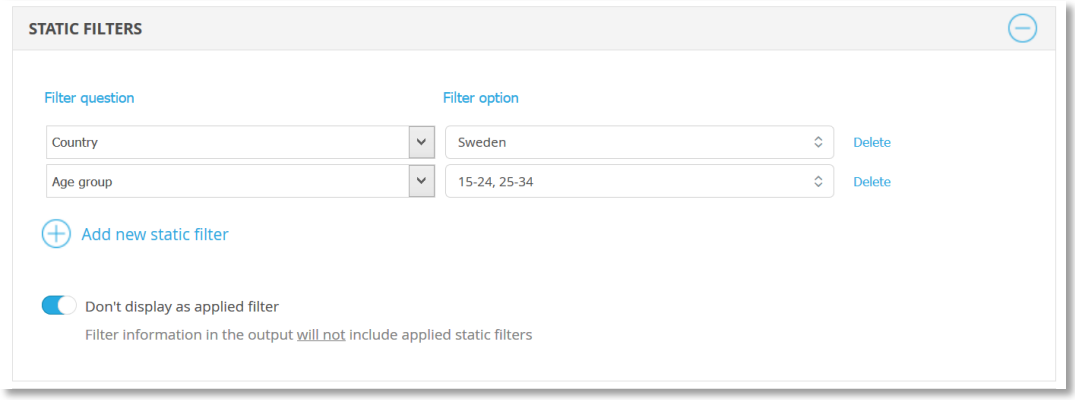
Except from applying a static filter, you can also select if the filter information, displayed in the above the table, shall include the static filter or not.

Here we see the Static Filter panel, in this example the result in the Cross table tool is always filtered by Swedish respondents.



Note: If selecting multiple options within a filter variable these are treated as “OR”. If selections have been made in multiple filter variables these are treated as “AND” between the variables.

Here we see an example of multi selection in the Static filter setup, in this example the static filter will include only Swedish respondents that are either 15-24 or 25-34.

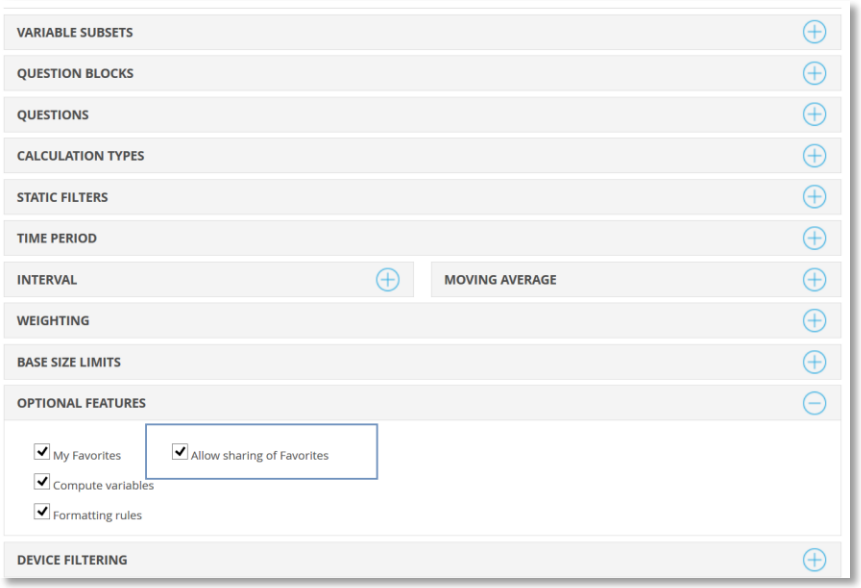


Note; a filter variable applied as a static filter will not be available as a regular variable in the Cross table tool, it becomes hidden in the Column & Row and the Filter tab automatically.

5.2 Turning off the ability to share Favorites

It is now supported to turn off the ability to share Favorites in the Cross table tool. When this setting is applied the users can still save their own favorites but not share those with other users.

Here we see the new setting in the Cross table tool for disabling the ability to share Favorites with other users.



Note; if the ability to share Favorites is turned off the administrator will still see the panel “Favorites created by other users” to be able to support the users.

6 Data import improvements

6.1 Ignoring new meta data

A new data import option supports importing data files with new meta data and relevant case data that will be ignored during the import process, not imported and have no impact on the import. This new setting is great to use in projects, that for example, uses daily scheduled imports where only case data is imported as the import process will be successful even if the data file contains new questions/answers, with the current logic the import process stops in this scenario and no data is imported.

