

It's a simple enough question...

So why can't you get the answer? In business, many questions are simple to ask, but prove difficult or impossible to answer in too many reporting tools. XLCubed lets the business user answer such 'simple' questions in a flexible way, and without recourse to writing or requesting complex MDX or SQL queries. Here we take a look at an example of a fairly common requirement around customer revenue analysis, which is equally applicable for product or cost based analyses.

Customer Classification and Banding

Many businesses classify their customers as a percentage of overall revenues or profits. For example, 'A' customers make up a the first 40% of company revenue, 'B' customers the next 30%, 'C' the next 25%, and 'D' the remaining 5%. The percentages used vary but the approach itself is fairly widespread. Other companies use literals, >\$10m, \$5-10m etc, the approach in XLCubed is the same.

XLCubed has an advanced selection mode which is ideal for handling this type of scenario. Reports such as the one below can be built quickly and easily. They are not simply point in time manually assembled lists, rather fully interactive and updateable with the user specified selections. Once built, they can be used to analyse the business from multiple angles.

A	B C	DE	F G	H I	J K	L M	N O
2		Custor	ner Segmentation	(Clothing - 2	015)	Segment Sales % #	Customers
3	Product Group			Year		A 40	23
						B 30	31
4 All Products	Accessories Bikes	Clothing Components	CY 2012 CY 2013	CY 2014 CY 2019	5	C 25	75
6						D 5	111
8 'A' (to	p 40% sales): 23	'B' (40 - 7	'0% sales): 31	'C' (70 -	95% sales): 75	'D' (last 5	% sales): 111
10	CY 2015 12 Months		CY 2015 12 Months		CY 2015 12 Months		CY 2015 12 Months
20 Toronto	£22,867.41	Etobicoke	£4,343.92 🔨	Newcastle	£2,321.34 _	North Ryde	£567.51 🔨
21 London	£9,883.87	Orlando	£4,324.34 _/	Tooele	£2,260.68 /	Muehlheim	£539.80 🔨
22 Paris	£9,050.86 V	Union City	£4,295.18	Ville De'anjou	£2,174.88 🔨	Boulogne-sur-Mer	£539.65
23 Montreal	£8,406.45	Daleville	£4,208.75 🔨	Charlotte	£2,124.21 🔨	Vero Beach	£526.17 🔨
24 Edmonton	£7,946.99	Spokane	£4,206.42 /_/	Valley Stream	£2,092.70 🔨 🔨	Quebec	£525.82
25 Miami	£7,379.43 🔨	Melville	£4,206.23 _/_/	Modesto	£2,046.61 🔨	Perth	£524.05
26 Phoenix	£7,188.46 _/	Woolston	£4,187.11 _/	Calgary	£2,017.60 ///	Cerritos	£521.92 _/_/
27 Burnaby	£7,141.46	Colombes	£4,058.95 🔨	Bellevue	£2,005.94 _/_/	Barrie	£507.52 🔨 🔨
Richmond	£6,806.47	Las Cruces	£4,043.59 🔨	College Station	£2,004.12 🔨	Puyallup	£503.93 🔨 🔨
29 Milton Keynes	£6,387.49	Bad Soden	£3,997.83 🔨	Salt Lake City	£1,975.51 🔨 🔨	Peoria	£470.74 🔨
30 Orleans	£6,051.47	Kittery	£3,985.55 🔨 🖊	San Antonio	£1,960.84 🔨	Burbank	£469.79 🔨 🖊
31 Seattle	£5,503.67	Offenbach	£3,954.83 _/	Lake George	£1,943.86 _/_/	Lynnwood	£463.34
32 Reno	£5,375.68 🔨	Grevenbroich	£3,946.71 🔨	Westminster	£1,934.73 _/_/	Johnson Creek	£461.93 _ </td
33 Saint Ouen	£4,985.82 _/_/	Howell	£3,932.03 _/	Sydney	£1,932.48 _ </td <td>Bothell</td> <td>£461.93 🔨</td>	Bothell	£461.93 🔨
84 München	£4,971.75 /_/	Chantilly	£3,886.33 _/_/	Lavender Bay	£1,885.85 📈	Suresnes	£461.93 🔨 🔨
35 Irving	£4,911.25 _/_/	Sand City	£3,837.39 🔨	Saarbrücken	£1,869.64	Cheektowaga	£453.83
86 New Hartford	£4,904.92	Bradenton	£3,812.17 _/	Van Nuys	£1,844.99	Tigard	£436.09
87 Rhodes	£4,854.40	Frankfurt am Main	£3,771.05 _/	Pnot-Rouge	£1,842.19 🔨	Eilenburg	£411.80 🔨
CustBand	ling XLCubedFormats (+	Maul	C2 704 61 A A	Machua	C1 672 20 \ \	Idaha Falla	CADE 7E \

In this example, on fictitious data, city corresponds to customer as the products are sold through regional based concessions. Here all customers in the four bands are listed for the period and product combination chosen by the user. We also display a sparkline to show the trend for each customer over the previous 12 quarters. If the number of customers in a segment grows, the sparkline is created as required, no re-design is required. The summary table at the top shows at a



glance that a small number of customers account for a large percentage of sales, and merit appropriate account management.

