Volume

2

INTERACTIVE REPORTING

Sales Analysis and Reporting Products

Interactive Reporting User's Guide

Version 2.4

INTERACTIVE REPORTING

Interactive Reporting User's Guide

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1

Overview

What all the excitement's about...

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

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

Chapter
2

Getting started

Your journey begins...

To start using 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 Interactive Reporting and the sales data appropriate to your needs.

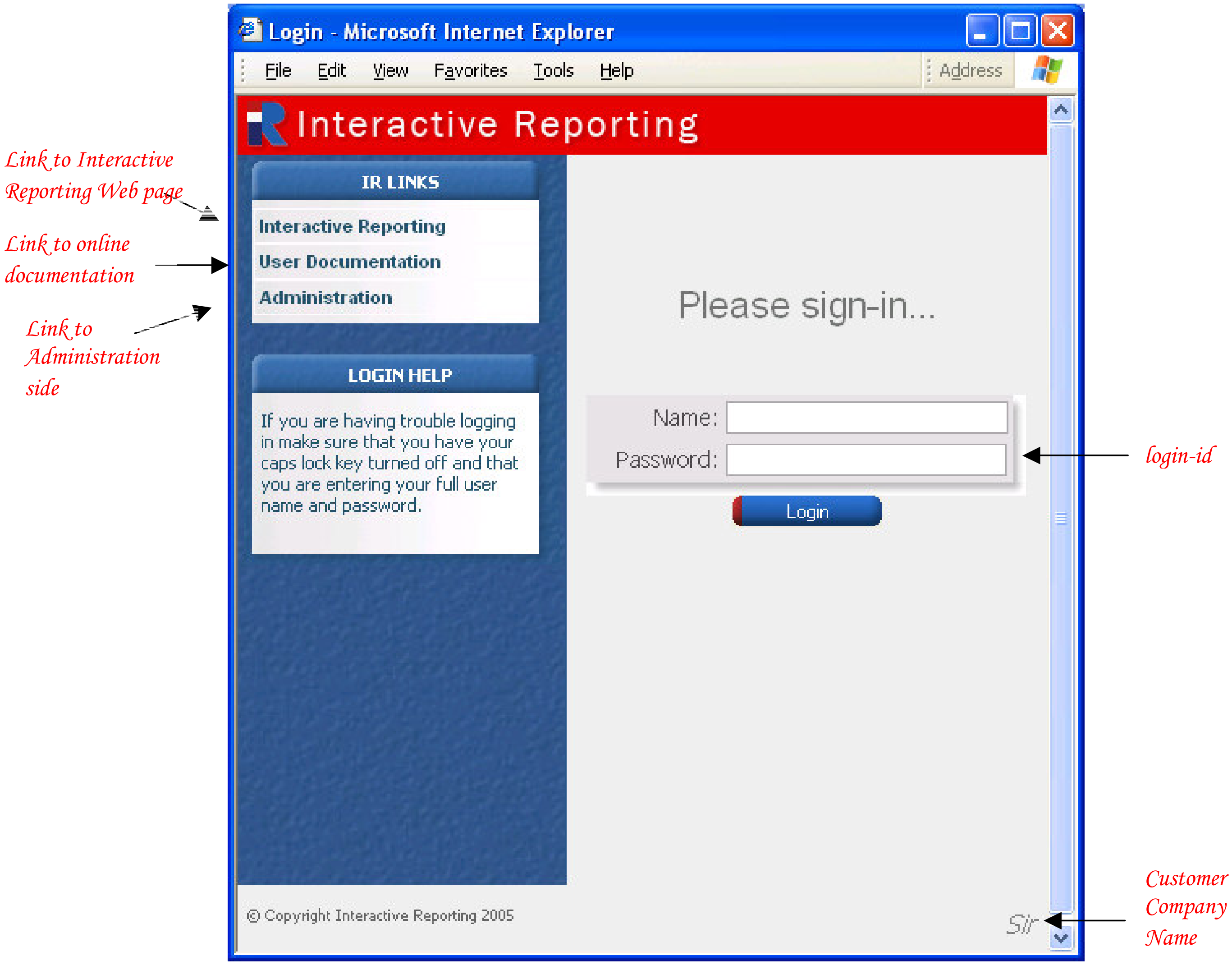


Figure 1

Now, simply fire-up your favourite browser and navigate to the 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 one of two screen screens. If you have more then one mappings available you will be directed to the 'Choose Mapping' Page, else you will be directed straight to the 'Report Type' page.

Choosing a Mapping

In the *Choose Mapping* section a list of mappings is available for the user to select from. Each mapping has two links associated with it. This first is the mapping name that will direct the user to the wizard pages for less complex report generation. The second link is the *Advanced* text. This link will direct the user to the advanced report generation page. This step is intended for users that are familiar with computer systems.

This page may be re-accessed at any stage by clicking on the *Choose Mapping* link on the task bar under the *Report Tasks* heading, see Figure 5.

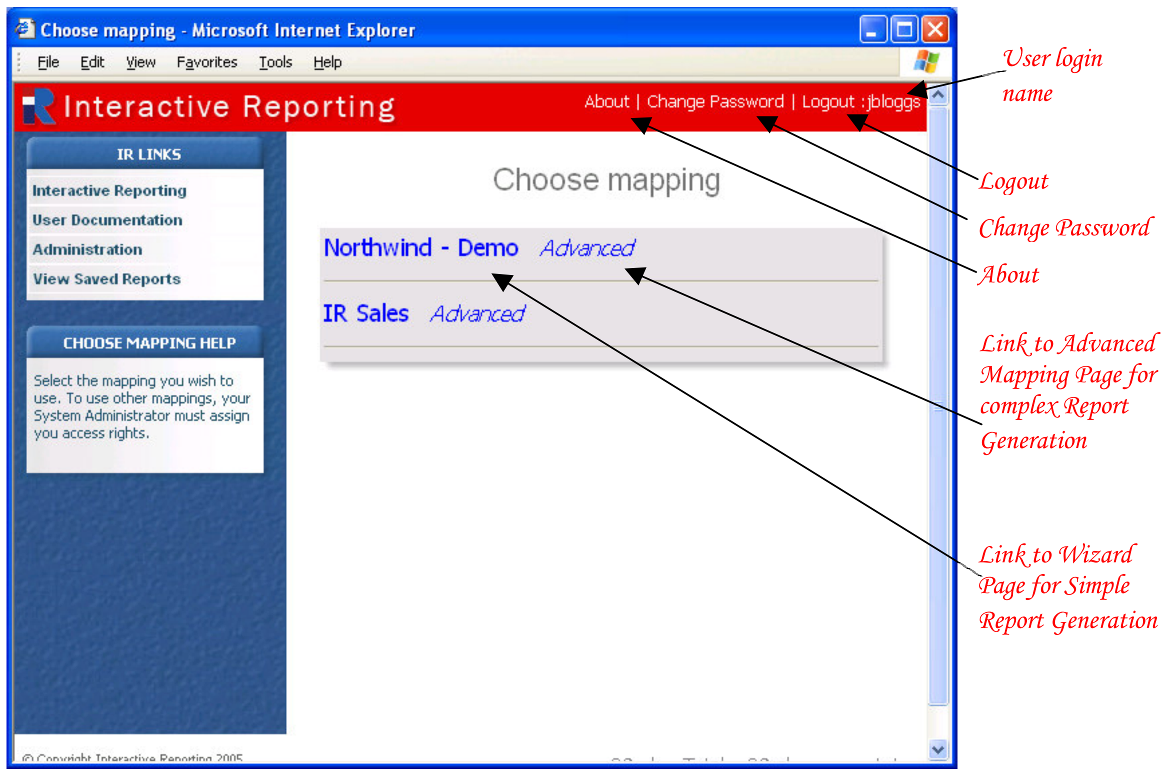


Figure 2

Logout

The Logout link logs out the current user. The current user is indicated after the semi-colon. In Figure 2 the users name is *jbloggs*, as can be seen in the top left corner. Once the logout link is pressed the user is directed to the main login screen.

About

When the about link is pressed a popup box appears (see Figure 3). This contains two pieces of information, the version of the current Interactive Reporting and the date of generation of this particulate version of Interactive Reporting. The name of the customer company may also be seen on the bottom right corner.

Figure 3

Change Password

Interactive Reporting provides the facility for a user to change their password without having to contact the system administrator. To change a password the user must click on the *Change Password* link at the top of the page. The user will be directed to the following screen. To change password type the current password into the *Current Password* box and the new password into the other two boxes. Then press Update. If the password is incorrect a message will appear detail which part of the process was completed incorrectly. Once the procedure has been completed correctly the user is returned to the *Choose Mapping* page, if a selection of mappings is available. Otherwise, they are returned to the *Report Wizard* Page.

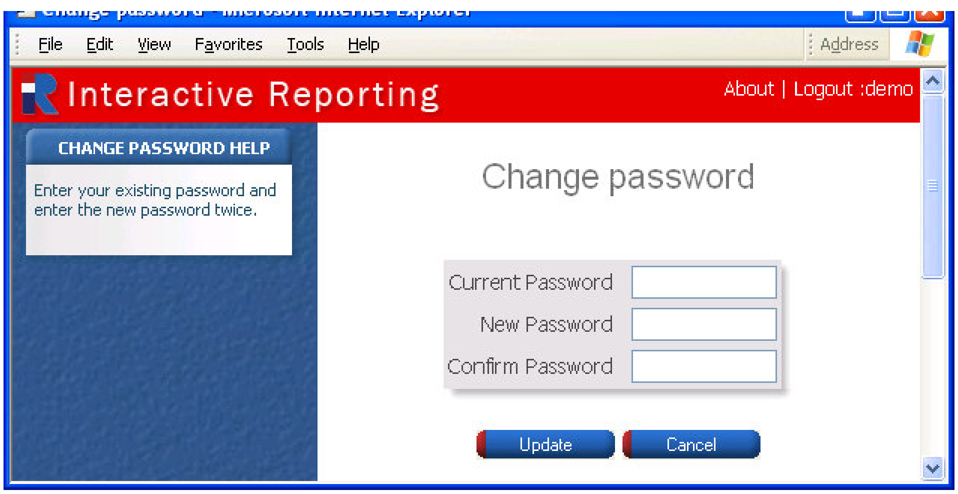


Figure 4

Chapter

3

Generating Wizard Reports

Putting Interactive Reporting to work...

Interactive Reporting provides a simple and easy-to-use wizard interface to your company's data. It provides a point-and-click means of specifying the sales data you wish to analyse.

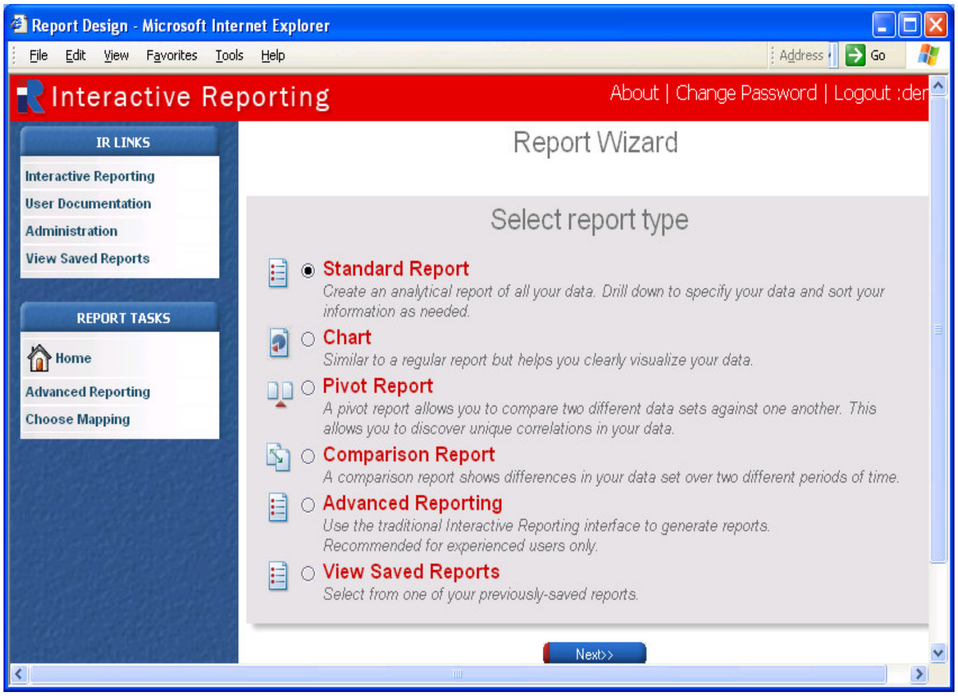


Figure 5

Report Wizard

The *Report Wizard* page allows the user to choose from one of six options in generating a report.

- Standard Report
- Chart Report
- Pivot Report
- Comparison Report
- Advanced Reporting
- View Saved Reports

The first four options all use the wizard interface to generate reports. The fifth option, *Advanced Reporting*, directs the user to the advanced reporting interface to generate their report. The final option is, perhaps, the simplest options. Here the user may select to view a report from a number of predefined reports.

1. Standard Report

When the *Standard Report* option is selected and the next button clicked the user is directed to the *Choose Analysis Report Parameters* page. As can be seen from Figure 6, a number or options must be set at this time.

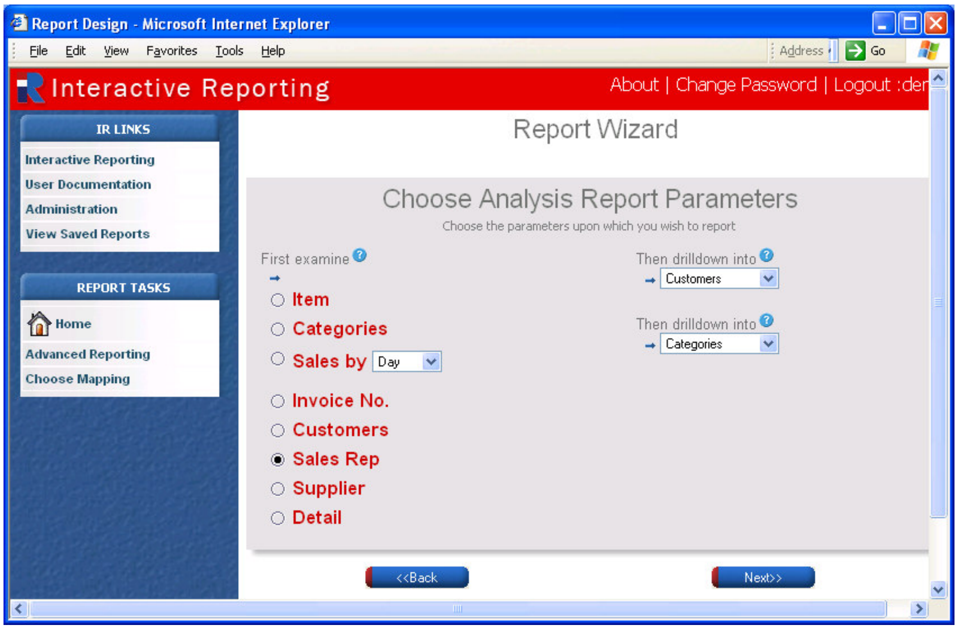


Figure 6

The first option to select is from the list on the left side of the screen under the *First Examine* title. When the report will be generated this is the value upon which the first level of generation is performed. In the above example of Figure 6 the *Sales Rep* has been chosen. This will result in a report on 'Sales Rep' data being generated.

The next options to select are the deeper levels of the report. These can be seen on the right side of the page under the heading '*Then drilldown into'*. There will be a minimum of two of these dropdown boxes to select from, their level within the report being reflected by their position from the top of the page. In the above example the Level 2 option is set to *Customers* and the level 3 options is set to *Categories*. When the report is generated the data presented will be for Salesrep. When a specific salesrep is selected, say *Davolio*, then the data generated will be the customers specific to this sales rep. When a specific customer is then selected, say *Ernst Handel*, then the data generated for the next level of the report will be the data for the categories supported by the customer *Ernst Handel* whose salesrep is *Davolio*. The customer may have other salesreps but their information will not be included in the report.

Choosing the Date Range

The next step in the wizard report generation is to choose the date range that the data will be extracted from. Interactive Reporting provides a number of predetermined date ranges that may be chosen from the drop down menu of *Date Range*. These include: *Last Year, YTD (Year to Date), Last Quarter* and *Yesterday*.

If the user would prefer to enter their own specific date range then there are two options available to them. The first is to type the date into the *Stare Sales Date* and *End Sales Date* fields. The second option is to click on the calendar figure next to the date boxed and select the dates from there. See Figure 8. Click on the arrows to increase/decrease the month and year.

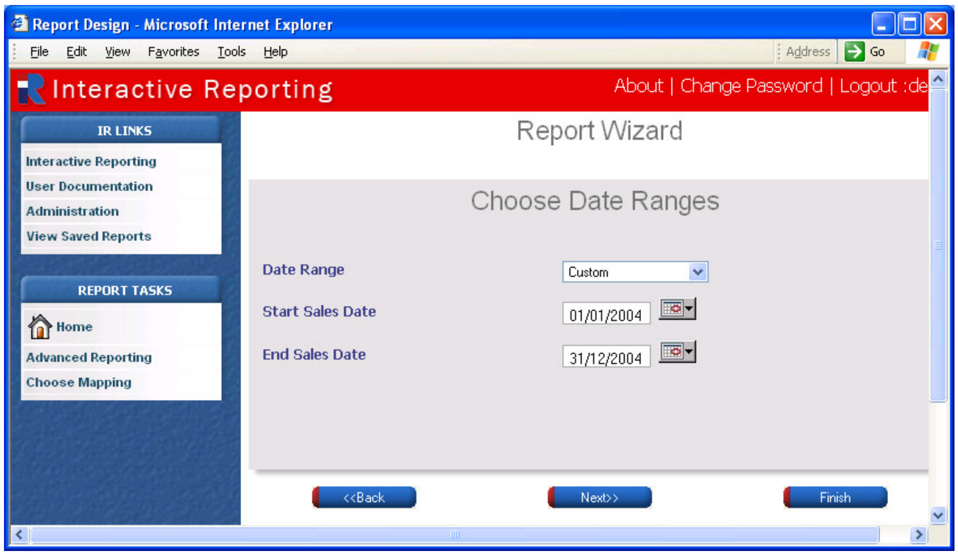


Figure 7

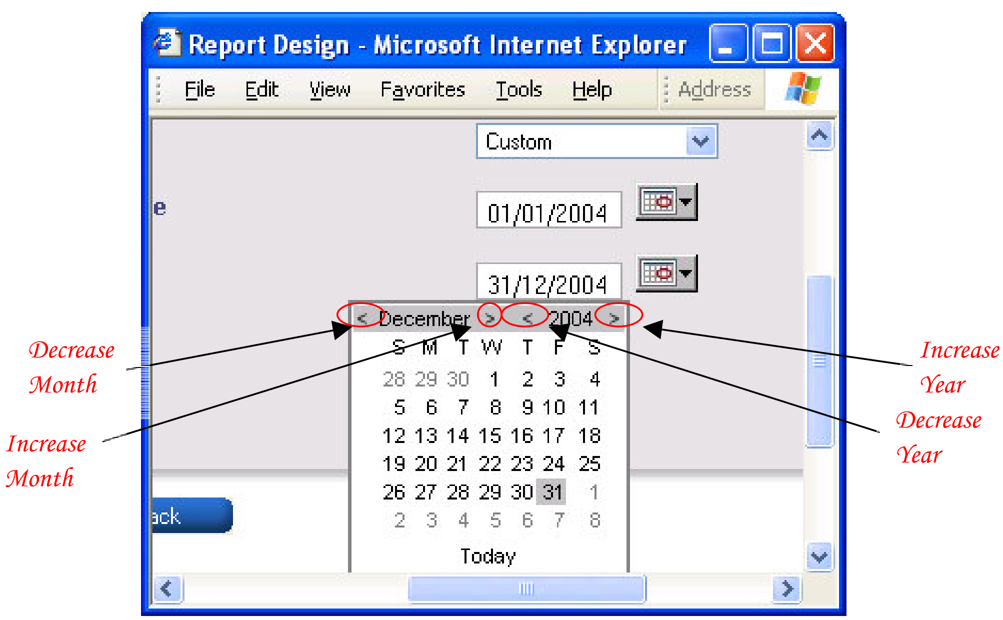


Figure 8

From this point on in the report generation the user may generate the report by clicking on the *Finish* button on any of the pages. However, if the user wishes to place more restrictions on the data they wish to view they should click on the *Next* button. If the user wishes to make amendments to some of the settings they have chosen, this may be achieved by pressing the *Back* button.

