

# **Interactive animations from R's Gridsvg in IE7+**

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# The challenge

Create an interactive visualisation from an R plot that works in a browser, ideally IE7.

Example GridSVG graphic:

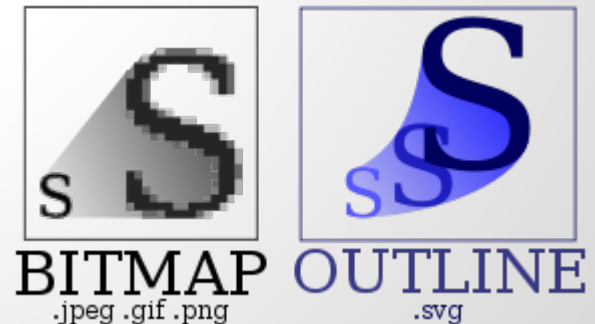
<http://sjp.co.nz/projects/gridsvg/docs/grid-animate/> By: Simon Potter

Analyse data and deliver to the user in as little time as possible

# What is SVG?

SVG is a W3C standard for XML which specifies vector graphics

SVG can be embedded in a browser and it is possible to specify animations using SMIL to: scale, move, change colour, etc...



# Why is SVG cool?

Browser support - Opera (since 8.0), Firefox & co 2005, Chrome and Safari 2006, **IE 9.0 (2011) partial support but possible for earlier versions through 3rd parties**

R can output SVG through GridSVG - Author: Paul Murrell

# Approaches

Plug-ins that bring SVG to older browsers: (1,2,3)

Pro: Complete support <sup>3</sup>, other functionality <sup>2</sup>

Con: Requires installing software (1,2,3)

Libraries that add SVG support to older browsers: (4,5)

Pro: Already familiar with them <sup>4</sup>

Con: Not so flexible <sup>5</sup>, requires mods to standard libraries (jQuery) <sup>4</sup>

# The solution

Ample SDK is a UI framework, which among many other things enables SVG in IE7

Another useful feature in this context is that it enables: XUL - a XML User Interface Language.



<http://dasfaha.com/r/ample-xul-boxes.html>

# Caveats

It doesn't actually work with R's SVG output...

- Some attributes had to be changed ('duration')
- Element links had to be removed and elements were nested instead

Could be done automatically through a script.

<http://dasfaha.com/r/ample-xul-boxes.html>

# Conclusion and questions

There are good news...

... it will probably also work in IE6

Questions