The business user can build this type of analysis in the Excel client, and with a few mouse clicks publish to the web for broader use, either natively in XLCubed Web or within a SharePoint portal. XLCubed allows the user to apply common sense logic to the problem through an intuitive series of dialogs. This report uses four of our grids (think Pivot Table, with the additional flexibility you need), which are linked together on the period and product group selections.

The first grid, for the 'A' segment customers is simply the top 40% of the overall value for the selected measure, and for the date held in cell B4.

Edit Ranking			-		
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Current Measure This measure:					
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Exclude zero values	Exclude nul	Is			

The remaining segments can be achieved using the logic that segment 'B' customers are those making up the top 70%, excluding those in the top 40% ('A').

- Firstly, two sets of members are selected; in this case both the same the City Level of the Customer Geography hierarchy.
- The set on the left is ranked to show only those contributing to the top 70% of sales.
- The set on the right shows the top 40%,
- The operator between them subtracts the set on the right ('A'), from the set on the left.
- Segments 'C' and 'D' are selected using the same approach.

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	Range: %	



Answers to questions such as this can be achieved fairly easily, and it's only a small step to make the report fully dynamic in terms of the user selections on period, product category, and the percentage splits being used. In this report the user can vary the time period, and the product. To add the segmentation percentage would be a straightforward addition, as in the customer tracking report.

Crucially, in XLCubed, every parameter setting can be manually specified, or alternately driven from an excel cell, giving huge flexibility. User selections can be through our cube aware dialogs and slicers, by directly typing in a cell, through Excel combo boxes, or derived through formulae based on any of the above. The flexibility is unrivalled.

Tracking Key Customer Movement

The ability to flexibly and quickly segment the customer base is in many cases a huge step forward. However, what is perhaps of even more interest is to understand how customers are moving between segments over time. Which customers are fading, from 'A' to 'B', or worse, and which are strengthening?

Tracking this movement over time has been notoriously difficult, and is normally a scheduled reporting process, or a periodic request to IT. With XLCubed it's achievable directly from the client, when the business user needs it, and with their specific filter criteria.

				Key Custo	omer Track	ing					
	Selected Year			Product C	ategory			% to rank			
CY 2012 CY 20	013 CY 2014 CY 2015		Il Products Accesso	ories Bikes	Clothing	Components	25 30	35 40	45	50	
								ComparisonYear			
							CY 2012 CY 2	013 CY 2014	CY 2015)	
	Customers Contributir	ng top 25% of over	rall Sales, CY 2014	: 13			5	Lost' Customers fro	m top 25%, CY 2	2013 to CY 20:	14:3
							All Periods	Customer City	CY 2014	CY 2013	P12 Quarters
	CY 2012	CY 2013	CY 2014	CY 2015	1,000,000 2,000,	Houston	£930,381 H	louston	£324,367	£338,921	
Toronto	£580,916	£1,601,389	£1,709,990	£704,187		San Antonio	£892,729 S	an Antonio	£339,735	£333,752	
London		£462,788	£980,787	£533,623		Carson	£704,316 C	arson	£243,459	£328,986	~
Paris		£351,697	£766,697	£372,458		La Mesa	£589,402 L	a Mesa	£91,380	£302,896	\sim
Richmond	£87,652	£423,513	£583,279	£200,312							
Burnaby	£81,758	£380,336	£575,578	£304,218							
Seattle	£215,056	£512,221	£572,137	£225,538							
Nashua		£363,527	£565,156	£200,394							
Montreal	£77,081	£285,063	£519,781	£265,332							
Orleans		£272,770	£519,733	£223,195							
Edmonton		£230,953	£463,265	£234,176							
Garland	£149,227	£401,509	£458,256	£133,543							
Memphis	£129,874	£429,940	£420,711	£139,996							
Loveland	£70.086	£187 621	£384 631	£191 227							

The above report is showing the top 25% customer segment for 2014, and which customers had fallen out of this segment since 2013. For the 'lost' customers a sparkline shows their sales over the last 12 quarters, depicting whether the fall has been steady or a sudden drop-off. The user can choose which years to compare, for which product category, and can vary the percentage being used for the classification.

