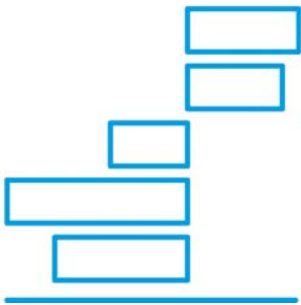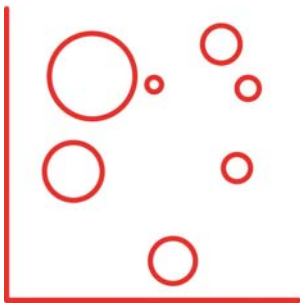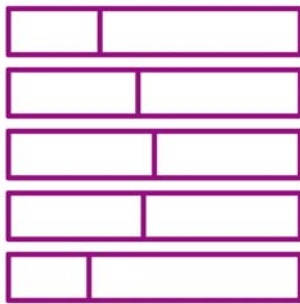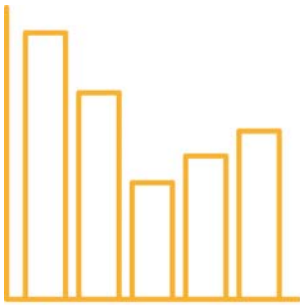# Chart styles in
Snap Survey Software

A summary of standard chart styles and advanced analysis options

SnapSurveys

Table of Contents

About this Report

This report has been produced to demonstrate the full range of chart styles supplied with Snap Survey Software. It also contains some guidance as to when you might use the different charts.

The report was generated through Snap and is based on a working sample survey - Crocodile Rock Cafe, which is supplied with Snap. The sample surveys, including Crocodile Rock Cafe, can be found in the Snap 11 folder which is usually found on your c: drive.

Alternatively, please email support@snapsurveys.com to request a copy of the survey.

How to use this report

This report serves to highlight the chart styles supplied with Snap. It is intended to be viewed alongside the Crocodile Rock Cafe survey. To gain further insight into how the different charts can be reproduced, the individual charts can be viewed within the survey. These charts contain additional notes as to which settings were used to produce them.

At the end of this report there is additionally information about the process of building your own charts and creating your own bespoke reports.

Other reports

Within the Crocodile Rock Cafe survey, there are two additional reports available - a report detailing the various tables, lists and clouds supplied with Snap, and a report which generates a cross tabulation table for each question. Analyses contained within the reports can be viewed independently of the report, giving further insight into how to build your own tables and charts.

Viewing the saved analyses

Whilst this report serves to demonstrate the charts that have been created in the survey and gives some indication as to how and when they might be used, you may wish to view the individual analysis that make up this report. This will give further insight into how these charts were created.

To view the saved tables, charts, lists and clouds, click the **Analyses** icon.
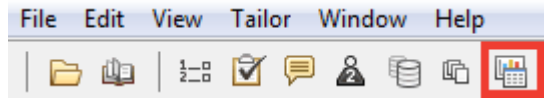
Click on the Properties icon to view the options that were selected to create each of the saved analyses.
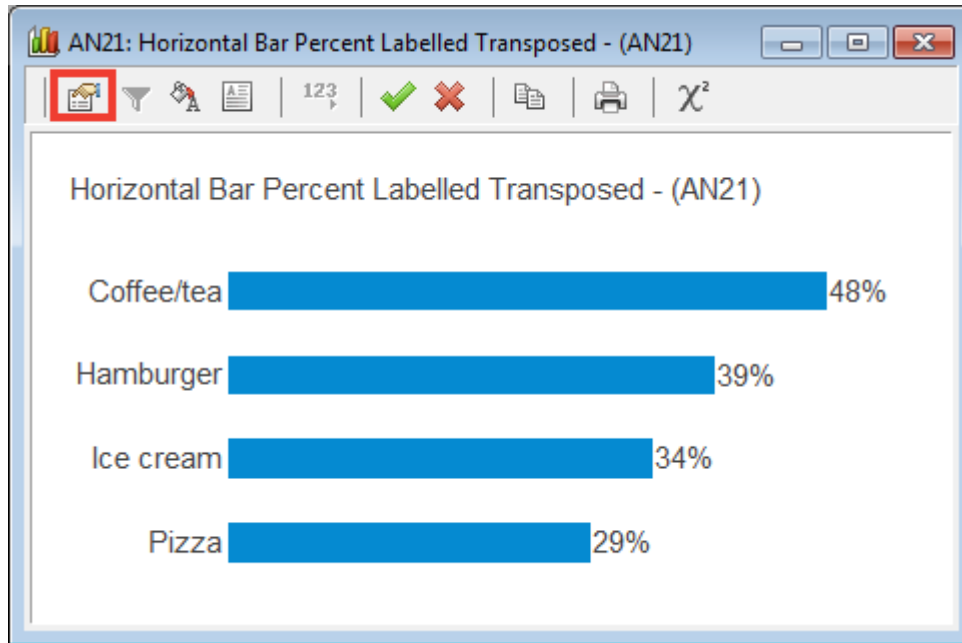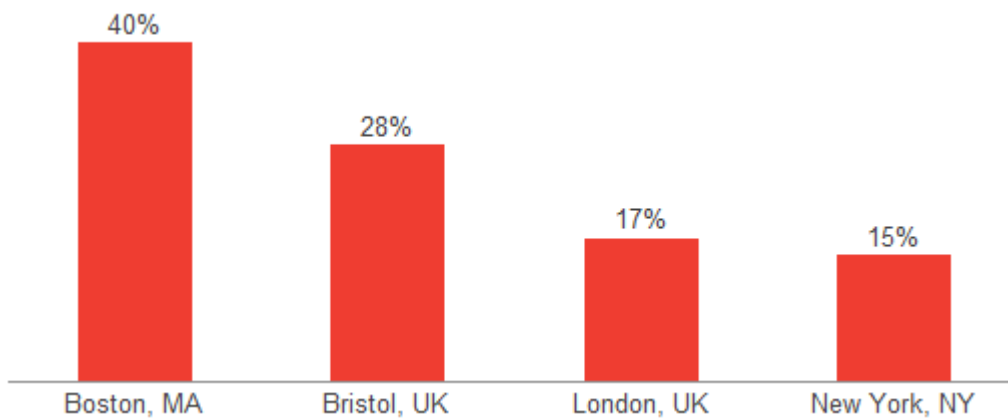
Bar Charts

This section displays the four Bar Chart styles that are supplied with Snap plus three additional examples of how these styles can be used.

Bar Charts are one of the most commonly used chart styles due to their ease of interpretation. Data is often ordered from top to bottom - the exception being where you have ordinal data such as Age categories, and you wish to keep the relationship between the categories.

Ordering of data is changed in the Base/Labels tab of the individual table or chart.

The following questions were used to build the charts within this section. Q4 is a multiple response question whereas Q2 and Q12 are single response questions.

Q2. How often on average, do you visit this restaurant?

☐ Daily
☐ Twice a week
☐ Weekly
☐ Monthly

Q4. Which of the following items did you order today?

☐ Hamburger   ☐ Ice cream
☐ French fries   ☐ Coffee/tea
☐ Pizza   ☐ Soft drink
☐ Salad   ☐ Other

Q12. Are you male or female?

☐ Male
☐ Female

The four standard bar chart styles differ only in that they display either counts or percents and with or without labels.

Bar Counts - (AN10)

- French fries
- Coffee/tea
- Soft drink
- Other
- Hamburger
- Ice cream
- Pizza
- Salad

Bar Counts Labelled - (AN11)

- French fries
- Coffee/tea
- Soft drink
- Other
- Hamburger
- Ice cream
- Pizza
- Salad

Bar Percent - (AN12)

- French fries
- Coffee/tea
- Soft drink
- Other
- Hamburger
- Ice cream
- Pizza
- Salad

Bar Percent Labelled - (AN13)

- French fries
- Coffee/tea
- Soft drink
- Other
- Hamburger
- Ice cream
- Pizza
- Salad
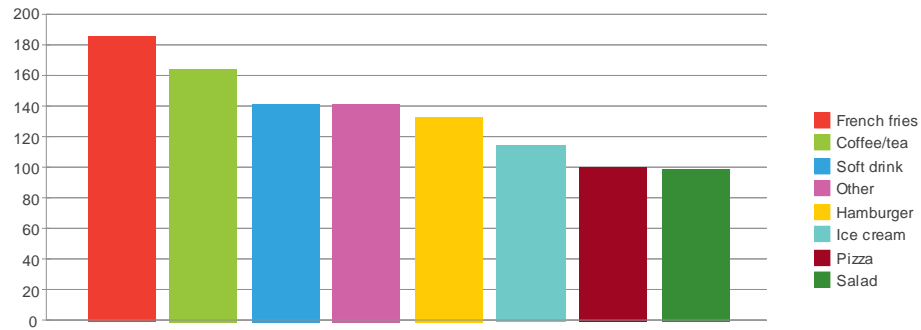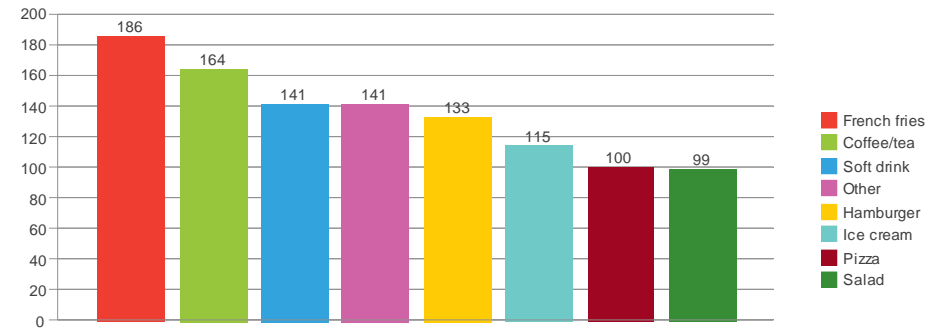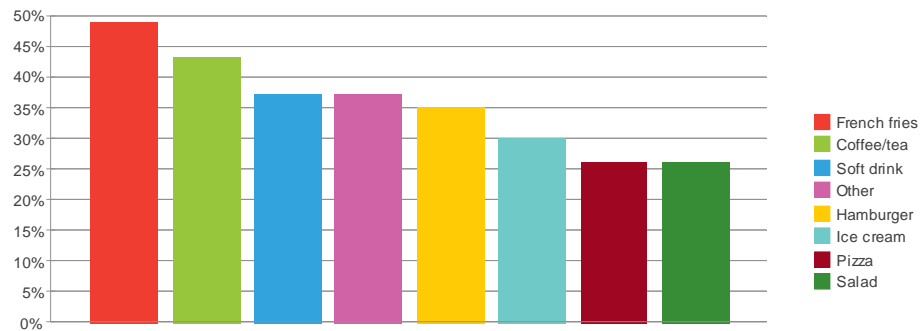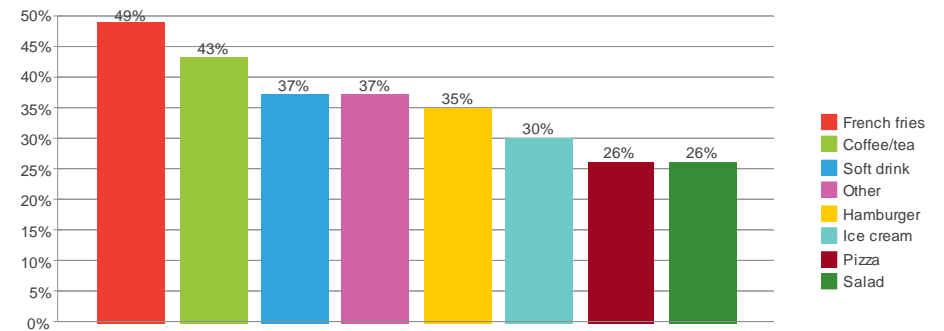
Bar Counts with 'Transpose' ticked - (AN10.1)
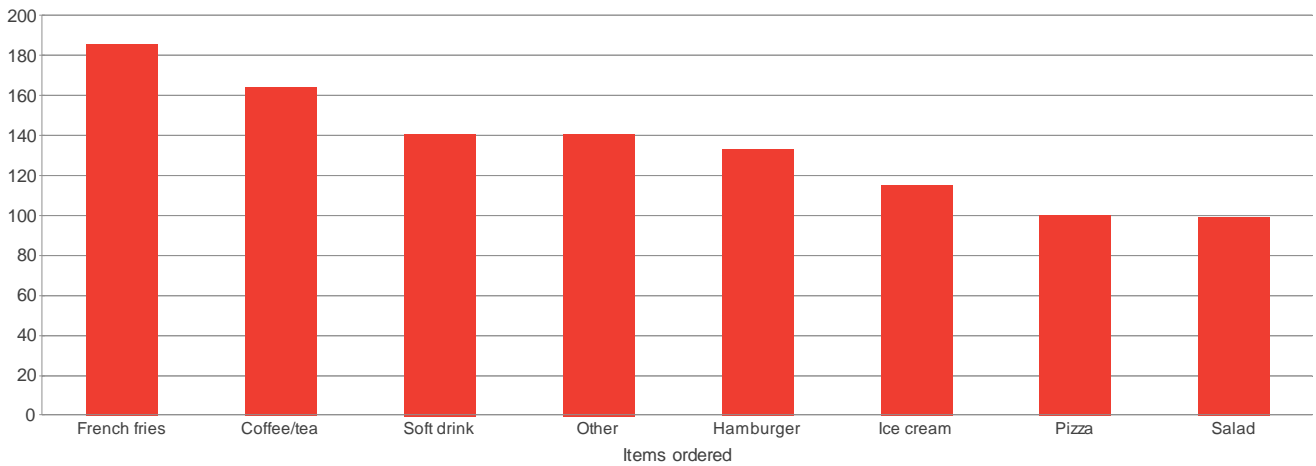
This example uses the standard Bar Counts chart style. This chart however, was built using one additional setting - 'Transpose' is ticked in the Definition tab. This attaches the legend to the bottom of each bar and converts the chart to a single color. This makes it easier to see which categories each of the bars represent.

Bar Percent Labelled - XTab - (AN13.1)
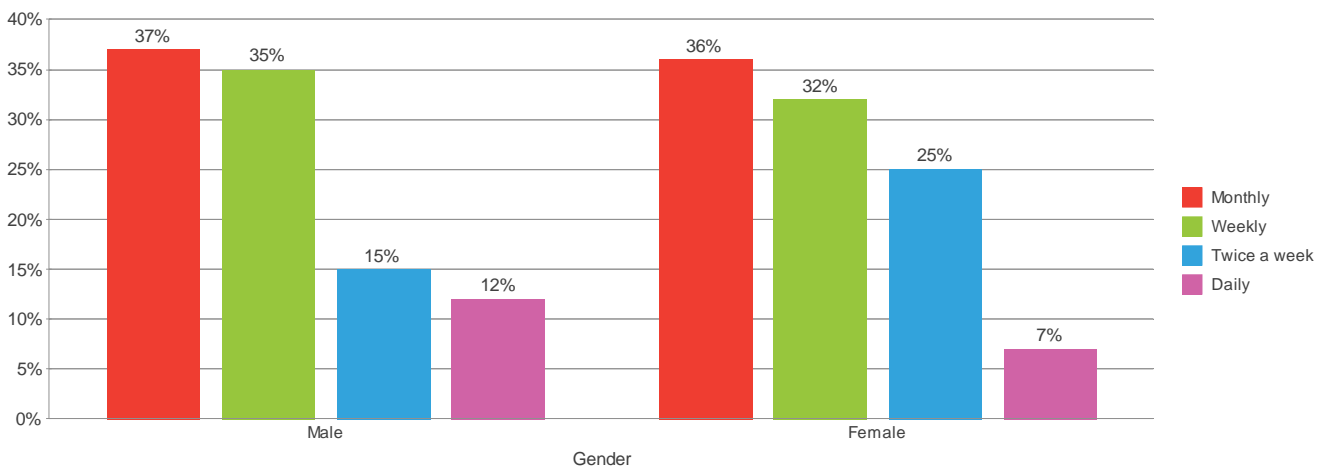
As AN13 with the exception that this chart is analysing 2 questions - a cross tabulation chart.

The bars within each gender category (Q12) add up to 100% - **Break Percents** has been selected in the **Definition** tab.

