



dun & bradstreet

Market Insight
Excelsior 2 Module
Training Manual v1.1

D&B Market Insight

Excelsior 2 Module

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Introduction to Excelsior

Market Insight Excelsior provides a reporting environment which combines the analytical power of Market Insight to process huge marketing databases with the flexibility of Excel to manipulate and present data driven results.

Market Insight Excelsior has two licensing levels:

- **Excelsior Developer** - small number of individuals who actually assemble the Excelsior reports in tandem with Market Insight
- **Excelsior Viewer** - larger number of individuals who can view and refresh the Excelsior reports with the latest results, but cannot alter the structure of the report

An Excelsior report is based on a number of embedded **Market Insight Objects** (e.g. a cube), which are linked to the Market Insight system and can be refreshed with the latest results.

Typically the Developer would use Excel functionality (e.g. formulae and charts) to manipulate the raw data and present it in an attractive format for the Viewers.

There is the opportunity to incorporate external data within the Excelsior workbook, for example, using some budget or target figures.

The Excelsior Report maintains a link to the Market Insight system so that the report can be refreshed to reflect the latest data.

The link between Market Insight and Excelsior is held as part of the plugin to Excel. Therefore when the report is saved it can be shared as a snapshot of the results, as there is no longer a link with the Market Insight system. An unlimited number of individuals throughout the business can use Excel, without the Excelsior plugin to view a report in this way.

	Report Functionality			Market Insight Requirements	
	Create	Refresh	View	Excelsior License	Market Insight Access Required?
Excelsior Developer	✓	✓	✓	Full	Yes
Excelsior Viewer	✗	✓	✓	Partial	Yes
Excel User	✗	✗	✓	None	No

The Example Data

The structure of your Market Insight system can vary. The elements shown here are typical – each Site may be simply flagged with Customer data or can have many related Contacts. A Site may also have many matched Customer Accounts, and / or many other types of related data (such as one or more URLs, UCC Filings and Corporate Family Linkage Plus entries, etc.) The data loaded for each matched Customer Account is configurable – for example you may have multiple Transactions or Divisional Summaries or Product Summaries etc.

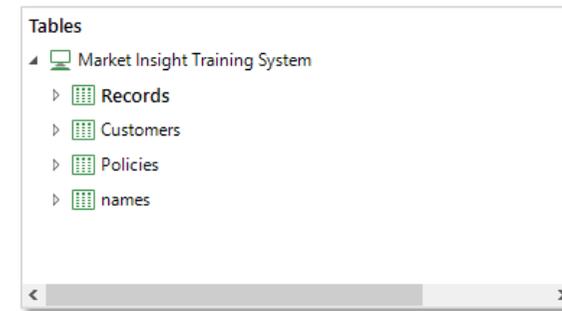
The detail present on each table of data depends on the Market Insight Administrator. The data is arranged into folders to assist the user to navigate and find data items.

The structure used in the Training System, illustrated in this manual, uses a simple structure that has sample customer data and contact tables that are linked to a Sites table and these sites are in turn linked to the Global Ultimate Sites table (e.g. worldwide headquarters).

 **N.B.** The counts and displays in this manual may well differ to the results you obtain due to the changing nature of the data.

Using This Manual

This manual is designed to act as a self-directed training course using the data described above or as a reference guide. Therefore you will not necessarily see the same figures as shown in this manual when working through the examples.



Training System Table Level Structure

 **N.B.** This manual is not designed to provide Excel training.

How to Login

Opening a Report

As a Developer or Viewer you can open an existing Excelsior report by opening it up through a version of Excel that has the Excelsior plugin installed. As a Developer you can create a new Excelsior report by logging in to the Excelsior plugin of Excel:

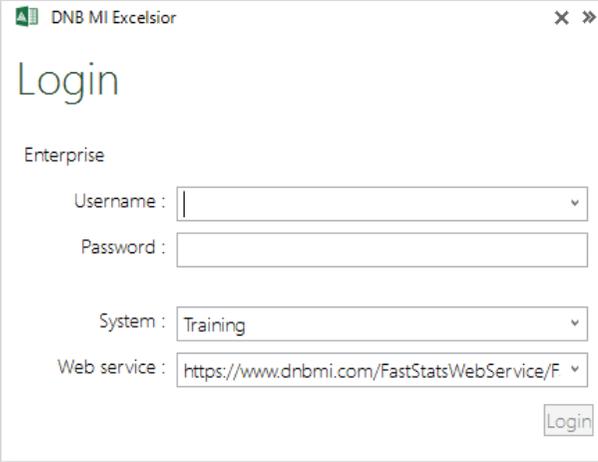
- Open **Excel** and click on the **Market Insight Excelsior** ribbon bar tab and then click on the **Show Task Pane** button

Connecting to the Market Insight System

The Excelsior Report is essentially an Excel workbook, with links to a Market Insight system in order to retrieve the latest data. The contents of the report when opening it will be a snapshot of the results when the report was last saved. A connection to the Market Insight system is required in order to refresh the results. There is a task pane on the right hand side of the workbook which connects the Excelsior report to the Market Insight system on which it is based.

Remote Login

Typically multiple users will view Excelsior reports that connect to a Market Insight system stored remotely. Your Market Insight Administrator will be able to set you up with an Excelsior Username and Password and provide you with the login details of the System name and Web Service address. This username will determine your level of access as a Developer or a Viewer.



Enterprise Login

Viewing an Existing Excelsior Report

To view an Excelsior report you have been sent (or created yourself) as an Excel file, you will need to save it on your local hard drive.

An Excelsior Viewer is able to log in to the Market Insight system and refresh the contents of the report at any time.

- From the **File** menu of **Excel** locate the **.xlsm** file that you wish to open (you may not have one yet)
- Open the file

Viewing the Report

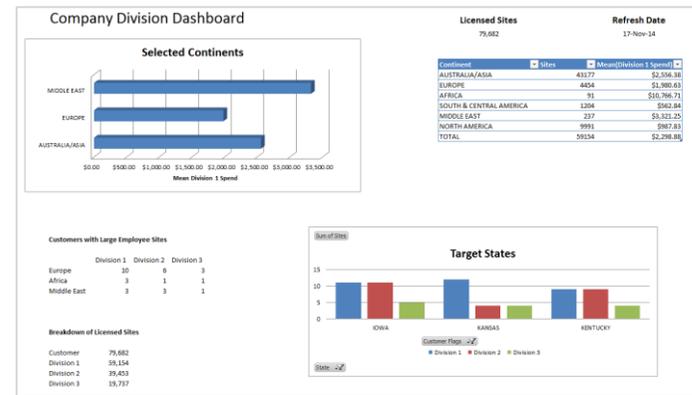
The contents of the report when opened will be a snapshot of the results when the report was last saved.

The report layout and display will be dependent upon the Excel skills of the Excelsior Developer. The aim will be to present clearly information found or derived from Market Insight. How these Market Insight objects are created and selected for use in Excelsior is shown later in this manual.

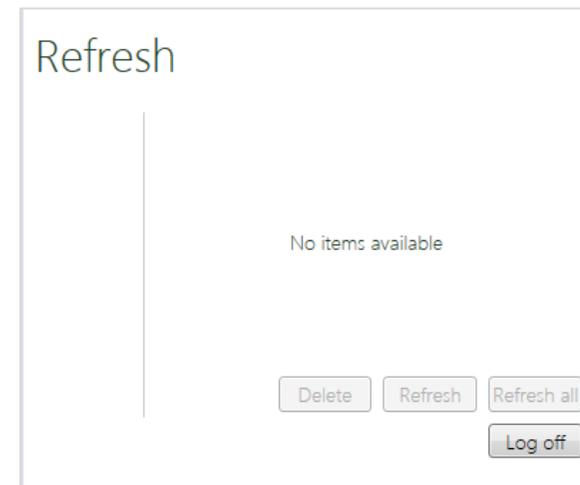
An Excelsior Viewer has two main options when using Excelsior:

- **Refresh** – to retrieve the current figures
- **Save** – to obtain a standalone copy of the report

The final option is to Log off from Excelsior which breaks the connection with the Market Insight system with which the report was generated.



