INTERACTIVE REPORTING

Sales Analysis and Reporting Products

Interactive Reporting User's Guide

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Overview

What all the excitement's about...

elling is never an easy business and making the right choices is crucial to any enterprise's survival. Sales Interactive Reporting is a revolutionary new tool designed to quickly obtain the right data to support key business decisions. The reports Sales Interactive Reporting can generate range across the totality of your company's data and may be readily exported to many other systems.

his manual documents how to get started with Sales Interactive Reporting and produce precisely-targeted sales reports within minutes.

Getting started

Your journey begins...

o start using Sales Interactive Reporting, you'll need to have a login-id and password assigned to you by your system administrator. These will give you access to Sales Interactive Reporting and the sales data appropriate to your needs.

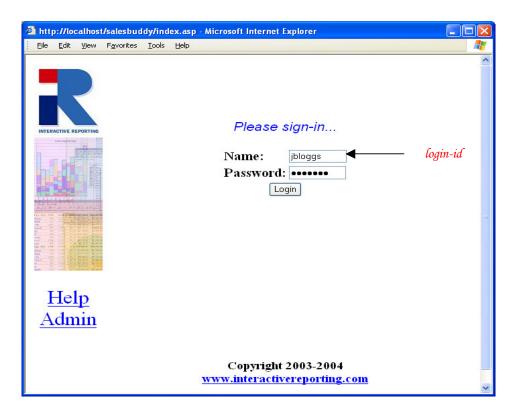


Figure 1

INTERACTIVE REPORTING USER'S GUIDE

Now, simply fire-up your favourite browser and navigate to the Sales Interactive Reporting login-screen (your system administrator will give you the URL).

Enter the login-name and password that your system administrator has given you, and click on 'Login' (in the above example, user *jbloggs* is signing-in).

For the rest of this manual our examples will be drawn from an enhanced version of the Microsoft's Northwind Traders sample database.

Once you have signed-in, you will be taken straight to the main Sales Interactive Reporting screen:

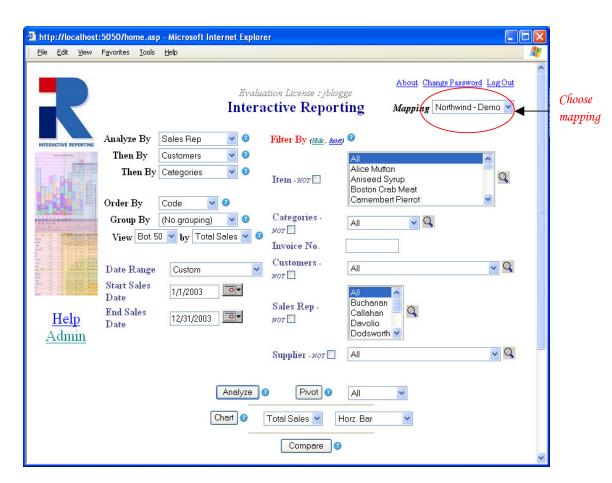


Figure 2

If you wish to look at a data set other than Northwind-Demo, you can switch by choosing from the dropdown in the top-right of the screen (assuming your system administrator has made another data-mapping available to you).

Depending on the data mapping you are using, your screen may differ from the one shown above. However, Sales Interactive Reporting has a standardized procedure for generation of the different types of reports, so don't worry...

.



Generating Reports

Putting Sales Interactive Reporting to work...

ales Interactive Reporting provides a simple and easy-to-use interface to your company's data. It provides a point-and-click means of specifying the sales data you wish to analyse. The main screen varies with the data-mapping chosen, but has a consistent structure:

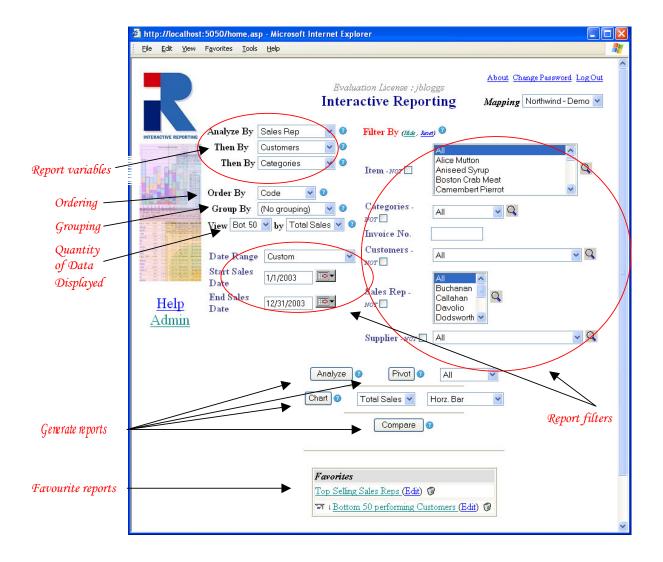


Figure 3

Report Variables

The report variables are the sales information you wish to analyse. You may specify (using the drop-down list boxes):

- Analyze By the main variable you wish to examine. In the example above, it
 is Sales Reps If an analysis is performed the first page of the report will display
 the Sales Reps data for the specified time period.
- Then By the variable by which you wish to perform further analysis. In the example above the three fields are Sales Rep, Customer & Category. If an analysis report is generated report will display the Sales Reps data for the specified time period. If a particular sales representative is then selected, the customers of

this sales representative are then displayed. If a particular customer is selected then all the categories used by this customer during the specified time period are displayed.

Report Ordering - Order By

This indicates how you wish to sort the results of your report. These are created in the template section. Choices may consist of the following:

- *Description* sort alphabetically by description
- Code sort alphabetically by alphanumeric code
- Avg Price sort by average price of item (calculated as volume divided by qty)
- Avg Cost sort by average cost of item (calculated as COG divided by qty)
- *Volume* sort by sales volume (calculated as *quantity* multiplied by *price*)
- Margin sort by profit margin (calculated as price less margin)
- Margin % sort by profit margin (calculated as margin divided by cost, and expressed as a percentage)

Depending on how your system administrator has configured your system, the above data may differ.