Bar Percent Labelled - XTab with 'Transpose' ticked - (AN13.2)
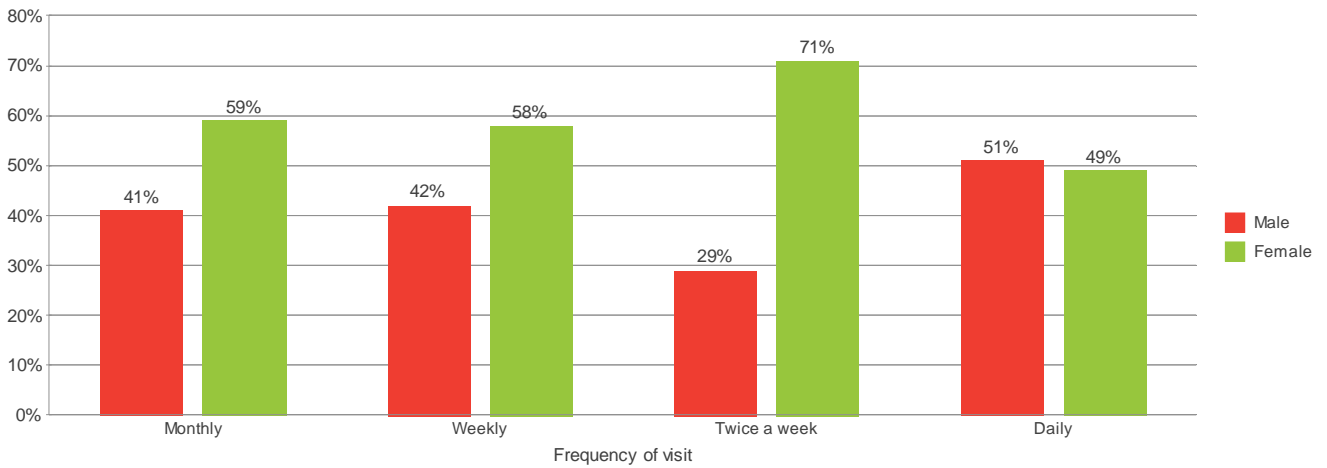
This chart is analysing the same questions as AN13.1, however the **Transpose** button has been ticked. This switches the rows and columns, transforming the chart to display the various periods across the bottom, rather than the gender categories across the bottom. Transposing a chart can often make it easier to read, depending upon your chosen categories.

The bars within each period category (Q2) add up to 100% - **Analysis Percents** has been selected.

Horizontal Bar Charts

Boston, MA	40%
Bristol, UK	28%
London, UK	17%
New York, NY	15%
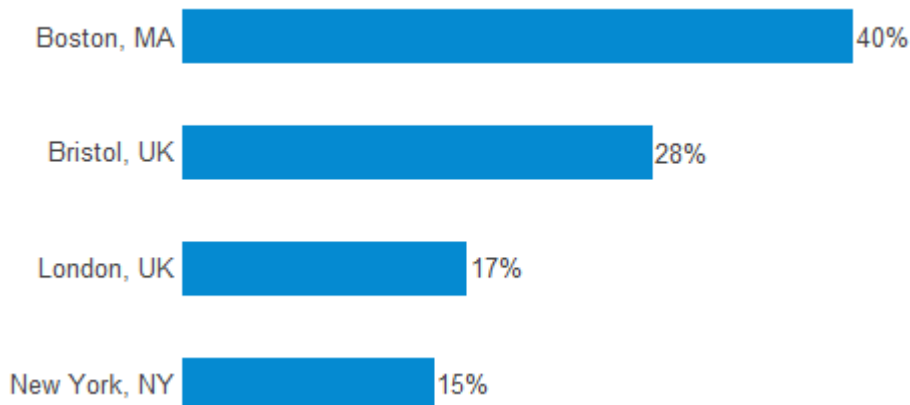
This section displays the nine Horizontal Bar Chart styles that are supplied with Snap plus an additional example of how these styles can be used.

Horizontal bar charts are much like standard bar charts - the difference being the orientation. They are commonly used when you have a larger number of categories as the bars are aligned beneath each other rather than side by side across the page, where space is generally more limited. The orientation also helps when you have longer code (answer) labels.

Data is often ordered from top to bottom - the exception being where you have ordinal data such as Age categories, and you wish to keep the relationship between the categories. Ordering of data is changed in the Base/Labels tab of the individual table or chart.

The following questions were used to build the charts within this section. Q4 is a multiple response question whereas Q2 and Q12 are single response questions.

Q2. How often on average, do you visit this restaurant?
- ☐ Daily
- ☐ Twice a week
- ☐ Weekly
- ☐ Monthly

Q4. Which of the following items did you order today?
- ☐ Hamburger
- ☐ French fries
- ☐ Pizza
- ☐ Salad
- ☐ Ice cream
- ☐ Coffee/tea
- ☐ Soft drink
- ☐ Other

Q12. Are you male or female?
- ☐ Male
- ☐ Female

Some of the following charts are transposed. Ticking **Transpose** aligns the legend to each corresponding bar making it easier to read. When transposing a table or chart, there is often a corresponding style that has been designed to work in conjunction with this setting.

Horizontal Bar Counts - (AN14)

French fries	Soft drink	Hamburger	Pizza
Coffee/tea	Other	Ice cream	Salad
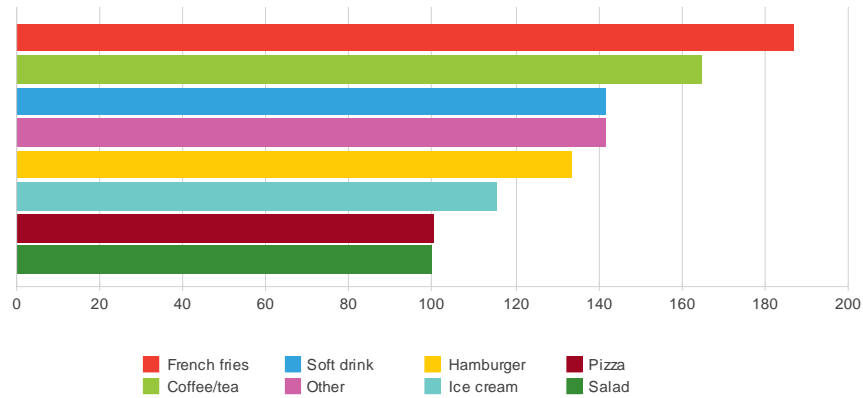
Horizontal Bar Counts Transposed - (AN15)
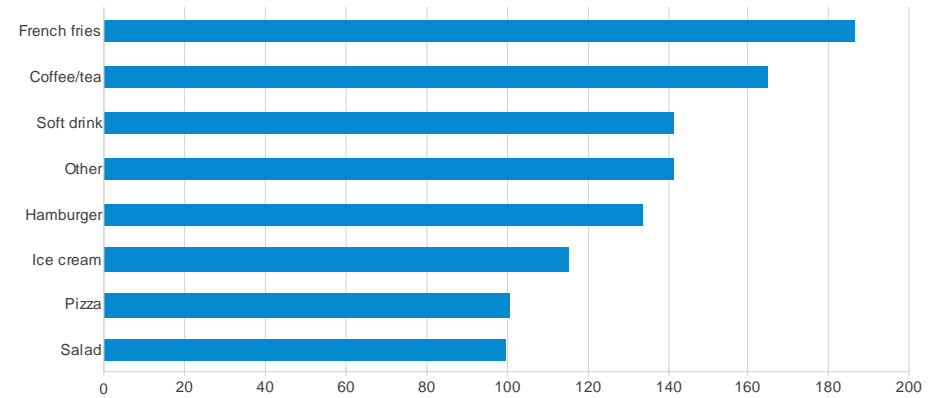
Horizontal Bar Counts Labelled - (AN16)
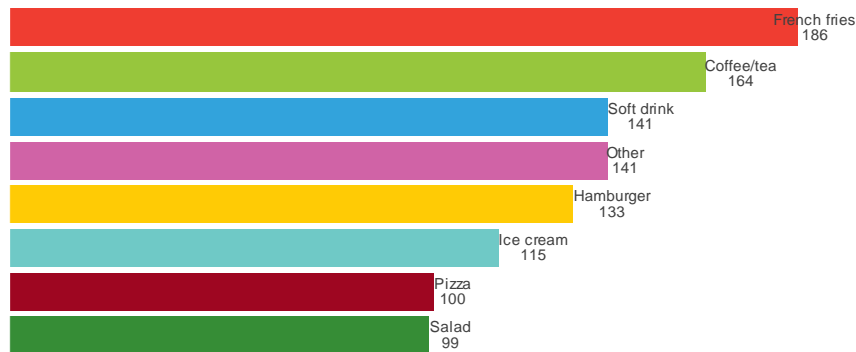
Horizontal Bar Counts Labelled Transposed - (AN17)

Horizontal Bar Percent - (AN18)

French fries
Coffee/tea
Soft drink
Other
Hamburger
Ice cream
Pizza
Salad
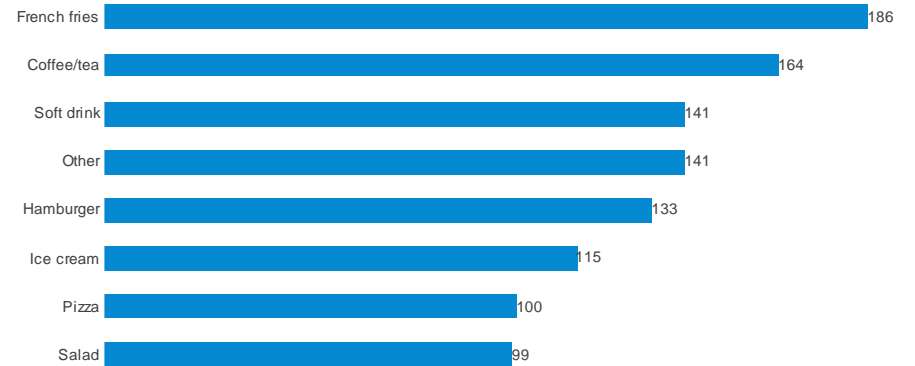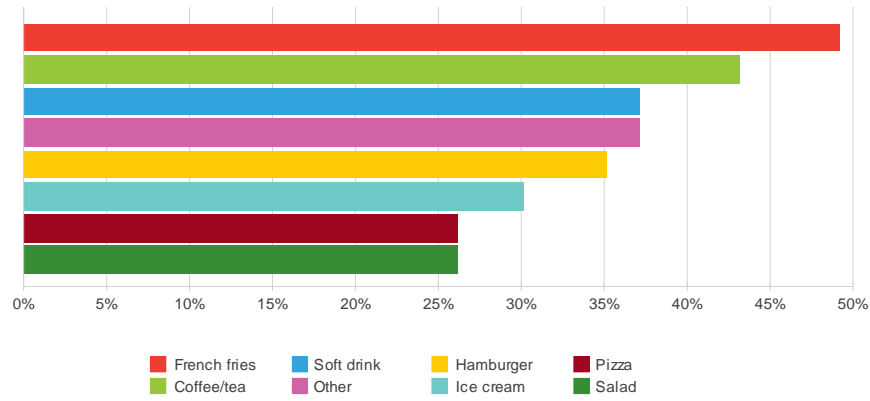
Horizontal Bar Percent Transposed - (AN19)
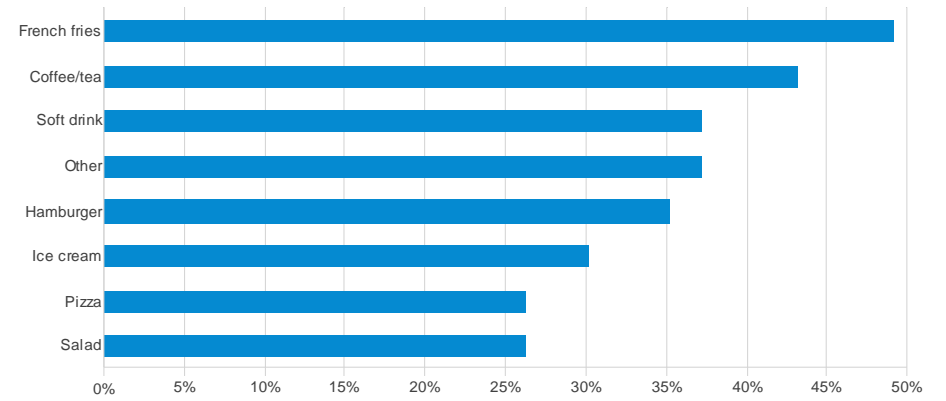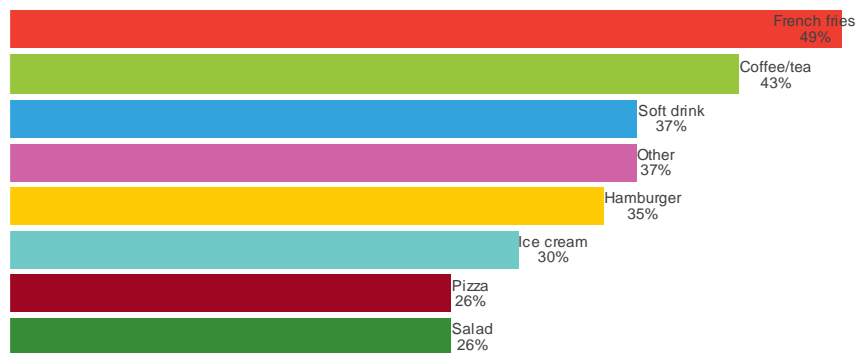
French fries
Coffee/tea
Soft drink
Other
Hamburger
Ice cream
Pizza
Salad

Horizontal Bar Percent Labelled - (AN20)

French fries 49%
Coffee/tea 43%
Soft drink 37%
Other 37%
Hamburger 35%
Ice cream 30%
Pizza 26%
Salad 26%

Horizontal Bar Percent Labelled Transposed - (AN21)

French fries 49%
Coffee/tea 43%
Soft drink 37%
Other 37%
Hamburger 35%
Ice cream 30%
Pizza 26%
Salad 26%
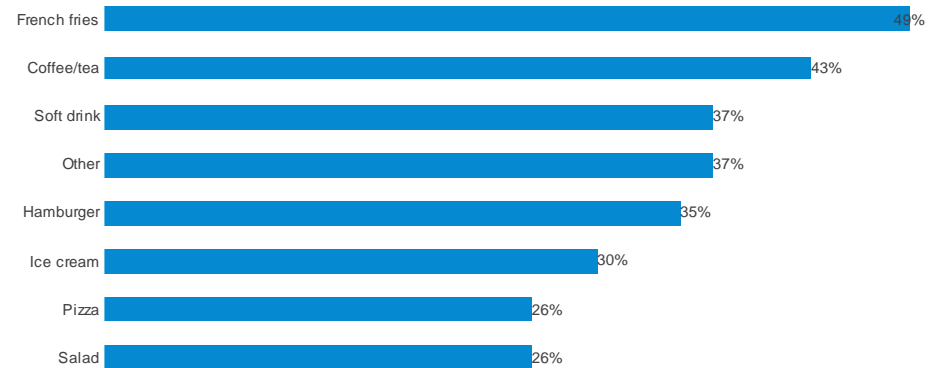
Horizontal Bar Percent Labelled Transposed - XTab - (AN21.1)

	Male	Female
Monthly	41%	59%
Weekly	42%	58%
Twice a week	29%	71%
Daily	51%	49%
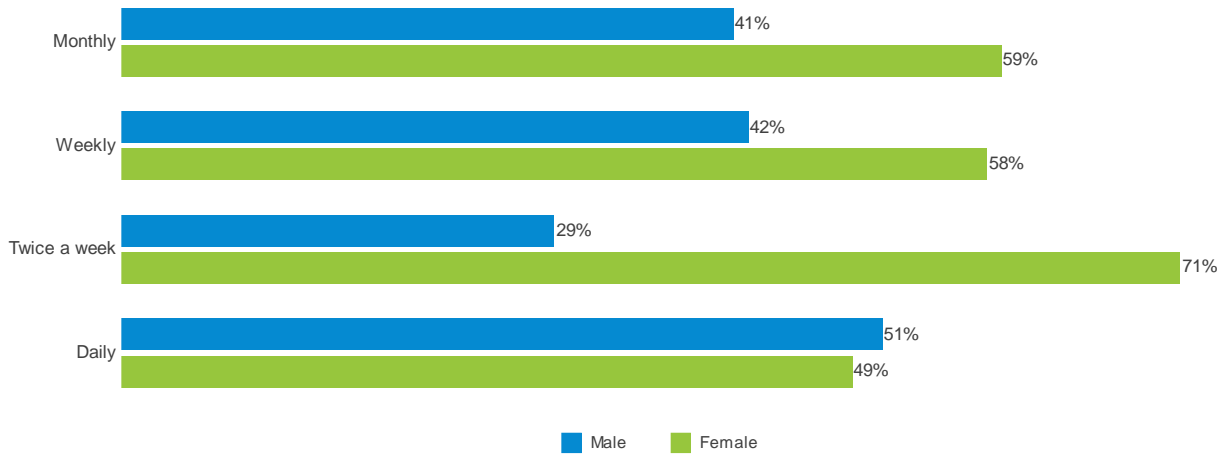
As AN21. This chart is analysing 2 questions - a cross tabulation chart.

Each period category (Q2) adds up to 100% - **Analysis Percents** has been selected.

Horizontal Bar Max 100 Percent Labelled Transposed - (AN22)

French fries (186)	49%
Coffee/tea (164)	43%
Soft drink (141)	37%
Other (141)	37%
Hamburger (133)	35%
Ice cream (115)	30%
Pizza (100)	26%
Salad (99)	26%
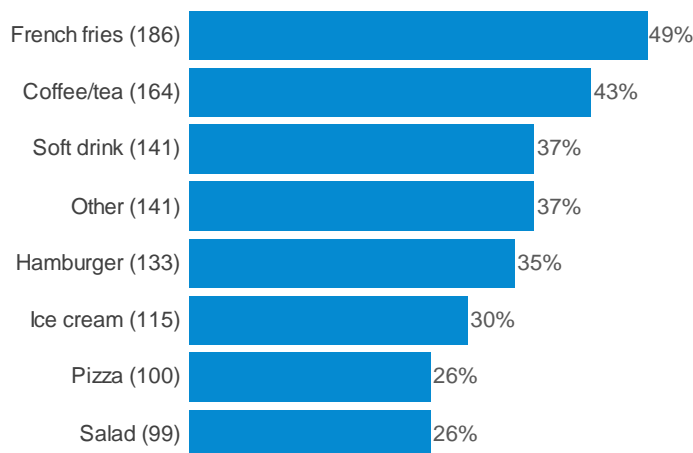
This style is based upon the chart used within the Summary Report. This is the only chart style that has a fixed axis of 100% (the hidden axis goes up to 100%). The benefit of a fixed axis is that it is easier to compare charts against each other when they are viewed side by side. This chart is also the only style to have font which doesn't change as the dimensions of the chart change.