Example:

The meta data table below shows the questions and answers in a project:

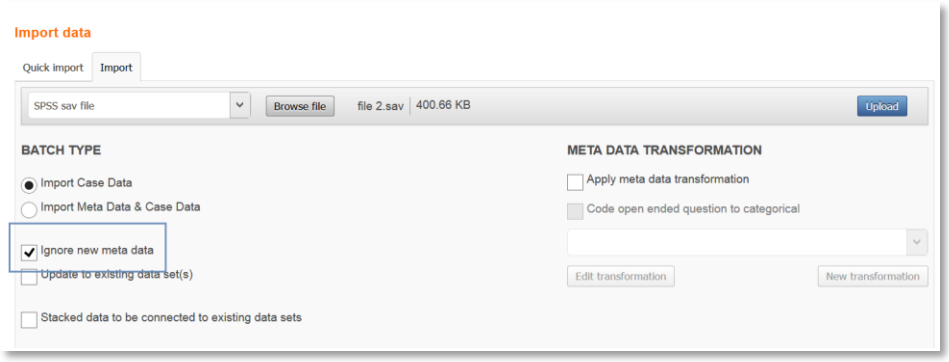
Q1 Gender
1 Male
2 Female
Q2 Favorite color?
1 Blue
2 Red
3 Yellow

The table below shows the questions and answers in a data file to be imported to the project. When applying the new option to ignore new meta data the questions and answers highlighted in red are ignored during the import as these do not exist in the project. The case data for these options is also ignored so if any respondent, for example, answered “4 Don’t know” in Q2 this respondent is imported as “missing” in Q2.

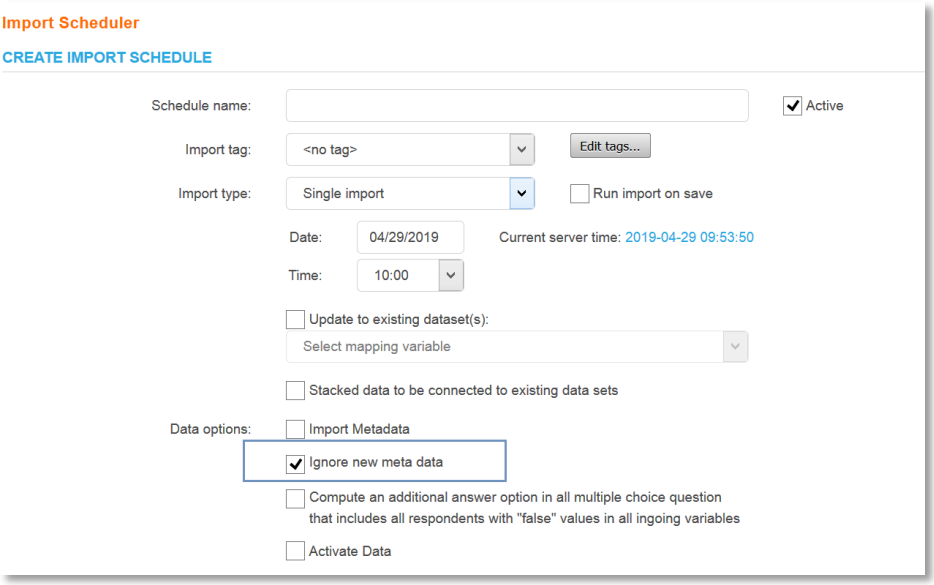
Q1 Gender
1 Male
2 Female
Q2 Favorite color?
1 Blue
2 Red
3 Yellow
4 Dont kow
Q3 Age
1 15-30
2 31-50

The new option to ignore new meta data is available both in the manual import page and the scheduled import page, the new option is only appearing when case data is imported only, not when Meta and Case data is imported.

Here we see the new option for ignoring new meta data in the manual import page. The option is only shown when importing case data only.



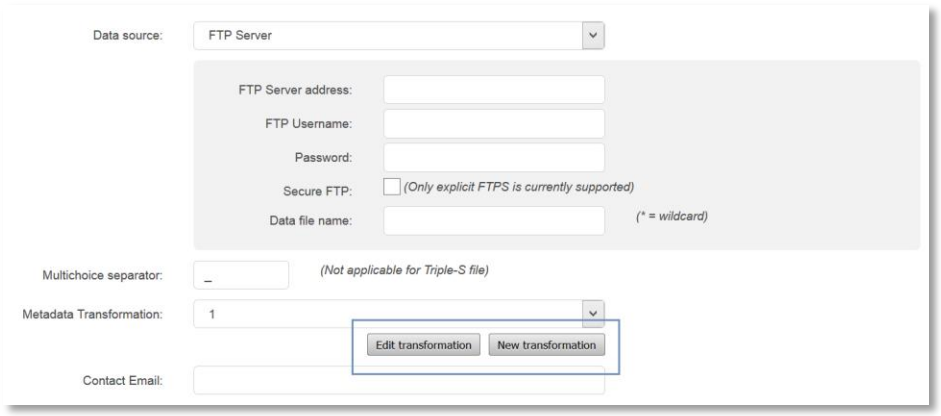
Here we see the new option for ignoring new meta data in the data import scheduler page. The option is only shown when importing case data only.



6.2 Create and edit Meta data transformations in Import scheduler page

You can now create, and edit, meta data transformations directly in the Import scheduler page which streamlines the process as it is no longer necessary to first make an manual import to be able to create the meta data transformation. This new option makes the process much more efficient, especially, in projects where the data source is a third party system and not a file transfer as you now can select which variables to be imported to your project, recode open ended questions to categorical questions etc. directly during the import by creating a Meta data transformation.

Here we see the new option for editing and creating new Meta data transformations from import scheduler page. The functionality within the Meta data transformation works exactly as in the manual import screen.