Report Grouping - Group By

This optional setting indicates how you wish to have the results of your query grouped. You may either select 'No grouping' or specify a particular quantity by which to group. Overall, the results are identical in both cases, but the latter provides a breakdown according to the grouping you have specified.

Quantity of Data Displayed - View By

This options lets you chose how much of the data is displayed. It consists of five values.

- All: This option lets you view all the resulting data from your analysis.
- Top 20: This displays the top 20 values in the resulting report, sorted by the value in the adjacent box. For example, if you were analysing by customers and this value was set to *Top 20* by *Total Sales*, then the result displayed would be the twenty customers with the highest total sales.

- Top 50: This displays the Top 50 values in the resulting report, sorted by the value in the adjacent box.
- Bottom 20: This displays the Bottom 20 values in the resulting report, sorted by the value in the adjacent box.
- Bottom 50: displays the Bottom 50 values in the resulting report, sorted by the value in the adjacent box.

Figure 4 shows the report settings for the Top 20 Customers, chosen by their Total Sales value. The Order By field is set to Code. If an analysis were performed on Customers with these settings then the 20 Customers with the highest Total Sales would be chosen and displayed on their customer code value. The result of an analysis of the settings on Figure 4 can be in Figure 5.



Figure 4

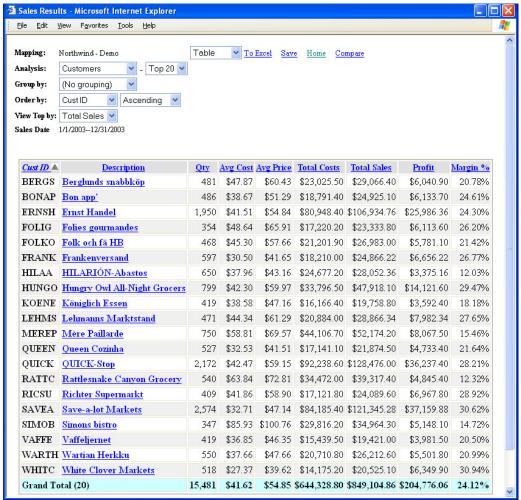


Figure 5

Report Filters

When generating reports, it is often desirable to restrict the data that is analysed to only a subset of what is available. Perhaps you are only interested in a particular category of goods, a specific range of dates or even the revenue generated by an individual member of the sales team. Sales Interactive Reporting's filter mechanism allows restriction of data through:

- Text-boxes simply enter the code/title (as appropriate) of the information to which you wish to restrict your report
- Combo-boxes choose from a drop-down list of the codes/title for each particular category of information.
- Start/end dates restrict the period over which the report obtains its information (in the example in Figure 3, we wish to consider only sales made

between January 1st, 2003 and December 31st, 2003). Dates may be indicated by entering the date in your local format or by clicking on the calendar control. A number of preset date choices are also included (just choose from the 'Date Range' drop-down: *Last Month, This Month, Last Quarter, This Quarter, Last Year, This Year, All, Yesterday*)

- Not Filter This filter allows the user to conduct an analysis excluding specific elements of a category.
- Required Field This filter ensure the user includes this data in the generated report.

Report Types

Once you have set all the parameters of your report (the variable by which you wish to analyse, the ordering you wish to use and the filters to restrict the data the report will analyse) you can generate the report you want in an instant. Available report-types are obtained by clicking on the appropriate button on the bottom of the screen:

- 'Analyze' a simple one-dimensional report type, which may be grouped, suitable for producing simple graphs and charts,
- Pinot' a two-dimensional report (possibly grouped) which provides a table of
 results using a drop-down list a user may choose to display a number of
 quantities such as volume, margin, margin %, quantity or a combined report with
 all of the quantities.
- 'Chart' a one-dimensional chart, containing the desired sales-related quantity of interest, for example *quantity*, volume, margin, margin %, in the form of a horizontal/vertical bar-chart, pie-chart or a line graph. Chart formats can be selected from a drop-down list. In the case where one chooses to group by a certain variable, one obtains a grouped or stacked chart.
- *Compare'* allows one to compare sales data across differing time-periods.

Favourite Reports

One a report has been generated it may be saved (described later). Shown in the bottom portion of the screen are the reports that have been saved by a user for the current mapping. Clicking on the report title will execute the report, while clicking 'Edit' will allow report properties to be changed and clicking on the trashcan will delete the report. Reports that will be emailed to users have an email icon associated with them in the favourite list.

Hide / Reset Link

The *Hide / Reset* link, shown in Figure 4, allows the user to hide the *Filter By* fields if they are not in use.

Help Icon

The *Help Icon*, shown below in Figure 4 as the question mark in the blue circle, allows the user to gain further information about a feature. When the icon is clicked a popup window will appear with additional information and possible examples.

Required Field Icon

The Required Field Icon, shown below in Figure 6 as the *, indicates that this field must have a value for a report to be generated. If an attempt is made to generate a report with this field empty then an error message will appear on the screen.

Not Filter

The *Not Filter*, shown in Figure 6, allows the user to conduct an analysis excluding specific elements of a category. Below we can see that the *Sales Rep Not* box in Figure 6 has been ticked. When an analysis, pivot, chart or compare is then performed the resulting data will exclude data only relevant to the sales rep *Buchanan*.