Having a fixed scale of 100% is not usually desirable when viewing individual charts as it is likely the largest percent on display would be significantly less than 100% resulting in lots of empty space on the chart.

Note: The Base (the number in brackets), has been added to the data labels. This is set within the **Templates** section of the **Base/Labels** tab.

Pie Charts
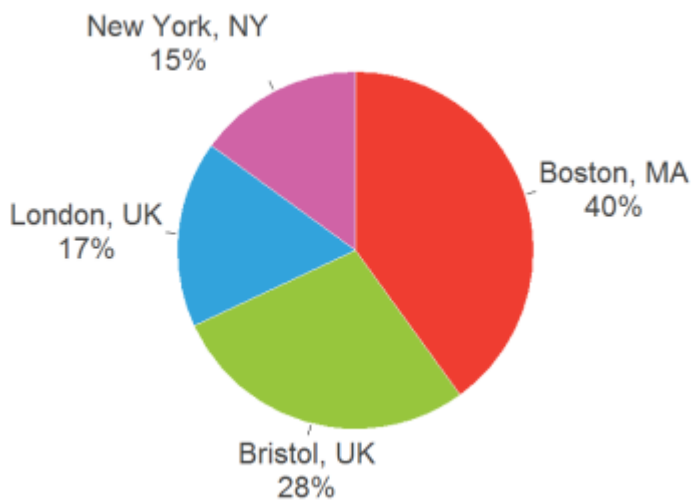
This section displays the three Pie Chart styles that are supplied with Snap plus two examples of how these styles might be used.

Pie Charts are commonly used when you wish to show a proportion of a given category against a whole. Whilst they are very popular, consideration should be given as to when to use them:

They are most effective when they are used to present no more than four categories and when you have larger percentages on display. This is because subtle differences between segments can be difficult to interpret and too many segments make the chart too 'busy'.

To aid interpretation, Pie Charts are usually ordered with the biggest data set top-right, moving clockwise to the lowest data set. The exception being where you have ordinal data such as Age categories, and you wish to keep the relationship between the categories. Ordering of data is changed in the Base/Labels tab of the individual table or chart.

The following questions were used to build the charts within this section. Both questions are single response questions.

Q2.   How often on average, do you visit this restaurant?

- ☐ Daily
- ☐ Twice a week
- ☐ Weekly
- ☐ Monthly

Q12.   Are you male or female?

- ☐ Male
- ☐ Female

The three standard pie chart styles differ only in how they display the data labels - either inside or outside of the chart or not at all.

Pie Percent - (AN23)

■ Daily   ■ Twice a week   ■ Weekly   ■ Monthly

Pie Percent Labelled Inside - (AN25)

9%
21%
36%
34%

■ Daily   ■ Twice a week   ■ Weekly   ■ Monthly

Pie Percent Labelled Outside - (AN24)

Daily
9%

Twice a week
21%

Monthly
36%
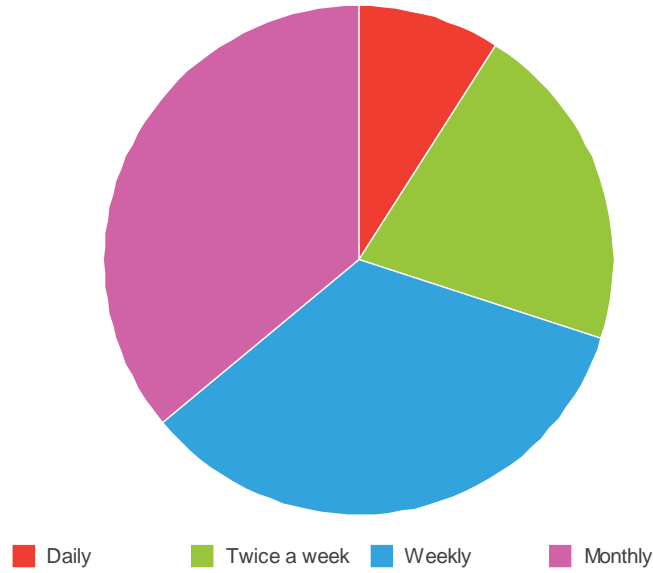
Weekly
34%

Pie Percent Labelled Inside - XTab - (AN25.1)

Male

12%	Daily
15%	Twice a week
35%	Weekly
37%	Monthly

Female

7%	Daily
25%	Twice a week
32%	Weekly
36%	Monthly

■ Daily ■ Twice a week ■ Weekly ■ Monthly

As AN25 with the exception that this chart is analysing 2 questions - a cross tabulation chart.

The categories within each pie (Q12) add up to 100% - **Break Percents** has been selected.

Pie Percent Labelled Inside - XTab with 'Transpose' ticked - (AN25.2)

Daily

49%	Female
51%	Male

Twice a week

29%	Male
71%	Female

Weekly

42%	Male
58%	Female

Monthly

41%	Male
59%	Female

■ Male ■ Female
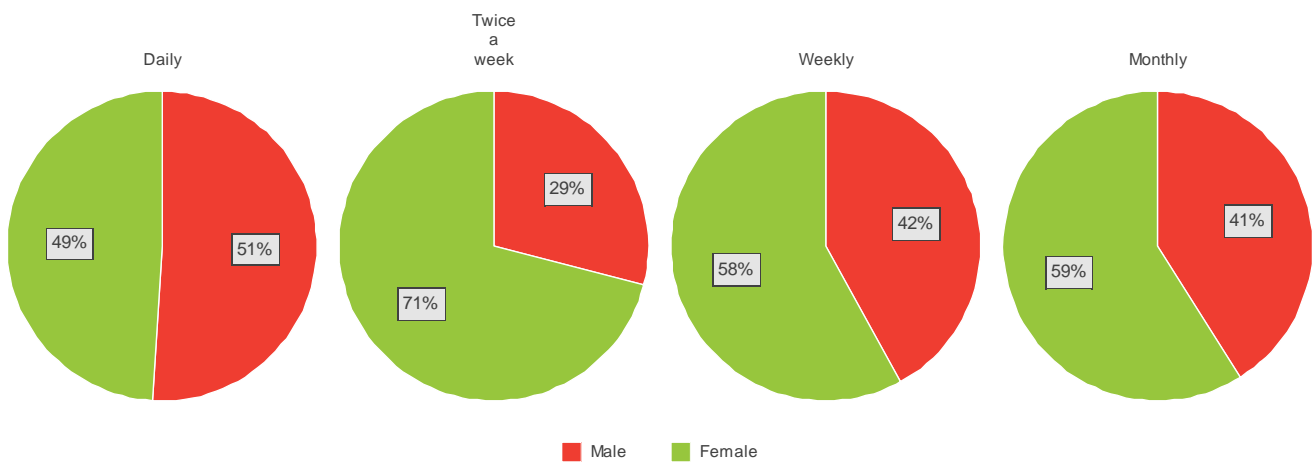
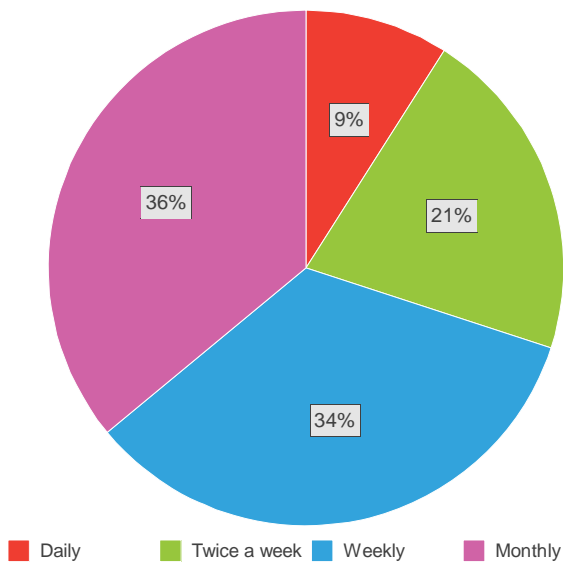This chart is analysing the same questions as AN25.1, however the **Transpose** button has been ticked. This switches the rows and columns, transforming the chart to display a separate pie for each period, rather than a separate pie for each gender category. Transposing a chart can often make it easier to read, depending upon your chosen categories.

Each pie (Q2) adds up to 100% - **Analysis Percents** has been selected.

Doughnut Charts

New York, NY 15%
Boston, MA 40%
London, UK 17%
Bristol, UK 28%
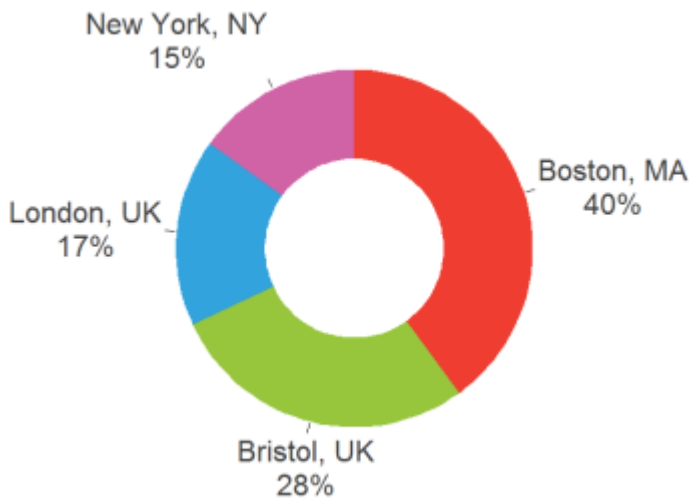
This section displays the three Doughnut Chart styles that are supplied with Snap.

A variation of a pie chart, Doughnut Charts are commonly used when you wish to show a proportion of a given category against a whole. Whilst they are very popular, consideration should be given as to when to use them.

Subtle differences between segments can be difficult to interpret and too many segments make the chart too 'busy'. For this reason, they are most effective when they are used to present no more than four categories and when you have larger percentages on display.

To aid interpretation, Doughnut Charts are usually ordered top to bottom - the exception being where you have ordinal data such as Age categories, and you wish to keep the relationship between the categories. Ordering of data is changed in the Base/Labels tab of the individual table or chart.

The following question was used to build the charts within this section.

Q2.   How often on average, do you visit this restaurant?
   ☐ Daily
   ☐ Twice a week
   ☐ Weekly
   ☐ Monthly

The three doughnut chart styles differ only in how they display the data labels - either inside or outside of the chart or not at all.

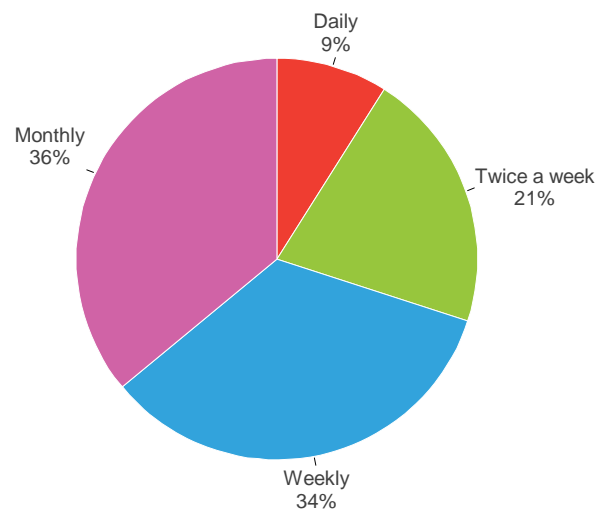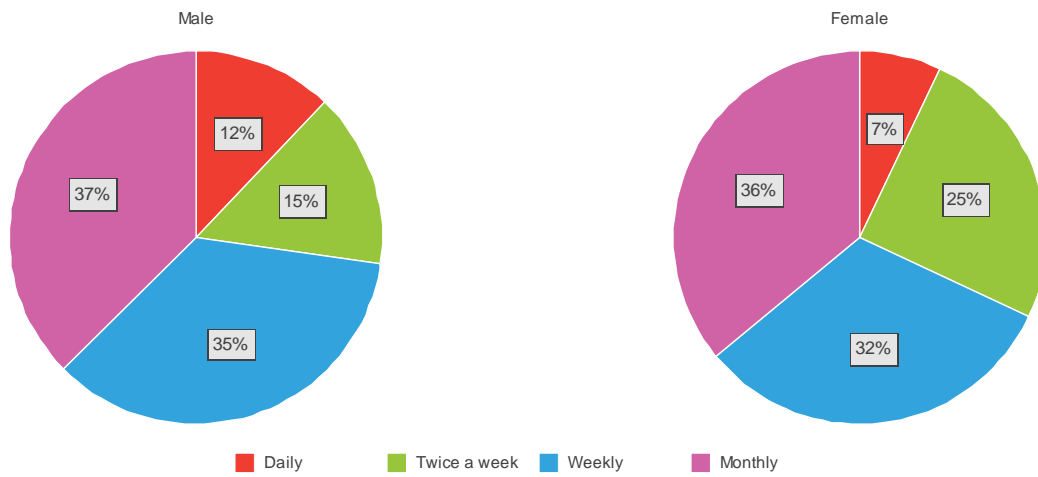Doughnut Percent - (AN28)
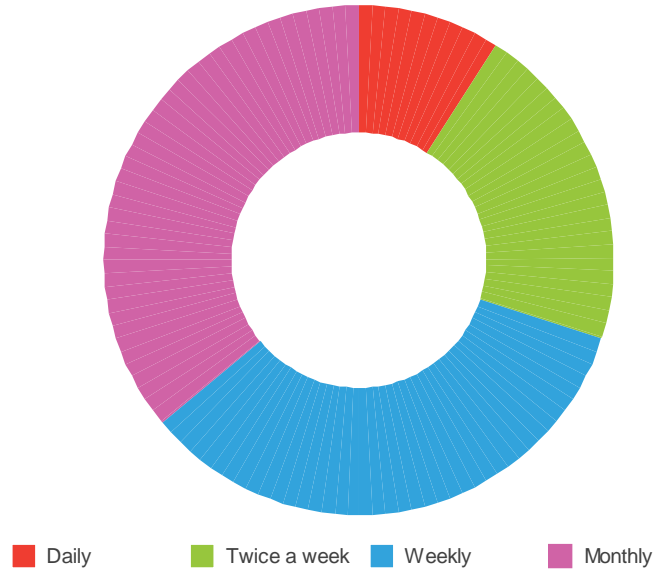
■ Daily   ■ Twice a week   ■ Weekly   ■ Monthly

Doughnut Percent Labelled Inside - (AN30)

9%
21%
36%
34%

■ Daily   ■ Twice a week   ■ Weekly   ■ Monthly

Doughnut Percent Labelled Outside - (AN29)

Daily
9%
Twice a week
21%
Monthly
36%
Weekly
34%
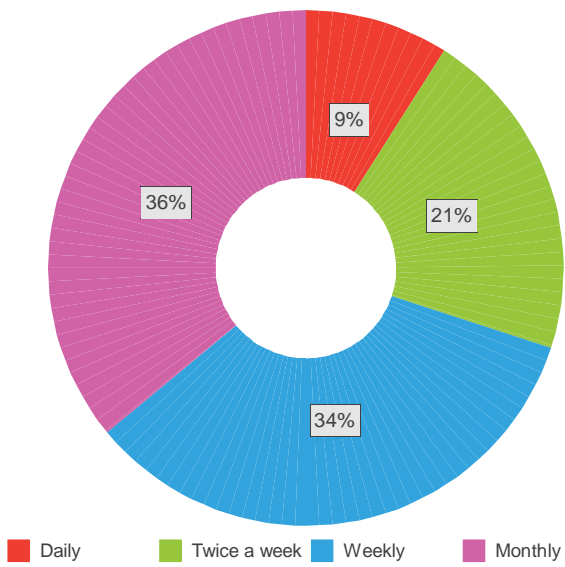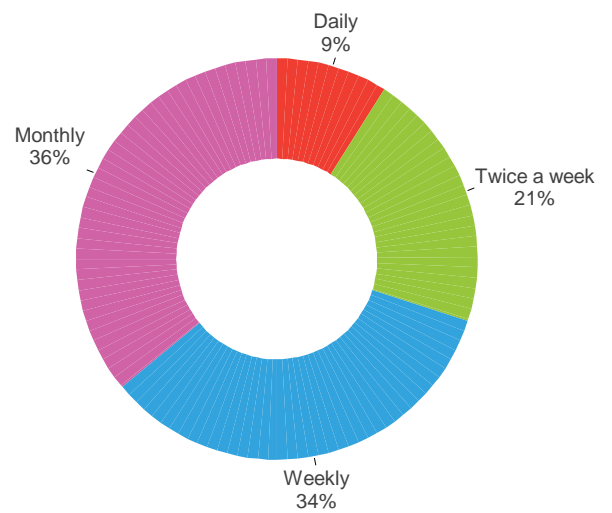
Horizontal Stacked Bar Charts
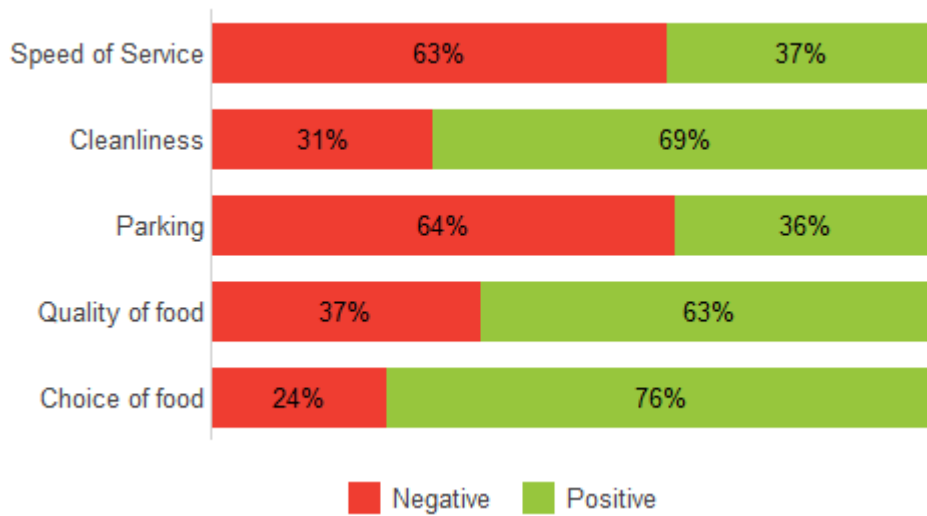
A staple question in any satisfaction survey is a ratings style question where respondents are asked to rate various aspects against a fixed scale. A great way of displaying this data is a Horizontal Stacked Bar Chart.