Refreshed Excelsior Report



Refresh & Log off Buttons

Refresh the Report

You are already aware that your Excelsior report is a snapshot in time. Therefore when the Market Insight database has been refreshed you will want to see this reflected in your report.

To achieve this action:

- Click the **Refresh all** button

The various Market Insight objects used within the report will be listed in the Refresh window. As the refresh takes place you will notice the report display change as new figures are inserted and graphs updated.

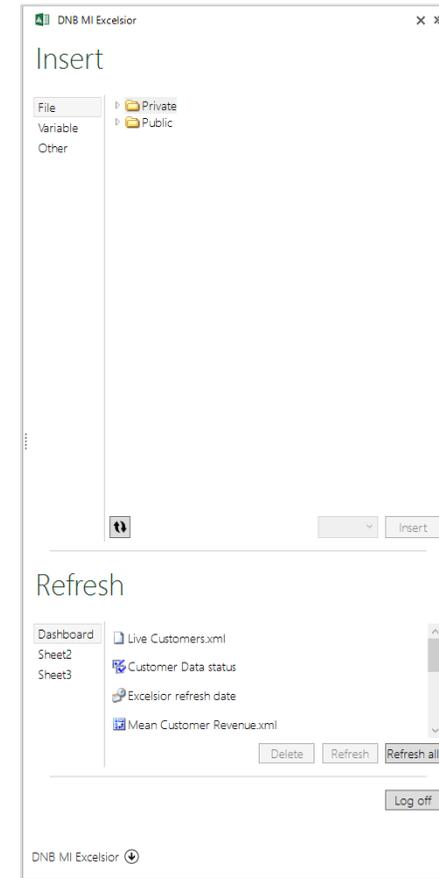
Logoff

To disconnect from the Market Insight system:

- Click the **Log off** button

The Excelsior Report will remain open so that normal Excel functionality can still be used.

The report can be saved (as a snapshot in time) and shared with Excel users who do not have the Excelsior plugin.



Excelsior Panel

Developing an Excelsior Report

To be able to create an Excelsior Report you will need an Excelsior Developer license. The following information gives you an overview of what is available to an Excelsior Developer.

The Excelsior panel is split into 2 sections, Insert and Refresh. The Insert section gives the Developer access to the data in the associated Market Insight system.

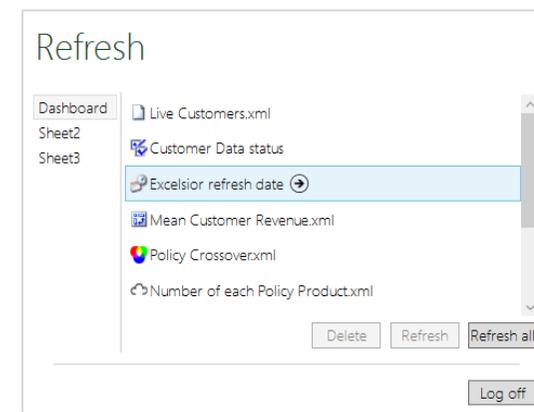
- File** This option gives you access to the My Market Insight Folders of your Market Insight system. Here you can locate any saved items you need e.g. cube, venn etc.
- Variable** This option gives you access to the System Explorer of your Market Insight system. Here you can locate any variables you wish to gain access.
- Other** This option allows you to insert 2 useful dates into your report; the refresh date of your report and the date of system build.



Insert Section of Excelsior Panel

The Refresh section allows you to refresh, delete and amend options on the items in your report. The label to the left of the vertical line indicates the sheet of your workbook (even those that are hidden). The items listed to the right of the vertical line relate to the sheet selected.

- Delete** Clicking on this button will delete the highlighted item. You will also need to delete the actual display on the report.
- Refresh** Clicking on this button will refresh the display for the highlighted item.
- Refresh All** Clicking on this button will refresh all the items, on all the sheets of the report.
- Log off** Clicking this button will sever the link between the Excelsior plugin and the Market Insight system.



Refresh Section of Excelsior Panel

Starting a new Excelsior Report

To create a new Excelsior Report you will need to open a new blank workbook.

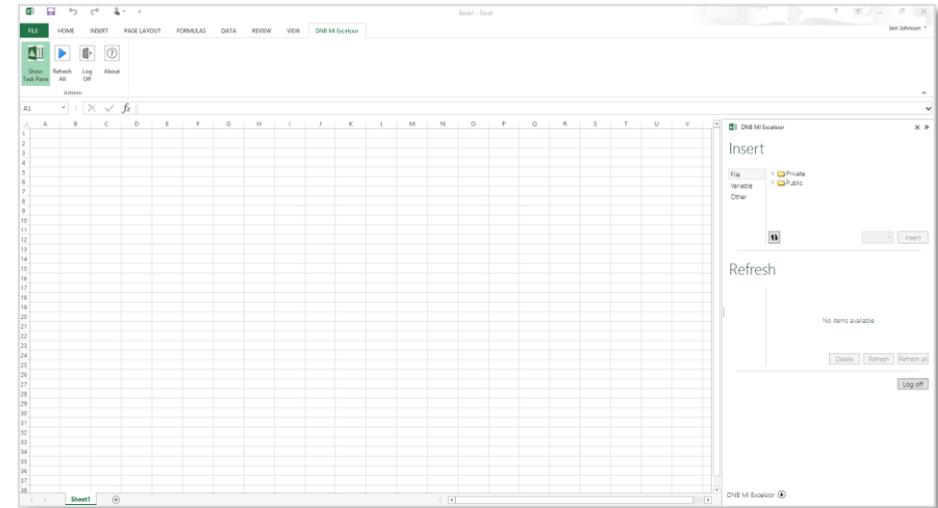
- From the **File** menu select **New → Blank workbook** and then click **Create**

The Excelsior Developer can use the powerful analysis tools available in Market Insight to prepare the report.

- In Market Insight you can create any of the Market Insight Objects listed opposite and save them in the My Market Insight Folders. (These objects will need to be saved in the Public folders if the Excelsior report is to be accessed by multiple users).
- In Excelsior, the saved objects are visible in the File section of the Insert panel.
- You can select a cell in a worksheet where the object is to be inserted, and double-click on the reportable or use the Insert button.

The latest results from the Market Insight system are inserted on to the selected worksheet. Excel functionality can then be used to manipulate and present the results inserted from the Market Insight system. The results can be updated at any time keeping the reports up to date with the latest data in the system.