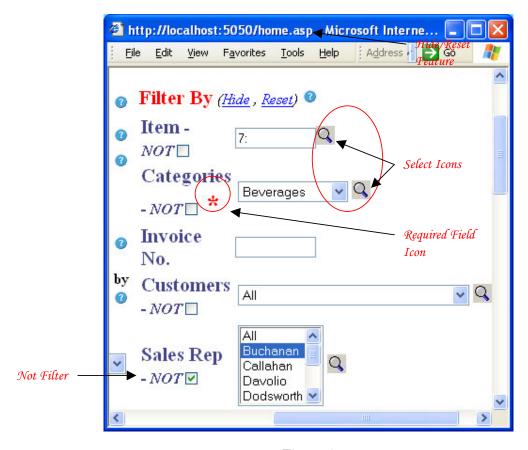


Figure 6

Select Icon

The *Select Icon* (represented by the magnifying glass in Figure 6) allows the user to select multiple fields from the filter categories.

After clicking on the *Sales Rep* select icon the following window appears. To select Callahan, Fuller and King simply press and hold down the Ctrl key while clicking on each name with the left mouse button on the *Search Result* box. Then click on the *Select Individual Result* Button (second arrow button from the top in Figure 7). You will then see the three names appear in the *Selection* box.

The *Search* field uses 'wild card selection' as its search method. This means that if you place the letter 'c' in the search field the names returned in the left-hand column will be "Buchanan, Callahan & Peacock", as all these names contain the letter 'c'. If the *case-sensitive* box had been ticked then only "Buchanan and Peacock" would have appeared in the left-hand column.

The *Show All* button is used after searched to display all search criteria in the left-hand column.

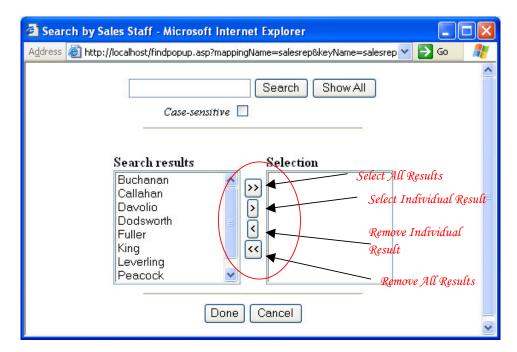


Figure 7

Range Selection

Interactive Reporting now supports Ranged Selection in text box filter fields such as the *Item* field seen in Figure 8. The character ": " is used as the range indicator. Please note that the date range is inclusive, i.e. –5:3 is all records including –5 and 3. Examples:

- -5:3 (from -5 to 3 inclusive)
- :5 (everything less than or equal to 5)
- 8: (everything greater than or equal to 8).

• E:G This also works in a case-insensitive fashion for characters - e.g. E:G will select E, F and G)



Figure 8

Top 20/50 Selection

Another method to view a selection of data is to use the View drop down selection as seen in Figure 6. The associate By field is the value upon which the Top/Bottom 20/50 are chosen on. This dropdown menu contains five options,

- All to select all the data
- Top 20 to select the top 20 results
- Top 50 to select the top 50 result
- Bottom 20 to select the bottom 20 results
- Bottom 50 to select the bottom 50 result.

Simple reports

To generate the following report using the Northwind Traders database proceed as follows. On the home page click on the select icon next to the 'Suppliers' and set it to Pavolova, Ltd. In the Report Variable section set the *Analyze By* field to 'Sales by Quarter', the first *Then By* field to 'Sales Rep' and the second *Then By* field to 'Categories'. Set the dates to those in the report below. Then click on the Analyze button. This will generate the following report.

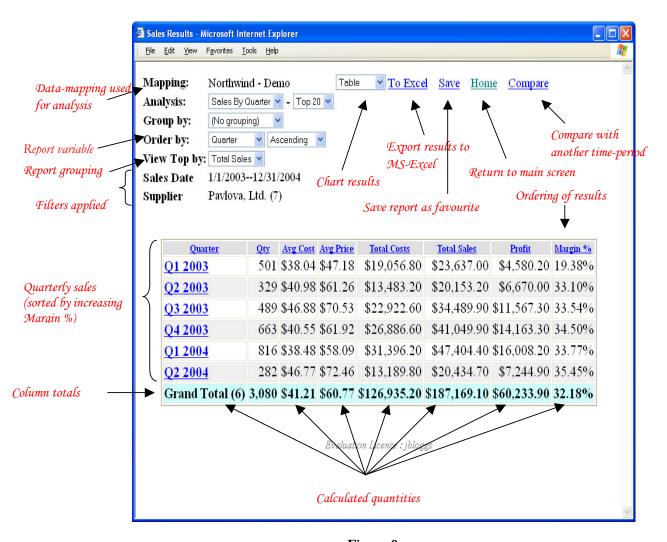


Figure 9

When a report is generated, a number of quantities of interest are calculated. These may include:

- *Qty* the quantity sold
- *Avg Cost* the average cost of goods
- Avg Price the average price of goods
- *Total Cost* the total cost of goods
- Total Sales the total cost of sales
- *Profit* the profit margin
- Margin % the percentage profit margin

Depending on the information available (which is constrained both by the original source of data and by what has been made available by your system administrator), not all of these quantities may appear. Specifically, if *cost* is not available, then *average cost*, *Total Cost*, *Margin* and *Margin* % cannot be calculated. Charts of the results may be obtained by choosing from the 'Chart' dropdown (described later).

Excel

If you wish to work with the above data outside of Sales Interactive Reporting, the table of results generated can be quickly exported to Microsoft Excel by clicking on the 'To Excel' link.

Save: Favourites

The report may be saved as a *favourite* by clicking on 'Save'. Clicking 'Save' will persist the report.