This section displays the two Horizontal Stacked Bar Chart styles that are supplied with Snap plus two additional examples of how these styles might be used, such as grouping categories together to simplify analysis and producing a grouped overall satisfaction level.

The following questions were used to build the charts within this section.

How do you rate the following?

|		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

The following two styles are the chart equivalent of AN2 (a Grid Table). One displays percentages and the other displays counts

Horizontal Stacked Bar Percent Transposed - (AN26)
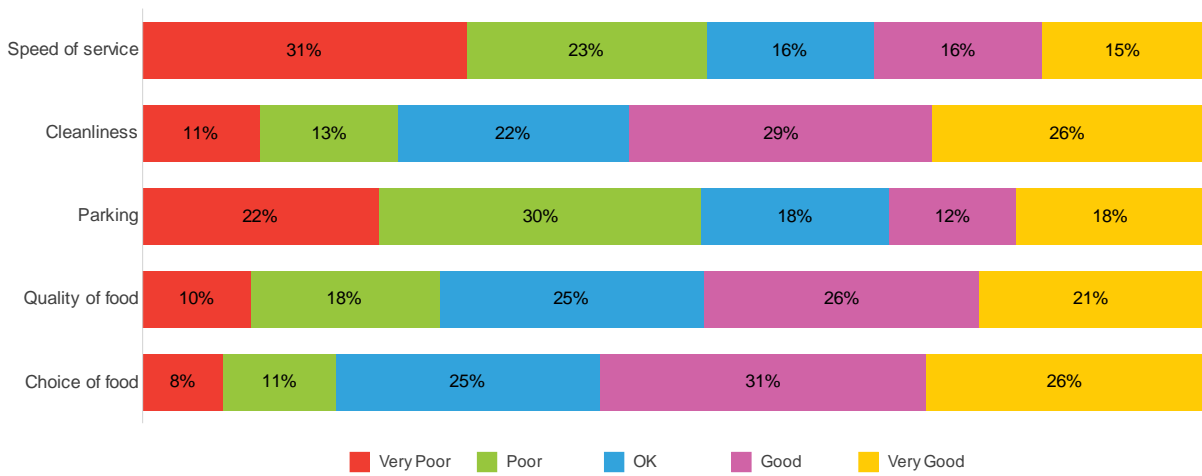
	Very Poor	Poor	OK	Good	Very Good
Speed of service	31%	23%	16%	16%	15%
Cleanliness	11%	13%	22%	29%	26%
Parking	22%	30%	18%	12%	18%
Quality of food	10%	18%	25%	26%	21%
Choice of food	8%	11%	25%	31%	26%

Legend: ■ Very Poor ■ Poor ■ OK ■ Good ■ Very Good

Horizontal Stacked Bar Counts Transposed - (AN27)

	Very Poor	Poor	OK	Good	Very Good
Speed of service	119	88	61	62	59
Cleanliness	43	50	84	110	99
Parking	86	117	68	46	68
Quality of food	39	68	95	99	80
Choice of food	29	41	95	118	100

Legend: ■ Very Poor ■ Poor ■ OK ■ Good ■ Very Good
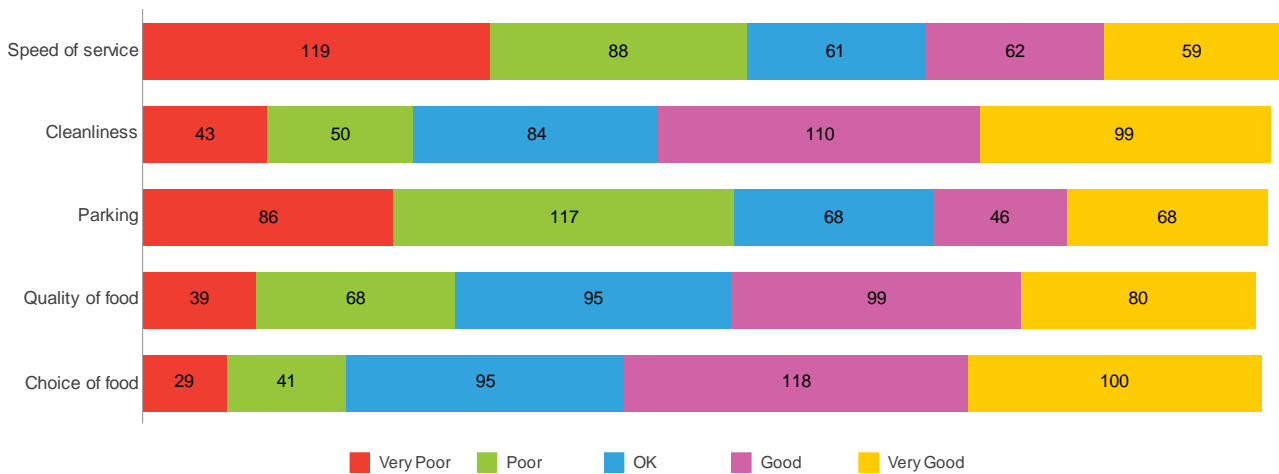
Horizontal Stacked Bar Percent Transposed - Using Derived Variables - (AN26.1)

	Negative	Positive
Speed of service	63%	37%
Cleanliness	31%	69%
Parking	64%	36%
Quality of food	37%	63%
Choice of food	24%	76%
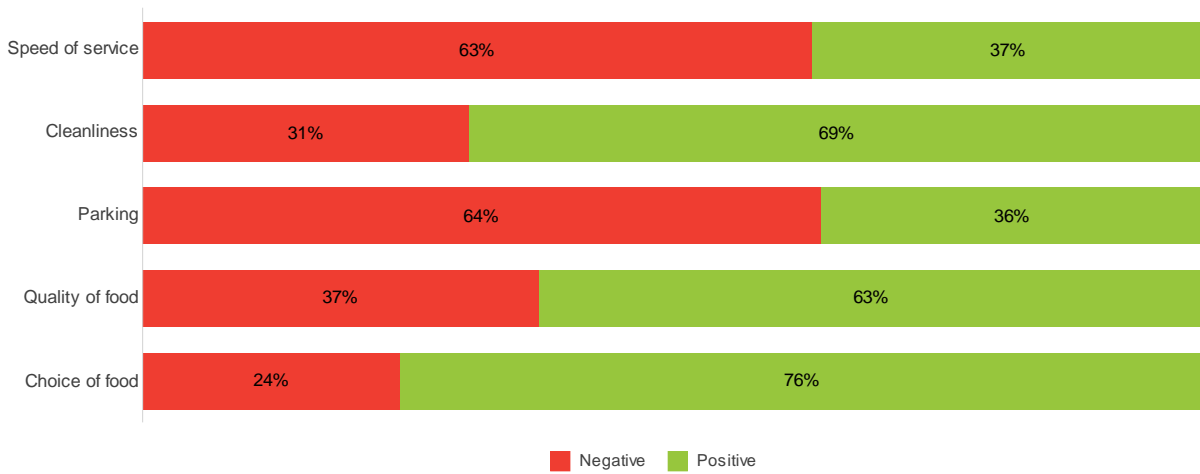
■ Negative ■ Positive

This chart is analysing the same data as AN26.

To simplify the analysis, this chart uses Derived Variables (V6aa to V6ee) which convert the original 5 point scales into the two categories of Negative or Positive.

Horizontal Stacked Bar Percent Transposed - using a Group Variable - (AN26.2)

|	Negative	Positive
Overall Satisfaction	46%	54%
Speed of service	63%	37%
Cleanliness	31%	69%
Parking	64%	36%
Quality of food	37%	63%
Choice of food	24%	76%

■ Negative ■ Positive
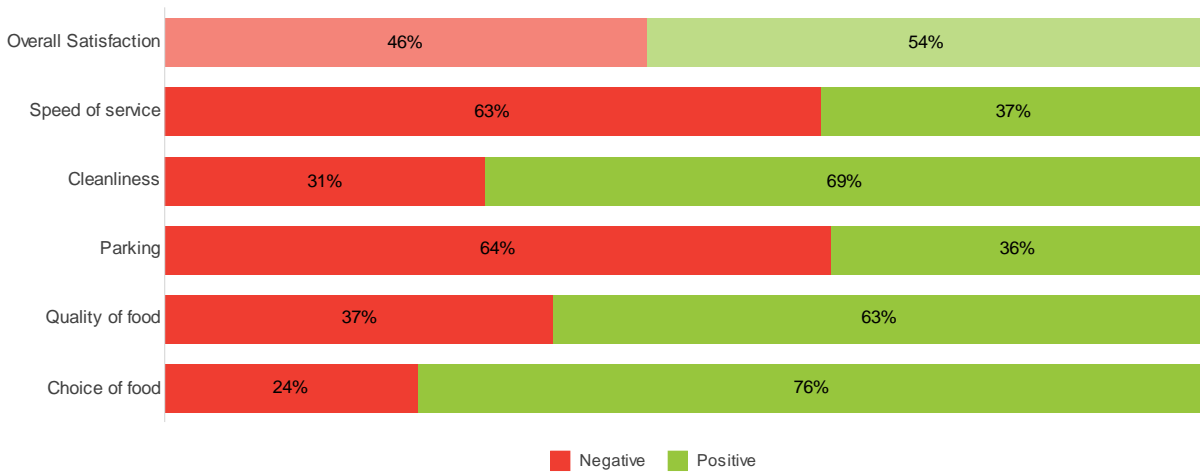
Similar to AN26.1 with the exception that this chart displays a **Group Variable** (GV1) which merges the data from a series of questions and displays the average result for each category (Overall Satisfaction).
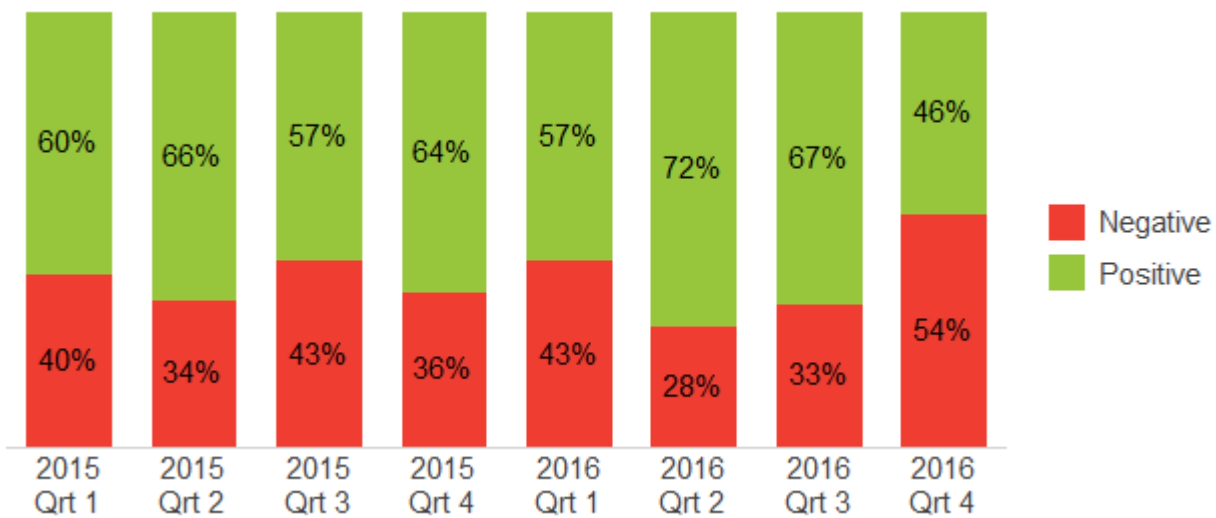
Group Variables are accessed using the Analysis Variables icon on the main Snap toolbar
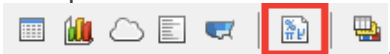
Note: The chart was originally based upon a Horizontal Stacked Bar Percent Transposed. The Group Variable data has been lightened using the chart designer - the chart style now has a temporary name of Chart_Style_4.
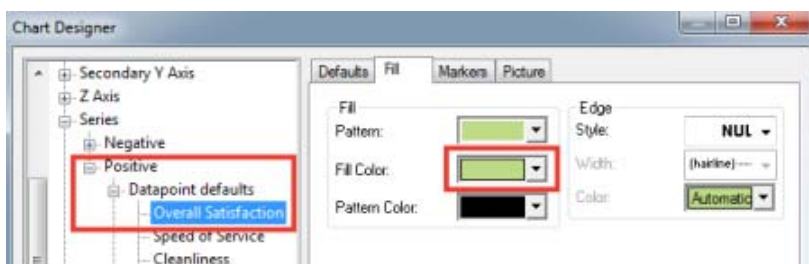
Stacked Bar Charts

This section displays the two Horizontal Stacked Bar Chart styles that are supplied with Snap including an example that uses a Derived Variable to re-categorise the answers.
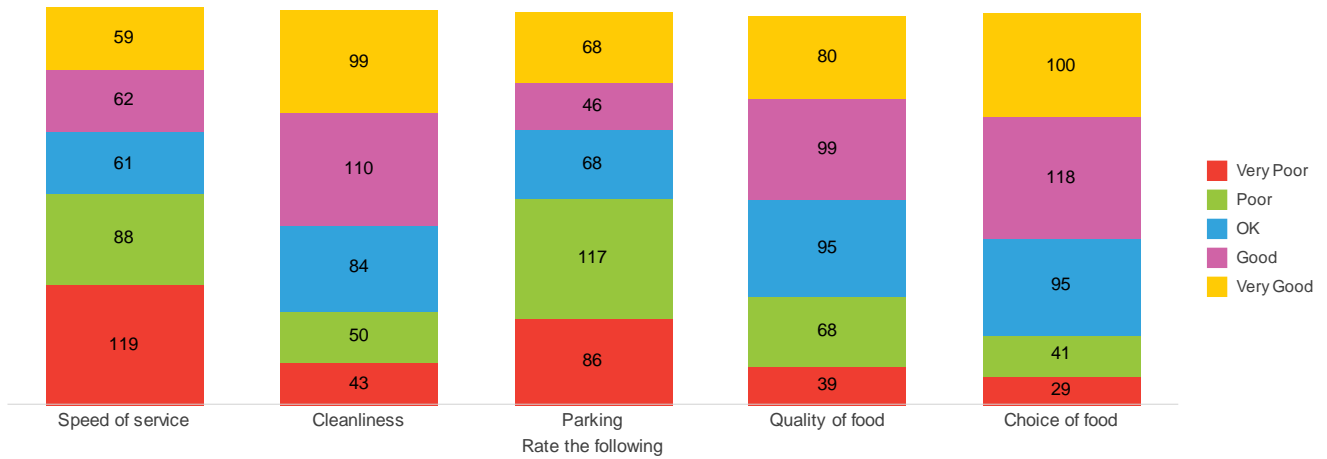
Often used when looking at ratings style questions, Stacked Bar charts are very similar to Horizontal Stacked Bar charts in that they very clearly show the proportion of a whole for each category. Whilst presenting the chart horizontally has the advantage of allowing for longer code labels (answers), displaying the data vertically is the preferred option when showing the data over a period of time as most people associate a data line going across rather than down.