The Market Insight objects shown opposite can be embedded in an Excelsior report:



New Excelsior Window

- Cubes/Trees
- Word Clouds
- Venn diagrams
- Data Grids
- Selections (saved as a Query)
- Maps
- Profiles

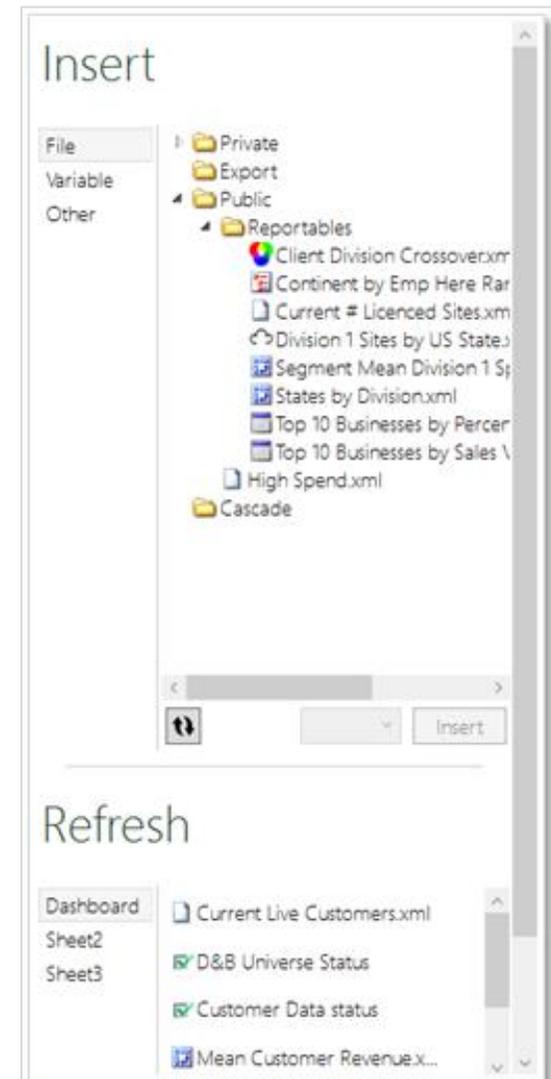
Creating an Excelsior Report

To guide you through the developing process a series of Market Insight Objects have been created and placed into a folder called Reportables. The following pages will demonstrate how you can insert objects into the Excelsior Report and use some basic Excel functionality to create a simple dashboard.

 **N.B.** This is not an Excel training course so you will need to use your own skill and knowledge to manipulate and display the data to the required standard when creating your own reports.

When using the various Market Insight Objects you may want to manipulate them within Excel. Therefore you may want to insert different objects into different worksheets before displaying the end results.

- Right click on the Excel **Sheet1** tab
- Select **Rename** and type **Dashboard**
- Click on cell **B1** and type **Company Product A Dashboard** in font Calibri 24
- Save your Excelsior Report on the Desktop as **My Excelsior Dashboard.xlsm**



Logged in Excelsior Panel

Working with Market Insight Objects

Before using some predefined Market Insight Objects, create a cube in Market Insight to demonstrate the start to end process. (You will require access to the Market Insight Training system to do this.)

- Create a Cube of the entire Training database. Display as a breakdown of **Banded Company Employee Model** by **Country Code** at the **Records** table
- Save the Cube as **Number of Employees by Country** in your **Private** folder (generally save your objects in your Reportables folder)
- In Excelsior click on cell **A1** in **Sheet2**
- In the **Insert** panel click on the  **Refresh** button then highlight the **Banded Company Employee Model** file
- Click **Insert as Data**

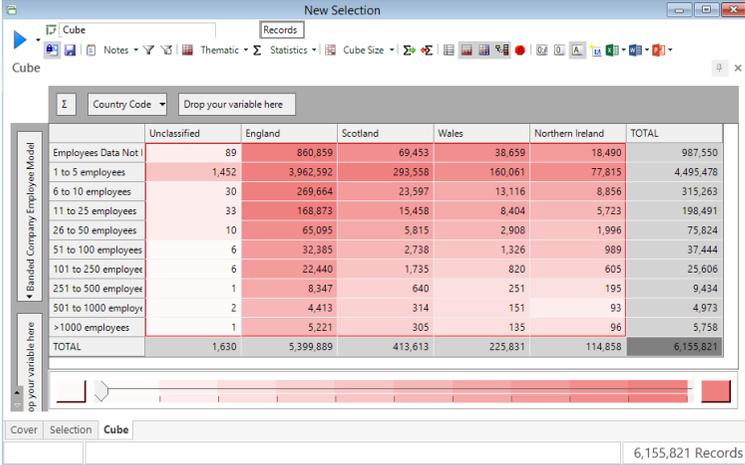
The results found in Market Insight are now represented in the Excelsior Report. In the Refresh panel there are buttons to:

Refresh

This option will retrieve the latest results from the Market Insight system and display them in the same position the object was placed on the Excelsior report.

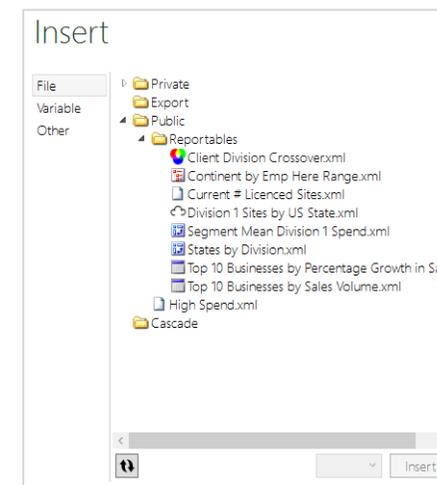
Delete

With the Market Insight Object highlighted in the Refresh panel, pressing the Delete button will remove it from the report. (Do not do this now)



	Unclassified	England	Scotland	Wales	Northern Ireland	TOTAL
Employees Data Not	89	860,859	69,453	38,659	18,490	987,550
1 to 5 employees	1,452	3,962,592	293,558	160,061	77,815	4,495,478
6 to 10 employees	30	269,664	23,597	13,116	8,856	315,263
11 to 25 employees	33	168,873	15,458	8,404	5,723	198,491
26 to 50 employees	10	65,095	5,815	2,908	1,996	75,824
51 to 100 employees	6	32,385	2,738	1,326	989	37,444
101 to 250 employees	6	22,440	1,735	820	605	25,606
251 to 500 employees	1	8,347	640	251	195	9,434
501 to 1000 employees	2	4,413	314	151	93	4,973
>1000 employees	1	5,221	305	135	96	5,758
TOTAL	1,630	5,399,889	413,613	225,831	114,858	6,155,821

Cube – Number of Employees by Country



Insert Panel

When the mouse pointer is over the Market Insight Object in the Refresh panel a small arrow is revealed. Clicking on this arrow will present you with the Options screen for that object.

Find

Clicking on this button will highlight the object's display in the report.

Apply

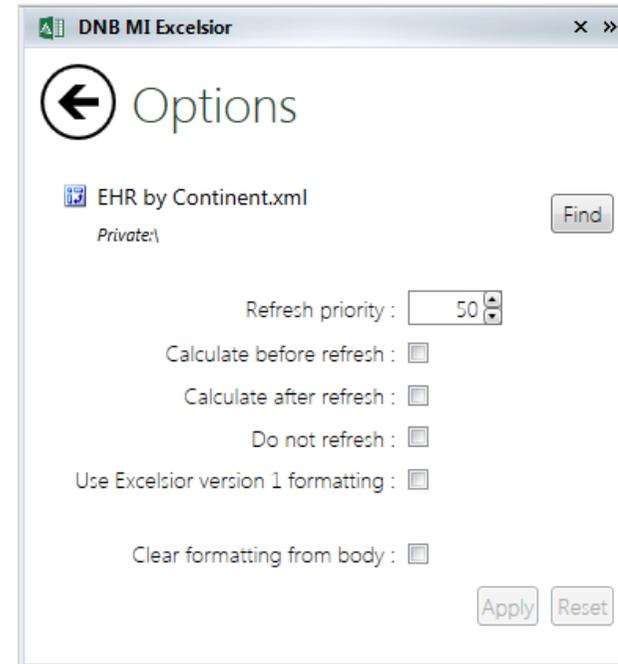
Use this button to activate the options once a mark has been placed in the relevant tick boxes.

Reset

Click this button to restore the default options, as seen in the screen shot opposite.

Click on the arrow at the top of the screen to return to the Refresh panel.