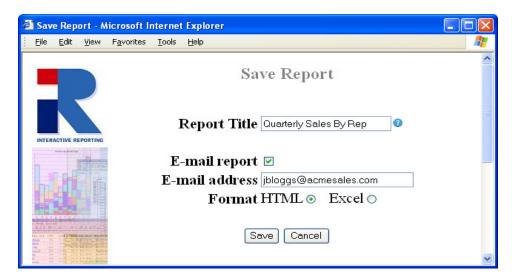


Figure 10

When saving, one must specify a title for the report. Note that the date range type effects the data displayed when a favourite is clicked. If the report was saved with an

absolute (explicit/customised) date, e.g. 31/12/03, then the report will always show the data for that date range. If however the report is saved with a template date such as 'yesterday', every time the favourite is access the data is updated to reflect yesterdays data.

Email

It is possible to have the report e-mailed on a scheduled basis (via the Server tool), by selecting 'E-mail report' and entering a valid e-mail address. To send the report to multiple recipients simply separate email address by a comma. Your system administrator will set the frequency of these emails, normally once a day. E.g. if you save a report as a favourite with the date range set to yesterday then you will receive an update report of the previous days data every morning. Favourites, which are saved as E-mail favourites, will have a letter-icon next to them in the *Favourites List* for ease of identification.

Compare

The sales data displayed in the report may be compared with data from a different by clicking on the 'Compare' link (described later).

Drill Downs

With any report that has been generated, obtaining a report at the next level of indicated granularity is simply a matter of clicking on the relevant link in the report table. This process may be repeated until the greatest level of granularity has been attained.

In our Northwind - Demo example, when specifying the analysis to be performed, we indicated that we wished to first analyse 'Sales by Quarter' and then analyse by 'Sales Rep'. To examine the sales for a particular quarter, we simply click on the appropriate link in the above table.

For example, we may examine sales for the most profitable quarter (in terms of highest percentage margin it is the second quarter of 2004) by clicking on the 'Q2 2004' link (we are, of course, still restricting ourselves to those sales supplied by Pavlova Ltd). This will take us to an analysis of Q2, 2004 by 'Sales Rep' as can be seen in Figure 11.

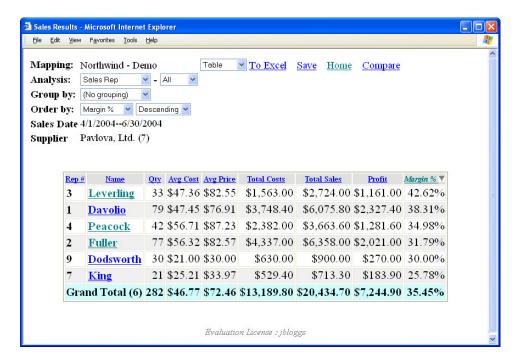


Figure 11

We see that the start- and end-dates of the analysis have adjusted themselves to select the second quarter of 2004 and that the report lists the sales figures of each of the sales representatives by decreasing percentage margin. As in the previous report, various quantities are calculated (i.e. average cost, average price, Total Sales, Profit, margin, percentage margin) and column totals are provided.

The third variable by which we specified we wished to analyse was 'Categories'. To view the categories sold by a particular salesperson in Q2 of 2004 (and supplied by Pavlova Ltd), simply click on the appropriate link.

In our example, clicking on the salesperson with the highest percentage margin (in this case Leverling) shows that his/her highest percentage margins where obtained from the sale of condiments and beverages:

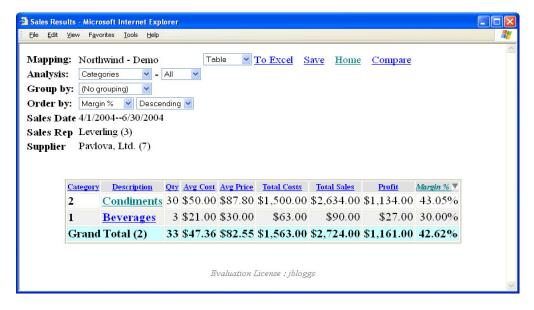


Figure 12

We may examine the details of Leverling's sales further by clicking on the appropriate link. If we click on 'Condiments' – the category of sales supplied by Pavlova Ltd over the specified period, we can obtain the line-details from the relevant invoices:

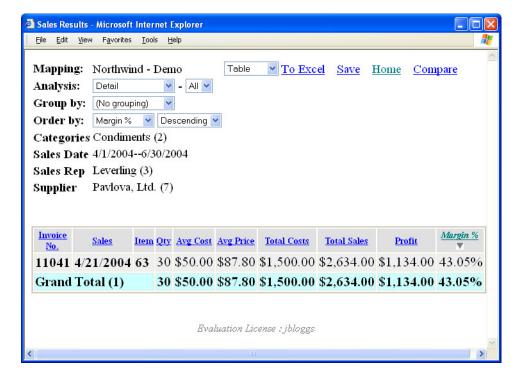


Figure 13

INTERACTIVE REPORTING USER'S GUIDE

We see that Leverling's condiment sales for Q2, 2004, supplied by Pavlova Ltd consisted of exactly one batch (from invoice 11041).

The greatest level of granularity that can be obtained in a report is the individual entries on a particular invoice - one can always 'drill-down' through a series of reports to this level of detail.

To return to a previous report or to the main Sales Interactive Reporting screen, simply click on your browser's *back* button or the *Home* link at the top of the page.