The following questions were used to build the charts within this section.
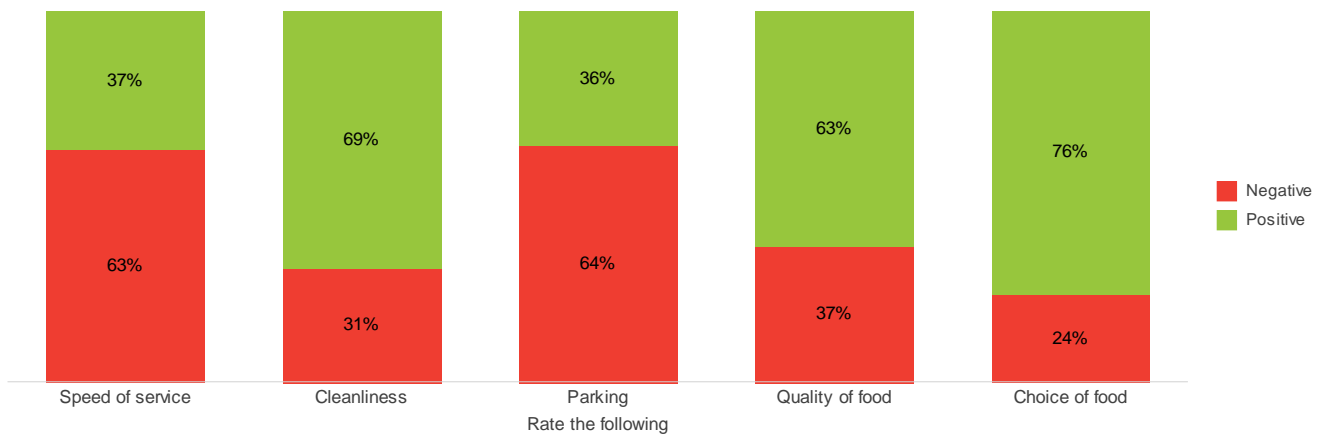

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

Stacked Bar Counts - (AN37)

Rate the following	Very Poor	Poor	OK	Good	Very Good
Speed of service	119	88	61	62	59
Cleanliness	43	50	84	110	99
Parking	86	117	68	46	68
Quality of food	39	68	95	99	80
Choice of food	29	41	95	118	100

The chart equivalent of AN2 (a Grid Table) and very similar to AN27 (Horizontal Stacked Bar Counts Transposed) - the only difference being the bars go vertically rather than horizontally.

Stacked Bar Percent - Using Derived Variables - (AN38)

| Rate the following	Negative	Positive
Speed of service	63%	37%
Cleanliness	31%	69%
Parking	64%	36%
Quality of food	37%	63%
Choice of food	24%	76%

This chart is analysing the same data as AN37 with the exception it is displaying percents rather than counts.

To simplify the analysis, this chart uses Derived Variables (V6aa to V6ee) which convert the original 5 point scales into the two categories of Negative or Positive.

Derived Variables can be found in the Variables window .
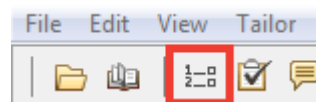
Radar Charts
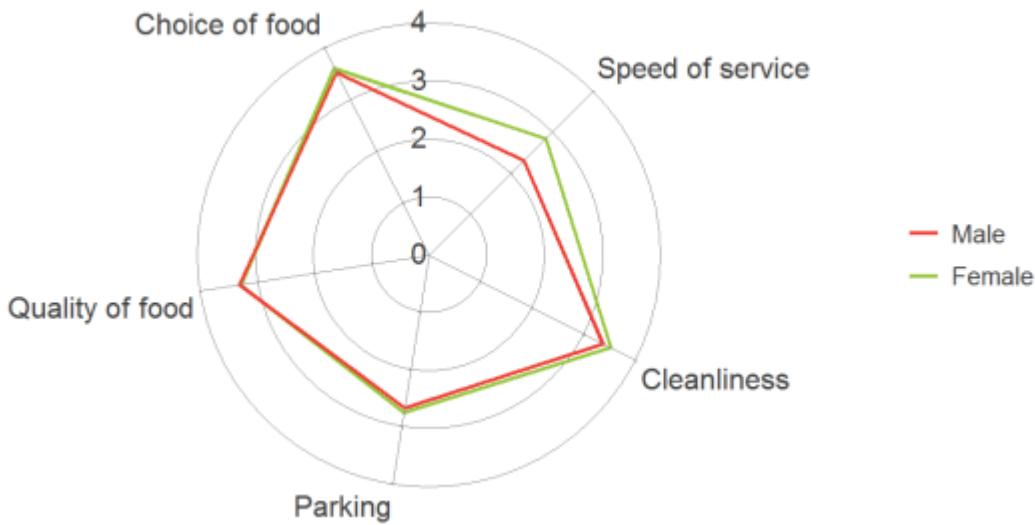
This section displays the two Radar Chart styles that are supplied with Snap. It also demonstrates the use of Derived Variables to group together categories and Weights to add a scoring system to the answer codes.

Radar charts are typically used when you wish to show how something is performing over a series of different criteria. Applications of this could be a HR survey where you wish to plot employee performance against key indicators or perhaps you are doing product comparisons and wish to plot different products against various functionality and performance.

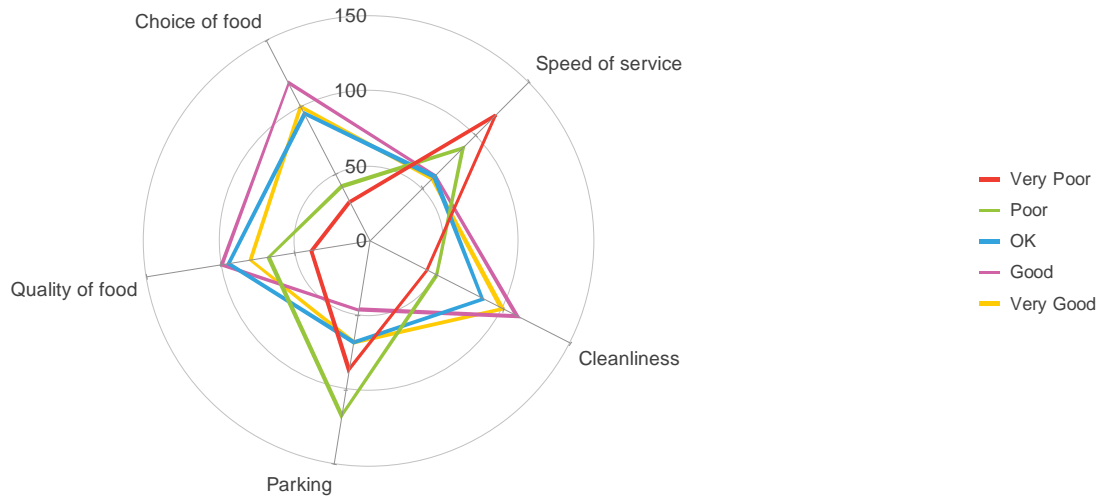The following questions were used to build the charts within this section.

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

Q12. Are you male or female?

☐ Male
☐ Female

Radar Counts - (AN31)

Legend:
- Very Poor
- Poor
- OK
- Good
- Very Good

The chart equivalent of AN2 (a Grid Table).

Radar Percent - Using Derived Variables - (AN32)

Legend:
- Negative
- Positive

Radar Counts using a Score - (AN31.1)


Legend:
- Male
- Female

To simplify the analysis, this chart uses Derived Variables (V6aa to V6ee) which convert the original 5 point scales into the two categories of Negative or Positive.

This chart style shows the mean (average) score across the different scales. A weight (Score) is used to calculate this mean.
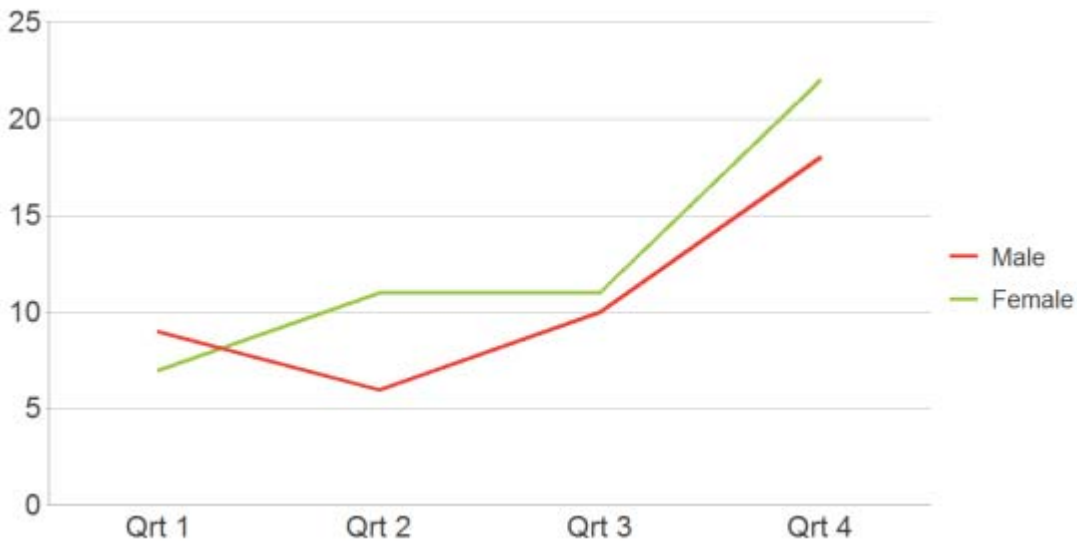
The scale has been manually set to run from 0 to 4 rather than Snap automatically setting it based upon the lowest and highest score. This is the reason it is based upon Chart_Style_1 rather than Radar Counts, which is what was initially selected.

Weights can be found using the Weights icon
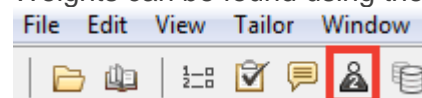
Line Charts

This section displays the four Line Chart styles that are supplied with Snap.

Line charts are typically used when you wish to display how data is changing over a period of time. They are particularly useful when you wish to show trends in data - potentially comparing these trends against different categories.

Care should be taken not to overload the chart with too many plot lines (categories). When a larger number of categories do need to be visualised together, consider splitting these into multiple line charts (one for each category). Each of these charts would then have one dark plot line with the remaining categories faded out.
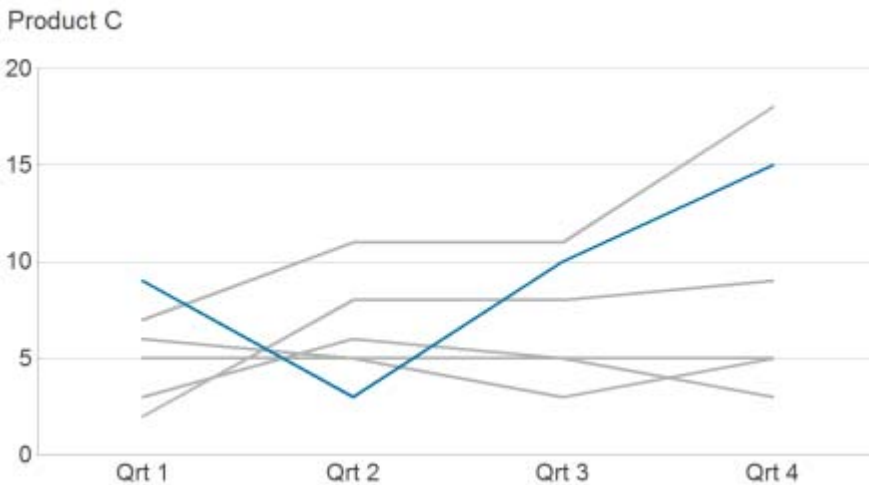

The following question was used to build the charts within this section.

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐

Line charts are often used when plotting data over a period of time. In these examples, a Derived Variable (Quarter) has been created. This categorises the data which came from the original date response question (Q1a).
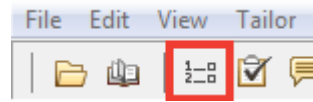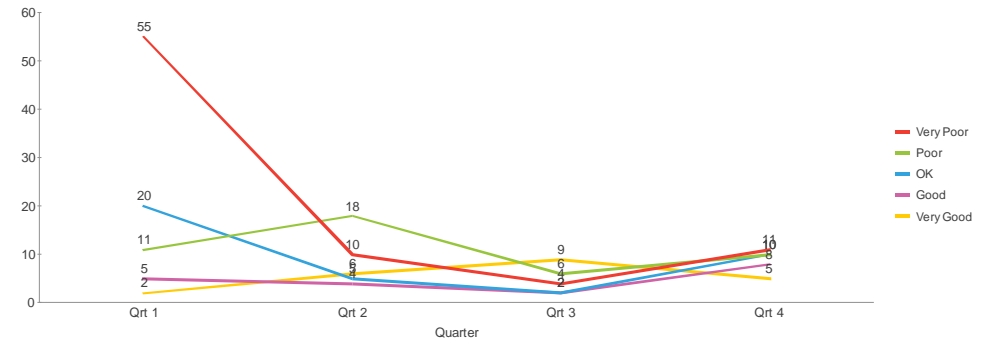
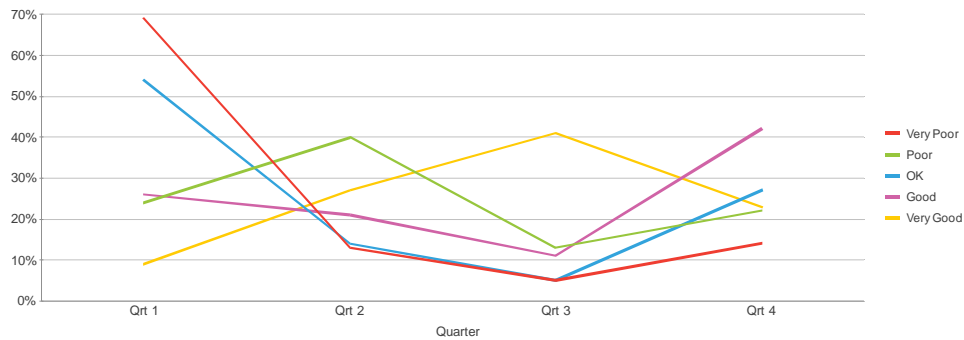Derived Variables can be found in the Variables window .
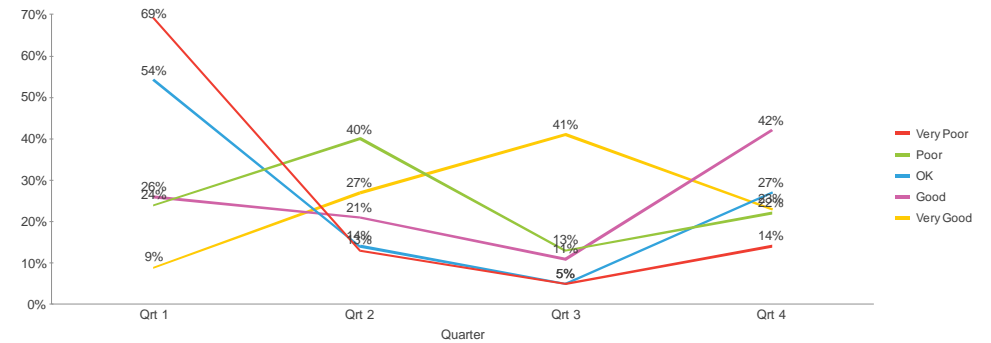
Line Counts - (AN33)
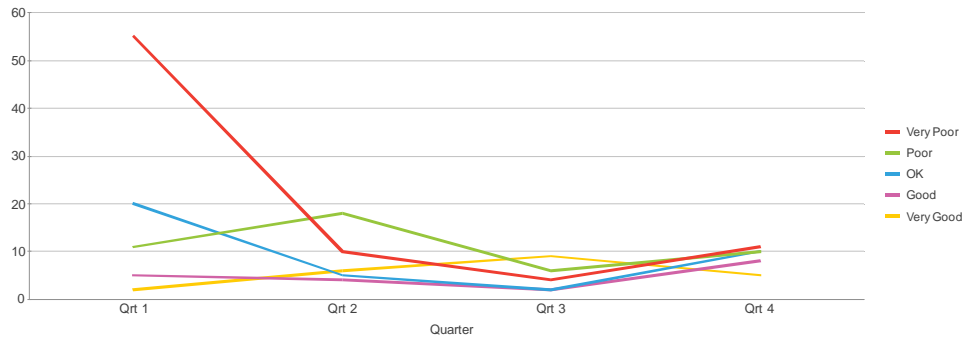
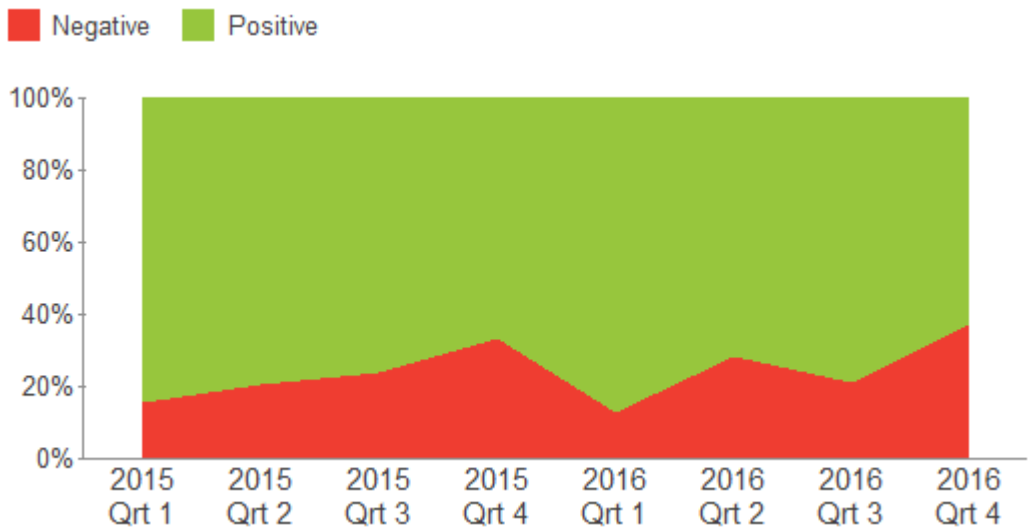### Line Counts Labelled - (AN34)

Line Percent - (AN35)

Line Percent Labelled - (AN36)

Area Charts

This section displays the six area style chart that are supplied with Snap - two standard area charts, two stacked area charts and two stepped charts.