- Delete this object and return to the **Dashboard** tab



Market Insight Object - Options

Working with Cubes and Trees

Cubes and Trees provide a powerful tool for aggregating your data. By using Market Insight Excelsior further data manipulation can be performed on the results (e.g. indexing, cumulating, and averaging) or results can be combined with data from external sources. Excel charts can be applied to Cubes or Trees to present results visually.

Inserting Cube Data

Any cube saved in Discoverer can be inserted into an Excelsior report either as an Excel Pivot Table, Source or the Cube Data (static table layout).

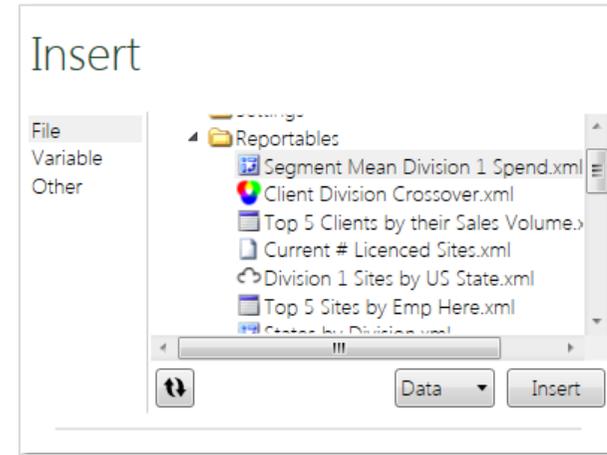
- Click on cell **J5** on the **Dashboard** where you want to insert the cube
- Select the cube saved in Discoverer from the **Insert** panel – **Public** → **Reportables** → **Mean Customer Revenue.xml**
- Choose **Data** (static table) rather than **Pivot** (dynamic Excel Pivot Table) and click **Insert**

The latest results of this cube will be inserted at the selected cell. The Refresh panel will also list the cube that has been inserted.

To tidy up the display it would be useful to hide the Unclassified row and wrap the Mean (Customer Level Revenue) text.

- Right click on the Row(s) and select **Hide**

 **N.B.** You cannot just delete elements of your Market Insight Object because when you refresh the display the original columns/rows, plus any new ones will be reinstated into that same position.



Insert Cube Data

	Records	Mean(Customer Level Revenue)
North	193,230	£10,603.57
North West (Excluding Greater Manchester)	329,517	£13,039.25
South East (Outside M25)	1,106,572	£13,434.28
South West	481,677	£8,596.81
East Midlands	334,178	£12,056.32
West Midlands	454,641	£12,217.20
East Anglia	190,250	£12,699.67
Yorkshire and Humberside	393,117	£10,887.39
South East (Inside M25)	1,374,916	£21,088.80
Scotland	388,665	£13,942.96
Wales	209,031	£9,747.56
Northern Ireland	107,595	£18,456.80
Greater Manchester	229,529	£14,450.17
Channel Islands	24,091	£18,676.65
TOTAL	5,817,986	£13,726.65

Cube Results in Excelsior

- Click on Mean (Customer Level Revenue) and wrap text, also from the Home button change the number on this from General to Currency if necessary
- Resize **Column J** and on Row 5 type **Region**
- Highlight the entire table remove the Coral shading and from the **Styles** group on the **Home** tab click on **Format as Table**
- Click on the **Table Style** you prefer and click **OK**

The formatting you have applied to these cells will be retained the next time a refresh takes place.

 **N.B.** This method is best used for objects where the number of categories is unlikely to change. Otherwise insert as a pivot table so you can always find the same categories. See the examples on the following pages.

To present some of this information as a chart:

- Highlight the **Regions** and **Mean (Customer Level Revenue)** for **North, West Midlands** and **South East (Inside M25)**
- Click on the **Insert** ribbon

Region	Records	Mean(Customer Level Revenue)
North	193230	10603.57
North West (Excluding Greater Manchester)	329517	13039.25
South East (Outside M25)	1106572	13434.28
South West	481677	8596.81
East Midlands	334178	12056.32
West Midlands	454641	12217.2
East Anglia	190250	12699.67
Yorkshire and Humberside	393117	10887.39
South East (Inside M25)	1374916	21088.8
Scotland	388665	13942.96
Wales	209031	9747.56
Northern Ireland	107595	18456.8
Greater Manchester	229529	14450.17
Channel Islands	24091	18676.65
TOTAL	5817986	13726.65

Cube Data with Formatting

Region	Records	Mean(Customer Level Revenue)
North	193230	£10,603.57
North West (Excluding Greater Manchester)	329517	£13,039.25
South East (Outside M25)	1106572	£13,434.28
South West	481677	£8,596.81
East Midlands	334178	£12,056.32
West Midlands	454641	£12,217.20
East Anglia	190250	£12,699.67
Yorkshire and Humberside	393117	£10,887.39
South East (Inside M25)	1374916	£21,088.80
Scotland	388665	£13,942.96
Wales	209031	£9,747.56
Northern Ireland	107595	£18,456.80
Greater Manchester	229529	£14,450.17
Channel Islands	24091	£18,676.65
TOTAL	5817986	£13,726.65

Continent & Mean Spend Highlighted

- From the **Charts** group click on the **Bar** button
- Select your preferred option
- Format the chart as you wish
- Highlight Chart Title and **name** the chart **Selected Regions**

You can now resize and position the chart to an appropriate place on the report.

- Drag the chart so it sits to the left of the table of figures



Chart of Selected Regions

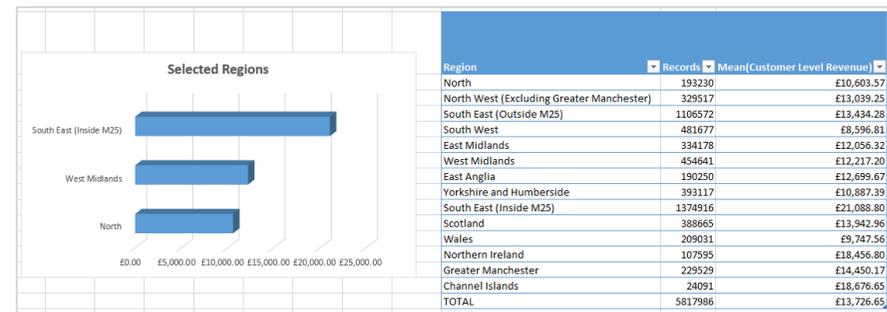


Chart & Data Displayed Side by Side

Inserting a Cube as a Pivot Table

Any cube saved in Market Insight can be inserted into an Excelsior report either as an Excel Pivot Table or the Cube Data (static table layout).

- Click on cell **A1** on **Sheet2** where you want to insert the cube
- Select the cube saved in Discoverer from the **Insert** panel – **Public** → **Reportables** → **Region by Product.xml**
- Choose **Pivot table** (dynamic Excel Pivot Table) rather than **Data** (static Cube table) and click **Insert**

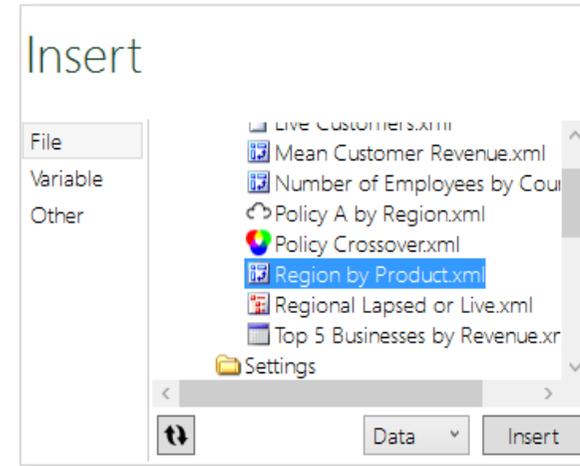
A Pivot Table will be inserted at the selected cell to display the latest results.

