

Creating Dynamic Cognos Reports with jQuery

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The Challenge

• Deliver dynamic and interactive reports that are as usable as our favorite modern web applications (e.g. Gmail, Kayak, Zillow)







- Cognos Mashup Services empowers us to build modern web apps using Cognos as a data source.
- What about within the confines of Cognos Viewer?





The Current Solution

 Use the Report Studio HTML Insertable Object to embed JavaScript Code in your reports.

• Problems:

- Report Authors now need to be JavaScript developers (or at least JavaScript aware) to apply packaged solutions
- Solutions can be complex, costly to develop and hard to maintain or update.





The Game Changer: jQuery

What is jQuery?

"A fast and concise JavaScript library that simplifies HTML document traversing, event handling, animating and Ajax interactions for web development..."

-jQuery.com

- Incredibly easy and fun to use:
 - \$('body').css('background-color','white');
- Lightweight Footprint (only 24KB)
- Cross-Browser Compatible
- CSS3 Compliant





jQuery's Extensible Nature

- jQuery is easily extended and is designed to do so.
- Thousands of open source plug-ins available for use:
 - Interactive Charting, Enhanced Tables, Form Validation
 - Pre-Built User Interface Widgets with jQueryUI
 - Visit http://plugins.jquery.com for more.





jQuery and Cognos

- Off-the-shelf plug-ins can be easily adapted to work in Cognos Viewer.
- You can design to leverage Cognos elements.
- Report Authors no longer need to be JavaScript developers.
- Code can be agile, loosely coupled to Cognos Objects and easily modified if they change.





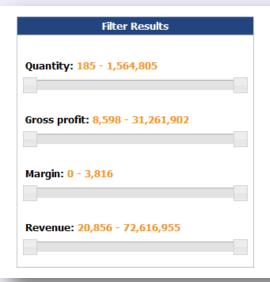
Kayak-Style List Navigation

The Problem

I want to be able to quickly sift through volumes of tabular data

The Solution

Use off-the-shelf widgets to add rate sliders and column sorting to your list.



Retailer name	Quantity	Gross profit	Margin	Revenue
4 Golf only	53,570	2,365,185.93	213.85	5,015,375.54
Accesorios Importados, S.A. de C.V.	115,721	3,476,312.02	515.78	7,945,373.51
AcquaVerde	286,461	5,152,922.75	437.14	12,696,927.89
Action Factory	126,402	3,588,049.50	243.65	8,613,520.15
Advanced Climbing Ltd	25,911	390,046.24	30.06	1,008,869.51
Air frais	64,315	1,359,334.72	143.75	3,225,980.69
Air marin	158,549	3,375,691.88	375.86	8,248,477.50
Aktive Markt	204,661	5,009,494.01	471.56	12,013,789.68
Allo Allo	40,147	526,184.47	78.92	1,289,430.26
Alpenfreizeit	5,129	139,454.76	31.47	320,044.00
Alpin Sport	57,165	1,179,410.38	109.94	2,762,663.92
Altitudes extrêmes	384,669	7,515,650.55	1,183.79	18,196,327.12
Amis de montagne	73,365	1,476,151.33	170.55	3,689,130.62





Tree Map Visualizations

The Problem

Cognos 8 does not currently offer native tree map data visualizations.

The Solution

Use a slightly modified off-the-shelf plug-in to generate tree maps.

Sales Region	CY Revenue	%Change to LY
Asia Pacific	204,564,827	26.73%
Central Europe	499,863,272	32.04%
Southern Europe	87,357,102	29.28%
<u>Americas</u>	233,605,784	27.87%
Northern Europe	91,945,289	34.06%







A Few Caveats

- No AJAX calls are made, the browser does the heavy lifting.
- Excellent performance in modern browsers that are optimized for JavaScript
 - Firefox 3.0 supported for Cognos Viewer in 8.4
 - IE8 and Firefox 3.5 supported in 8.4.1
- Follow Best Practices for JavaScript
 - Optimize JavaScript for better IE7 performance
 - Centralize your code for simplified management
 - Leverage the plug-in architecture of jQuery