7 Performance improvements

7.1 Calculations

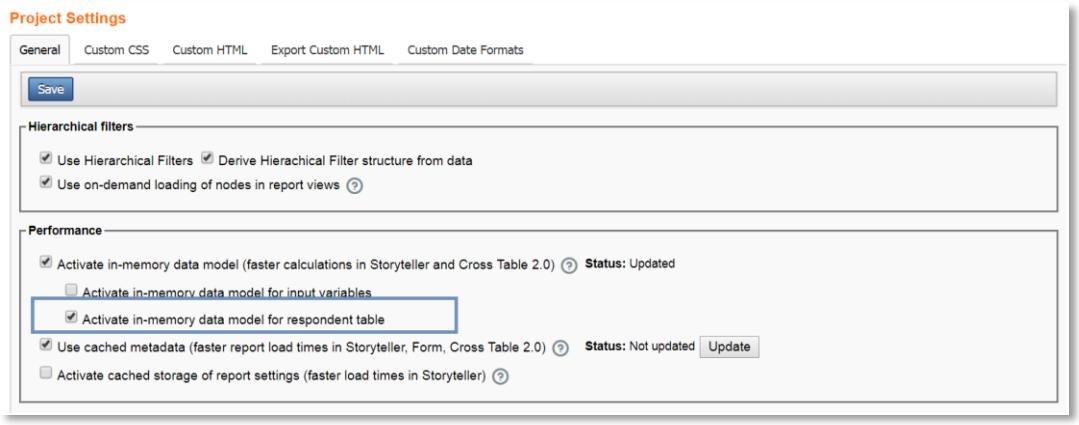
The calculation speed is now faster in projects with non-stacked data. The improvement is particularly significant in large projects. All projects benefit from the enhancement to performance. These performance improvements are applied to all projects so no setting needs to be applied to your projects.

7.2 Support for using in-memory model in Respondent tables

The Respondent table object is now supporting the in-memory data model which results in faster performance. How much faster the respondent tables load depends on multiple factors it is many times faster than before. The bigger the project and the Respondent table is, in terms of data, the bigger impact the new logic has.

The in-memory support for Respondent tables is not applied to your projects by default, you must turn this logic on in the Project settings page.

Here we see the setting for turning on In-memory support for Respondent tables.



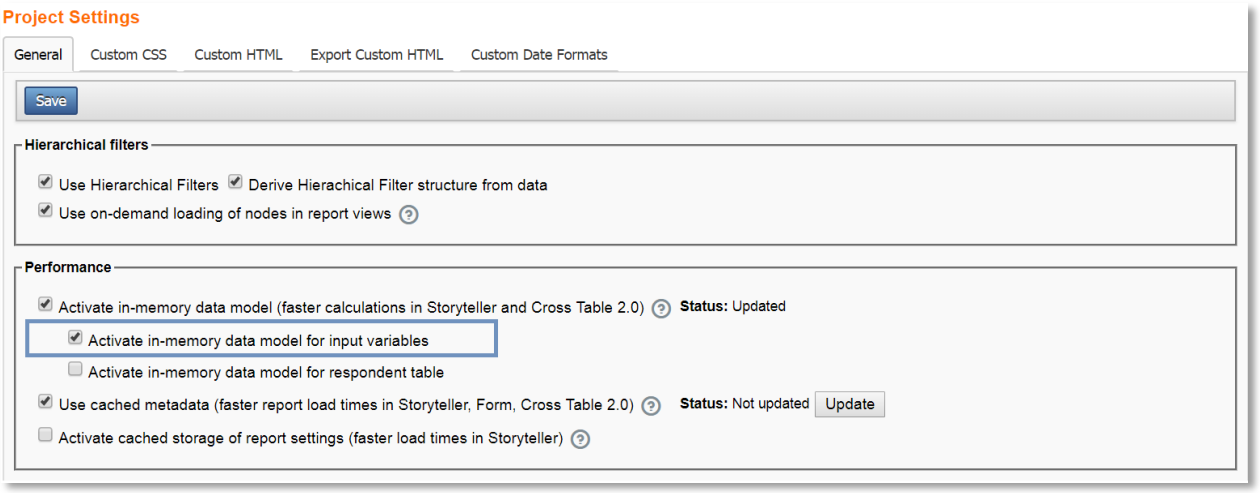
7.3 Support for storing Input variables in the in-memory data model for faster performance

The Input variables can from now on be stored in the in-memory model in the same way as regular variables are stored in the in-memory data model. By storing the Input variable data in the in-memory model the calculations of Input data in the Storyteller and the loading of Input data in Forms is much

faster.

The in-memory storage of the Input variables is not applied to your projects by default, you must turn this logic on in the Project settings page. We recommend turning the feature on if your Storyteller reports which contain Input variables are loading slowly.

Here we see the setting for turning on In-memory storage of Input variable data.



Note: The Input variable data of respondents in the in-memory model is updated **automatically** when a Form is saved.
However, if an Input variable is updated in the Create/Edit Input variable page, the In-memory model needs to be updated manually in same way as when, for example, a Computed variable is created or edited.