Configuring the Pivot Table

The Pivot Table may need configuring (see Excel help for more details on this functionality). For example:

- Change Field Value Settings to display values as Sum or Count.
- Change Field Value Settings to display values as % Row or Column etc.
- Change the orientation of rows and columns.
- Use Filters to hide certain categories.

These configurations will be maintained when the Pivot Table is refreshed.



Insert Panel

	A	B	C	D	E	F
Sum of Records		Policy Product Type				
Economic Region		PRODUCT A	PRODUCT B	PRODUCT C	PRODUCT D	Grand Total
Unclassified		2	2	3	1	8
North		1047	508	777	465	2797
North West (Excluding Greater Manchester)		1548	857	1257	743	4405
South East (Outside M25)		5837	2840	4081	2331	15089
South West		3258	1443	1551	1245	7497
East Midlands		2014	1101	1311	1270	5696
West Midlands		2389	1171	1780	1265	6605
East Anglia		1222	747	890	489	3348
Yorkshire and Humberside		2291	1018	1540	1021	5870
South East (Inside M25)		4612	2383	3828	1585	12408
Scotland		2630	2320	1769	783	7502
Wales		1383	818	674	556	3431
Northern Ireland		670	1237	783	549	3239
Greater Manchester		952	479	872	436	2739
Channel Islands		42	36	51	23	152
Grand Total		29897	16960	21167	12762	80786

Cube Displayed as a Pivot Table

To create a simple, but flexible chart:

- Click within the pivot table and then from the **Options** ribbon click on the **Pivot Chart** from the **Tools** group
- Select the **Clustered Column** chart and click **OK**

You now have the opportunity to choose which items you would like to display on your chart:

- On the **PivotTable Field List** click on the drop down arrow on the **Economic Region** field. Deselect all destinations except **North, West Midlands, and South East(Inside M25)**
- On the **PivotTable Field List** click on the drop down arrow on the **Policy Product Type** field. Deselect **No Policies**
- Click on the chart, the **Design** ribbon should now be displayed. From the **Charts Layouts – Quick Layouts** select **Layout 3**
- Click on the title and amend as shown in the screen shot opposite
- Click on the **Move Chart** button on the ribbon bar, select **Object in: Dashboard** and click **OK**

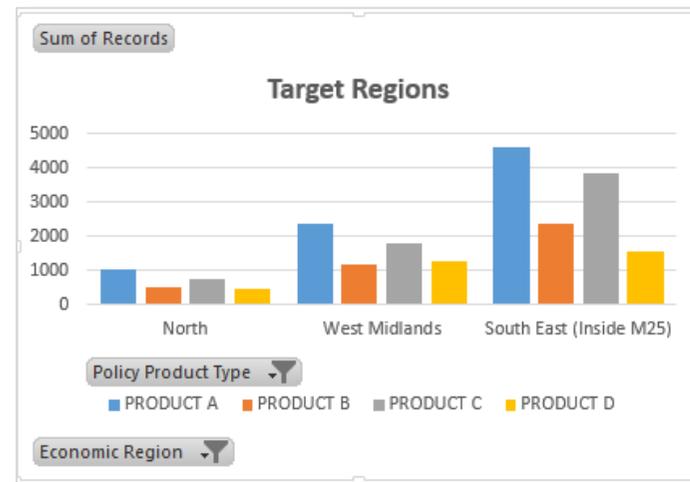
You can now drag the chart to an appropriate place on the dashboard.

- Resize the chart and place the top left corner around cell **I24** on the dashboard

As mentioned above, once a Market Insight object has been inserted into an Excel worksheet as a Pivot Table you have a great deal of functionality available to you. Unfortunately these further options are outside the scope of this training course.

Sum of Records	Policy Product Type	PRODUCT A	PRODUCT B	PRODUCT C	PRC
2		2	2	3	
1047		1047	508	777	
1548		1548	857	1257	
5837		5837	2840	4081	
3258		3258	1443	1551	
2014		2014	1101	1311	
2389		2389	1171	1780	
1222		1222	747	890	
2291		2291	1018	1540	
4612		4612	2383	3828	
2630		2630	2320	1769	
1383		1383	818	674	
670		670	1237	783	
952		952	479	872	
42		42	36	51	
29897		29897	16960	21167	

PivotTable Field List



Pivot Chart of Target Regions

Inserting a Tree

A tree has the same underlying structure as a cube, but is usually displayed in hierarchical form. The advantage of a Tree is that it is more efficient at storing multi-dimensional data where there are large numbers of unpopulated combinations.

A Discoverer Tree can be inserted in the same way as a Cube, with the following options: “Tree” (flattened form) or “Pivot” (dynamic Excel Pivot Table).

The examples shown above could equally apply to Trees, as would the following example apply to using a Cube.

- Click on cell **A1** on **Sheet3** where you want to insert the Tree cube
- Select the Tree saved in Market Insight from the **Insert** panel – **Public** → **Reportables** → **Region Lapsed or Live.xml**
- Choose **Pivot table** (dynamic Excel Pivot Table) rather than **Data** (static table) and click **Insert**
- Use the **filters** to deselect regions not of immediate interest

Calculations based on Cube or Tree results

The difficulty of formatting and presenting some data is that the source information location on a worksheet might change when an update takes place. New categories or variables may be included so that the position of figures may now be in a different position to when you originally set up your display.

The GetPivotData function provides a useful way to extract data from a Pivot Table by naming the information you want so it can be found despite changes made by a Refresh.

Sum of Records			
Economic Region	Policy Product Type	Policy Status	Total
North	PRODUCT A	Lapsed	101
		Live	1004
	PRODUCT A Total		1105
	PRODUCT B	Lapsed	51
		Live	485
	PRODUCT B Total		536
	PRODUCT C	Lapsed	105
		Live	721
	PRODUCT C Total		826
	PRODUCT D	Lapsed	19
		Live	454
	PRODUCT D Total		473
	North Total		
North West (Exclud	PRODUCT A	Lapsed	152
		Live	1487
	PRODUCT A Total		1639
	PRODUCT B	Lapsed	109
		Live	808
	PRODUCT B Total		917
	PRODUCT C	Lapsed	176
		Live	1161
	PRODUCT C Total		1337
	PRODUCT D	Lapsed	38
		Live	723
	PRODUCT D Total		761

Tree Displayed as a Pivot Table

- Click on cell **B28** on the **Dashboard** and type **North**
- Complete the remainder of the table headings as shown opposite

You have now setup the format of the display you would like to see on your Dashboard. Next you need to associate each cell with where the data is held within the Pivot table on Sheet3.

- In cell **C28** type = and then click on the cell in **Sheet3** that gives the **North, Product A, Live** figure. Press **Return**
- Click on cell C28 and in the Excel formulae bar change the section **“North”** with the cell reference for the heading North – **B28**

=GETPIVOTDATA("Records",Sheet3!\$A\$1,"Economic Region",B28,"Policy Product Type","PRODUCT A","Policy Status","Live")

This action has now referenced the name North so it will find this data anywhere in the pivot table.