Filtering Data

In Figure 9 the three main types of data selection boxes can be seen. The *Item* box is a multi-select combo box, which allows the user to select multiple items from the scrollable item list. Please note, to select multiple item hold down the *CTRL* key when making the selections.

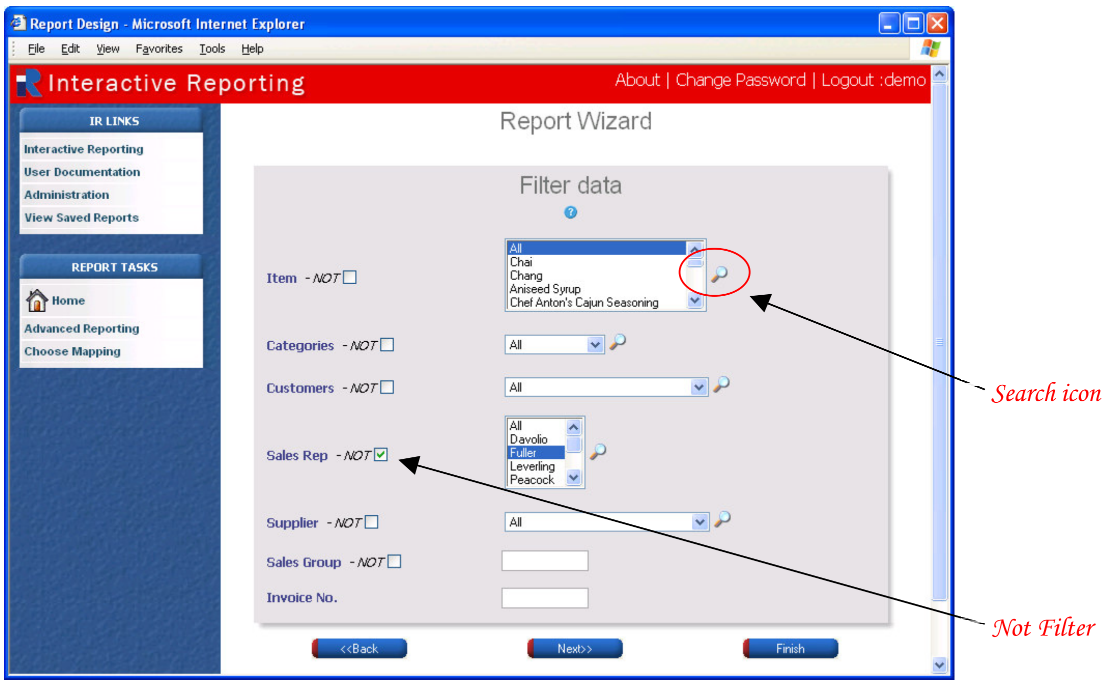


Figure 9

The second option available is the single select combo-box. An example of this is the *Customer* dropdown list. As the name implies, only one item may be selected from this list. The final option is the text box option. To make a selection from this option simply type the value to request to be present in the report into the text box. If this box is left blank then all of the values will be included in the report.

Not Filter

The *Not Filter* allows the user to conduct an analysis excluding specific elements of a category. In Figure9 we can see that 'Sales Rep' *Fuller* will be excluded from any report generated.

Search Box

Another method for selecting data to place in the report is to click on the magnifying glass, or *Search Icon*, next to the boxes as can be seen in Figure 10.

The following is the search box for the *Items*. As Items is a multi-select box there are '>>' and '<<' present allow for multi selections and removals. To select an item to include in the report simple highlight it in the *Search Results* section and click the relevant arrow option. I.e. highlight *Aniseed Syrup* and then click on the '>' button. If there are is a large amount of data in the search results list then it may be easier to use the search box. The user may enter part or all of the text into the box and press search. If the case-sensitive box is clicked then the text entered *must* match a value in the search results. Typing 'ob' in the search box of *Items* would result in the following appearing in the *Search Results* section: *Uncle Bob's Organic Dried Pears* and *Mishi Kobe Nikku*. To view the full range of values again click the *Select All* button. Once the selection has been made click on the *Done* button. When the user returns to the filter page they will see the values chosen highlighted.

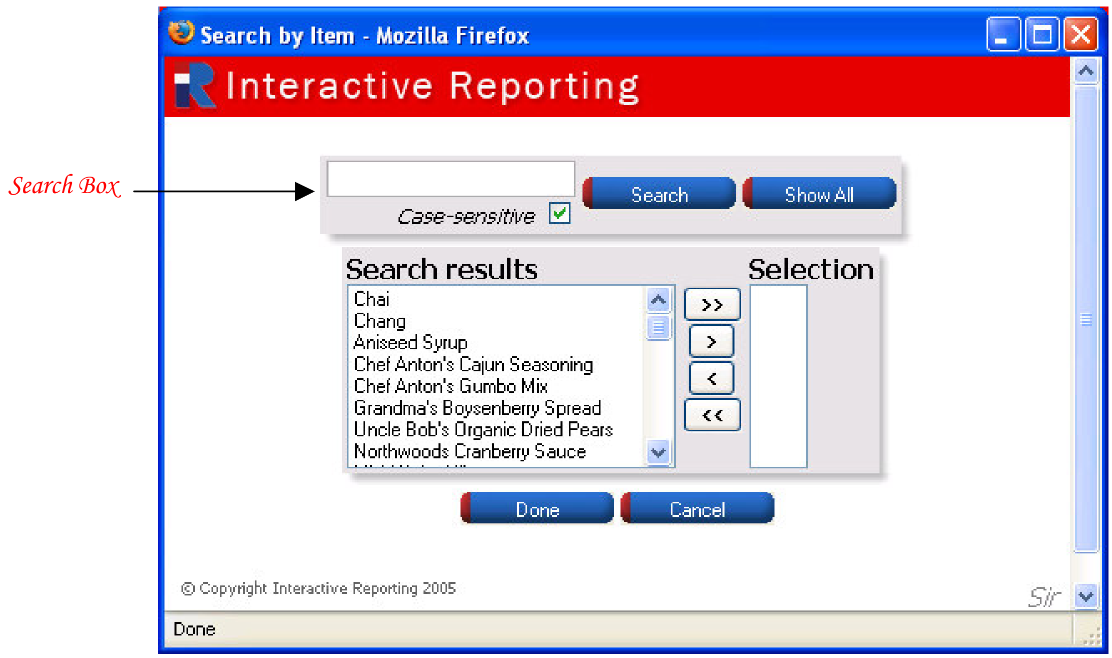


Figure 10

Choose Report Configuration

The final section of the report wizard is choosing the report configuration, see figure 11. This is broken into two segments: Group By and Order By.

The *Group By* dropdown selects a variable by which a report or a chart is to be grouped. For example, the sales data for salesreps can be divided into monthly segments by selecting *Sales by Month* from the drop down menu. Please note that this does not apply to comparison reports or charts.

The *Order By* dropdown specifies the manner in which a simple one-dimensional report, chart or comparison report should be ordered. For example, the sales data for salesreps can be ordered on Qty. When the report is generated the salesreps will be listed in order of the highest Qty. Please note that this does not apply to pivot reports, pivot or grouped charts or comparison charts.

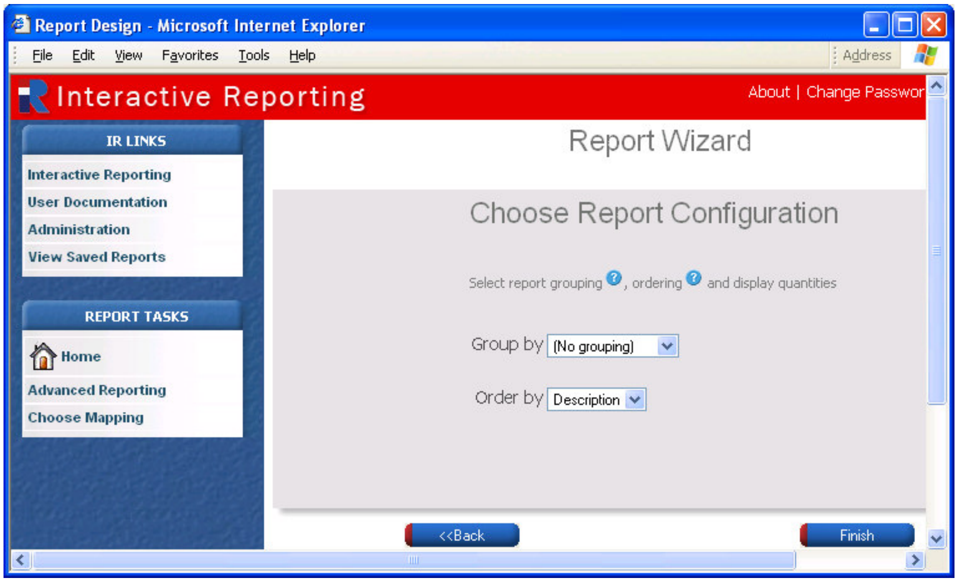


Figure 11

Figure 12 shows the first level of a report where the *Group By* is set to *Sales by Quarter* and the *Order by* is set to *Qty*.

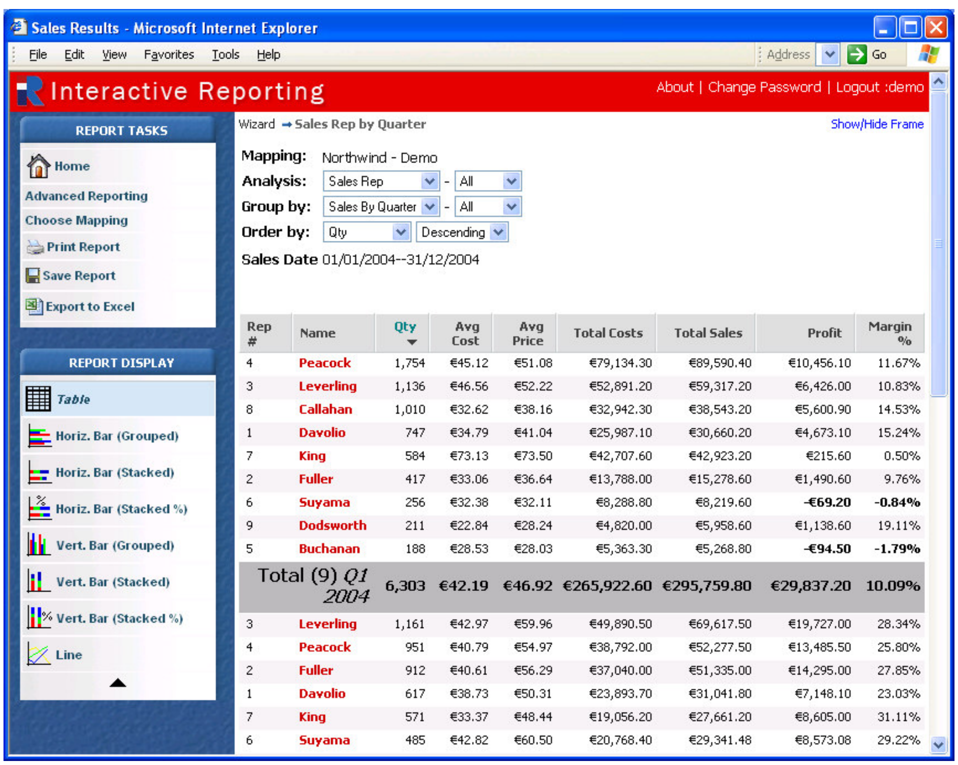


Figure 12

The following settings have been used to generate the report displayed in Figure 12.

- **Select Report Type:** Standard Report
- **Choose Analysis Report Parameters:** *First Examine* is set to SalesRep, the top *Then drilldown into* is set to Customer and the final *Then drilldown into* is set to Categories.
- **Choose Date Ranges:** This was set to *Last Year*.
- **Filter Data:** All fields in the filter data were set to *All*
- **Choose Report Configuration:** *Group By* was set to Sales by Quarter while *Order By* was set to Qty.

2. Chart Report

The generation of the chart report is very similar to that of the Standard report with two variations. The first is an extra page that allows the user to select the type of chart they wish the data to be displayed as. The second is a minor variation to the *Choose Report Configuration* page. There is an extra criterion for selection, the Chart Quantity.

The *Choose Chart Format* page enables the user to choose the chart format they wish their data to be displayed in. This page is displayed after the *Choose Date Ranges* page. As can be seen in Figure 13, there are 4 options available. The user simply clicks the chart type they wish to use.

Figure 13

Figure 14 shows the slightly altered *Choose Report Configuration* page. Here the user selects the value they wish the data to reflect in their chosen chart. Again the user simply clicks on the desired options to make their selection.

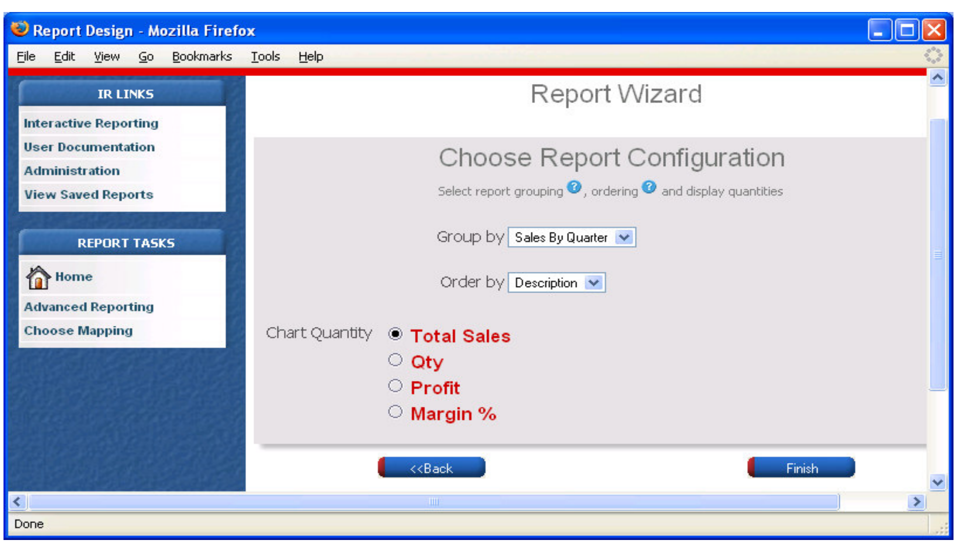


Figure 14

3. Pivot Report

The first page of the wizard for generating Pivot reports differs from all of the other options. A pivot report allows the user to compare two sets of data against one another. This differs from a comparison report where the same set of data is compared over different time periods.

In the *Choose Pivot Report Parameters* page the user must decide on the layout for the report, which value shall be displayed along the horizontal for comparison and which along the vertical. The choices in Figure 15 will result in the generated report that can be seen in Figure 17.

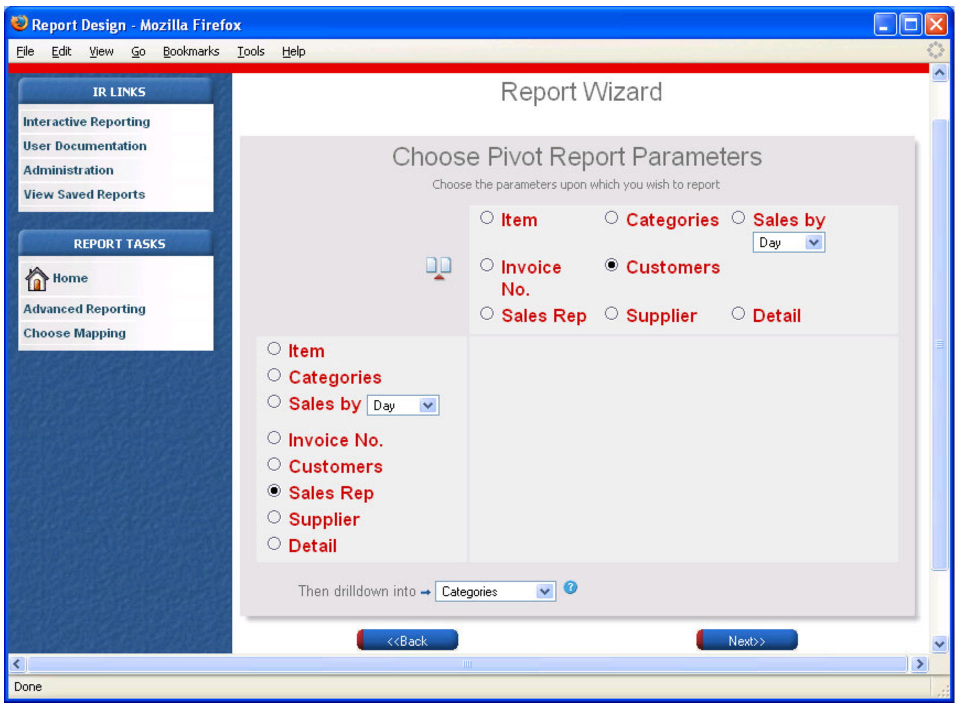


Figure 15

Again the *Choose Report Configuration* Page differs slightly. As can be seen the user has the option of select one of three values, or all values to display in the generated report. The *All* option was chosen in the report generated in Figure 17. Each of these options has a different colour associated with them to help easily distinguish each value. Once the report has been generated a different option may be viewed by changing the value in the *Viewing* dropdown box.