Simple reports with grouping

Using the dropdown on the main screen or indeed when looking at a particular analysis report, one can choose to group the results following a particular categorization. As an example, taking the report produced above (in Figure 9) and grouping by 'Categories' on the 'Sales by Quarter' report gives us:

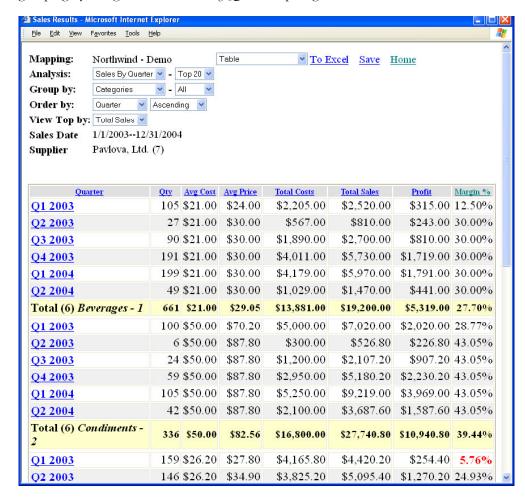


Figure 14

We can see that a grouped report produces subtotals of the quantities of interest for each of the categories of goods. Also, a grand total of these quantities are given at the bottom of the report.

One may change the grouping variable or revert to the simpler analysis given earlier by selecting as appropriate from the 'Group by' dropdown.

Pivot Reports

Using the Northwind Traders database, with variables and filters specified below (see Figure 9.), clicking on 'Pivot' generates the following report:

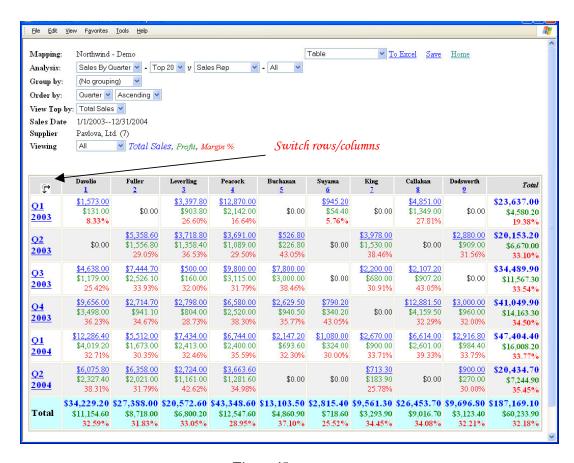


Figure 15

When performing a pivot-report, the first variable specified for the analysis (through the 'Analyze By' drop-down of the main screen) specifies the rows of the report and the second variable specified for the analysis (specified using the first 'Then By' dropdown) specifies the columns of the report.

In our Northwind Traders example, we chose to 'Analyse By' *Sales by Quarter* and 'Then By' *Sales Rep*. The resulting report then has *Sales by Quarter* listed along its rows and *Sales Rep*. listed along its columns. The figures presented in the body of the table are thus the *total sales*, *profit* and *margin* % of each salesperson per quarter (filtered, of course, to examine sales between January 1st, 2003 and December 31st, 2004 which were supplied by Pavlova Ltd).

The rows and columns may be switched by clicking on the 'Switch' icon in the top left cell of the table.

From a pivot report, one may zoom-in to a greater level of detail in three different ways. You may click on a:

- Row heading this will produce a simple report which has been filtered to only include data from the row you have clicked-through
- Column heading this will produce a simple report which has been filtered to
 only include data from the column you have clicked-through
- Sales figure this will produce a simple report which is filtered to include only
 those sales which contribute to this particular figure for sales volume (i.e.
 filtered to include data from both the relevant row and column)

In our Northwind Traders example, clicking on the 'Q2 2004' row heading produces a report (ordered, of course, by percentage margin), which is filtered to include only the relevant dates:

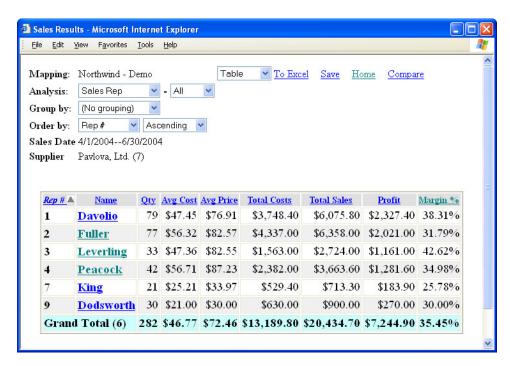


Figure 16

Clicking on the 'Leverling' column heading (3) in the pivot report (Figure 15) produces a report (ordered by percentage margin), which is filtered to include only those sales that were made by Leverling (and, of course, supplied by Pavlova Ltd):

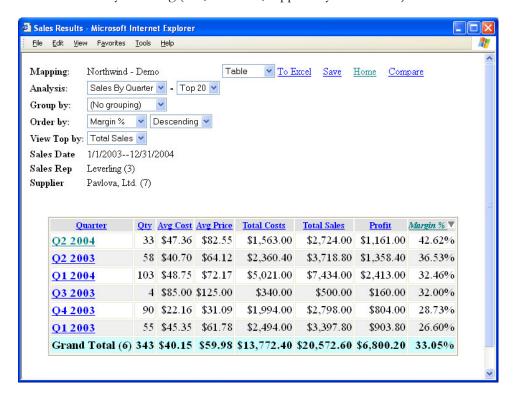


Figure 17

Clicking on the sales figure of \$12,881.50 in the pivot report (Callahan's sales for the fourth quarter of 2003 in Figure 15) shows how Sales Interactive Reporting arrived at this figure for sales volume:

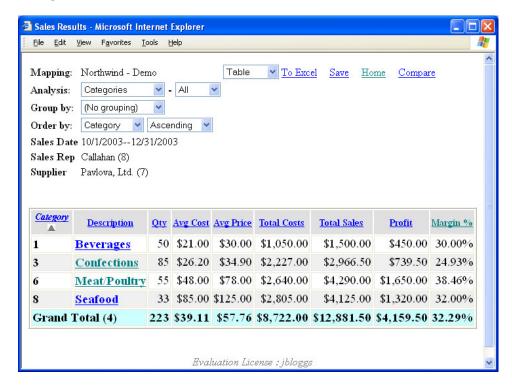


Figure 18

As before, you may click through the relevant links to obtain reports of increasing granularity, ending with individual invoice details.

