



ESRI

The Innovation Heat Map from SAS Institute and ESRI

Track global innovation for a view of the past and a vision of the future

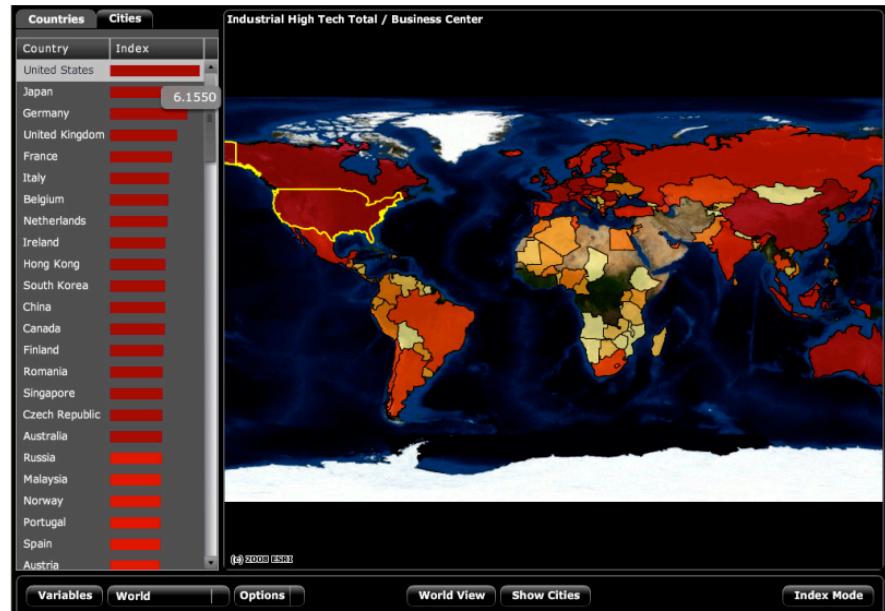
For thousands of years, the world has been driven by innovation. Not only is it essential to human survival, but with global warming and a global economy, innovation is quickening its pace and becoming more critical today than ever before.

When world leaders and senior-level decision makers need insight on where their nations or cities rank on a global comparison of innovation or emerging trends across the globe, they now can turn to the Innovation Heat Map. Developed through a SAS and ESRI strategic technology partnership, the application was unveiled at the World Economic Forum Annual Meeting 2008 in Davos, Switzerland.

Easily deployed on the Web, the graphical visualization tool can compare, for instance, roughly 900 measures gathered on 160 countries and 2,900 cities around the world, along areas of business, government, infrastructure, culture and education. It uses SAS® to integrate the data and ESRI® for the geospatial mapping on the user interface screen.

Ultimately, the application is designed to increase the quality of global conversation about innovation among the highest level of global experts and will expose leaders to new and challenging insights that may lead to questioning previously held notions about innovation.

Heat Map Samples¹



Example 1. This heat map view ranks countries on the variables "industrial high tech total" and "business center." The United States, Japan and Germany are ranked the highest for the combination of these variables. When a user hovers over a country name on the left-hand side, the same country is also illuminated on the map.

¹ The data used in these heat map examples was gathered by management consulting firm McKinsey & Company from many sources, including the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-Operation and Development (OECD) and the World Bank.

"We concentrated on developing a map-based application that is interactive, flashy and makes it easy to compare countries and cities side by side. I think that we have produced something that is both interesting and fun to use."

Dale Rierson

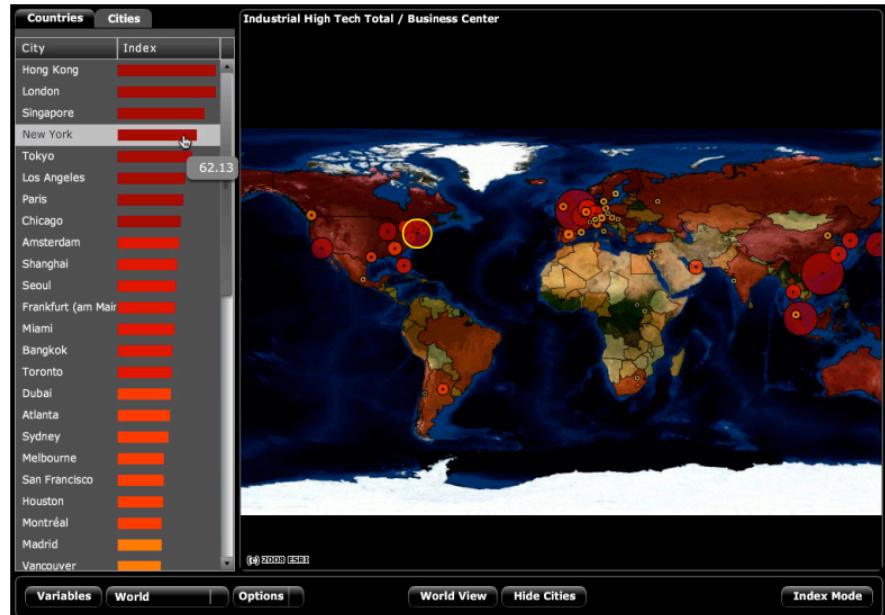
Technical Architect, SAS Business Performance Analytics Integration and a chief architect for the application

About SAS

SAS is the leader in business intelligence and analytical software and services. Customers at 44,000 sites use SAS software to improve performance through insight from data, resulting in faster, more accurate business decisions; more profitable relationships with customers and suppliers; compliance with governmental regulations; research breakthroughs; and better products and processes. Only SAS offers leading data integration, storage, analytics and business intelligence applications within a comprehensive enterprise intelligence platform. Since 1976, SAS has been giving customers around the world THE POWER TO KNOW®.

About ESRI

As the world leader in Geographic Information Systems (GIS), ESRI applies innovative technologies to help organizations create, analyze, and visualize information for more informed decisions. Running on more than a million desktops and thousands of servers, ESRI GIS applications are the foundation of the world's mapping and spatial analysis infrastructure. www.esri.com



Example 2. This heat map view displays the city-level data on the same variables – "industry high tech total" and "business center." Hong Kong, London and Singapore top the list. Future phases of the Innovation Heat Map will include SAS analysis to further explore the underlying relationships between these variables.



Example 3. The Innovation Heat Map application allows users to view data in "index mode," where they can select specific countries to see how they compare according to selected variables. In this example, the six different countries are compared on "ease of hiring foreign labor," "scientific and technical journal articles," "urban population" and "burden of government regulation."