Area charts are similar to line charts in that they are generally used to plot data over a given time period. Stacked Area charts in particular tend to be used where you wish to plot the part to whole relationship or, when dealing with counts you wish to show how the whole changes over the charting period.

Care should be given as to how some of these charts may be interpreted. In the above example, the flowing lines of data could suggest that there are multiple data points per quarter, meaning that over a date period, your data is slowly rising or falling as you are getting closer to the next quarter. The chart is only displaying 8 data points - one for each quarter.

The following questions were used to build the charts within this section.

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

Area Counts - (AN39)
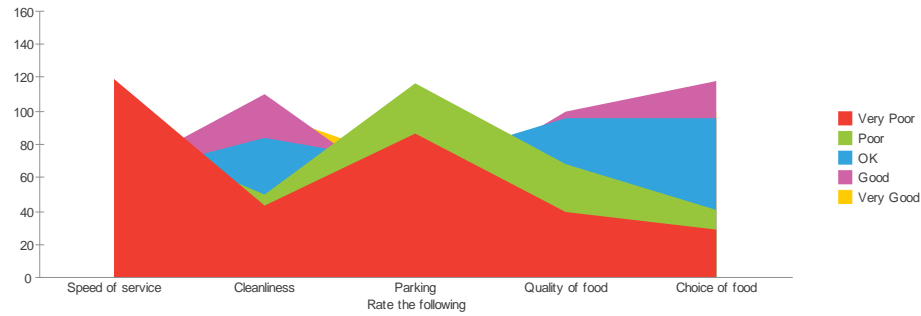
Area Percent - (AN40)
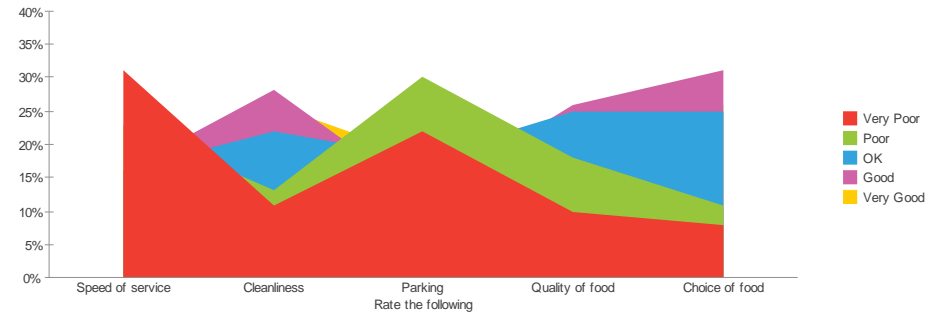
When using area charts, consideration should be given to the fact that smaller values at the back will be obscured by larger values at the front.

Stacked Area Counts Labelled - Using Derived Variables - (AN41)
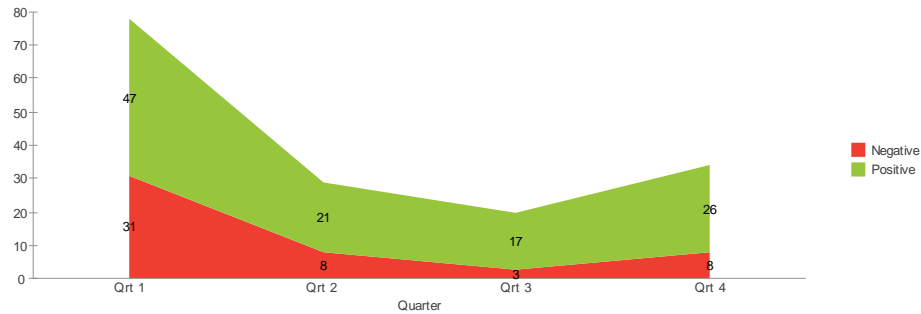
Stacked Area Percent Labelled - Using Derived Variables - (AN42)
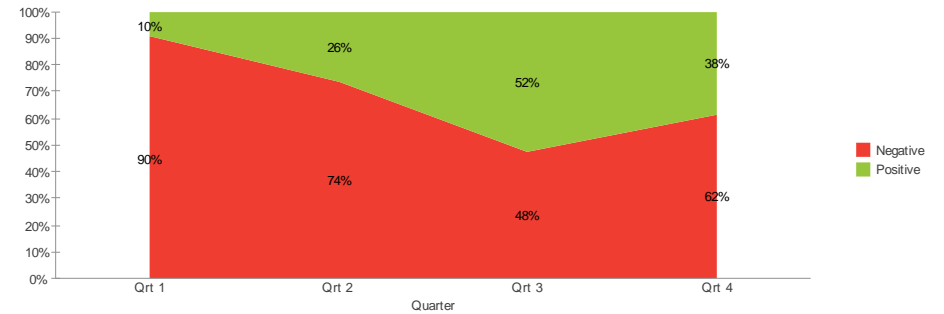
Stacked Area charts are often used to represent cumulated totals over time where you wish to show the part to whole relationship.

To enable data to be compared against different periods of time, a Derived Variable (Quarter) has been created. This categorises the data which came from the original date response question (Q1a). Another Derived Variable (V6aa) is used to categorise the ratings for Q6a into Negative or Positive rather than Very Poor through to Very Good.
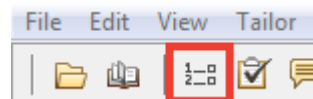
Derived Variables can be found in the Variables window .

Stepped charts are closer in design to stacked bar charts than area charts. Whilst a stacked bar chart would typically have a gap between the bars, in a stepped chart this gap is removed. This gives a more rigid feel to your data than an area chart.

When plotting data against larger date period, such as quarters or years, this 'step' of data is less likely to give the impression that data is rising or falling throughout a given period, be that a quarter or year.

The area charts on the previous page could be interpreted that you have multiple data points per quarter, whereas the chart is only displaying 4 data points - one for each quarter.

Stepped Counts Labelled - (AN43)
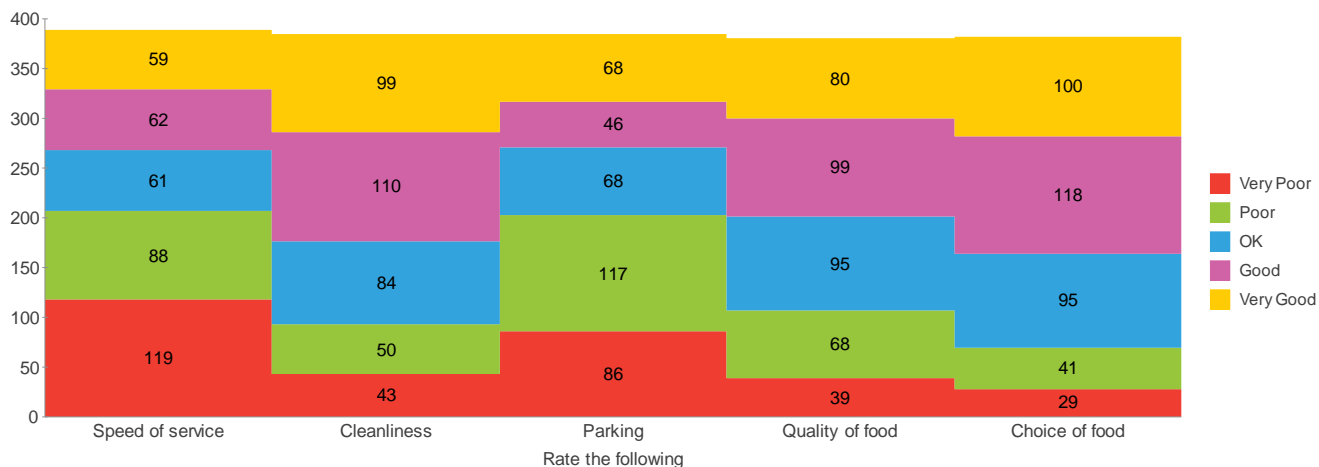
Stepped Percents Labelled - (AN44)
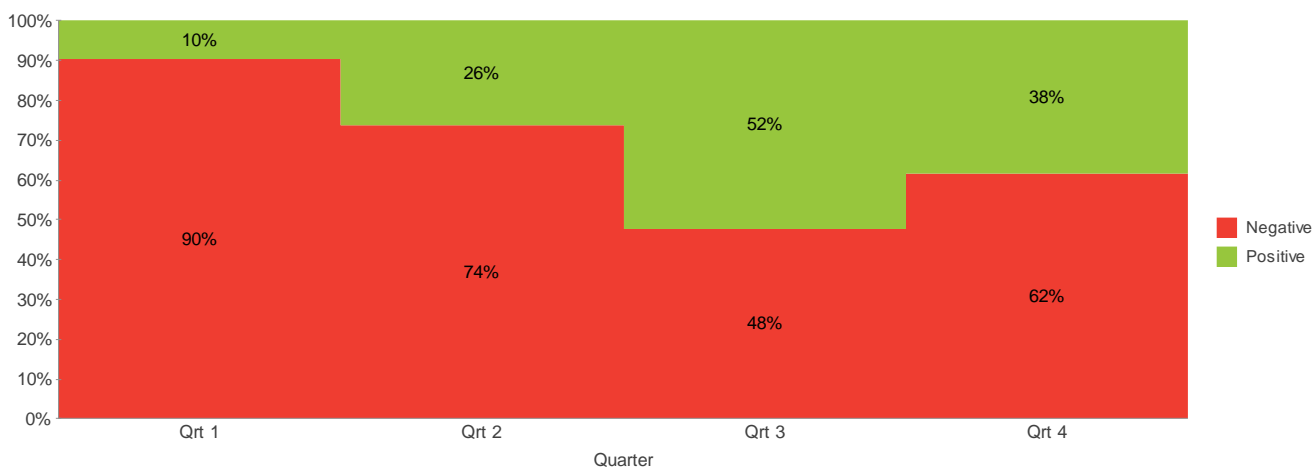
Advanced Charts

This section displays seven chart styles that require a certain type or series of corresponding questions. Some require additional calculations to be derived from the initial data and others make use of some of the more advanced analysis features of Snap such as Cell Referencing.

Due to their complex nature, consideration should be given as to whether these charts are suitable for public consumption. If you need to explain to the public what they are looking at - should they be looking at it or is a bar chart or a pie chart more suitable? For a monthly management report however, where a discussion is likely to take place, the charts within this section can be a very powerful indicator of performance.

The following questions were used to build the charts within this section.

How many people were in your party today?

Q3a	Adults	☐
Q3b	Children	☐

Q5. How much did you spend in the restaurant today? ☐

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

How important are the following to you?

		Not Very Important	Not Important	Neither	Important	Very Important
Q6f	Speed of service	☐	☐	☐	☐	☐
Q6g	Cleanliness	☐	☐	☐	☐	☐
Q6h	Parking	☐	☐	☐	☐	☐
Q6i	Quality of food	☐	☐	☐	☐	☐
Q6j	Choice of food	☐	☐	☐	☐	☐

Thinking about the main waiter / waitress who served you today...
(Select the position on the following scales that best represent them)

Q7a   Friendly ☐ ☐ ☐ ☐ ☐ ☐ ☐ Rude

Q7b   Smart ☐ ☐ ☐ ☐ ☐ ☐ ☐ Scruffy

Q7c   Attentive ☐ ☐ ☐ ☐ ☐ ☐ ☐ Inattentive

Q8   How do you rate the overall performance of this restaurant?   ☐
(Rate on a scale of 1 to 10, where 10 is Excellent and 1 is Poor)

Q10   How likely are you to recommend this cafe to a friend or colleague?

0	1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

Q14   Approximately how much do you spend dining out each month?

☐

Semantic Scale

Semantic scale questions ask respondents to choose a point between two apposing properties. Often these are positive at one end and negative at the other end, as in the example below.

In other situations, it may be more appropriate to ask about how things are perceived. For example, a hotel chain may wish to know whether its clientele perceive its brand as a business hotel or a leisure hotel chain. Respondents mark a point along the scale with Business at one end and Leisure at the other end.

Semantic Scale - (AN45)
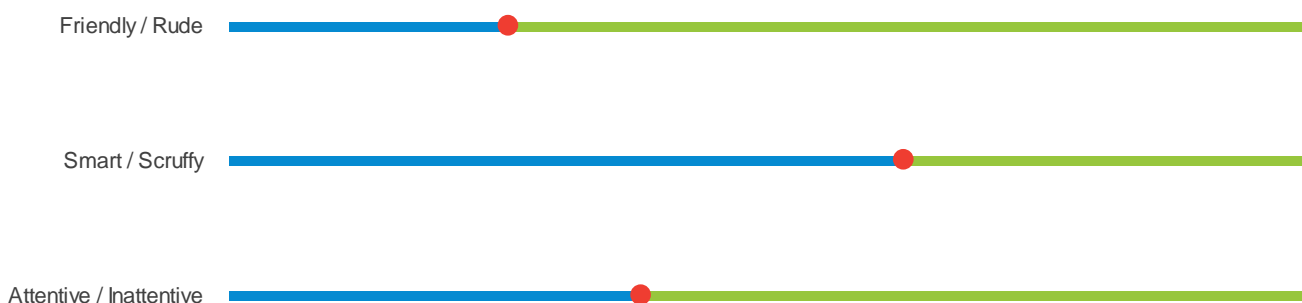
This chart style shows the mean (average) score across the different scales.

The blues line shows the positive data and the green line shows the negative data. The red marker indicates the mean score.

This chart using a weight to calculate the mean score. Weights can be found on the main Snap toolbar.

Gap Analysis

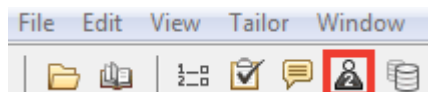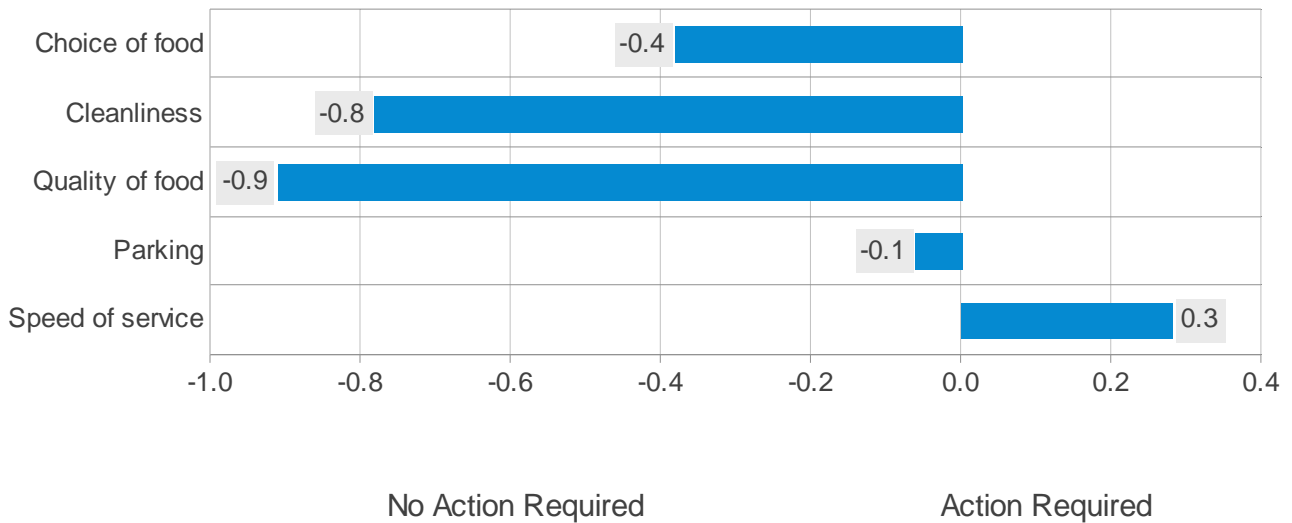Gap Analysis is a very useful tool which can assist you when managing resources. These resources could be financially based or they could be based upon human resources.

Respondents are asked to rate aspects of a business or product, as well as stating how important that aspect is to them.

Gap Analysis - (AN46)

A set of quantity response Derived Variables are used to deduct the Satisfaction from the Importance of each set of questions. A Statistics Table then calculates the mean, which is then displayed in chart format.

The result of this is then used to see where you need to commit more resources and where you may choose to redirect some of the resources.