The process to build the report is similar to the initial segmentation report. To create it manually, and lots of people have to, requires a listing of the 'A' segment customers from 2013, and those from 2014. It's then an exercise in finding those which exist in the 2013 listing, but not the 2014 listing. It's also an exercise in patience, or in honing your Excel formulae skills.



With XLCubed you use the same base logic, but get there much quicker, and with a report which is inherently flexible. The rankings are carried out in the context of the user selections, so once built the report can be run for a multitude of filter criteria and time periods. Design it once, quicker than you can right now, and the next time the analysis is required, it's nothing more than a few button clicks away.

The leftmost table shows the customers contributing the first 25% of sales revenue. The 25% is a variable, which can be changed by the user by picking a new value via the '% to rank' slicer. Below is the setup for the 'Lost' customers from the first 'x' % of sales, between the specified years.

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anking			Members Member Properties Advanced	Ranking		
Top Bottom Top/Bot.from Range Current Measure This measure: Measure in alloe: Herarchy Date.Calendar .	Selection CustomerTrack13M84	v V X	⋮ ↓ 1 ▼ 71 ▲ ■ ■ ■ ■ ○ ○ ●	Top Bottom Top/Bot. from Range Current Measure This measure: Measure in silce: Herarchy Date Calendar .	Selection 'CustomerTrack'ISC\$4	v X X
Exclude zero values	Exclude nulls		Other options Aggregation Function:	Exclude zero values	Exclude nulls OK	Cancel
	OK	Cancel	Aggregate	•	O	Cancel

The left and right hand sets look the same initially - the key difference, however, is that the set on the left is using the date selection in M4 (this holds the output from the Comparison Year slicer – in our example, 2013. The set on the right is using the output in C4 from the Selected Year slicer – 2014.

Both are based on the percentage held in \$M\$3, but the ranking is applied on a different period. The 2014 customers are then removed from the set of 2013 customers, set by the operator joining the sets together, leaving the 'lost' customers from first 25% of income.

It's a simple enough question, get the answers your business needs with XLCubed!

XLCubed have been helping businesses maximise their investment in Microsoft's BI platform since 2002. Customers range from Oil and Gas, Banking, and Pharmaceutical companies using XLCubed within mission critical global systems, through to the SME sector.



Latest Network ERP Data	• Warehouse We	b Site Email	IT Dashboard for	D. Smith (CIO)			Report Index 28-Nov-05
Major System Availability (Last 12 months)	(B Actual A Not	Acceptable A Acceptable)	Key Non-System Metrics		(B Actual A	Good A Excess	sive A Critical)
Last 12 Months ! System		Availability %	Year-To-Date	! Metric	% of Target		Actual
Networ	k	98.5%		Expenses YTD K\$			6,613,844
ERP	_	97.9%		Customer Satisfaction	n	_	4.5
😑 Data W	arehouse	93.2%		Level I Problems	_		48
Web Sit	te	98.5%			0% 50%	100% 150%	
Email	_	100.0%	Major Project Milestones				Days Until
HR	_	96.7%	! Project	Mileston	e	Due Date	Past Due
Problem	n Tracking	94.7%	ERP Upgrade	Full Syste	em test	01/08/07	608
	0% 10	0% 200%	Add services data to Datawa	arehouse ETL Cod	ling	02/08/07	609
			Upgrade Mainframe OS	Prepare	Plan	03/07/07	579
Hardware % of Capacity	(B Actual A Go	od A Excessive A Critical)	DR Site Upgrade	Install Ha	ardware	04/08/07	611
CPU Last 7 days	Overall	96.7%	Budgeting System	Hire PM	resource	23/07/07	599
Storage Last 12 Mo.	- Today	94.7%	Web site redesign	QA revie	ew	06/08/07	613
	0% 501	5 100%					
Monthly Network Traffic (Kilobytes)			Top 5 Projects in the Queue	e (Sorted by priority)		Funding	
Network Traffic LM	Network Traffic 10D Network	vork Traffic 5D	# Project	Status		Approved	Sched. Start
2000K			I Timesheet and Expense Syst	tem Project N	Manger awaited	Х	01/10/07
1800K 1600K			2 Upgrade Office to 2007	Cost ber	nefit Analysis		01/09/07
1400K			3 Failover for ERP	Gate I p	reparation		12/09/07

A best of breed, business-focused dashboard capability has been a key part of the product set for a number of years. With a build in Excel and deploy to the web model, key business users become authors of sophisticated, thin client web report and dashboards.

XLCubed blends our experience over the last decade, with that of our customers and partners, to extend and further improve the product set in every area. For more information, to discuss your interest in detail, or to arrange a web-based product overview or evaluation, please contact sales@xlcubed.com.