- Click on the small black box on the bottom right of the cell and drag down to populate **West Midlands** and **South East (inside M25)**
- Repeat the above process for the **Product B, C and D** columns
- Add a title and formatting to your table

	Product A	Product B	Product C	Product D
North				
West Midlands				
South East (inside M25)				

	Product A	Product B	Product C	Product D
North	1004	485		
West Midlands	2280	1101		
South East (inside M25)	4284	2173		

Targeted Regions				
Region	Product A	Product B	Product C	Product D
North	1004	485	721	454
West Midlands	2280	1101	1625	1247
South East (inside M25)	4284	2173	3445	1525

Table with formatted figures

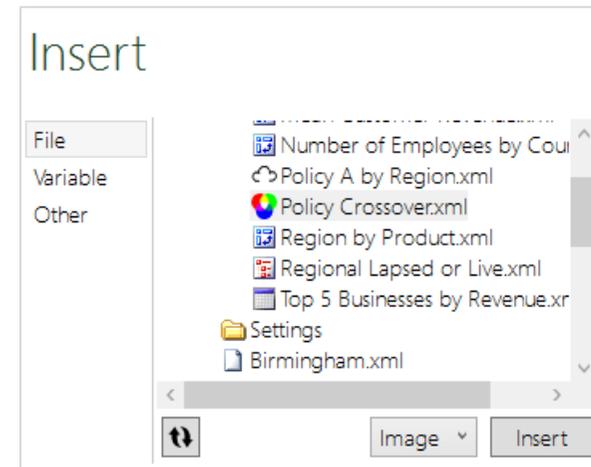
The figures shown opposite will be different to what you see.

Inserting a Venn

A Venn diagram can be inserted into an Excelsior report as an image.

- Click on cell **B43** on the **Dashboard** where you want to insert the Venn file
- Select the Venn file saved in Discoverer from the **Insert** panel – **Public** → **Reportables** → **Policy Crossover.xml**
- Click **Insert**
- Add a title and borders as desired

You can now drag the image around the report and resize if required. When the Venn is updated the latest counts will be displayed and the Venn diagram optimized for the new size.



Insert Panel



Venn Image

Inserting a Data Grid

A Data Grid can be inserted into an Excelsior report as a table of data.

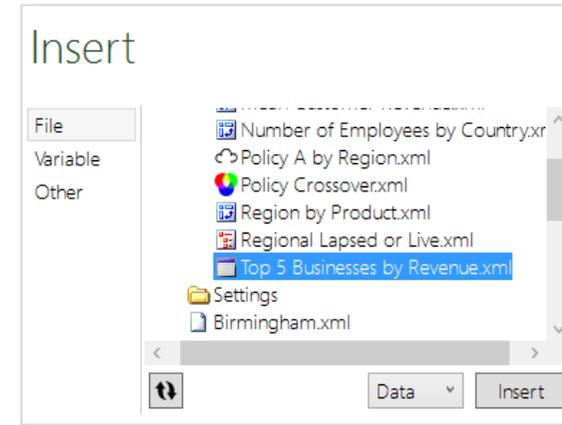
- Click on cell **H2** on the **Sheet2** where you want to insert the Data Grid cube
- Select the Data Grid saved in Market Insight from the **Insert** panel – **Public** → **Reportables** → **Top 5 Businesses by Revenue.xml**
- Click **Insert**

To present this information on the main Dashboard you may want to pick and choose certain items of data

- Click on cell **J43** on the **Dashboard** where you want to insert the information
- Type = and click on the first **Business Name** cell on **Sheet2**
- Press **Return** to see the result
- Click on the small black box on the bottom right of the cell and drag down a further 4 cells

The Top 5 Business Names are now displayed.

- Type = in the cell next to your first **Business Name**. Click on the appropriate **Town and County** name in **Sheet2**. Press **Return**
- Click on the small black box on the bottom right of the cell and drag down a further 4 cells to replicate the formulae and show the figures
- Repeat for **Customer Level Revenue** and then add some appropriate headings and a title and format the figures



Insert Panel

Top 5 Businesses by Revenue		
Business Name	City	Revenue
Willis Ltd	London	681094.99
Dunhills (Pontefract) P L C	Pontefract	630570.28
Hacking & Paterson Management Services	Glasgow	802287.81
Burke Berkeley & Company Ltd	Leicester	718706.84
Cbre Global Investors (Uk Funds) Ltd	London	618950.61

Formatted Details of Top 5 Businesses

Inserting a Selection Count

The count from a selection can be inserted into a single cell anywhere on the report. In the following example you will insert a count of the total number of Sites currently licensed by the organization.

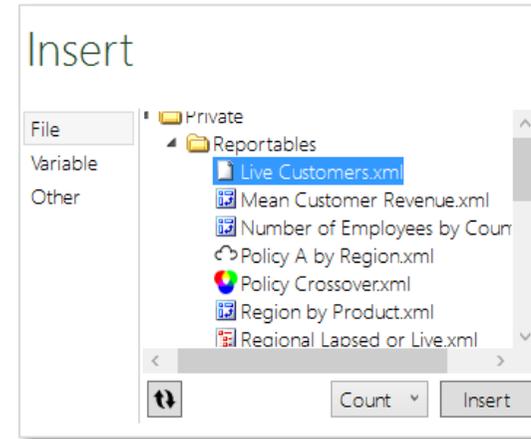
- Click on cell **J2** on the **Dashboard** where you want to insert the count
- Select the count saved in Discoverer from the **Insert** panel – **Public** → **Reportables** → **Current Live Customers**
- Click **Insert**

You may want to give your figure a label:

- Click on cell **J1** and type **Live Customers**

Use the Format Cells option in Excel to make the best display of the label and figure.

- Right click on the cell and select **Format cells...**



Insert Panel



Count Figure Inserted in Excelsior

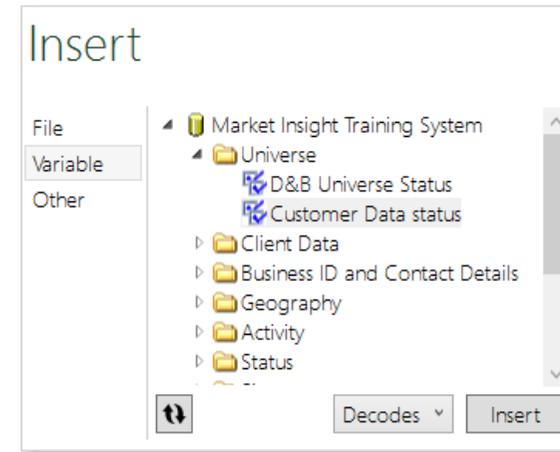
Inserting Variable Categories and Counts

A list of categories and the full system counts can be inserted anywhere on the report. In the following example you will insert the Destination variable.

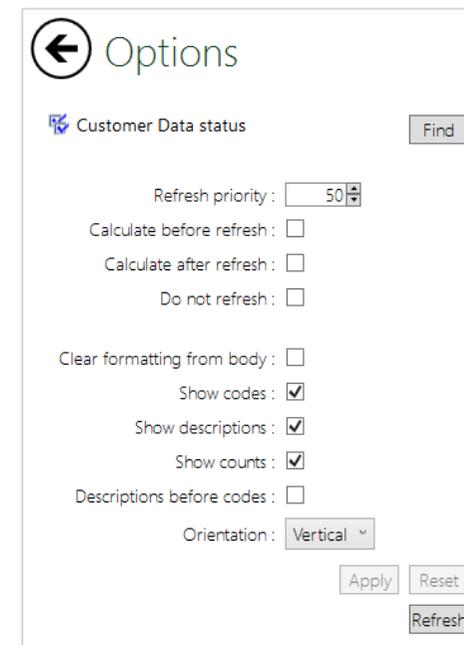
- Click on cell **O2** on the **Dashboard** where you want to insert the variable
- Select the variable in **Market Insight** from the **Variable** section of the **Insert** panel – **Sample Customer Data** → **Customer Data Status**
- Click **Insert**

You can now format the display using Excel and Excelsior options.