A negative score suggests that you are doing well enough in that area so no further action is required. A positive score suggests that further work needs doing.

Note: As the negative scores move further away from the centre point (zero), this could suggest that you are putting too many resources into an area which isn't of great importance to your customers. As such, perhaps some of your resources would be better placed elsewhere. In the example above, perhaps some of the time, effort and money put into producing quality food could be sacrificed for speedier service.

Derived Variables can be found in the Variables window .
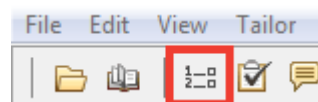
Statistical Charts

Box Plot - (AN47)

Statistics of quantity Response Questions
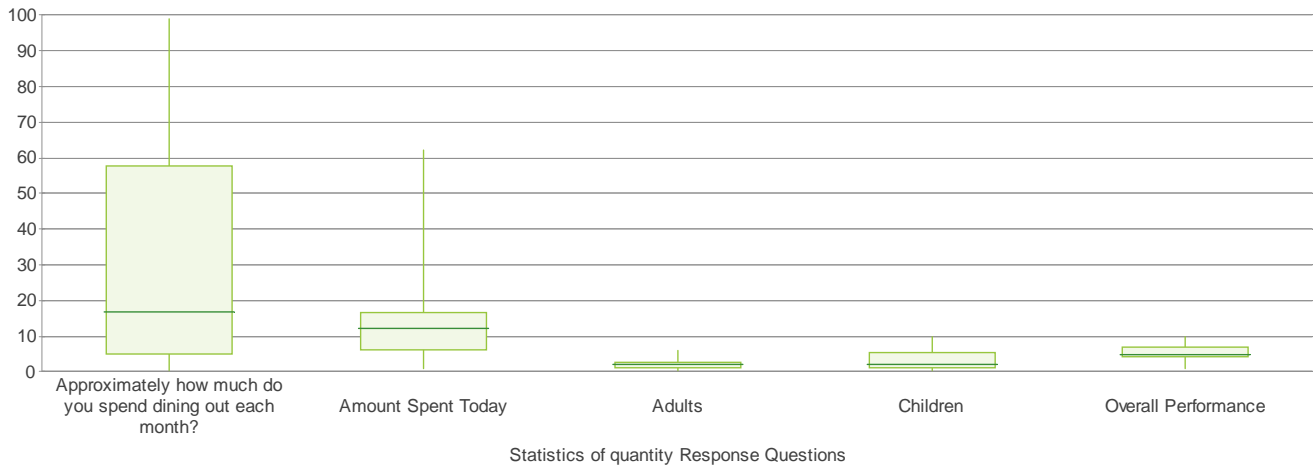
A Box Plot is a visual interpretation of a statistics table (AN3).

The elements on display are the **Minimum** and **Maximum** (the top and bottom points of the line), the **1st Quartile** and the **3rd Quartile** (the top and bottom points of the bar) and the **Median** (the line across the bar).

The remaining descriptive statistics available within Snap have been removed using the **Descriptive Statistics** tab.

Hilo - (AN48)

Statistics of quantity response questions

Similar to a Box Plot, a Hilo is a visual interpretation of some of the elements of a Statistics table (AN3).
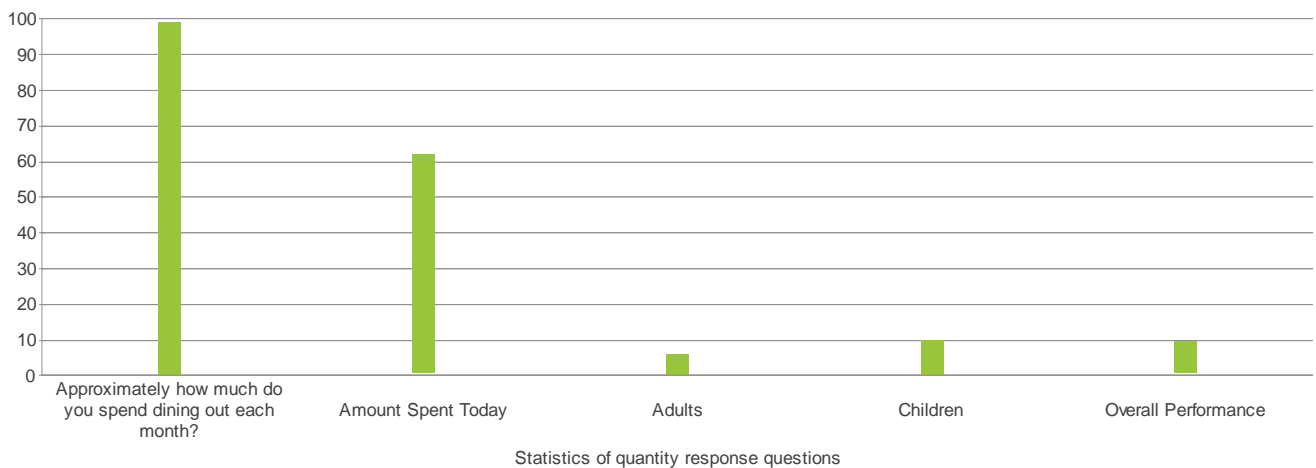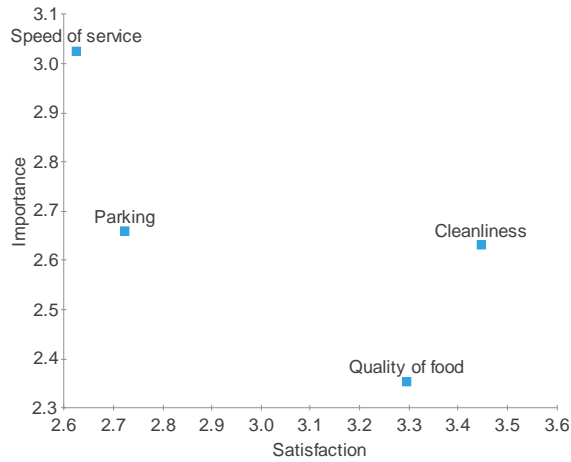
The elements on display are the **Minimum** and **Maximum** (the top and bottom points of the bar).

The remaining descriptive statistics available within Snap have been removed using the **Descriptive Statistics** tab.

Scatter and Bubble charts

XY Scatter - (AN49)

XY Scatter charts can be used to show the relationship between two sets of data.

In this example, Importance and Satisfaction of various attributes have been plotted using the mean score. This is calculated using the **Descriptive Statistics** tab.

Bubble - (AN51)
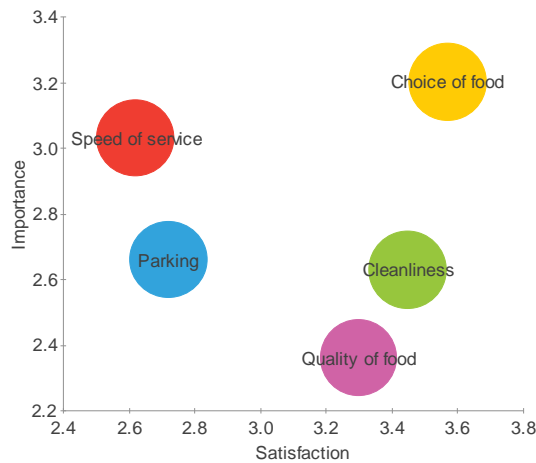
A Bubble Chart plots 3 questions against each other. In this example, the size of the bubble represents the average spend in the restaurant in comparison to the average score for Importance and Satisfaction. This is calculated using the Descriptive Statistics tab.

These average spends are based on Derived Variables, which remove any data where a respondent has not rated a service in terms of both Satisfaction and Importance.
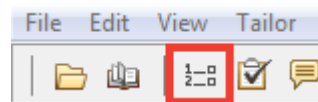
Derived Variables can be found in the Variables window .

Net Promoter Score

Net Promoter Score, or NPS, is a score based upon the percentage of respondents who are Promoters (those who are deemed to keep providing you with revenue or will promote your company) minus the percentage of those respondents who are Detractors (those who are deemed to be unhappy customers who may go on to damage your brand).
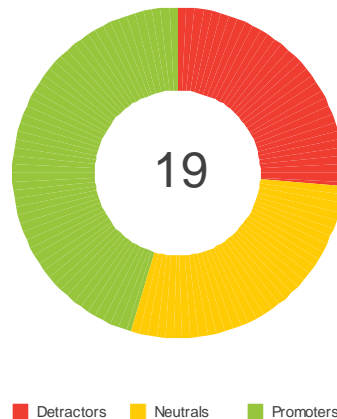
NPS Doughnut Percent - Using Cell Referencing in the Notes - (AN50)

Based on an 11 point scale of 0 to 10, respondents are asked to say how likely they are to recommend a friend, family member or colleague. A derived variable is used to re-categorise these 11 points to Promoters, Detractors and Neutrals (or Passives).

A table is built using the derived variable. The score (NPS) is calculated using a Cell Value Field, which takes the Detractors from the Promoters and displays the result in the notes.
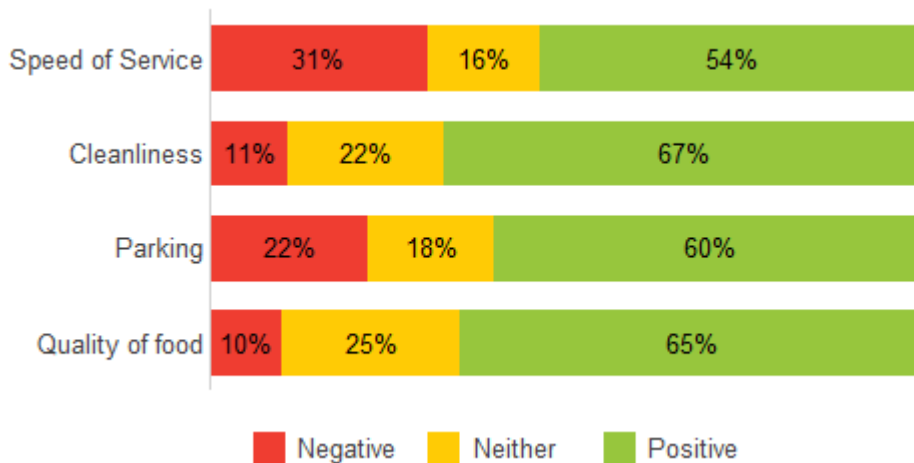

The final step is to convert the table to a chart (NPS Doughnut Percent). This displays the note in the centre of the chart.

Color Schemes

	Negative	Neither	Positive
Speed of Service	31%	16%	54%
Cleanliness	11%	22%	67%
Parking	22%	18%	60%
Quality of food	10%	25%	65%

This section displays 2 of the 24 color scheme styles that are supplied with Snap. The styles supplied with Snap include 'RAG' (red, amber, green) variations, black and white variations and a number of Excel color schemes.

To make use of these styles, first create your preferred chart (i.e. a bar chart) and then apply the color scheme style on top of the existing chart.

Color Scheme chart styles dictate the colors on display as well as whether the chart is stacked and is labelled.

Should you wish to create charts using your company colors, you can create your own color schemes to be applied over the top of the original chart styles. This is the suggested course of action - the alternative being to create your own colored variant of each chart style. It is potentially quicker to create a color scheme that can be applied to multiple chart styles.

The following questions were used to build the charts within this section.

Q4   Which of the following items did you order today?

☐ Hamburger   ☐ Ice cream
☐ French fries   ☐ Coffee/tea
☐ Pizza   ☐ Soft drink
☐ Salad   ☐ Other

How do you rate the following?

		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

A color style is applied over the top of your existing chart. The Color Scheme styles dictate the colors which are in use, as well as whether the chart will include labels and whether the codes are stacked.

Color - 5 Point Red to Green Labelled Stacked - (AN52)

	Very Poor	Poor	OK	Good	Very Good
Speed of service	31%	23%	16%	16%	15%
Cleanliness	11%	13%	22%	29%	26%
Parking	22%	30%	18%	12%	18%
Quality of food	10%	18%	25%	26%	21%
Choice of food	8%	11%	25%	31%	26%
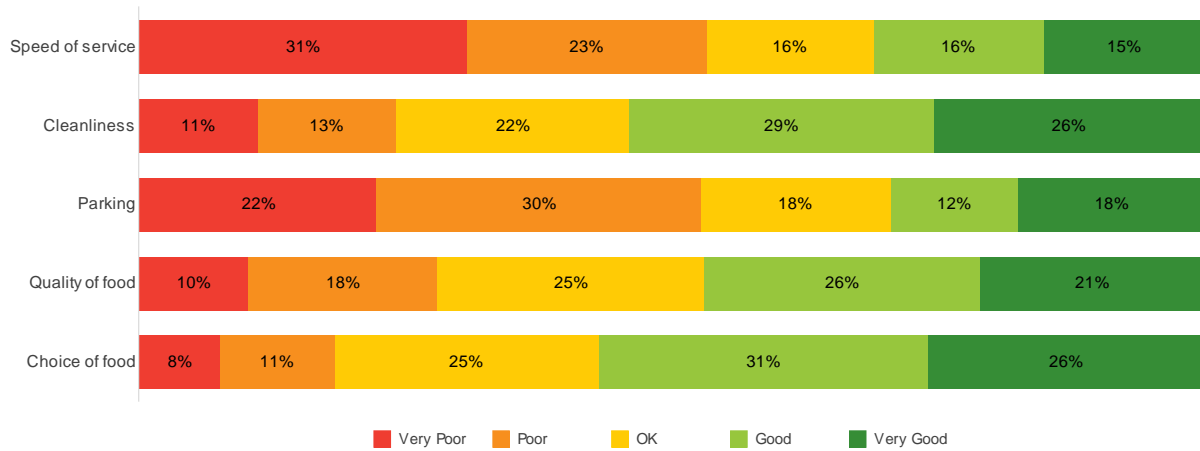
The above chart was initially created as a 'Horizontal Stacked Bar Percent Transposed' and then the Color Scheme was applied on top.

Color - Excel 2010 Labelled - (AN53)

French fries	Coffee/tea	Soft drink	Other	Hamburger	Ice cream	Pizza	Salad
49%	43%	37%	37%	35%	30%	26%	26%
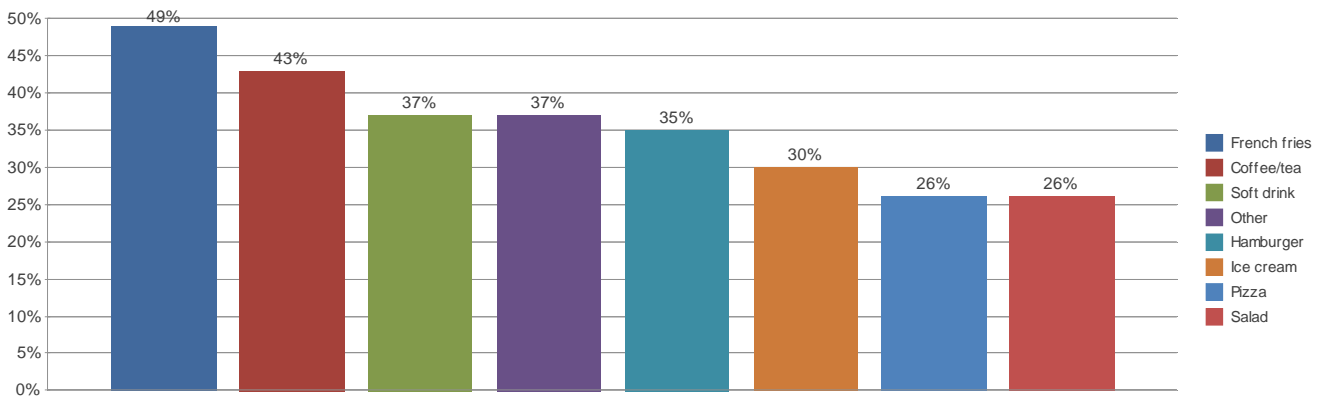
The above chart was initially created as a 'Bar Percents Labelled' and then the Color Scheme was applied on top.

Context

Context allows you to view your data from different aspects and in contrast to different sets of data.

In Snap, we use Context in three different ways:

Filtering (Global Filter)

Used to filter multiple saved analyses to the same subset of respondents without the need to change the individual tables, charts, lists or clouds.

Making comparisons (Dynamic Benchmarking)

Used to compare the results of a given subset of respondents against the remaining respondents.

Sharing tailored reports with clients and colleagues (Analysis Associates)

Used to set up log-ins for colleagues or clients who wish to view reports online via WebHost rather than waiting for a pdf to be emailed to them.

Context is used to set what level of access each Analysis Associate has. The Bristol cafe manager may have access to just one report which is set to compare their cafe against the remaining cafes. The New York cafe managers access would adjust that same report to view the data from the aspect of the New York cafe. The Area Manager may then have access to the report, but with the added option of being able to adjust the report to the context of any of the cafes within the area that they manage. They may additionally, have access to other reports.

The following questions were used to build the charts within this section.

Q5. How much did you spend in the restaurant today?