Reports may also, by clicking on the appropriate links, be saved, exported to Excel or charted.

Pivot reports with grouping

As with simple reports, pivot reports may be grouped according to a certain criteria – it is simply a matter of specifying a variable by which to group in the drop-down (this currently cannot be performed directly from the main screen – you must first click the 'Pivot' button on the main screen and then change the grouping using the 'Group by' dropdown). An example report is a pivot of Quarterly Sales against Sales Rep., grouped by Customer (restricting ourselves to those goods supplied by Pavlova Ltd):

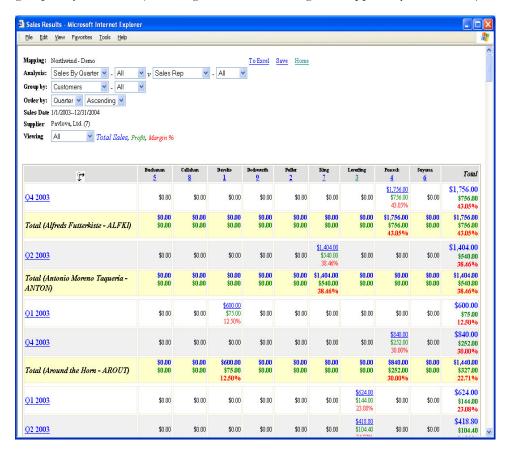


Figure 19

As before, one can click on a particular value to see how it was calculated. Also, clicking on a row heading will produce a simple report upon the row's information (within the specified group) and clicking on a column heading will produce grouped report restricted to just that column (in the above case, effectively filtering by the chosen sales rep.).

Charts – Simple Reports

One of Sales Interactive Reporting's most powerful features is its ability to provide interactive charts of data. When performing straightforward 1-D analyses (as described earlier), one may zoom-in to the next level of detail by clicking on a link. This unique feature is also available through charts.

Using the Northwind Traders database, with variables and filters specified as above (Figure 9), clicking on 'Chart' generates the following horizontal bar-chart of sales volume:

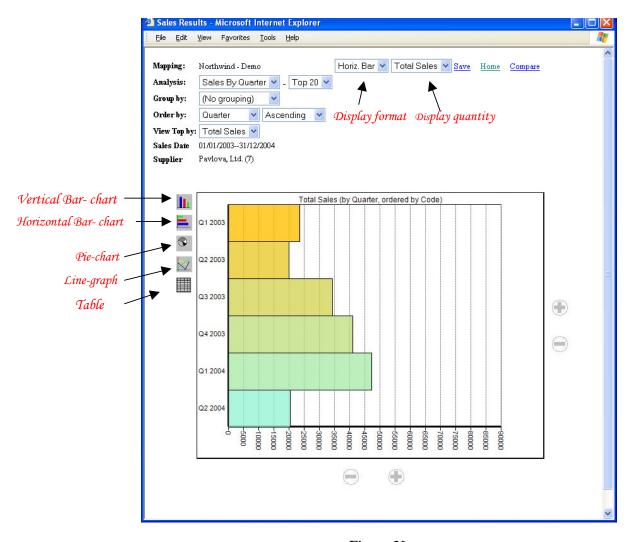


Figure 20

One may choose the variable to be charted by selecting, from the *display quantity* drop-down, one of *Total Sales*, *Margin*, *Quantity* or *Profit*, just as when producing a pivot-report.

One may view the results in a vertical bar chart, a pie chart, a line graph or the corresponding table by choosing from the *display* drop-down along the top of the screen or clicking on one of the icons on the bottom left of the chart. As before, one can save as a favourite report by clicking on 'Save'.

Again, if there is a large amount of data present the view may be changed to reveal only the top 20 or top 50 results by simply clicking on the second dropdown menu associated with the *Analysis* menu.

The *Order By* menus allow the data to be displayed from ascending to descending order or visa-versa. It also allows the way in which the data is ordered to be modified, e.g. by quantity, by profit, by average cost, ect.

Just as tables allow drill-down, so do charts. For example, clicking on the bar associated with the 'Q4, 2003' volume, will give a bar-chart of each sales rep.'s performance during that quarter (similarly to zooming-in with the tabular 'Analyze' report):

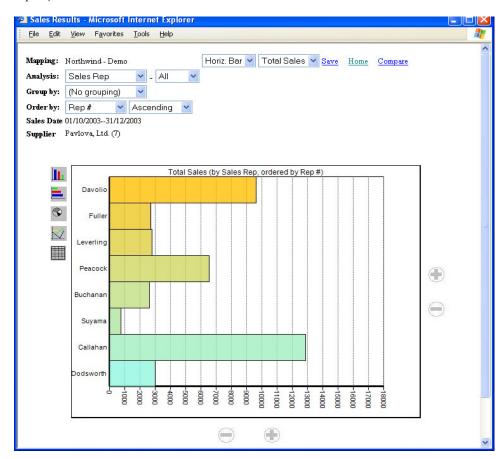


Figure 21

As before, one may recursively drill-down until the greatest level of granularity is attained (that of invoice detail).

Charts - Grouped Simple Reports

Just as one can group the results of a simple tabular analysis, one can also produce corresponding grouped charts. One simply (if a chart is already being displayed) changes the 'Group by' dropdown from 'No grouping' to the desired grouping. Alternatively, the grouped chart may be produced from the main screen by specifying the desired grouping and clicking on 'Chart'. A final means is to change the selection in the display format dropdown (as one did when, e.g., switching between a pie-chart and a line-graph – for grouped charts, however, the available chart formats are somewhat different).