- Click on the arrow which appears when you mouse over the **Customer Status** variable in the **Refresh** panel
- Deselect the **Show codes** check box
- Click **Apply**
- **Refresh** the **Customer Status** variable in the **Refresh** panel
- Add an appropriate title i.e. **Breakdown of Licensed Sites**



Insert Panel



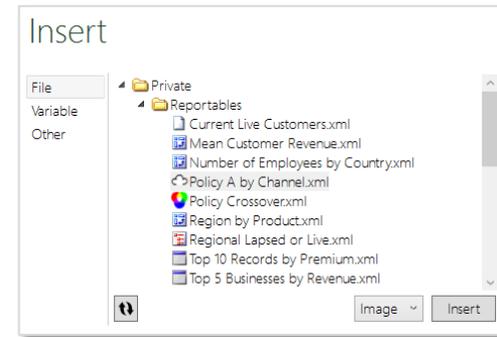
Variable Options Window

Inserting a Word Cloud Image

A Word Cloud image can be inserted anywhere on your report.

- Click on cell **I51** on the **Dashboard** where you want to insert the Word Cloud image
- Select the Word Cloud saved in Market Insight from the **Insert** panel – **Public** → **Reportables** → **Policy A by Channel.xml**
- Click **Insert**

You can now drag the image to an appropriate place on the report and add a title.



Insert Panel

Inserting a MapPoint Image

A Microsoft MapPoint image can be inserted anywhere on your report. In the same manner as described above for the Word Cloud.

 **N.B.** Using Venn, Word Cloud and MapPoint objects will always result in an image of the item

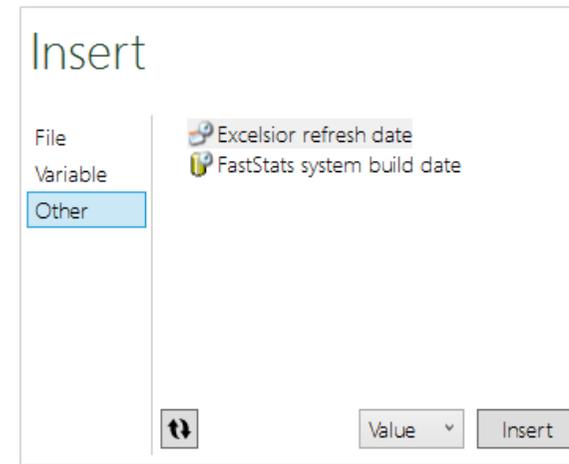


Word Cloud Image

Inserting a Refresh Date/System Build Date

An Excelsior Tool available to insert into a report is the Refresh Date. This date tells you the last time you updated the report. However, if the Market Insight database has not been refreshed then the same figures will be returned. In addition you may wish to also display the System Build date

- Click on cell **L2** on the **Dashboard** where you want to insert the **Refresh Date**
- Select the option **Excelsior refresh date** from the **Other** section of the **Insert** panel
- Click **Insert**
- Add a title in cell **L1** – **Refresh Date**



Insert Panel – Other Section

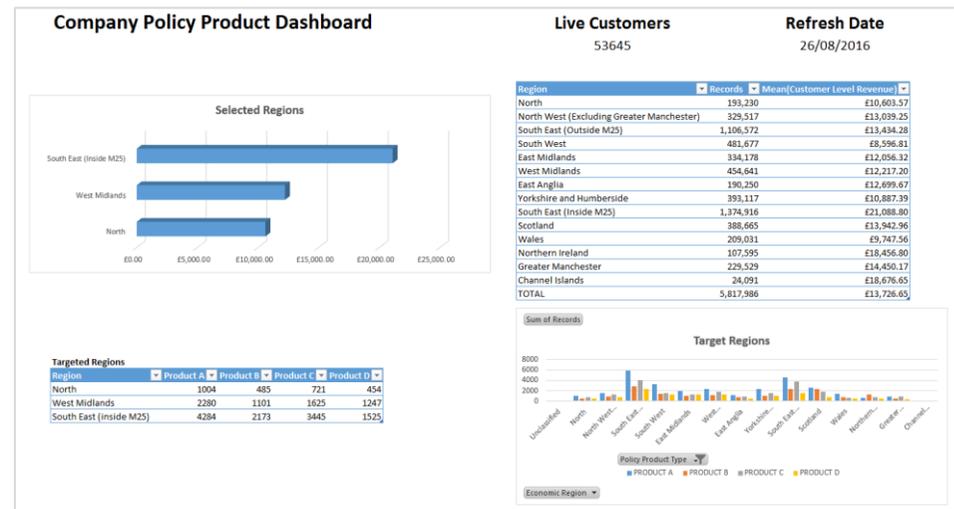
Apply formatting to the title and date as appropriate.

Finishing Touches

To complete your report for final presentation you may want to hide the gridlines or even change the color of the background:

- In **Excel** go to the **View** ribbon and then the **Show** group
- Untick the **Gridlines** box
- Highlight the whole worksheet, right click and select **Format Cells**
- From the **Fill** tab select a light color and click **OK**

You may need to readjust other colored headings already applied.



Company Policy Product Dashboard

Using Parameterized Selections

Parameterization in Market Insight allows a User to determine the values used within a selection. This function can be taken advantage of within Excelsior to allow the Viewer to filter the display by the parameterized variable categories.

In this example you are going to use the Region variable as a mechanism to filter a Data Grid representing a selection of bookings.

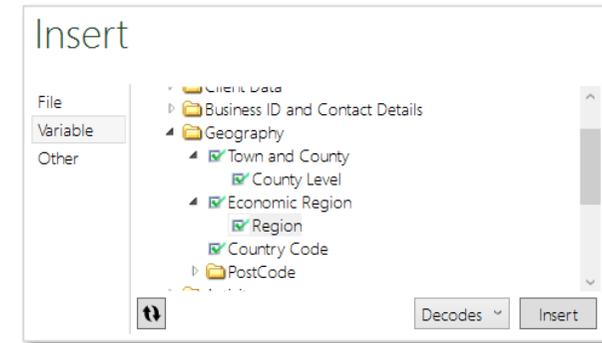
- On **Sheet 3** of the report click on cell **J12**
- Select the **State** variable in Market Insight from the **Insert** panel – **Variable section** → **Geography** → **Region** and click the **Insert** button
- Hide column **J** and **L** (this will tidy up the display)
- Highlight the cells in column **M** next to the **Region** descriptions
- In the **Name Box** enter **Region** as the name for the range of cells and press **Return** (**N.B.** This must be the same name as the parameterized item)

To select a Region or Regions the Viewer could just type the relevant Region code in one of the cells just defined. To make this process more User friendly we will use the following formula to test for an entry in column G next to the relevant State to select the relevant code.

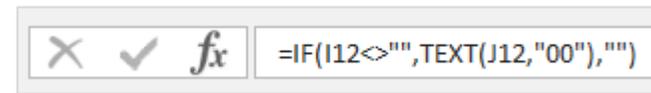
- Highlight cell **M13** and type the following in the **Formula Bar**:

```
=IF(I13<>"",TEXT(J13,"00"), "")
```

- Copy the cell down against the other regions



Insert Panel – Variable Section

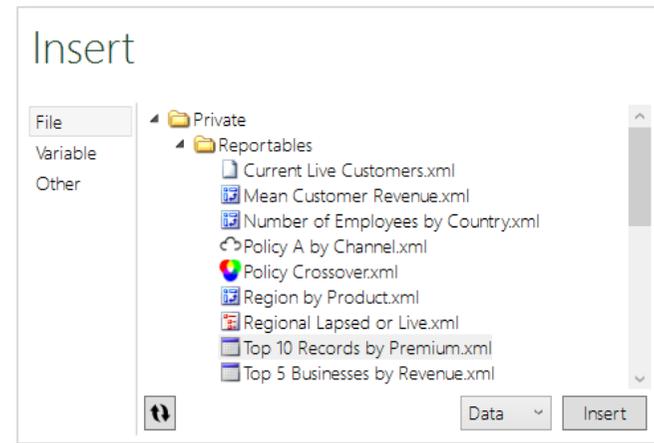


Parameterized Formula

- Hide column **M** and then put an **x** in cell **I3** against **Scotland**
- Click on cell **O13** and then highlight the **Top 10 Records by Premium Volume** Data Grid from the **Insert** panel. Click **Insert**

Each time you add or change the range selected you will have to highlight the item in the Refresh panel and click on the Refresh button to see the updated results.