How do you rate the following?

|		Very Poor	Poor	OK	Good	Very Good
Q6a	Speed of service	☐	☐	☐	☐	☐
Q6b	Cleanliness	☐	☐	☐	☐	☐
Q6c	Parking	☐	☐	☐	☐	☐
Q6d	Quality of food	☐	☐	☐	☐	☐
Q6e	Choice of food	☐	☐	☐	☐	☐

Context - Global Filter

Using context to filter allows multiple analyses to be filter at the same time. For example, you may have a series of charts which you wish to view from the aspect of the Bristol cafe (i.e. just showing the data for those customers who visited the Bristol cafe). But you then wish to view the same charts from the view of the New York cafe. The benefit of this Global filter is that all the charts are changed simply by editing the global filter, rather than editing each chart one at a time.

Using Context as a filter - showing results for Bristol, UK - (AN54)
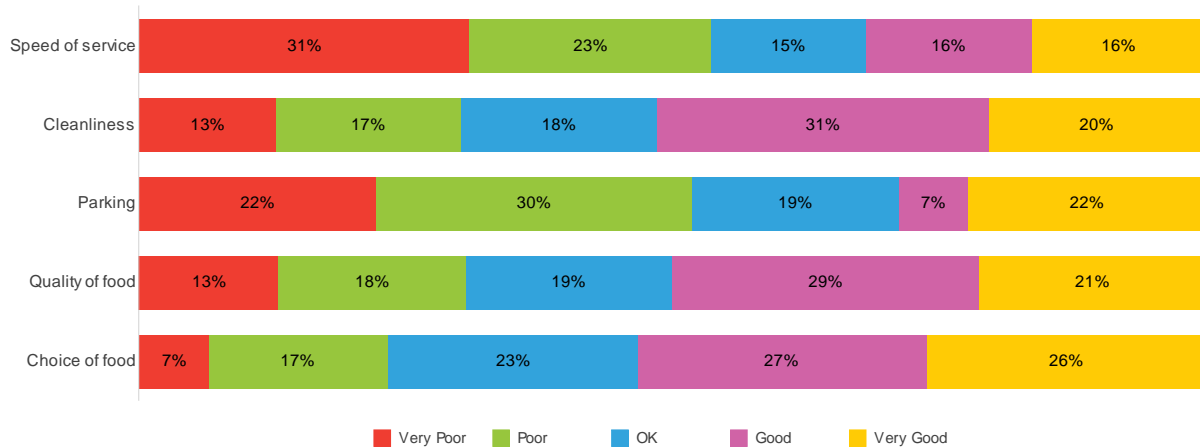
This chart makes use of **Context** to filter the data according to your requirements. The context is set using the Global Context which can be found at **File | Context Values**. This Global Context is then reference within the filter of the chart.
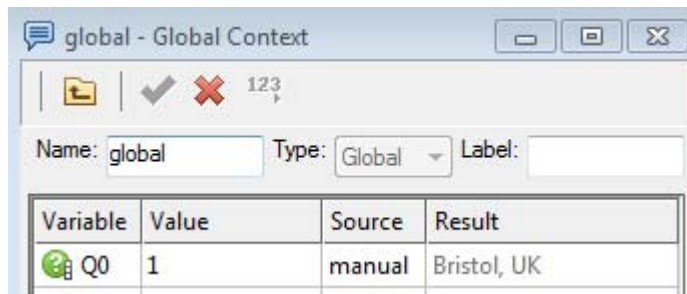

Multiple tables and charts can then reference this Global filter, meaning that should you wish to change the filter to a different cafe, you would simply change the Global filter rather than having to amend multiple filters in multiple charts.

Context - Dynamic Benchmarking

Context can be used to compare data sets. Whilst filtering removes all other data (e.g. the data from the three other cafes) from a chart, context compares one category against the remaining categories. For example, the average overall satisfaction score at the Bristol cafe compared with the combined average overall satisfaction score for the remaining three cafes.

Using Context in a Variable - showing results for 2016 - Qrt 2 - (AN55)
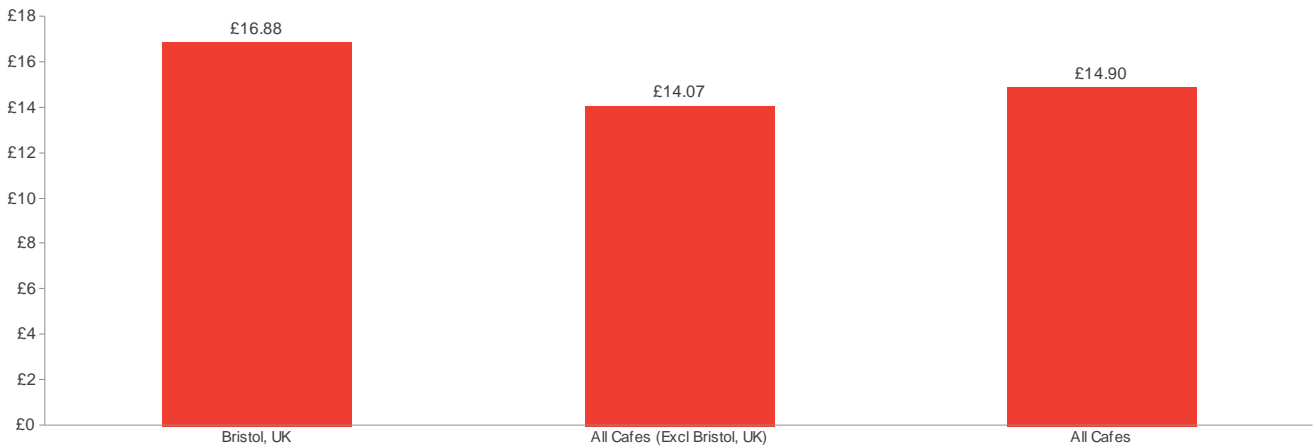

This chart makes use of **Context** to show the results of a chosen cafe in relation to the remaining cafes - in this case charting the average daily spend. Rather than referencing the Context in the filter (as per AN54), the context is incorporated into a Derived Variable (Compare), which allows more control over how a particular cafe is compared.

In this example, it is compared against 2 additional columns of data with an additional filter on the actual chart to show the results for a particular date period.
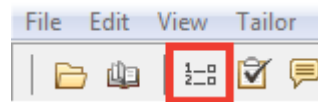
Derived Variables can be found in the Variables window .

The context is set using the Global Context which can be found at **File | Context Values**.
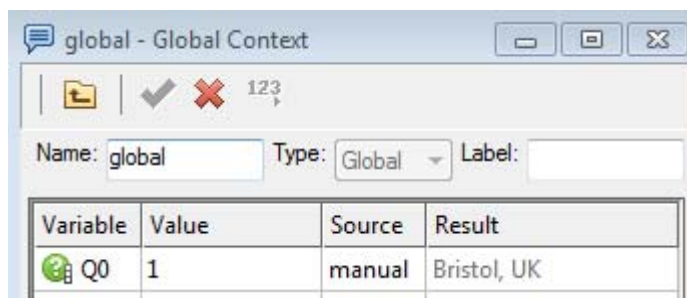
Changing the Global filter will amend the focus of the chart to that of the chosen Context.

How this report was generated

Reports created in Snap can be set up in two distinct ways:

One option is to create the tables and charts as you create the report, adding in text and commentary as you go. Whilst this is quick, it does not give you the option to fine tune the analyses, such as editing the format, as the tables and charts aren't actually created until the report is run.

This report has been set up using the second option. This involves creating the individual tables and charts that you wish to include in the report, and then adding these saved analyses to the report. When a previously saved table, chart, list or cloud is included in a report, the data within that analysis is automatically updated with the latest data.

Whilst creating the analyses in advance of building the report is more time consuming, it gives far greater control over how these tables and charts are viewed, and allows you to make use of the data within the text or commentary of your report. As the tables and charts update within the report, so does the commentary. This is the essence of 'Smart Reporting'.

The report can be filtered to extract data for a particular date period.

Adding saved analyses to a report

A report is a series of 'Instructions'. There are various types of instructions available which set aspects such as page setup, analysis tailoring and free text areas.

Each chart within this report is added using an 'Execute' instruction. This forms a permanent link between the saved chart and the report. As such, if a change is made to a previously saved chart, that change will filter down to any reports where that chart is executed.
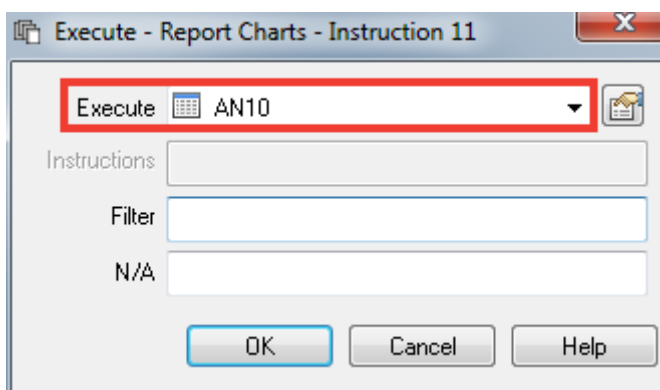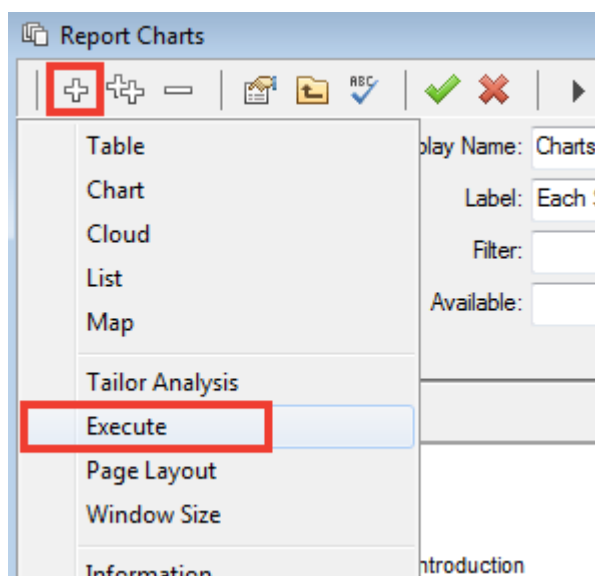
In the example below, there are a number of free text pages (the main introduction and the bar charts introduction) followed by two charts (AN10 and AN11). The window size instruction sets the chart proportions.
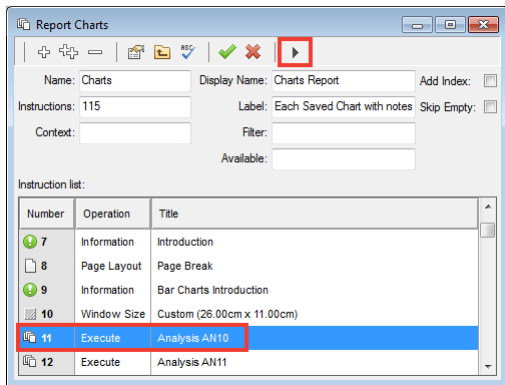
The report is run using the Execute / Check Report icon ▶ .

For info: When adding saved analyses to a report, consideration needs to be given as to which aspects of that analysis you want displaying in the report. This is set within the Base/Labels tab of each saved analyses.
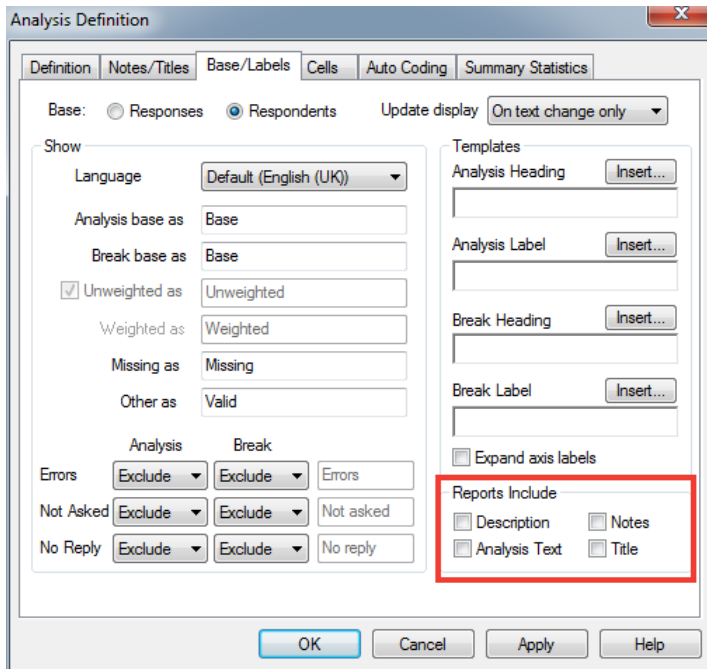
Because charts have their own title built into the chart style, the report does not need to create an additional title for each chart. A table on the other hand does not contain a title, so it is quite likely that a title will need to be generated by the report.

Additionally, due to the purpose of this survey, each of the saved analyses have notes attached to them. When viewed as part of a standalone chart, these notes serve to describe the charts purpose. If these descriptions were included in the report, many of these notes would be repetitive. Instead, the notes below the charts in this report have been generated using 'Information' instructions.

Building your own charts

Whilst building a chart is as simple as choosing a chart type and selecting the question you wish to analyse, consideration should be given as to which type of chart is most suited to your data and also to your audience.

When creating charts in Snap, the first decision is to decide what kind of chart do you require. Is it a bar chart? Is it a pie chart?

Using the chart styles supplied with Snap

There are 18 core chart types supplied with Snap along with 6 additional color schemes. The 18 chart types are split into variations of these core styles. For example, there are four bar chart variations. Two of which display percentages and two of which display counts. Of these, two are labelled (they have the counts or percentages labelled on the bar) and two are without labels.

Bar Counts
Bar Counts Labelled
Bar Percent
Bar Percent Labelled

To aid with the creation of new charts, the chart styles supplied with Snap have been named to give further assistance as to which options should be selected within the Definition tab.

For example, when using the 'Horizontal Bar Percent Labelled Transposed' chart style, one of the percent options from the 'Show options' section should be chosen and the 'Transpose' box should be ticked.
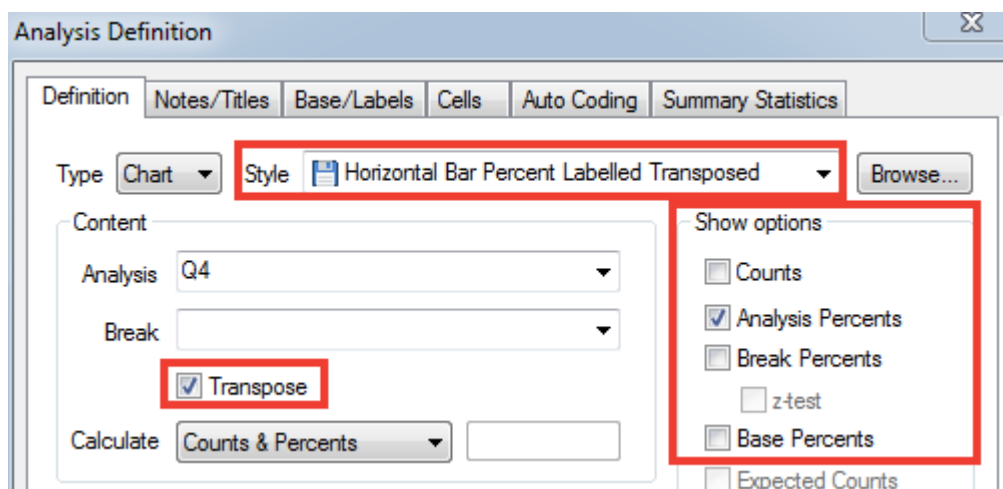
If a chart style contains the word 'Counts', select counts.

Building your own charts

Once the preferred chart style has been chosen, the next step is to decide which calculations you wish to display.

Use of Analysis & Break

Understanding the difference between 'Analysis' and 'Break' is key to knowing which options to choose. 'Analysis' is the equivalent of the X Axis (the rows) and 'Break' is the equivalent of the Y Axis (the columns).

In the example above, Q12 is the Gender question and Q0 is the Cafe question. This displays the makeup of the respondents for each of the cafes. 'Break Percents' calculates the percentage of males and females that visit each cafe. i.e. each cafe adds up to 100%.
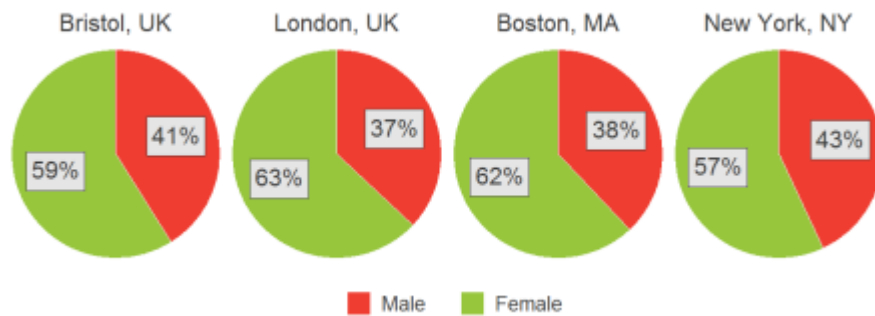
The equivalent table is below, where each of the columns (Break categories - the Cafes) add up to 100%.

Break % Respondents	Base	Location			
		Bristol, UK	London, UK	Boston, MA	New York, NY
Base	383	107	63	157	56
Gender					
Male	39%	41%	37%	38%	43%
Female	61%	59%	63%	62%	57%

If 'Analysis Percents' were selected, each of the rows (Analysis categories - Males and Females) would add up to 100%.