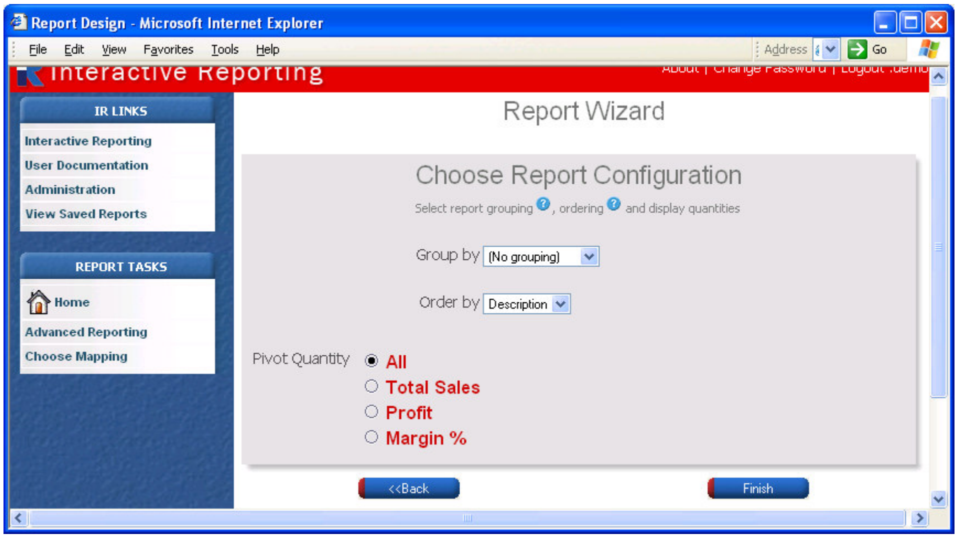


Figure 16

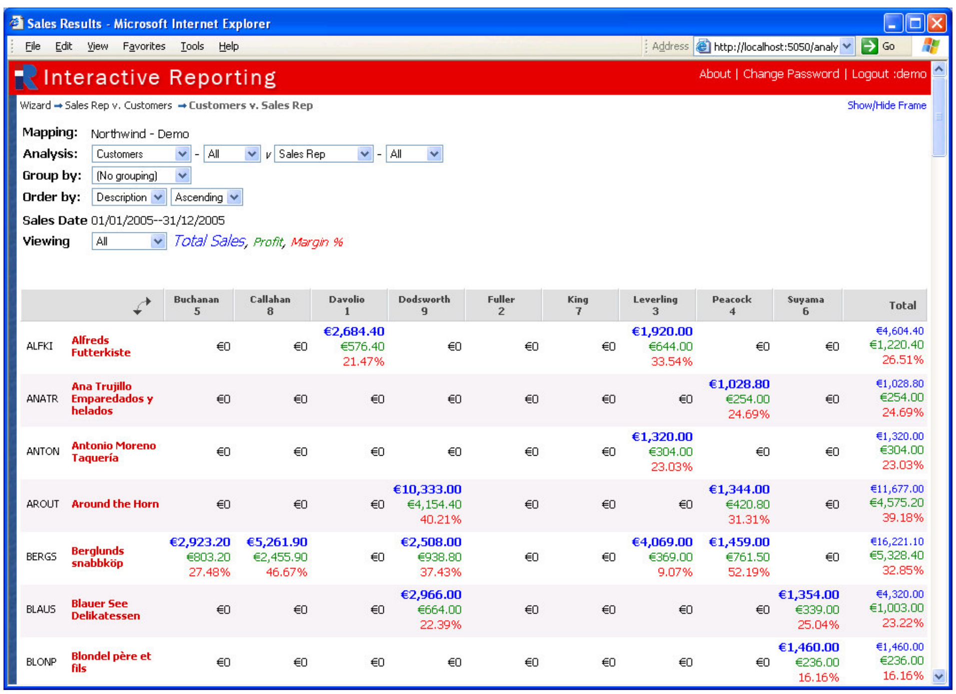


Figure 17

4. Comparison Report

The comparison report is the final report wizard option. This report allows the user to compare data over two (or four) date ranges. To generate a comparison report the user follows the same set-up format as the standard report with one difference. After the finish button has been selected the user is directed to the *Choose date-ranges for comparison* page, as can be seen in Figure 18. Here the user is provided with a number of options. Firstly they may choose to view the data over two date ranges as can be seen in Figure 18. To compare data over four date ranges the user must click on the *Advanced* button. The display will change to that in Figure 19. The third option available to the user is the dates they wish to view. Some reports may offer more then one type of date, i.e. invoice dates, sales date and delivery dates. The user can select the dates they wish to compare on from the dropdown menu on the top right corner of the screen.

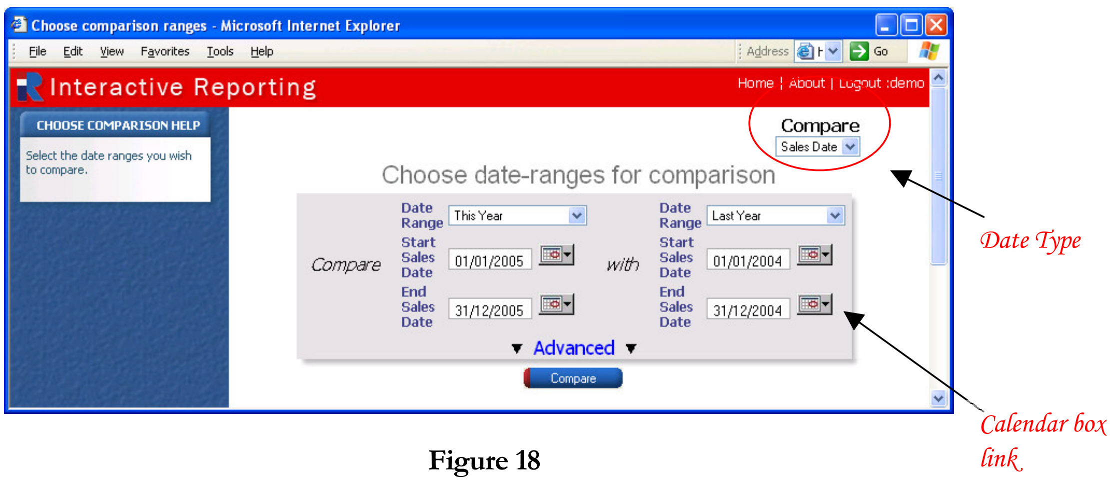


Figure 18

Once the date type and the complexity levels have been decided the user must then enter the desired date ranges. These may be selected from the dropdown list, manually typed into the date box or selected from the calendar box link. As seen, this report will generate a compare on *YTD(Last Yr)* versus *YTD(This Yr)*, i.e. year to date last year versus year to date this year. This will result in the generated report in Figure 20.

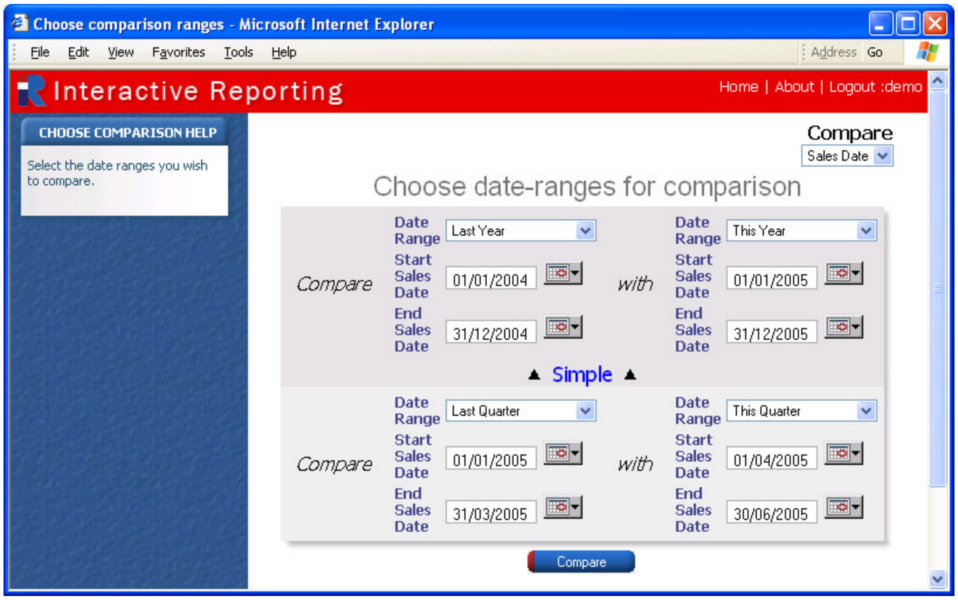
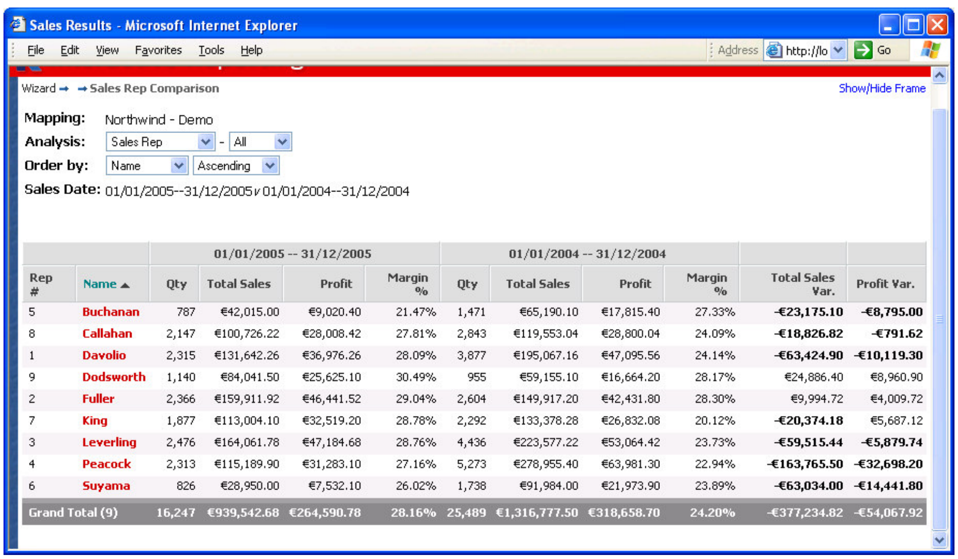


Figure 19

The following report compares the sales figures from each salesrep from the YTD(last year) versus YTD(This year), where 'today's' date is 11th April



		01/01/2005 -- 31/12/2005				01/01/2004 -- 31/12/2004					
Rep #	Name ▲	Qty	Total Sales	Profit	Margin %	Qty	Total Sales	Profit	Margin %	Total Sales Var.	Profit Var.
5	Buchanan	787	€42,015.00	€9,020.40	21.47%	1,471	€65,190.10	€17,815.40	27.33%	-€23,175.10	-€8,795.00
8	Callahan	2,147	€100,726.22	€28,008.42	27.81%	2,843	€119,553.04	€28,800.04	24.09%	-€18,826.82	-€791.62
1	Davolio	2,315	€131,642.26	€36,976.26	28.09%	3,877	€195,067.16	€47,095.56	24.14%	-€63,424.90	-€10,119.30
9	Dodsworth	1,140	€84,041.50	€25,625.10	30.49%	955	€59,155.10	€16,664.20	28.17%	€24,886.40	€8,960.90
2	Fuller	2,366	€159,911.92	€46,441.52	29.04%	2,604	€149,917.20	€42,431.80	28.30%	€9,994.72	€4,009.72
7	King	1,877	€113,004.10	€32,519.20	28.78%	2,292	€133,378.28	€26,832.08	20.12%	-€20,374.18	€5,687.12
3	Leverling	2,476	€164,061.78	€47,184.68	28.76%	4,436	€223,577.22	€53,064.42	23.73%	-€59,515.44	-€5,879.74
4	Peacock	2,313	€115,189.90	€31,283.10	27.16%	5,273	€278,955.40	€63,981.30	22.94%	-€163,765.50	-€32,698.20
6	Suyama	826	€28,950.00	€7,532.10	26.02%	1,738	€91,984.00	€21,973.90	23.89%	-€63,034.00	-€14,441.80
Grand Total (9)		16,247	€939,542.68	€264,590.78	28.16%	25,489	€1,316,777.50	€318,658.70	24.20%	-€377,234.82	-€54,067.92

Figure 20

Chapter

4

Generating Advanced Reports

Putting Interactive Reporting to work...

Interactive Reporting provides a more advance but 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:

If there is more then one mapping available to the user the screen displayed in Figure 21 will be displayed after login. To generate an advanced report the user must click the *Advanced* link next to the desired mapping.

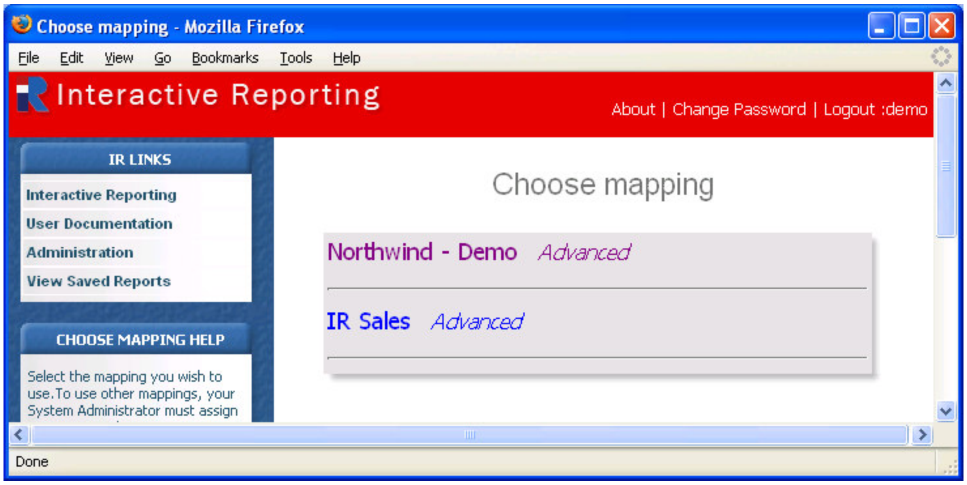


Figure 21

If there is only one mapping available to the user then the screen displayed to the user can be seen in Figure 22. To generate an advanced report the user simply clicks the *Advanced Reporting* link and they will automatically be redirected to the advanced screen.

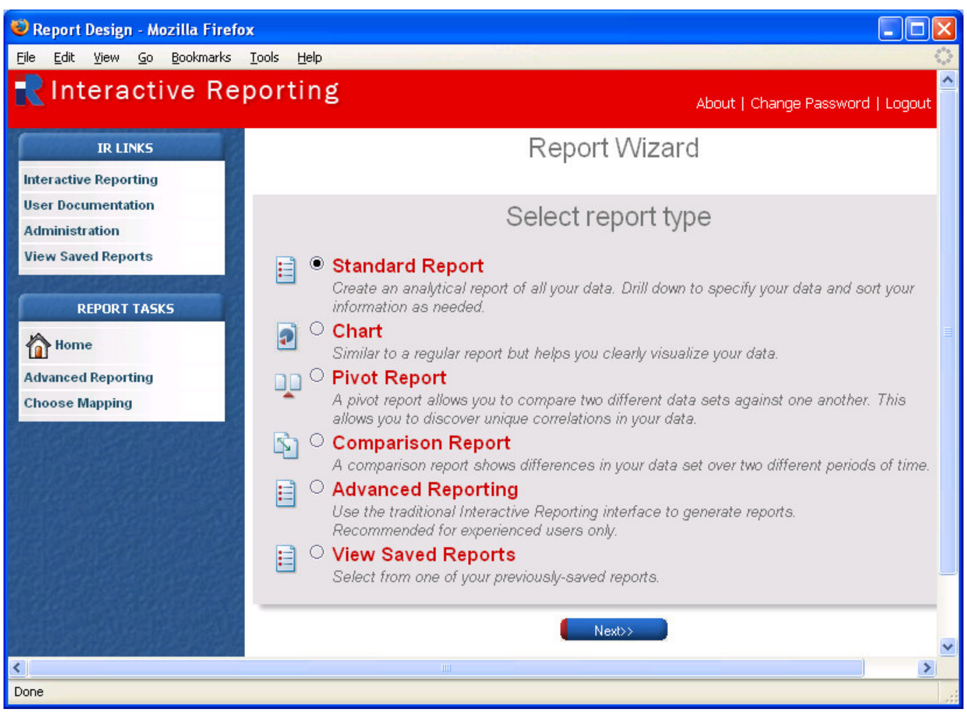


Figure 22

Once the advanced option has been chosen the user is directed to the page displayed in Figure 23. This page is a culmination of all options available to the user in the *Wizard* report-generating tool.

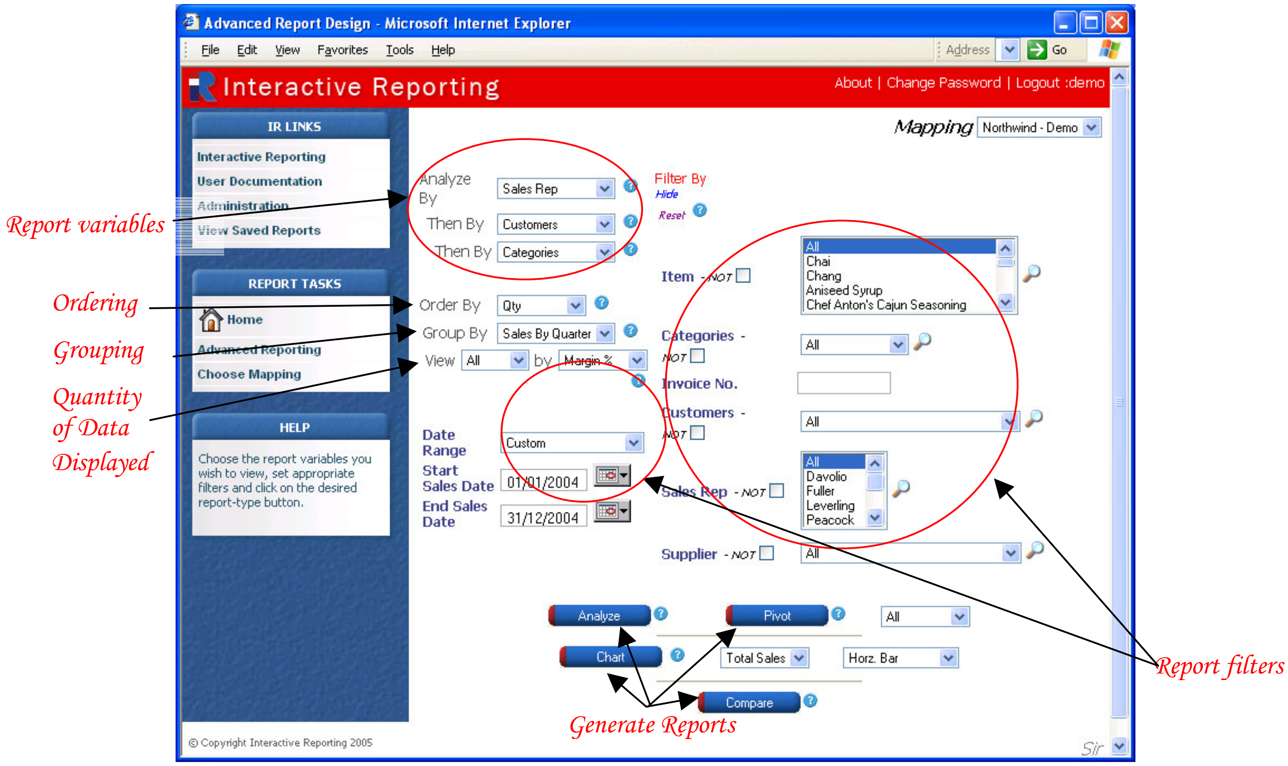


Figure 23

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 for the specific salesrep, 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 *Revenue*, 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 24 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 24 can be in Figure 25.