The chart of the earlier grouped report is:

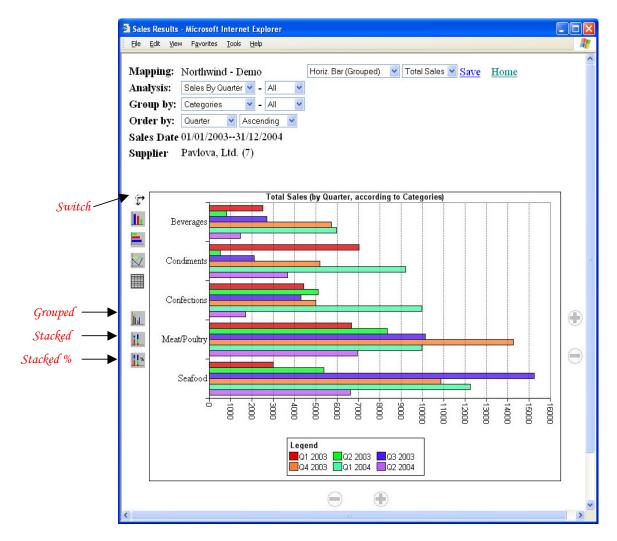


Figure 22

The stacked version of this is:

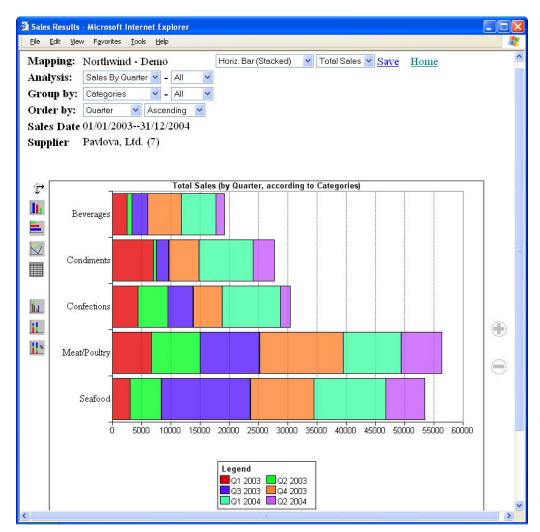


Figure 23

There are several ways in which the data may be grouped within the chart. These correspond to the extra buttons on the bottom left of the chart. One may produce grouped, stacked or stacked-% versions of the bar charts previously available.

Clicking on the 'Switch' icon may alter the grouping of the data.

As with charts of simple reports, one may click on a quantity of interest to view a more detailed chart of that quantity. Below is chart resulting from clicking on the Q3 2003 Seafood cell in the above chart:

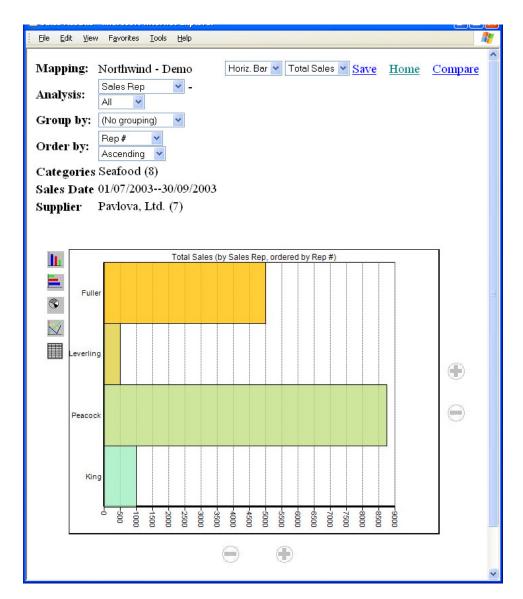


Figure 24

We can see that sales of seafood made during Q3 2003 supplied by Pavlova Ltd were made by just four of the sales reps., with Peacock being responsible for the greatest volume.

Charts – Pivot Reports

As one can chart simple analyses, so one can also chart pivot reports. Analogously to how one produces simple charts, pivot reports (*must* have 'No grouping') can be charted by selecting the desired chart format from the dropdown at the top of the screen. As with grouped charts, there are several varieties (grouped, stacked, stacked-% available) and the icons on the bottom left of the chart may be used to switch between the various possibilities.

The example below shows a stacked vertical bar chart of sales margin on goods supplied by Pavlova for each quarter and for each sales rep.

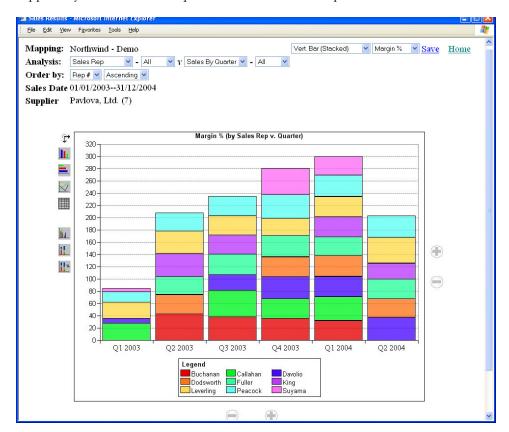


Figure 25

This type of chart is broadly similar to the grouped chart presented earlier and, similarly, allows drill-down into further detail as, e.g., with the Q4 2003 sales of Davolio of Figure 25:

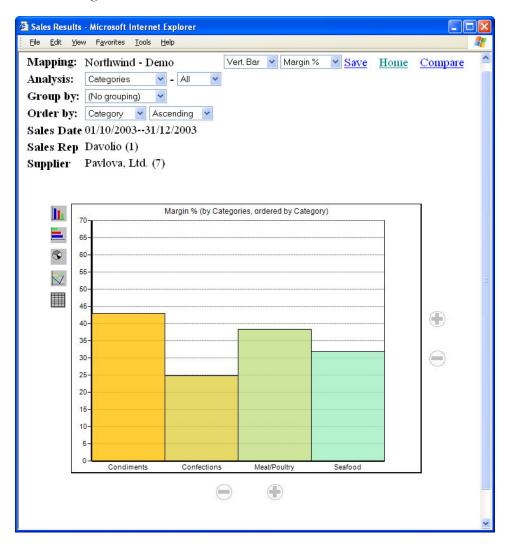


Figure 26

Comparison Reports

One of Sales Interactive Reporting's most powerful features is its capability to compare sales data across different time-periods.