To use this functionality for all of the Market Insight Objects in your Report, you will need to ensure that the variable (State in this case) is parameterized in the selection of each item.



Enter X	Region	Top 10 Records by Premium
	North	Business Name
	North West (Excluding Greater Manchester)	
	Sout East (Outside M25)	Willis Ltd
	South West	The British Land Company Plc
	East Midlands	Dunhills (Pontefract) P L C
	West Midlands	Trelleborg Offshore Uk Ltd
	East Anglia	Lhoist Uk Ltd
	Yorkshire and Humberside	Liberty International Holdings Ltd
	South East (Inside M25)	Hacking & Paterson Management Services
x	Scotland	Burke Berkeley & Company Ltd
	Wales	Cbre Global Investors (Uk Funds) Ltd
	Northern Ireland	
	Greater Manchester	
	Channel Islands	

Refreshing the Whole Report

The Refresh All button can be used to refresh all the Market Insight Objects in the report.

The Refresh panel displays each object and shows the progress as they are updated.

Development Considerations

You need to ensure that the refreshed results do not clash with any Excel functionality you add to the Excelsior report. For example, you need to ensure that a change in the number of rows or columns in the results does not over-write any of your own formulae. The safest way to do this is to use separate sheets for the inserted Market Insight objects.

Formulae

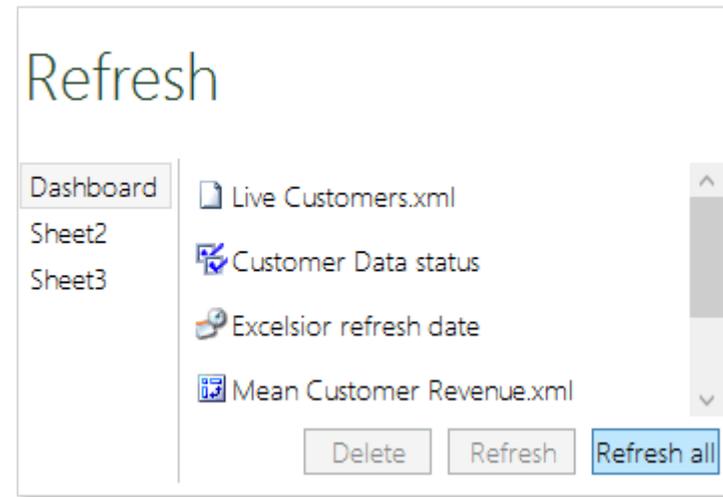
Standard Excel functionality will ensure that any formulae based on data in Market Insight Objects are updated automatically.

Pivot Tables

All pivot tables in an Excelsior report are automatically updated whenever you do a Refresh.

Filters

Unfortunately Excel does not refresh filters when the underlying data changes. Some simple Visual Basic can be used to achieve this.



Refresh Panel

Appendix 1 – Excel Functionality

Named Ranges

Individual cells and groups of cells can be given descriptive names. These can be used in formulae to refer to the cells instead of using the row-column notation, such as A1:E1.

Advantages

Formulae are more readable.

- For example “Sum(product_sales)” is more meaningful than “Sum(C1:C20)”

Formulae automatically adjust if the number of cells changes in a named range.

- If the number of products change, such that they are now in cells C1:C25, the named range can be redefined and formulae such as “Sum(product_sales)” need not be changed

Reference data (e.g. the name of a system table, such as “Holidays”) can be easily modified.

- Instead of writing formulae such as “vlookup(“Holidays”, \$A1:\$C10, 2)” it would be better to use vlookup(Transaction_Table_Name, \$A1:\$C10, 2) where Transaction_Table_Name is the name of a cell whose contents is the word “Holidays”
- If the table name is changed, then it is only necessary to update this single cell, rather than all individual formulae

Using Named Ranges

Create the named range:

- Select the cell or cells to name
- A useful short cut is to select the cell you wish to name and also an adjacent cell containing the text to be used as the name. More powerfully, you can select say a whole table including the column headers, to name each column with the column header. Click Ctrl-Shift-F3

You can now use the name in a formula instead of the cell reference. You can click on the cell name in the formula bar and Excel will highlight the cell or cells that the name relates to.

The example opposite shows the range of cells that relate to the inserted cube. This block of cells has the name:

“FSO_Table_Todays_Destinations_652...” (which is the name of the Market Insight Object with a unique identifier appended).

This named range can be used for example in formulae or as the source data for a chart. For example:

- Sum(FSO_Table_Todays_Destinations_65265de6578b47b9b0df1e571fdf4295)
- Or paste the Reference in the Source Data box for a chart.

Any changes in the size of the data inserted by Market Insight will be picked up by formulae or charts referring to the data via the named range.

	A	B	C	D
1	Destination	Statistics	TOTAL	
2	Unclassified	People	3	
3	Mali	People	1	
4	Namibia	People	2	
5	Senegal	People	0	
6	Sierra Leone	People	0	
7	South Africa	People	1	
8	Jamaica	People	1	
9	United States	People	32	
10	Kuwait	People	5	
11	Mongolia	People	0	
12	Australia	People	31	
13	New Zealand	People	0	
14	Denmark	People	0	
15	France	People	18	
16	Germany	People	17	
17	Greece	People	16	
18	Italy	People	2	
19	Latvia	People	0	
20	Portugal	People	4	
21	Sweden	People	3	
22	TOTAL	People	78	
23				

Useful Functions

The following functions are useful for creating reports to look up and reference areas of a workbook.

Function	Description
GetPivotData()	Extracts the value of a specific data field from a pivot table, matching a number of criteria based on the rows and columns. =GETPIVOTDATA("Sum(Cost)",A\$1, Year",2007,"Destination",,"Sweden")
Match()	Finds the position of a value within an array of cells =Match(\$C\$19,Month_Names,FALSE) [C19 contains month to find, Aug]
Index()	Picks a value from an array of cells, according to its position. =INDEX(Field_Names,C20) [C20 contains value 3 = 3 rd item]
Vlookup()	Picks a value from a block of cells according to a lookup value and an offset value. =VLOOKUP("Aug",Target_Values,3,FALSE) [Use False for exact match]
Offset()	Picks a value from a block of cells according to 2 offset values. =OFFSET(Table_Corner,8,3) [Row first, then Column]
Indirect()	Picks a value from a cell using the name of the cell. =INDIRECT(C25) [C25 contains the name or reference of a cell]

	A	B	C	D
1				
2		Total Value	Number of Transactions	Number of Customers
3	Jan	£ 21,245,121	60,256	35,235
4	Feb	£ 27,141,320	71,343	44,891
5	Mar	£ 32,141,835	88,217	55,961
6	Apr	£ 34,866,978	81,862	51,252
7	May	£ 50,000,000	70,634	41,723
8	Jun	£ 29,565,395	72,939	44,504
9	Jul	£ 30,985,360	75,817	45,891
10	Aug	£ 30,256,636	76,320	45,331
11	Sep	£ 24,884,018	56,384	34,456
12	Oct	£ 19,774,984	31,076	20,012
13	Nov	£ 16,002,958	25,251	16,587
14	Dec	£ 13,889,383	21,198	14,362
15	Total	£ 330,753,988	731,298	450,203
16				
17				
18		Function	Parameter	Result
19		Match	Aug	8
20		Index	3	Number of Customers
21		Vlookup	Aug	45,331
22			4	
23		Offset	8	45,331
24			3	
25		Indirect	\$C\$2	Number of Transactions
26		Indirect	Named_Cell	Total Value
27				
28				