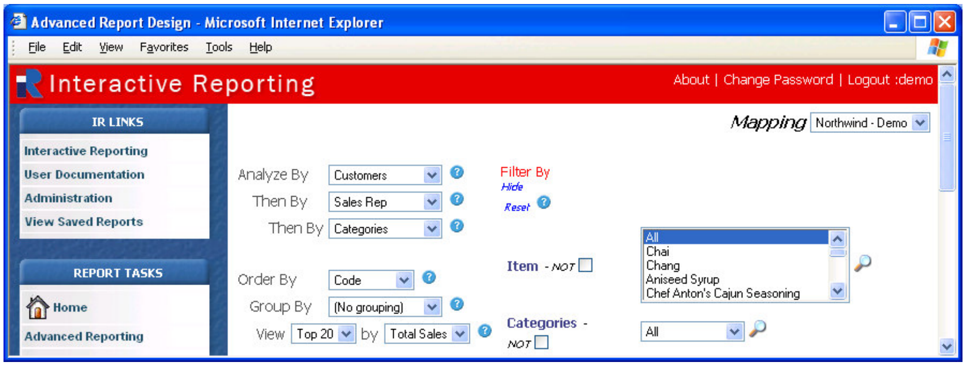
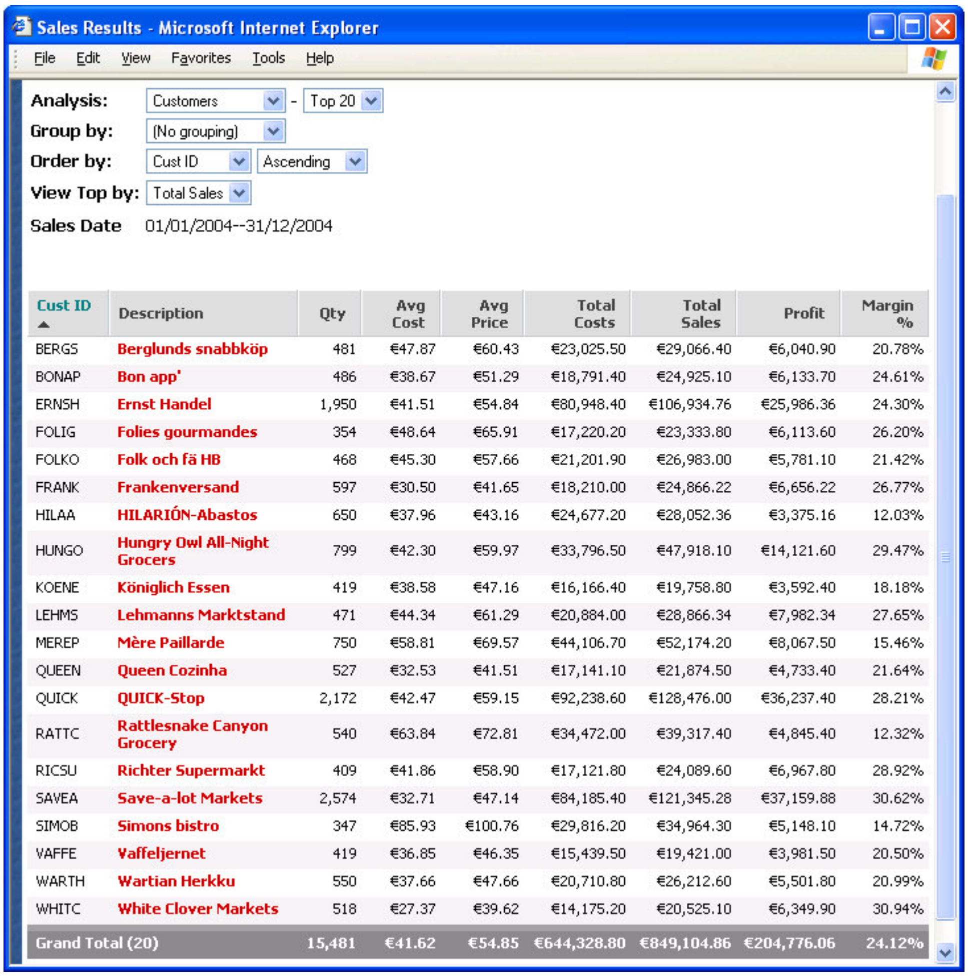


Figure 24



Cust ID	Description	Qty	Avg Cost	Avg Price	Total Costs	Total Sales	Profit	Margin %
BERGS	Berglunds snabbköp	481	€47.87	€60.43	€23,025.50	€29,066.40	€6,040.90	20.78%
BONAP	Bon app'	486	€38.67	€51.29	€18,791.40	€24,925.10	€6,133.70	24.61%
ERNSH	Ernst Handel	1,950	€41.51	€54.84	€80,948.40	€106,934.76	€25,986.36	24.30%
FOLIG	Folies gourmandes	354	€48.64	€65.91	€17,220.20	€23,333.80	€6,113.60	26.20%
FOLKO	Folk och fä HB	468	€45.30	€57.66	€21,201.90	€26,983.00	€5,781.10	21.42%
FRANK	Frankenversand	597	€30.50	€41.65	€18,210.00	€24,866.22	€6,656.22	26.77%
HILAA	HILARIÓN-Abastos	650	€37.96	€43.16	€24,677.20	€28,052.36	€3,375.16	12.03%
HUNGO	Hungry Owl All-Night Grocers	799	€42.30	€59.97	€33,796.50	€47,918.10	€14,121.60	29.47%
KOENE	Königlich Essen	419	€38.58	€47.16	€16,166.40	€19,758.80	€3,592.40	18.18%
LEHMS	Lehmanns Marktstand	471	€44.34	€61.29	€20,884.00	€28,866.34	€7,982.34	27.65%
MEREP	Mère Paillarde	750	€58.81	€69.57	€44,106.70	€52,174.20	€8,067.50	15.46%
QUEEN	Queen Cozinha	527	€32.53	€41.51	€17,141.10	€21,874.50	€4,733.40	21.64%
QUICK	QUICK-Stop	2,172	€42.47	€59.15	€92,238.60	€128,476.00	€36,237.40	28.21%
RATTC	Rattlesnake Canyon Grocery	540	€63.84	€72.81	€34,472.00	€39,317.40	€4,845.40	12.32%
RICSU	Richter Supermarkt	409	€41.86	€58.90	€17,121.80	€24,089.60	€6,967.80	28.92%
SAVEA	Save-a-lot Markets	2,574	€32.71	€47.14	€84,185.40	€121,345.28	€37,159.88	30.62%
SIMOB	Simons bistro	347	€85.93	€100.76	€29,816.20	€34,964.30	€5,148.10	14.72%
VAFFE	Vaffeljernet	419	€36.85	€46.35	€15,439.50	€19,421.00	€3,981.50	20.50%
WARTH	Wartian Herkku	550	€37.66	€47.66	€20,710.80	€26,212.60	€5,501.80	20.99%
WHITC	White Clover Markets	518	€27.37	€39.62	€14,175.20	€20,525.10	€6,349.90	30.94%
Grand Total (20)		15,481	€41.62	€54.85	€644,328.80	€849,104.86	€204,776.06	24.12%

Figure 25

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. 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 Figure3, we wish to consider only sales made between January 1st, 2004 and December 31st, 2004). 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. A red asterisk will indicate this field, *.

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,

- *'Pivot'* – 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 a user to compare sales data across differing time-periods.

Hide / Reset Link

The *Hide / Reset* link, shown in Figure 26, allows the user to hide the *Filter By* fields if they are not in use.

Help Icon

The *Help Icon,* , shown below in Figure 26 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 26 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 26, 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 26 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.*

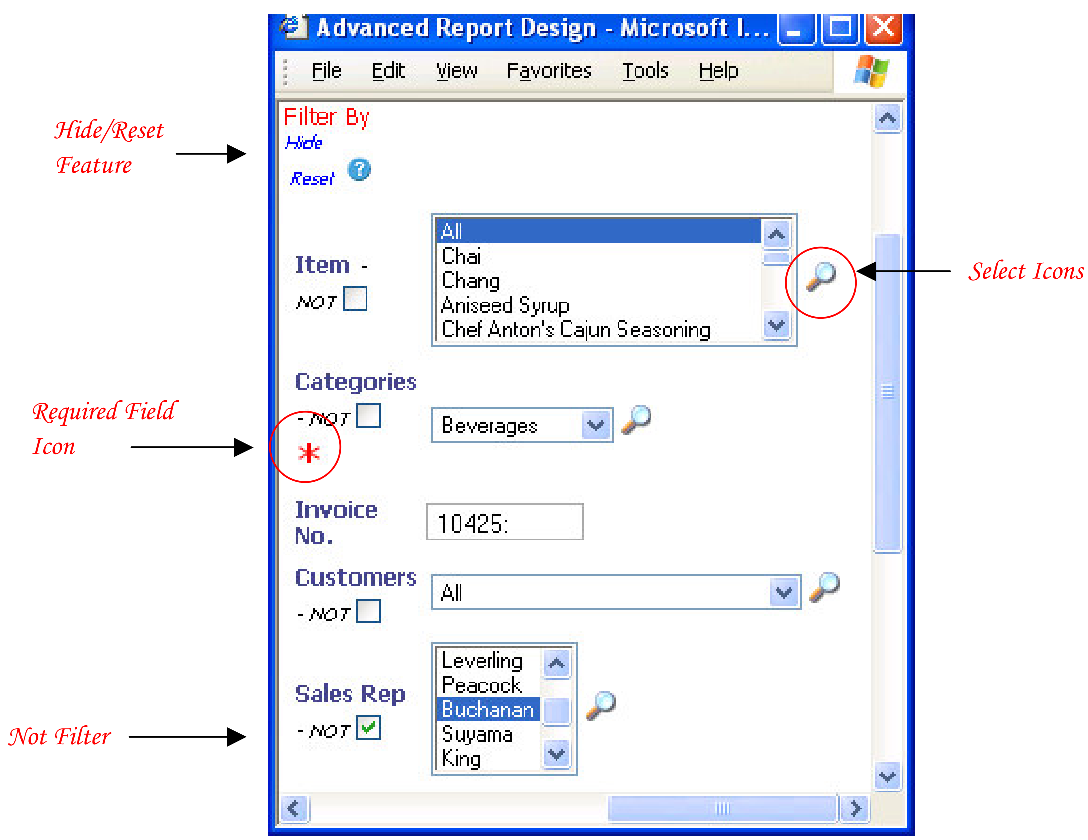


Figure 26

Search Icon

The *Search* or *Select Icon* (represented by the magnifying glass in Figure 26) allows the user to select specific fields from the filter categories. This is especially useful if a filter has a large quantity of values or if the user wishes to select more then one value from a multi-select combo-box.

After clicking on the *Sales Rep* select icon the following window appears. *Sales Rep* is a multi-select combo box so more then one salesrep may be selected at a time. 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 the user typed the letter 'c' in the search field the names returned in the left-hand column would 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 27

Range Selection

Interactive Reporting now supports *Ranged Selection* in text box filter fields such as the *Invoice* field seen in Figure 28. 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)

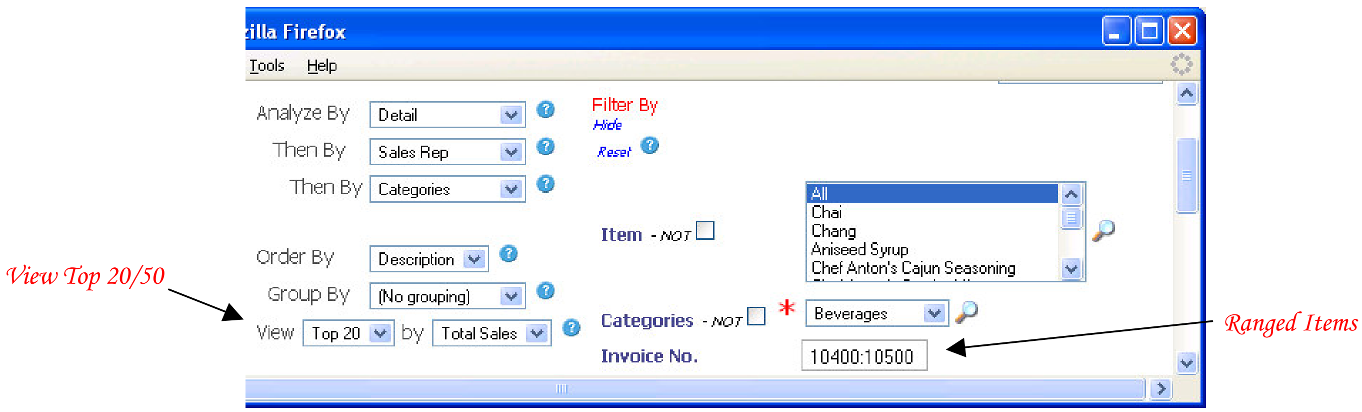


Figure 28

Top 20/50 Selection

Another method to view a selection of data is to use the *View* drop down selection as seen in Figure 28. The associate *By* field is the value upon which the Top/Bottom 20/50 is 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.

Standard report

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.

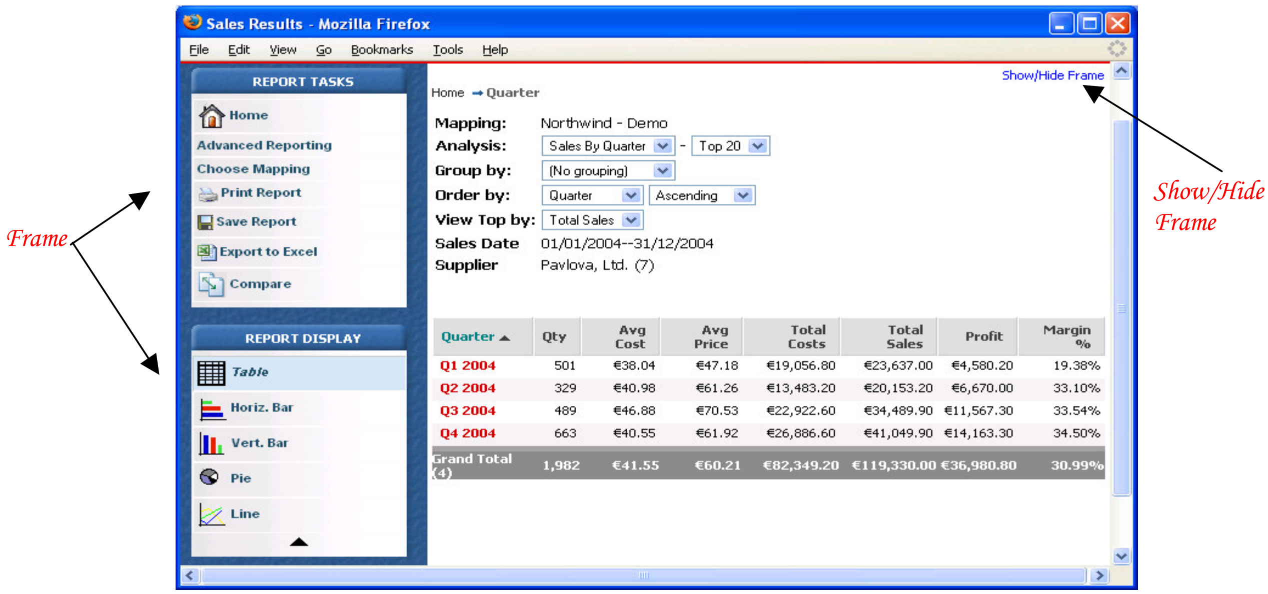
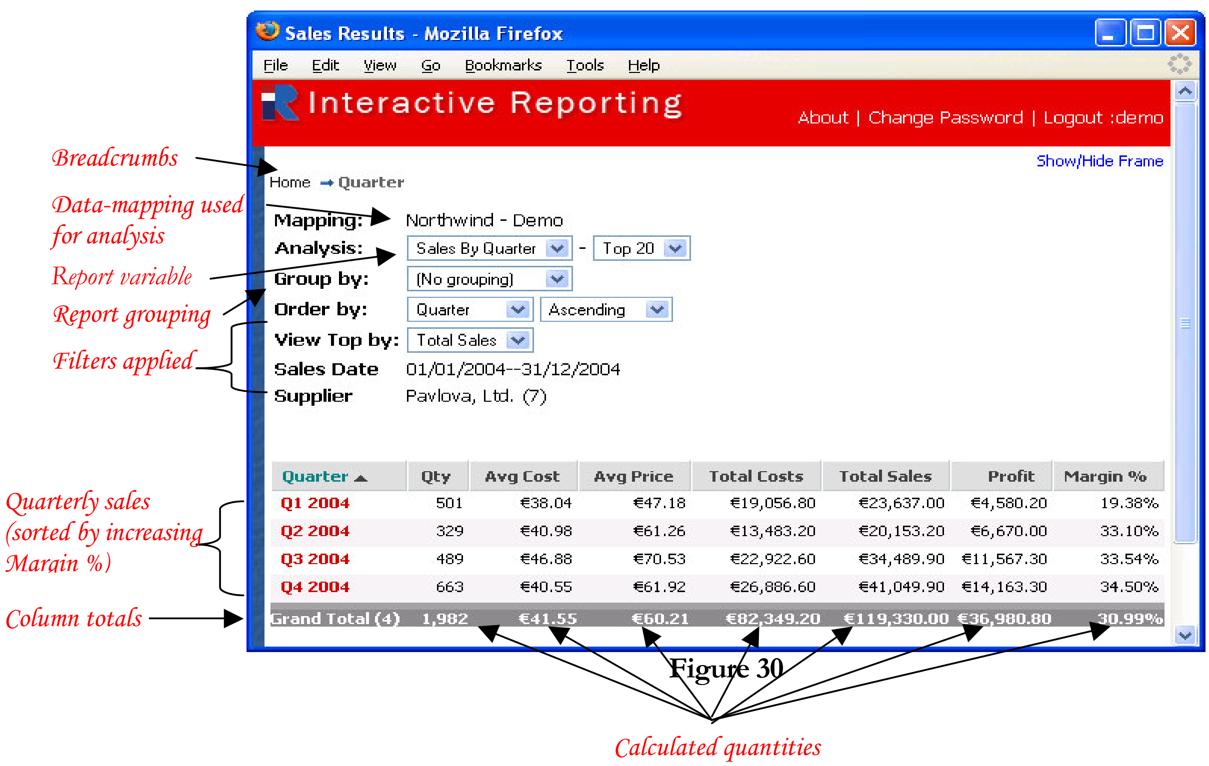


Figure 29



Quarter ▲	Qty	Avg Cost	Avg Price	Total Costs	Total Sales	Profit	Margin %
Q1 2004	501	€38.04	€47.18	€19,056.80	€23,637.00	€4,580.20	19.38%
Q2 2004	329	€40.98	€61.26	€13,483.20	€20,153.20	€6,670.00	33.10%
Q3 2004	489	€46.88	€70.53	€22,922.60	€34,489.90	€11,567.30	33.54%
Q4 2004	663	€40.55	€61.92	€26,886.60	€41,049.90	€14,163.30	34.50%
Grand Total (4)	1,982	€41.55	€60.21	€82,349.20	€119,330.00	€36,980.80	30.99%

Figure 30

The report generated in Figure 29 may be simplified for viewing by clicking on the *Show/Hide Frame* Link. This removes the panel to the left of the screen resulting in the page displayed in Figure 30. The panel for a standard analysis report can be seen below in Figure 31.