To access this feature, click on either the 'Compare' button on the main screen or the 'Compare' link on a report screen. You will be taken to:

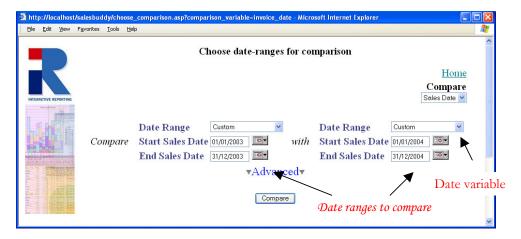


Figure 27

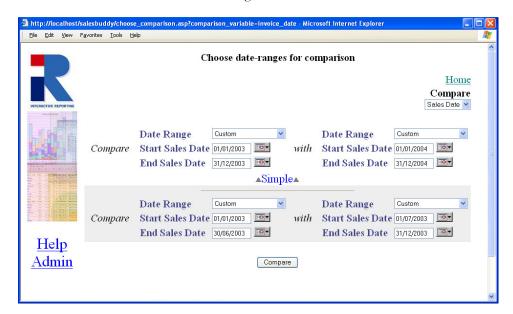


Figure 28

The comparison choice screen above allows one to produce one comparison reports. To produce two comparison reports click on the *Advanced* button. The following window will appear

In the above example of Figure 27, the choice that has been made is to compare sales data with invoice dates from 2003 with data from 2004. Clicking on the 'Compare' button for the Simple Report (Figure 27) will give:

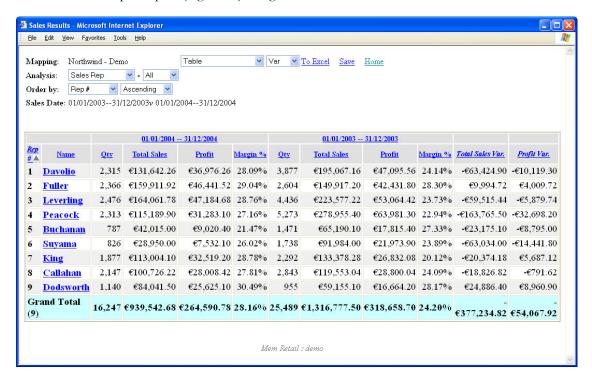


Figure 29

As before, one can drill-down by clicking on a link. Here, clicking on a sale rep's name will perform a comparison across the same date-ranges for that particular rep., examining what is specified by 'Then by' on the main screen (in this case, by Customer). The report for Buchanan is:

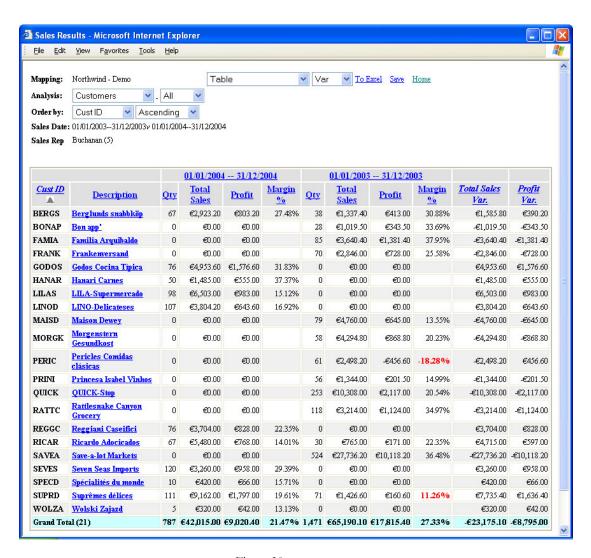


Figure 30

Charts - Comparison reports

Charts of comparison reports are similar to the grouped reports already discussed. To obtain a chart of a comparison, simply choose the appropriate format from the drop-down. As an example, a chart of sales rep. performance (in terms of total sales) comparing 2003 and 2004 is:

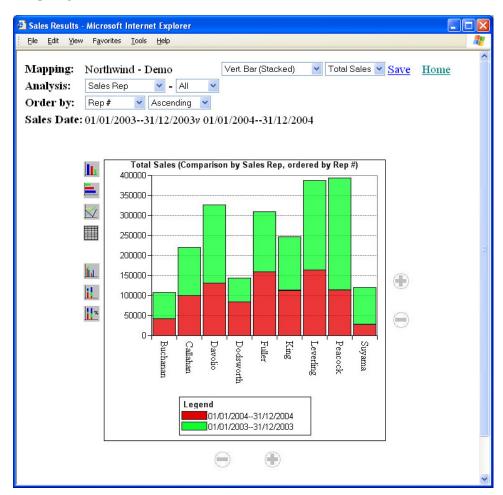


Figure 31

The quantity being compared may be changed by choosing a different quantity in the drop-down at the top of the screen. As previously, one may drilldown into the report by clicking on a cell of interest and changes the format of the chart by either clicking on the chart icons or choosing from the dropdown.



Getting Help

What to do if you're lost...

or any problem that you're unable to resolve using this manual, particularly if you are having problems signing-in or if you feel that data that should be available is not visible, your principal resource should be your system administrator.

lternatively, you can look for assistance from the 'Support' section of Interactive Reporting's web-site:

http://www.interactivereporting.com

or simply e-mail your query to:

support@interactivereporting.com