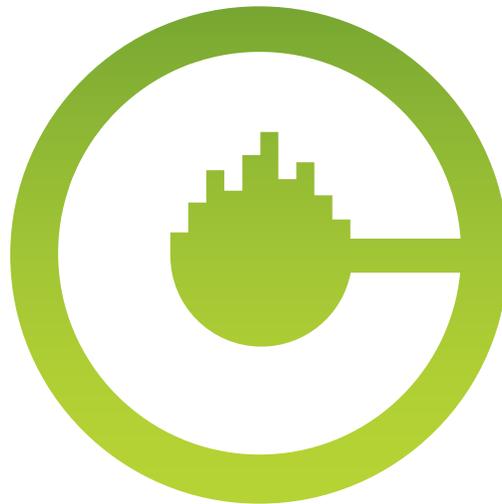




WHITE PAPER

Maps: An Intro Guide for Business Intelligence Dashboards



Business Intelligence Results

Business Intelligence technology exists to transform raw data into valuable information used at all levels of any organization. A successful business intelligence implementation relies on a careful balance of process and technology to ensure “intelligent” business decisions are reached. The speed and efficiency that an organization can cultivate real business intelligence can have a profound effect on the bottom line. While there are multiple layers of software required to execute an end to end business intelligence solution, user adoption is driven through end user tools including reports, dashboards, and analytic packages.

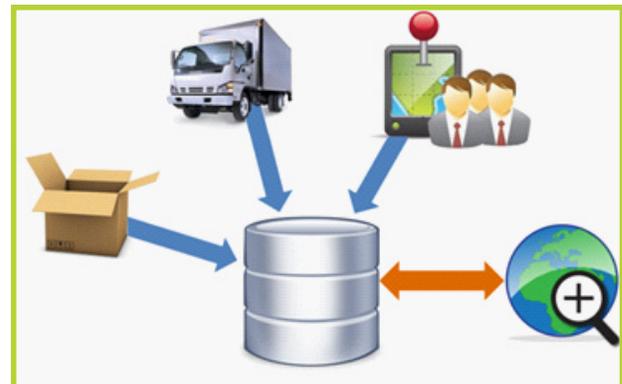
Driving User Adoption with Dashboards

Dashboards have become an important tool for deploying business intelligence within an organization. Dashboards make business intelligence approachable for information consumers thanks to the interactive web 2.0 user experiences employed by most software vendors to fuel the expansion of business intelligence adoption. A successful dashboard deployment should speed up the information assimilation process, thus increasing the capacity to consume more information. All dashboard tools are packaged with controls for navigating and visualizing information, and may include maps.



Why Maps are Important

Geographic information is critical for organizations to understand how location impacts business performance. Maps provide a powerful solution for assimilating the location of assets (people, customers, products, vehicles, etc) and/or areas (zones, regions, etc). While geo-spatial visualization is certainly not a new concept, as the pervasiveness of GPS, RFID, and location aware wireless devices increase, organizations require business intelligence to monitor location based metrics. Most database vendors have made significant investments to produce geo-data base solutions specially designed to capture, index and deliver this data. The challenge of transforming geospatial data into meaningful information is driving BI vendors to enhance their reporting and dashboard tools to meet the demands for mapping. As operational business intelligence and mobility become more important to providing near real time analysis, business users will need to monitor location based problems and opportunities.



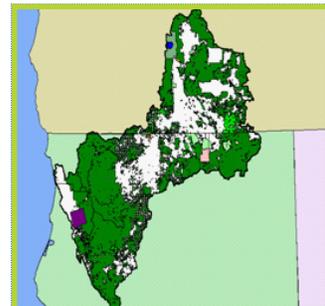
Choosing the Right Map for the Job

While most dashboard solutions are packaged with a library of maps, few address the wide range of business requirements for monitoring and analyzing geographic metrics. The unlimited business requirements for monitoring and tracking performance have been addressed using multiple technology approaches, all with their own set of strengths and weaknesses.

SVG and Vector Maps- Most dashboard packages include a library of thematic maps formatted as vector or SVG images. For organizations that monitor regional performance based on state/country these are extremely effective yet inflexible for company specific territories/zones, regardless how large the map library is.

Web 2.0 Maps- Google, Yahoo, and Bing Maps are widely adopted as the de facto interface for navigating maps on the web. The flexibility to quickly navigate any geographic level provides a powerful ability to address a wide range of visualization requirements. In recent years these consumer technologies have been repurposed and offered as enterprise “software as a service” solutions. Gartner recently reported that by 2012, 1/3 of analytic applications applied to business processes will be delivered through application mashups. Many organizations are now adopting these powerful APIs to provide exactly what business users require in an interactive map interface. While Google and Bing may supply robust platforms for delivering map visualization to business users they are not equipped to address some of the advanced capabilities facilitated by GIS Mapping solutions.

GIS Solutions- Geographic Information Systems (GIS) solutions enable organizations to generate and edit maps or create advanced geographic planning, and analysis not possible with SVG and Web 2.0 maps. While GIS solutions provide tremendous power in the breadth and depth of analysis, most business intelligence dashboards require a small fraction of what GIS solutions are capable of delivering. Database and BI vendors have filled several capabilities traditionally managed in GIS, now allowing customers to deploy rich mapping experiences without any GIS software.



Reaching Information Consumers

As the gap decreases between enterprise and consumer technologies, business will demand more from dashboard and reporting solutions. The pervasiveness of maps on desktop, mobile, and automotive computing devices has eliminated barriers for end users to comfortably navigate geospatial information. Providing visualization for locations and regions at multiple geographic levels (country, state, street) is the key to fulfilling a vast majority of mapping requirements in business intelligence dashboards. As dashboard technologies evolve on premise, in the cloud and on our mobile devices, location-based intelligence is one of the keys to unlocking the true potential of operational business intelligence.

About the Author

Ryan Goodman is the CEO of [Centigon Solutions](#), author, and expert in dashboard design. With over 7 years of developing interactive data dashboards with SAP BusinessObjects Dashboards (formerly known as Xcelsius), Ryan is currently focused on developing rich geographic visualization solutions with Centigon Solutions [GMaps Plugin](#).