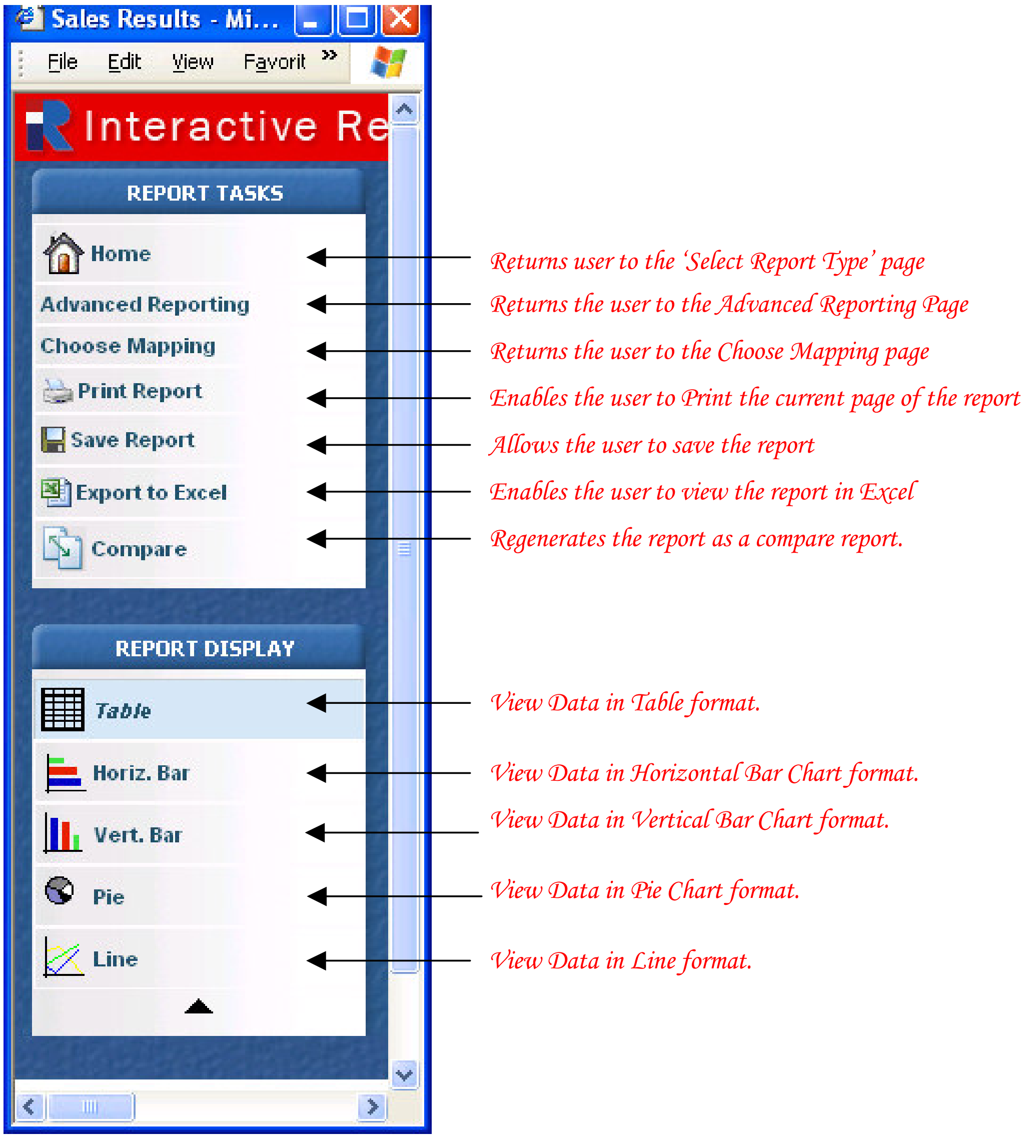


Figure 31

Generated Results

When a report is generated, a number of quantities of interest are calculated, see bottom of Figure 29 and Figure 30. These quantities 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).

Breadcrumbs

Breadcrumbs appear at the top of every page of a generated report. They indicated the step taken by a user to reach the current page/level of the report. To return to an early page the user simply clicks on the relevant section of the breadcrumb link. The start of every breadcrumb is *Home* and this may be used to quickly access the Advanced setup page.

Export to Excel

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

Printing

To print a report click on the *Print Report* link in the *Report Tasks* frame. This will open a new browser with the report; no frames are displayed in this browser. The printer options will also appear

Saved Reports

The report may be saved by clicking on *Save Report* on the task bar. Clicking *Save Report* will persist the report. This allows the user to automatically recreate the circumstances that generated the specific report, saving setup time.

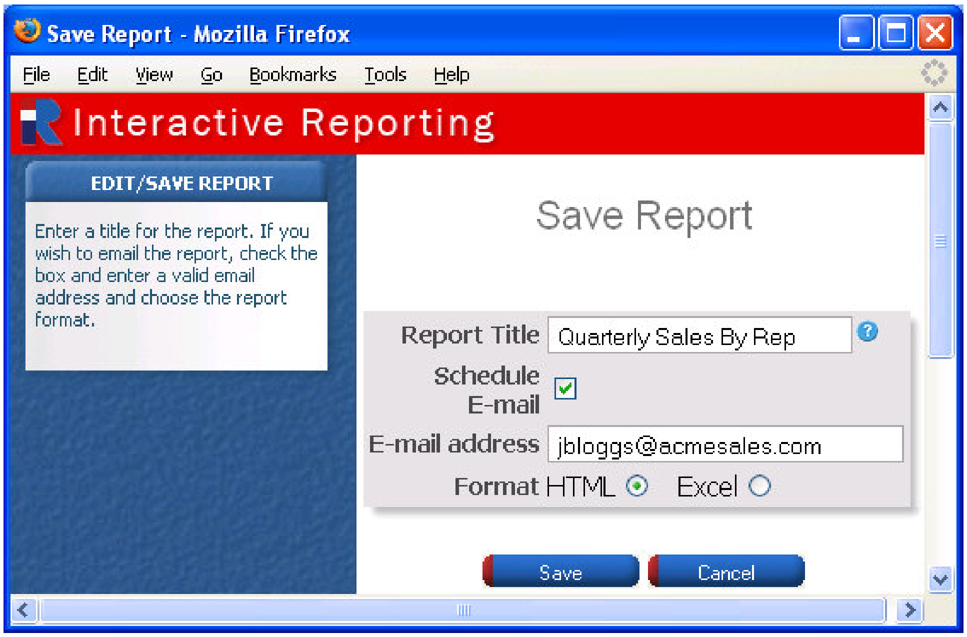


Figure 32

When saving, one must specify a title for the report. Note that the date range type effects the data displayed when a report name is clicked. If the report was saved with an absolute (explicit/customised) date, e.g. 31/12/04, 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 saved report is access the data is updated to reflect yesterdays data.

To view saved reports the user must click on the *View Saved Reports* section that is visible in the *IR Links* task box on the left frame. This will direct the user to the *Saved Reports* page as seen in Figure 33. Here it is see the list of saved reports available to the user. Clicking on the report name generates the associated report. The report *Top Selling Reps* has a tick under the Email heading indicating that this report is emailed to the user on a scheduled basis. To edit the title, or to add/remove emailing options the user simply clicks on the pencil icon under the edit heading. This will direct the user to the screen displayed in Figure 32.

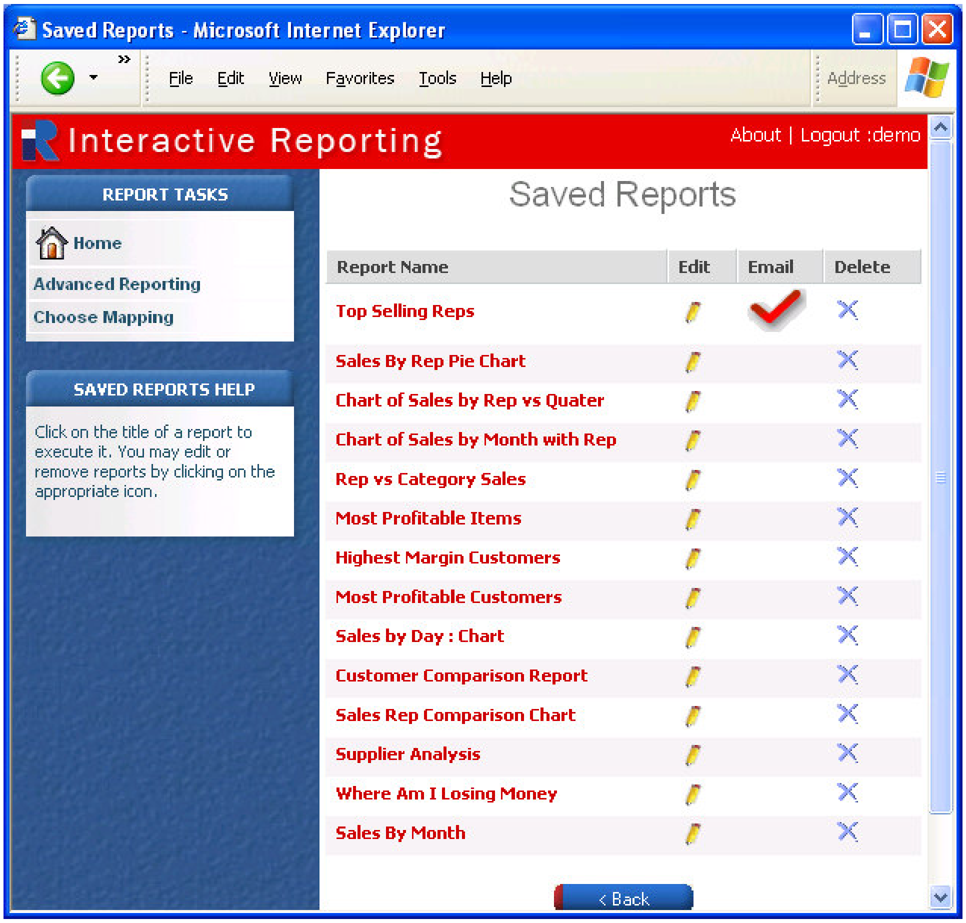


Figure 33

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. The system administrator will set the frequency of these emails, normally once a day. E.g. if the user saves a report with the date range set to yesterday then they will receive an update report of the previous days data every morning. Reports that are saved as reports will have a tick under the *Email* heading in the *View Saved Reports* section. This section is visible in the *IR Links* task box on the left frame.

Please note that the System Administrator must have enabled the IR emailer for this to work. Please see the Administrator Manual in the System Settings section for email setup.

Report Display

The report display options in Figure 31 allow the user to view the data in different formats. For example, users may find it easier to view trends by opting to view the data as a Vertical Bar Chart.

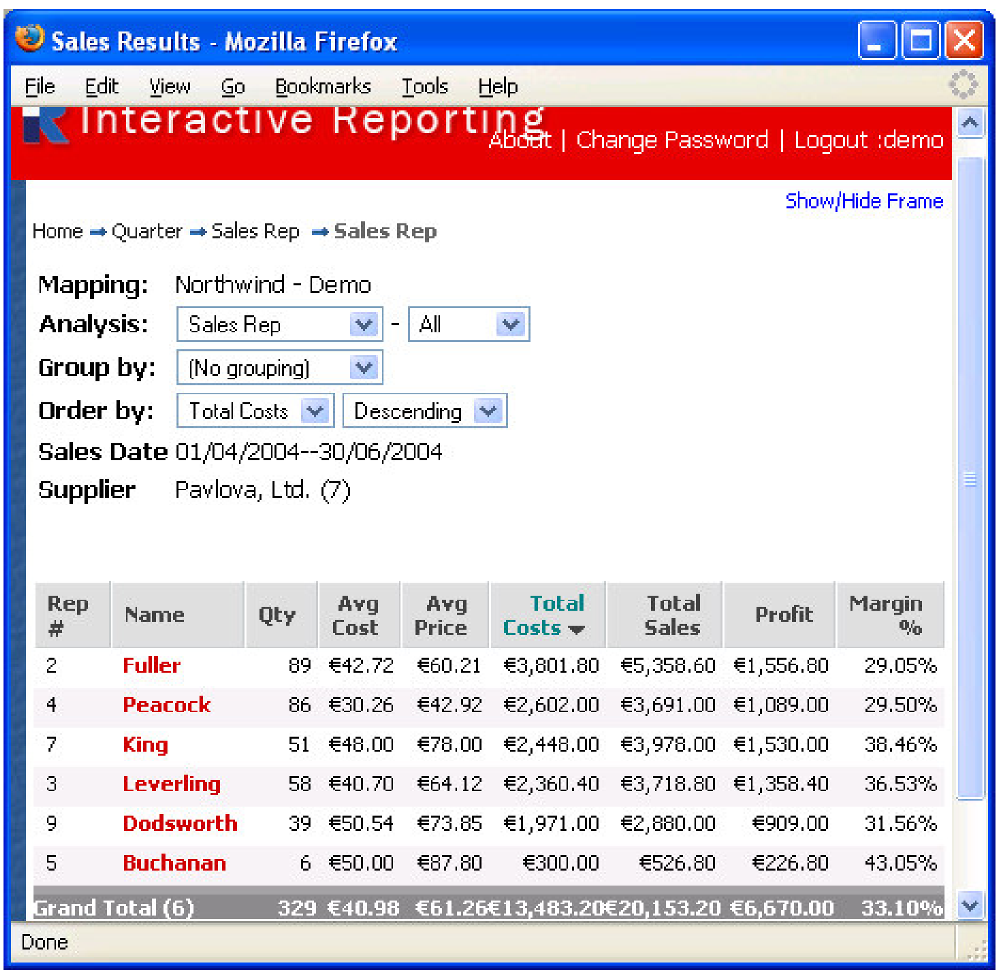
Compare

The sales data displayed in the report may be compared with data from a different date range 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 maybe 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 table shown in Figure 30. 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 34.



Rep #	Name	Qty	Avg Cost	Avg Price	Total Costs	Total Sales	Profit	Margin %
2	Fuller	89	€42.72	€60.21	€3,801.80	€5,358.60	€1,556.80	29.05%
4	Peacock	86	€30.26	€42.92	€2,602.00	€3,691.00	€1,089.00	29.50%
7	King	51	€48.00	€78.00	€2,448.00	€3,978.00	€1,530.00	38.46%
3	Leverling	58	€40.70	€64.12	€2,360.40	€3,718.80	€1,358.40	36.53%
9	Dodsworth	39	€50.54	€73.85	€1,971.00	€2,880.00	€909.00	31.56%
5	Buchanan	6	€50.00	€87.80	€300.00	€526.80	€226.80	43.05%
Grand Total (6)		329	€40.98	€61.26	€13,483.20	€20,153.20	€6,670.00	33.10%

Figure 34

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 total cost. 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 total cost (in this case Fuller) shows that his/her total costs where obtained from the sale of seafood and confections:

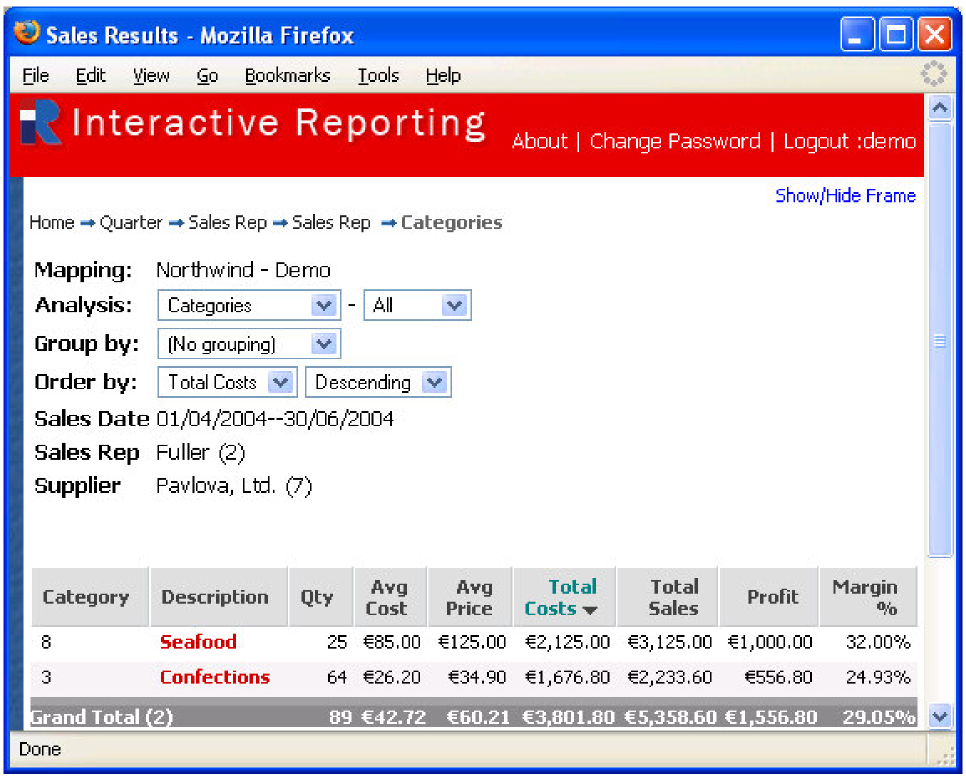


Figure 35

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

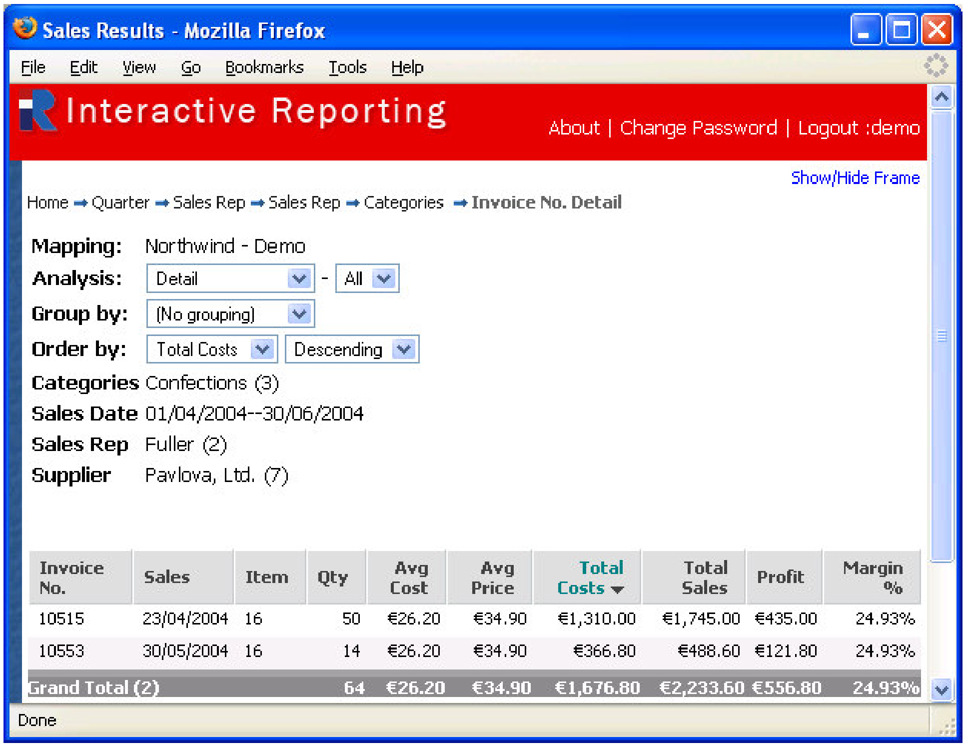


Figure 36

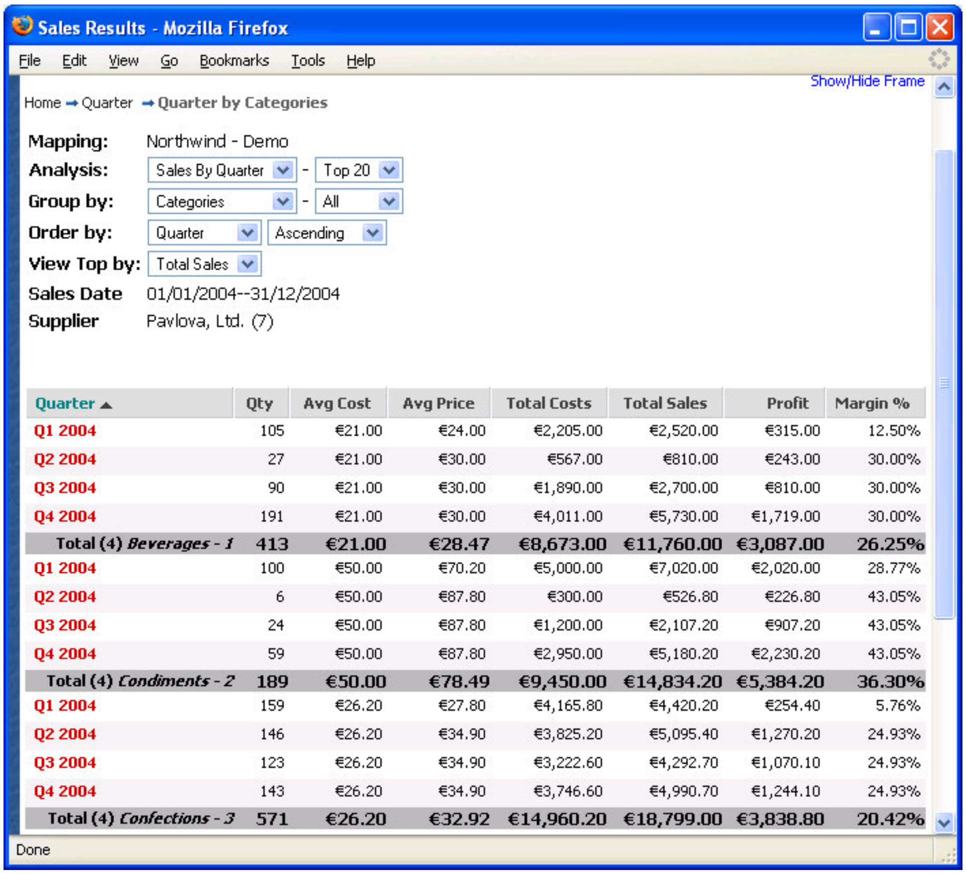
We see that Fuller's confections sales for Q2, 2004, supplied by Pavlova Ltd consisted of two batches, from invoice 10515 and invoice 10553.

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 Interactive Reporting screen, simply click on your browser's *back* button, the *Home* link at the top of the page or the *Advanced Reporting* on the task bar.

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 in Figure 30 and grouping by '*Categories*' on the '*Sales by Quarter*' report gives us:



Quarter ▲	Qty	Avg Cost	Avg Price	Total Costs	Total Sales	Profit	Margin %
Q1 2004	105	€21.00	€24.00	€2,205.00	€2,520.00	€315.00	12.50%
Q2 2004	27	€21.00	€30.00	€567.00	€810.00	€243.00	30.00%
Q3 2004	90	€21.00	€30.00	€1,890.00	€2,700.00	€810.00	30.00%
Q4 2004	191	€21.00	€30.00	€4,011.00	€5,730.00	€1,719.00	30.00%
Total (4) *Beverages - 1*	**413**	**€21.00**	**€28.47**	**€8,673.00**	**€11,760.00**	**€3,087.00**	**26.25%**
Q1 2004	100	€50.00	€70.20	€5,000.00	€7,020.00	€2,020.00	28.77%
Q2 2004	6	€50.00	€87.80	€300.00	€526.80	€226.80	43.05%
Q3 2004	24	€50.00	€87.80	€1,200.00	€2,107.20	€907.20	43.05%
Q4 2004	59	€50.00	€87.80	€2,950.00	€5,180.20	€2,230.20	43.05%
Total (4) *Condiments - 2*	**189**	**€50.00**	**€78.49**	**€9,450.00**	**€14,834.20**	**€5,384.20**	**36.30%**
Q1 2004	159	€26.20	€27.80	€4,165.80	€4,420.20	€254.40	5.76%
Q2 2004	146	€26.20	€34.90	€3,825.20	€5,095.40	€1,270.20	24.93%
Q3 2004	123	€26.20	€34.90	€3,222.60	€4,292.70	€1,070.10	24.93%
Q4 2004	143	€26.20	€34.90	€3,746.60	€4,990.70	€1,244.10	24.93%
Total (4) *Confections - 3*	**571**	**€26.20**	**€32.92**	**€14,960.20**	**€18,799.00**	**€3,838.80**	**20.42%**

Figure 37

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 30 to recreate.), clicking on 'Pivot' instead of 'Analyze' generates the following report:

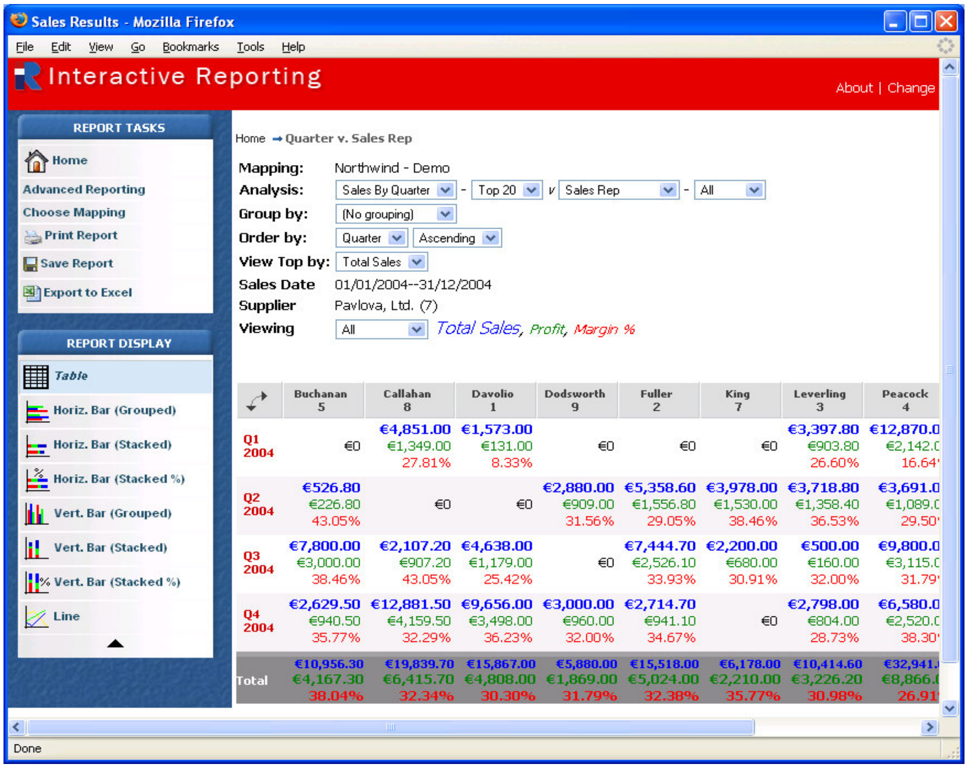


Figure 38

Switch rows/columns

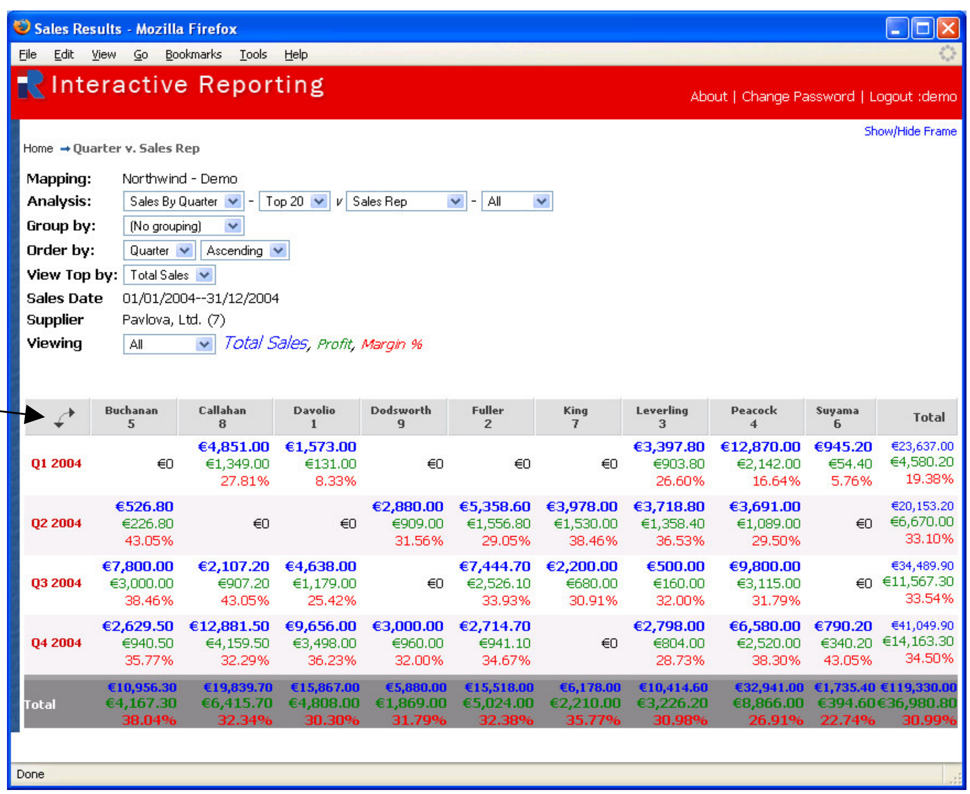


Figure 39

As the Sales Rep continues to extend to the right side of the page, clicking on the *Hide Frame* options allows the data to be viewed more easily as can be seen in Figure 38.

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' drop-down) 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, 2004 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 that is filtered to include only the relevant dates:

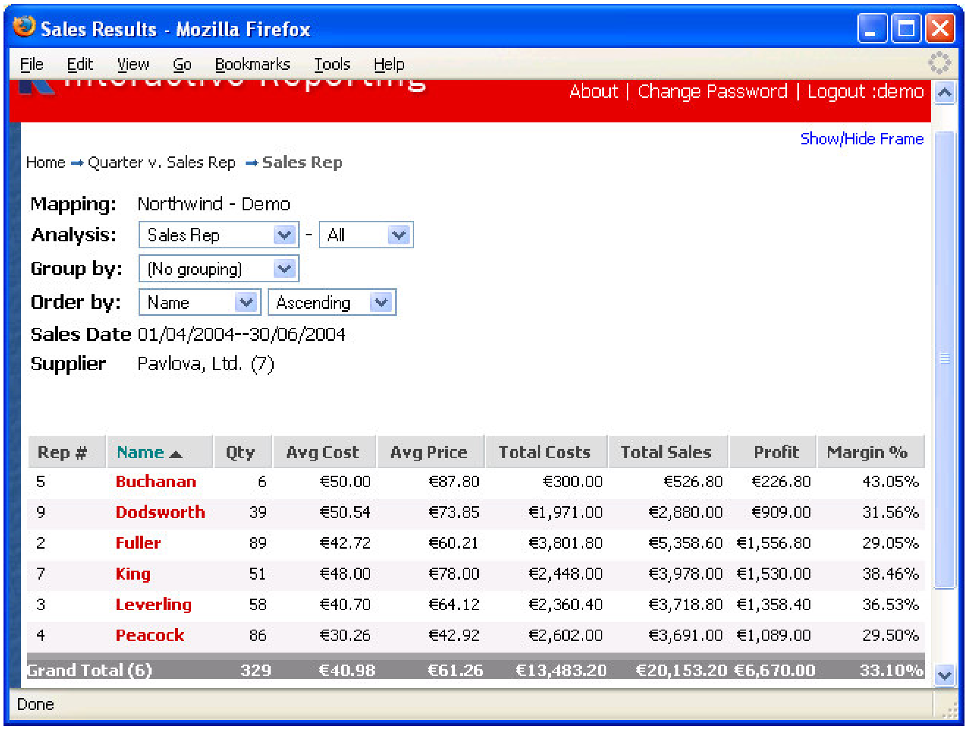


Figure 40

Clicking on the 'Leverling' column heading (3) in the pivot report (Figure 38) produces a report, which is filtered to include only those sales that were made by Leverling (and, of course, supplied by Pavlova Ltd):

Figure 41

Clicking on the sales figure of $12,881.50 in the pivot report (Callahan's sales for the fourth quarter of 2004 in Figure 38) shows how Interactive Reporting arrived at this figure for sales volume:

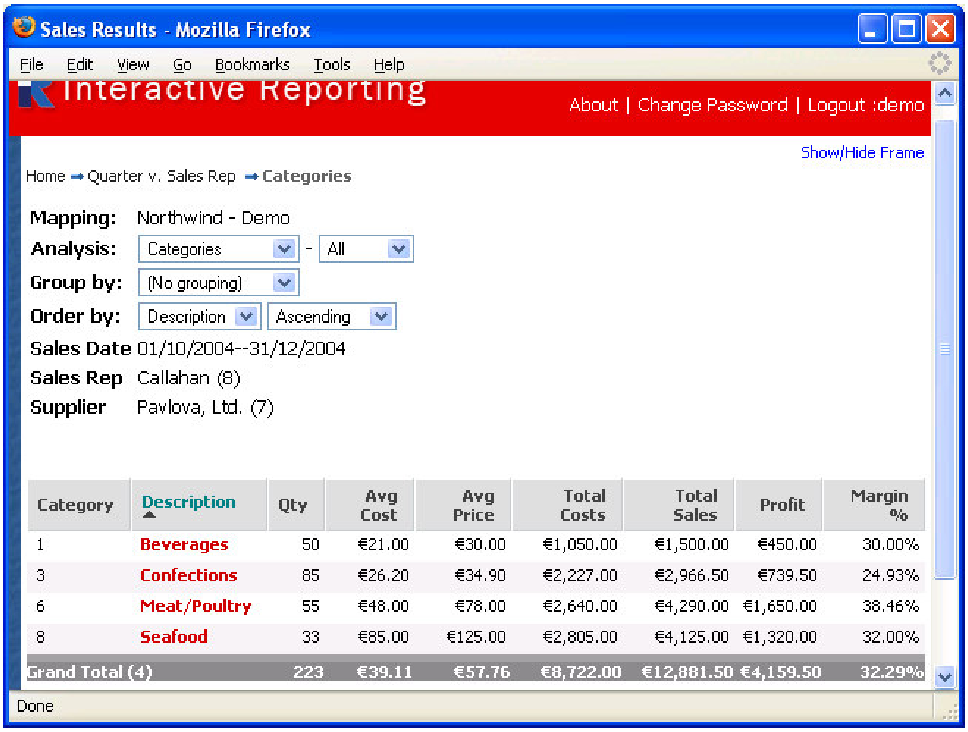


Figure 42

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 task bar links, be saved, exported to Excel or charted.

Pivot Task Frame

The *Report Display* section of the Pivot Task frame differs from the *Analyze* task frame in that there are a number of extra display options available. Data may be charted and displayed in both stacked and group format.

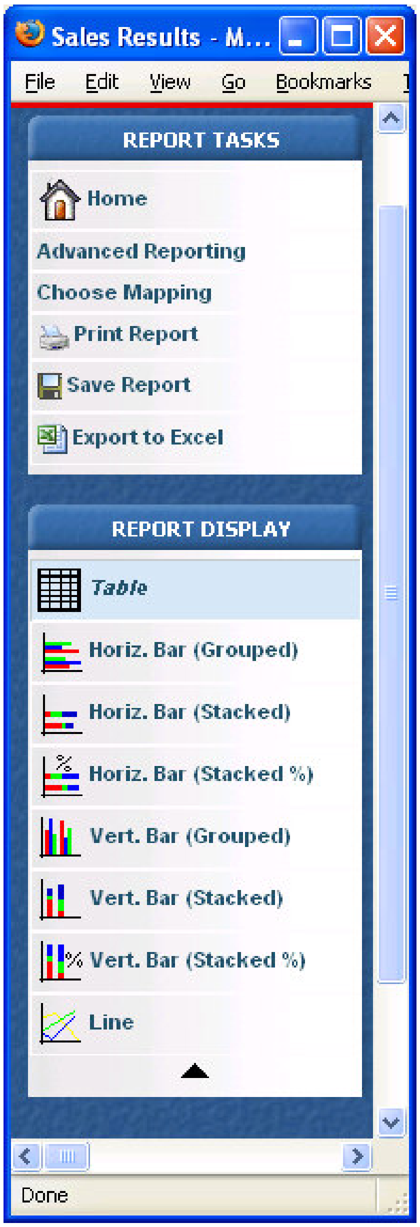


Figure 43

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):

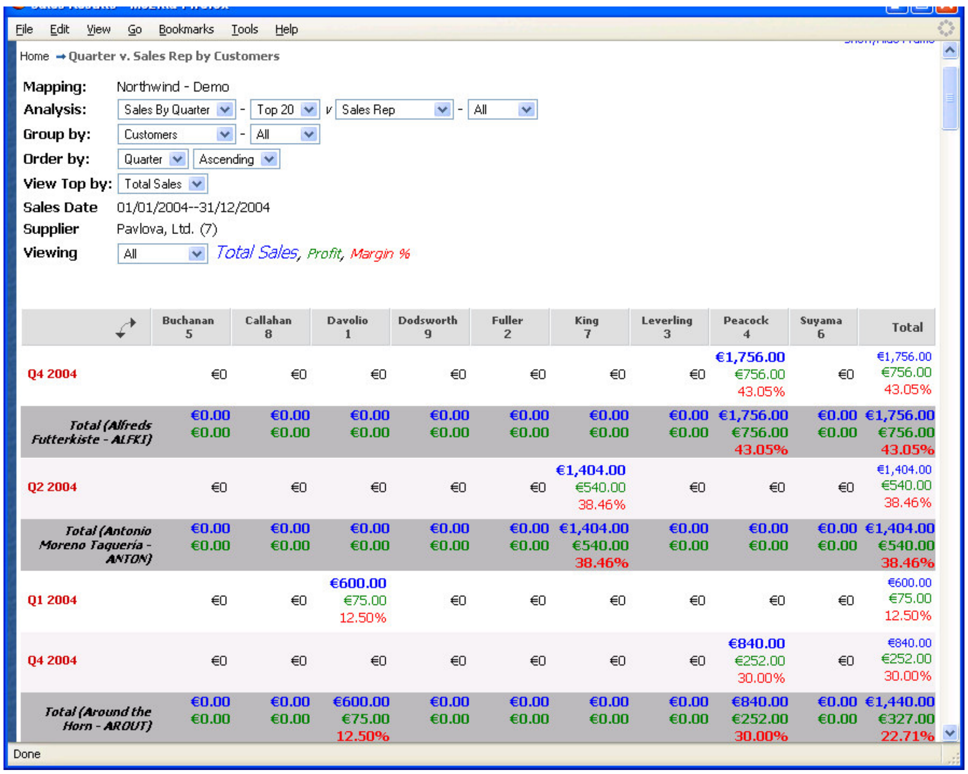


Figure 44

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 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 in Figure 30, clicking on 'Chart' generates the following horizontal bar-chart of sales volume:

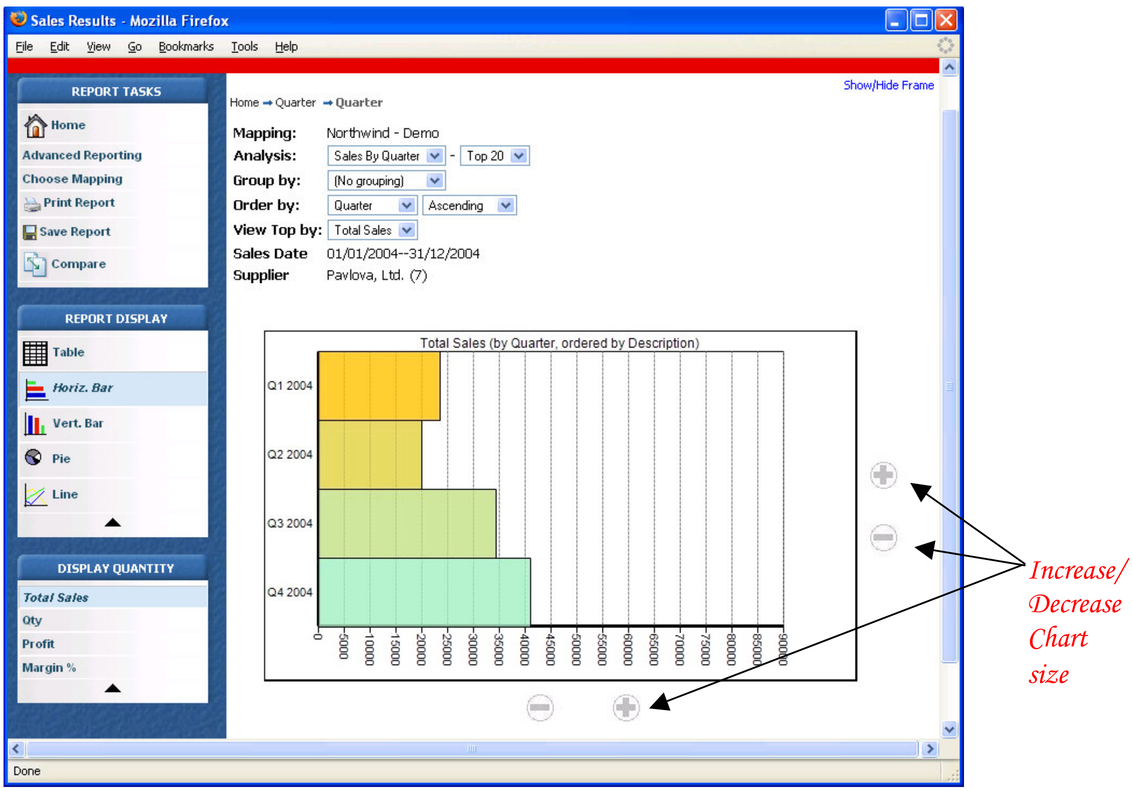


Figure 45

One may choose the variable to be charted by selecting, from the *display quantity* on the task frame, 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 *Report Display* on the Task Frame on the right of the chart. As before, one can save as a report by clicking on *Save Report* .

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 allows 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, etc.

Just as tables allow drill-down, so do charts. For example, clicking on the bar associated with the 'Q4, 2004' volume, will give a bar-chart of each sales rep.'s performance during that quarter (similarly to zooming-in with the tabular 'Analyze' report):

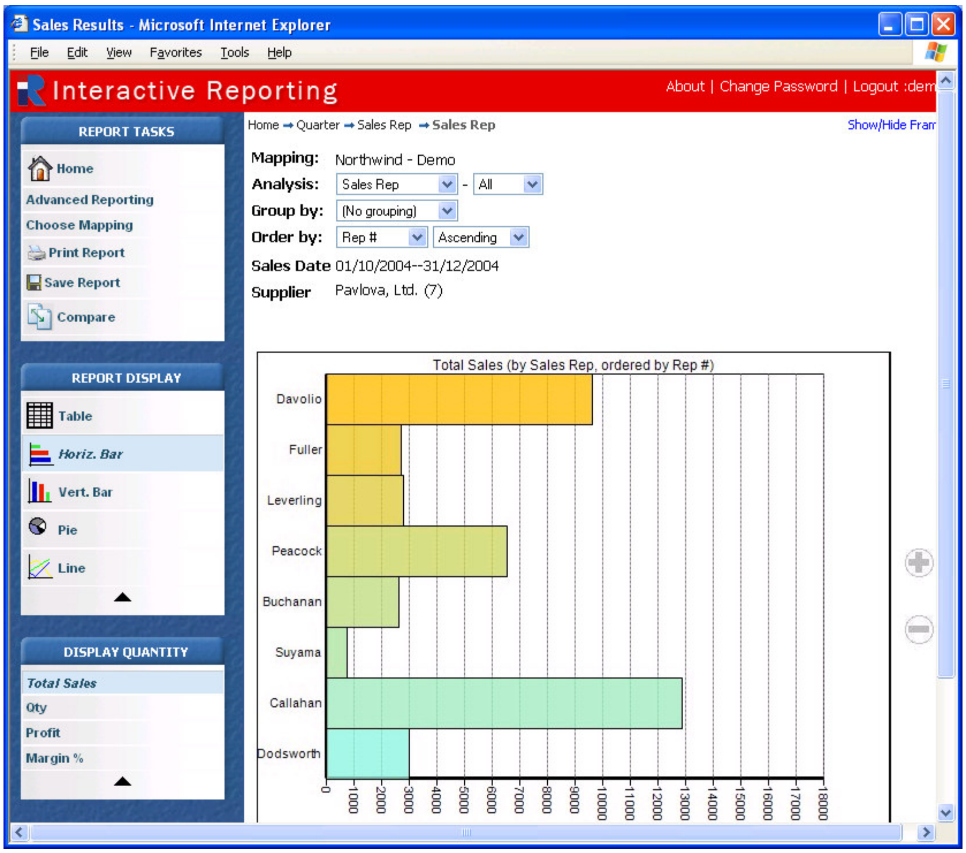


Figure 46

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 in Figure 45 is:

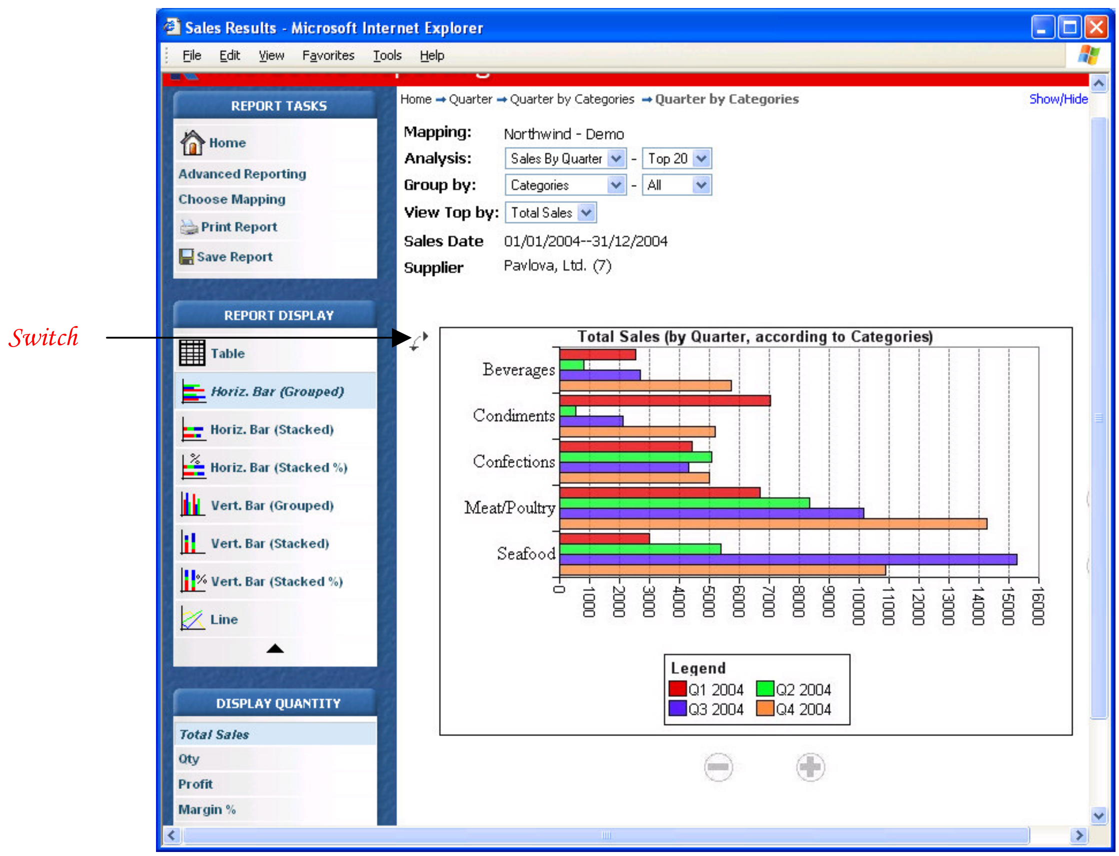


Figure 47

The stacked version of this is:

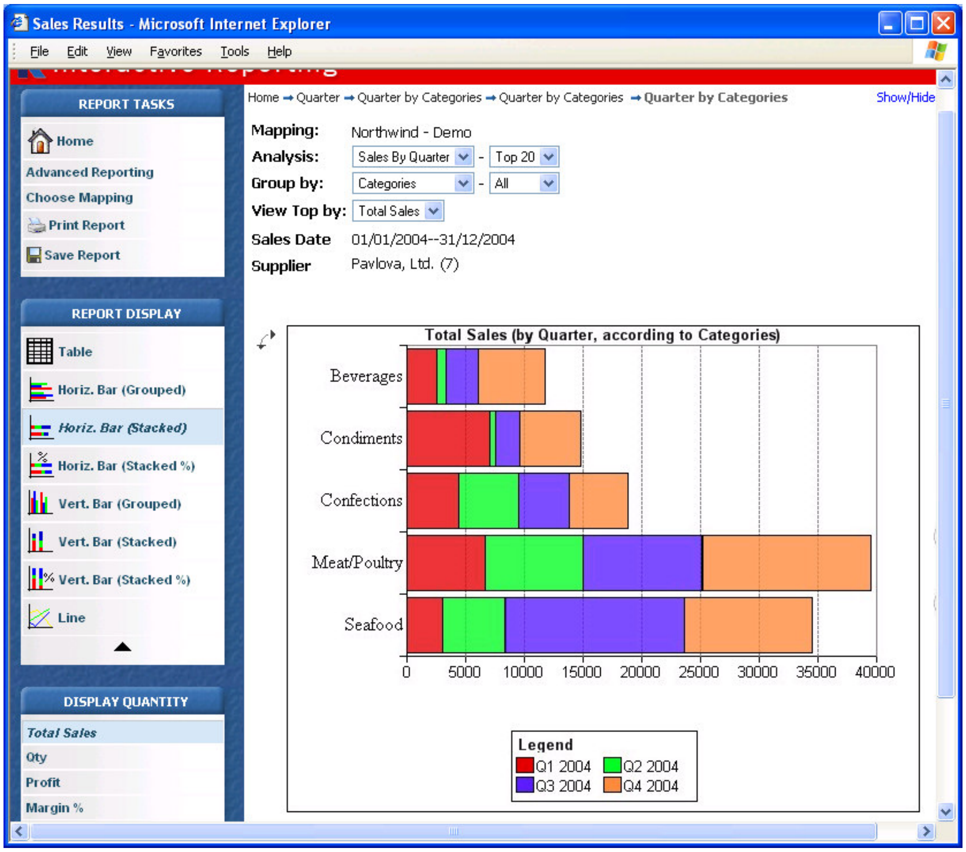


Figure 48

There are several ways in which the data may be grouped within the chart. These correspond to the description in the task frame to the 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 2004 Seafood (the purple) cell in the above chart:

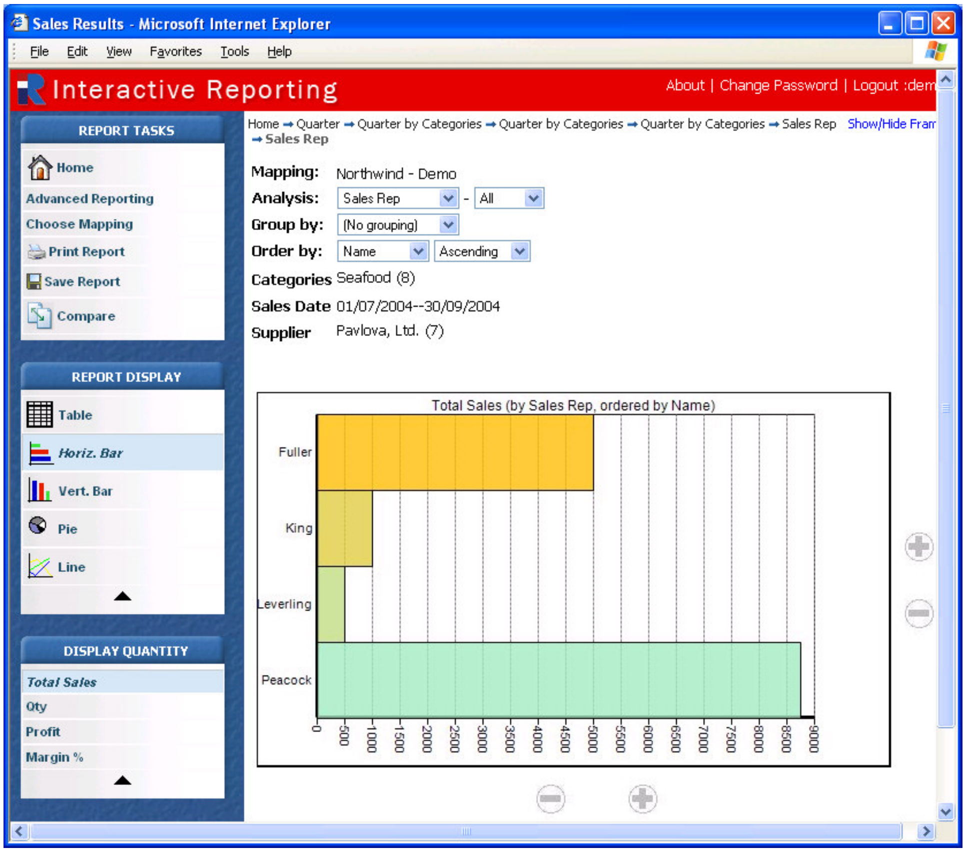


Figure 49

We can see that sales of seafood made during Q3 2004 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.

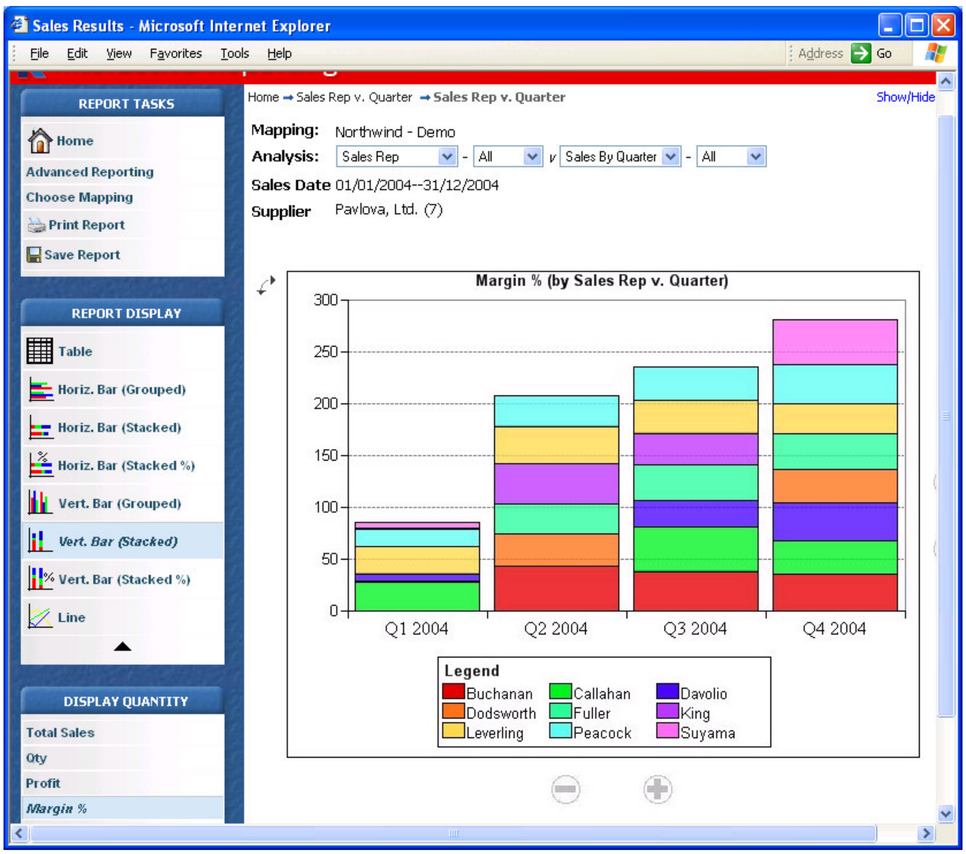


Figure 50

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 2004 sales of Davolio of Figure 50:

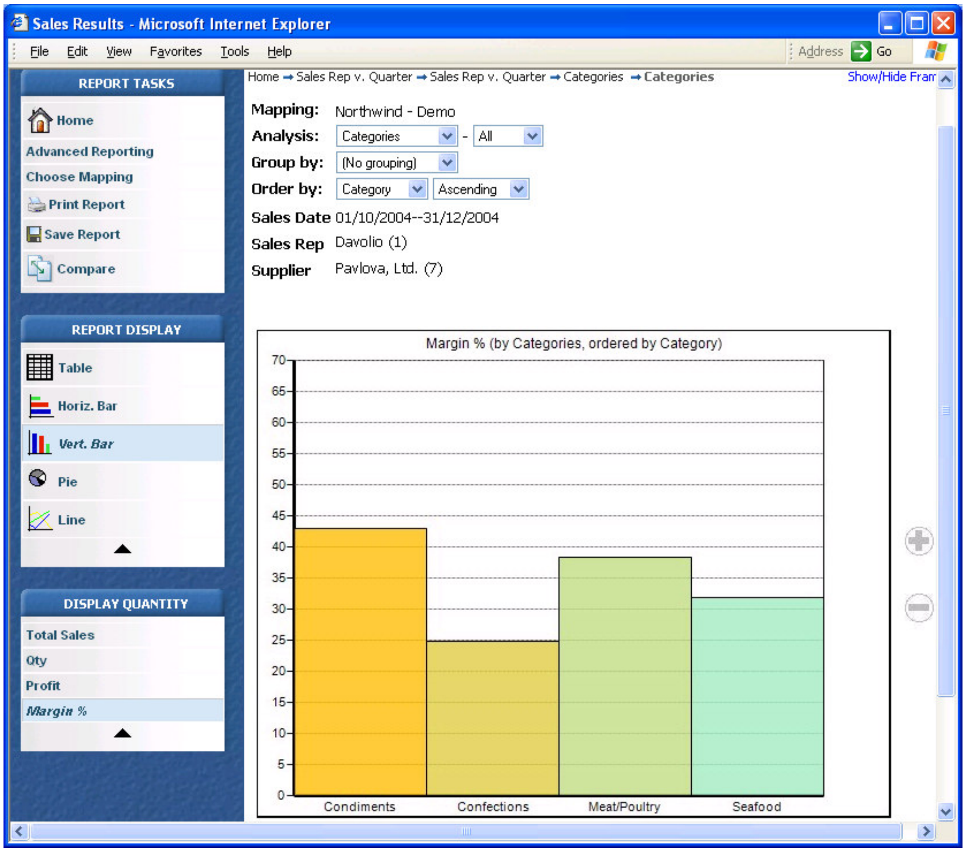


Figure 51

Comparison Reports

One of 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:

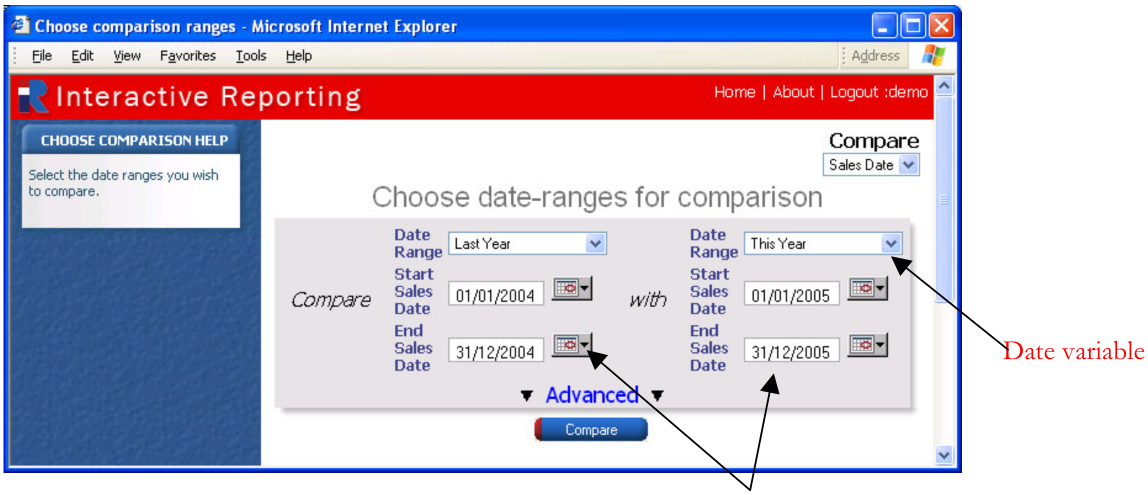


Figure 52

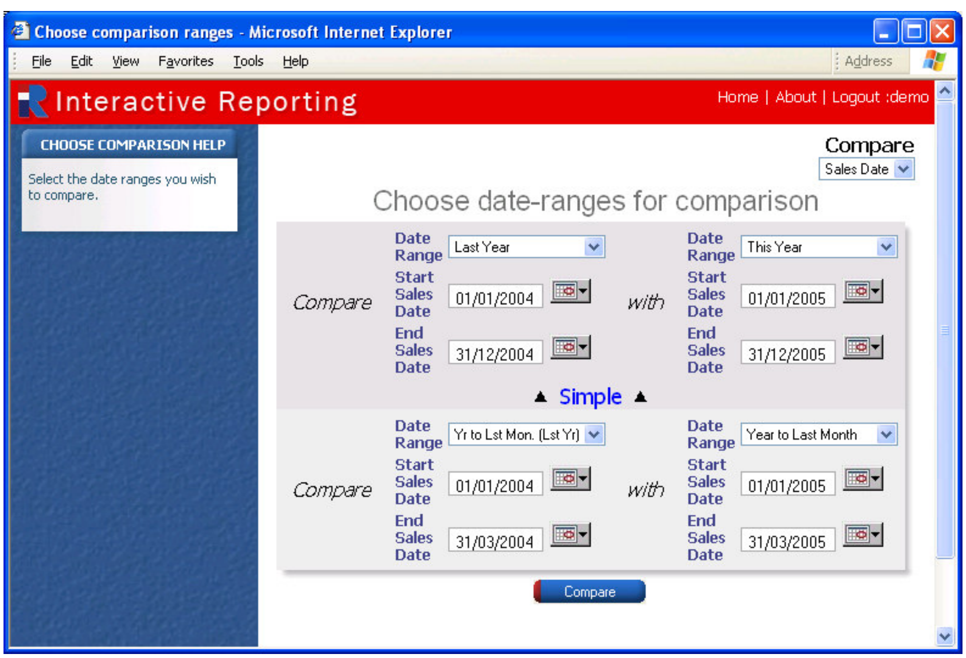


Figure 53

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

In the above example of Figure 52, the choice that has been made is to compare sales data with invoice dates from 2004 with data from 2005. Clicking on the 'Compare' button for the Simple Report (Figure 52) will give:

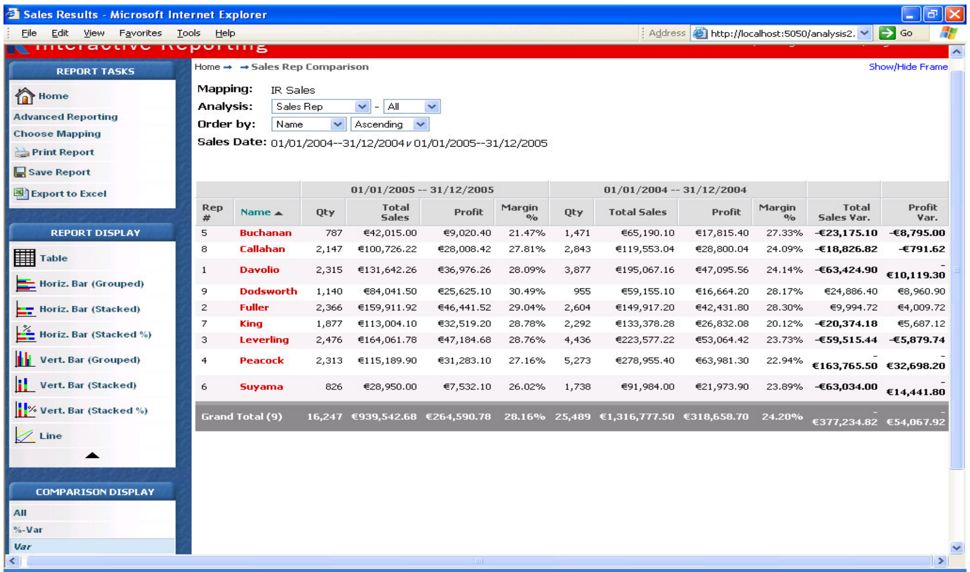


Figure 54

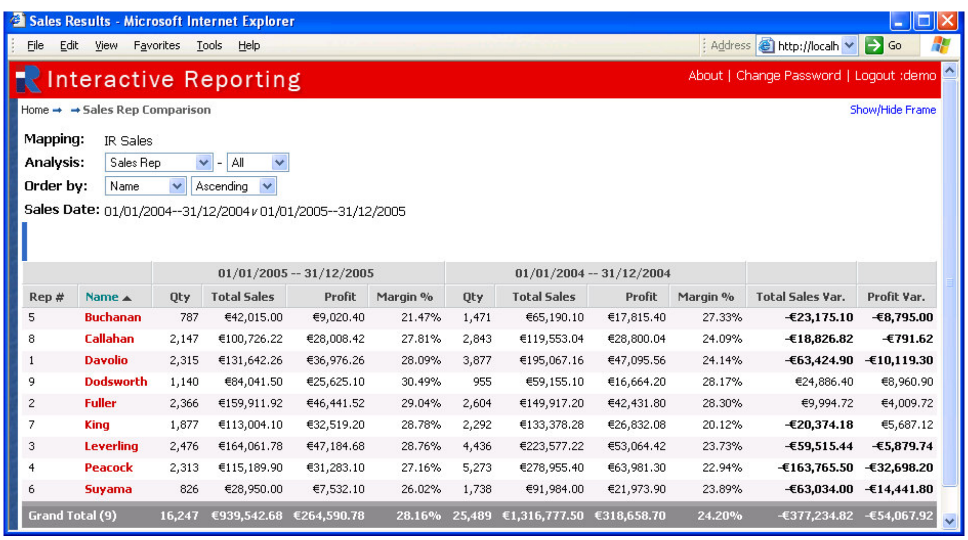
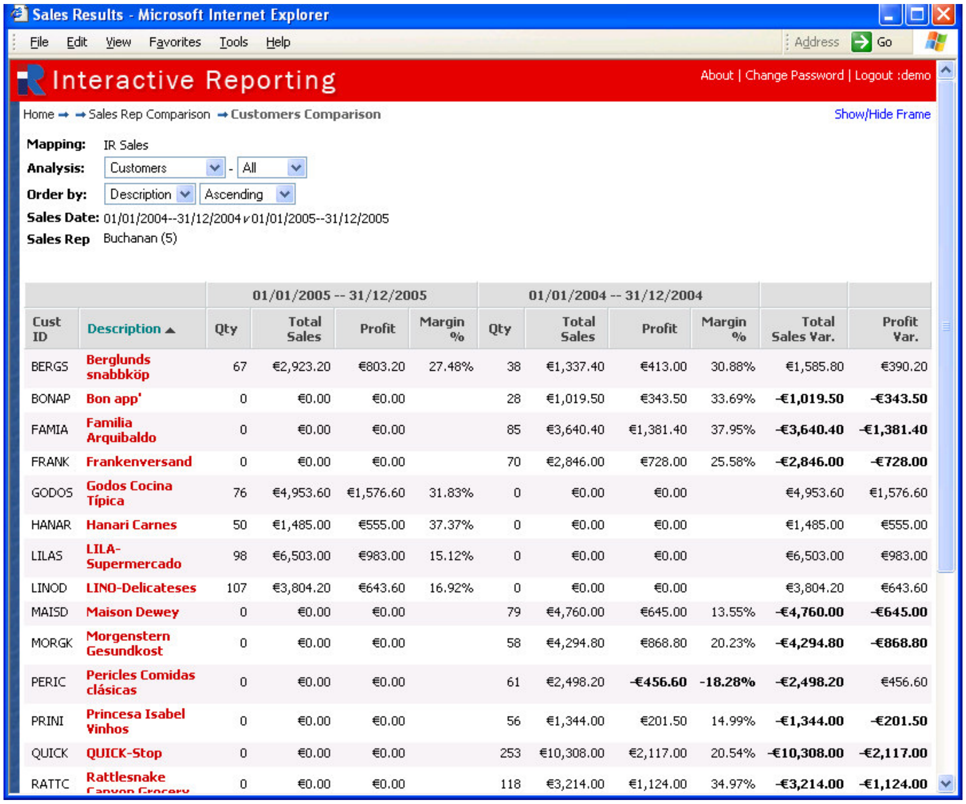


Figure 55

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:



		01/01/2005 -- 31/12/2005				01/01/2004 -- 31/12/2004					
Cust ID	Description ▲	Qty	Total Sales	Profit	Margin %	Qty	Total Sales	Profit	Margin %	Total Sales Var.	Profit Var.
BERGS	Berglunds snabbköp	67	€2,923.20	€803.20	27.48%	38	€1,337.40	€413.00	30.88%	€1,585.80	€390.20
BONAP	Bon app'	0	€0.00	€0.00		28	€1,019.50	€343.50	33.69%	**-€1,019.50**	**-€343.50**
FAMIA	Familia Arquibaldo	0	€0.00	€0.00		85	€3,640.40	€1,381.40	37.95%	**-€3,640.40**	**-€1,381.40**
FRANK	Frankenversand	0	€0.00	€0.00		70	€2,846.00	€728.00	25.58%	**-€2,846.00**	**-€728.00**
GODOS	Godos Cocina Típica	76	€4,953.60	€1,576.60	31.83%	0	€0.00	€0.00		€4,953.60	€1,576.60
HANAR	Hanari Carnes	50	€1,485.00	€555.00	37.37%	0	€0.00	€0.00		€1,485.00	€555.00
LILAS	LILA-Supermercado	98	€6,503.00	€983.00	15.12%	0	€0.00	€0.00		€6,503.00	€983.00
LINOD	LINO-Delicateses	107	€3,804.20	€643.60	16.92%	0	€0.00	€0.00		€3,804.20	€643.60
MAISD	Maison Dewey	0	€0.00	€0.00		79	€4,760.00	€645.00	13.55%	**-€4,760.00**	**-€645.00**
MORGK	Morgenstern Gesundkost	0	€0.00	€0.00		58	€4,294.80	€868.80	20.23%	**-€4,294.80**	**-€868.80**
PERIC	Pericles Comidas clásicas	0	€0.00	€0.00		61	€2,498.20	**-€456.60**	**-18.28%**	**-€2,498.20**	€456.60
PRINI	Princesa Isabel Vinhos	0	€0.00	€0.00		56	€1,344.00	€201.50	14.99%	**-€1,344.00**	**-€201.50**
QUICK	QUICK-Stop	0	€0.00	€0.00		253	€10,308.00	€2,117.00	20.54%	**-€10,308.00**	**-€2,117.00**
RATTC	Rattlesnake Canyon Grocery	0	€0.00	€0.00		118	€3,214.00	€1,124.00	34.97%	**-€3,214.00**	**-€1,124.00**

Figure 56

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 2004 and 2005 is:

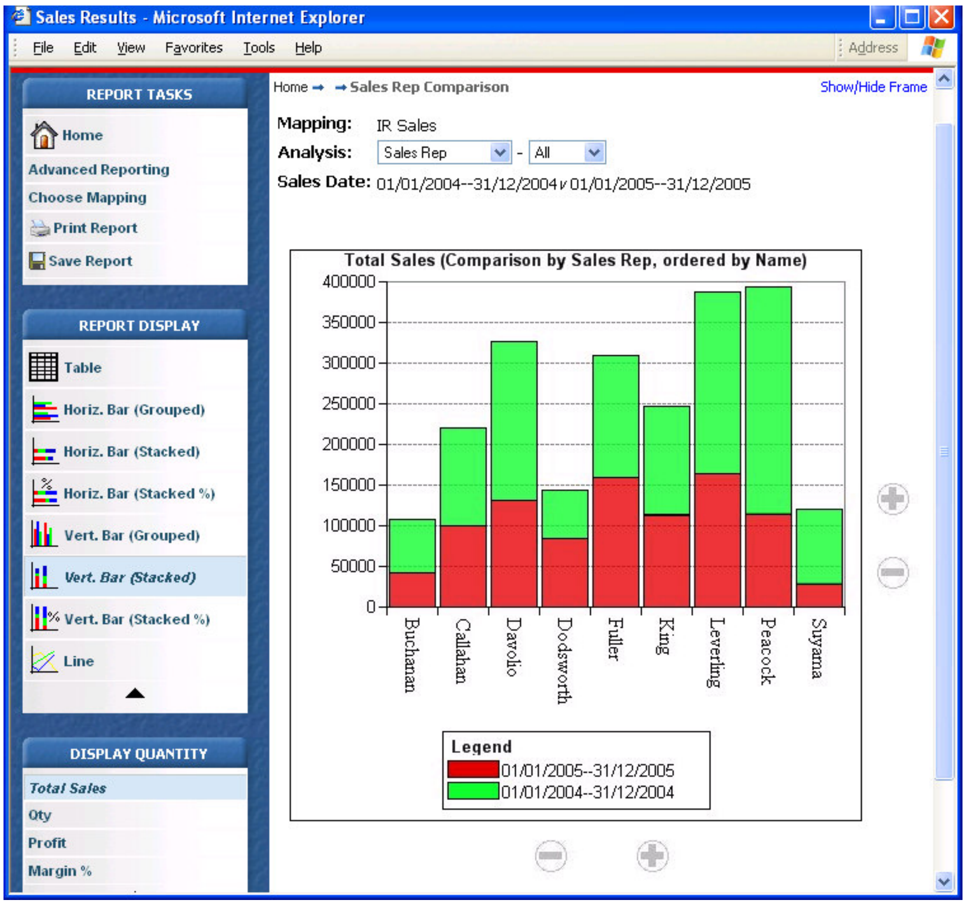


Figure 31

The quantity being compared may be changed by choosing a different quantity in the *Display Quantity* section of the Task Frame. 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.

Chapter

4

Getting Help

What to do if you're lost...

For 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.

Alternatively, 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