Why you need a true data visualization API

As business graphics consume more screen real estate in desktop and mobile apps, product managers and UX teams struggle to push “beyond the bar chart” with innovative concepts that are difficult to productize and frequently don’t scale to enterprise dimensions.

Advanced Visual Systems has developed a multifunction API that serves as a rich canvas for the development of intelligent and interactive data visualizations that have an intimate relationship with both the underlying data and the end user.

Think outside the chart

For many ISV and OEM product teams, some of the biggest barriers to developing an innovative data visualization strategy have been the limits imposed by off-the-shelf charting packages.

Advanced annotation, axis layout, conditional trendlines, rule-based transparencies, dynamic chart-in-chart tooltips, internationalization and icon-based legends are just a few of the impossibilities with most unsophisticated charting packages that aren’t pure data visualization systems.

The OpenViz API was created specifically for use by ISV and OEM teams committed to differentiating their value proposition with highly effective visualization features that accent the underlying data and eclipse the generic look and feel of commodity charts.

As data becomes larger and more complex the need to embrace non-traditional methods of visualization is essential for any long-term product strategy. Switching graphics platforms or vendors every few release cycles is impractical and inefficient. OpenViz has a ten-year release history of providing distinctive user experience to many types of OEM clients. To understand how, request an online demo.

Data before visualization

The OpenViz API consists of a flexible data management pipeline that feeds many millions of in-memory data points into a high performance rendering engine for scalable graphics generation.

The pipeline is an effective way to capture a large query and/or build a sizable array of disparate values from any combination of static or real-time inputs and frees an application from being dependent on highly aggregated or pre-calculated data strings that are the only connection between data and a visualization.

A large selection of OpenViz components enable a variety of statistical, computational and data management functions that radically innovate the range options available to a product team seeking to synchronize a proprietary business process, algorithm or workflow with interactive components of a user interface.

Each time that an end user interacts with an application through a server-side AJAX (or Java or .NET client-side) element such as a slider, gesture, region selector or click-to-drill action, the OpenViz data management pipeline responds with a dynamic generation of refreshed in-memory values that are pushed to the OpenViz graphics renderer.

Technology Snapshot

- API with 200+ highly-configurable components for charting, data import, analytics
- Generate HTML5 or PNG graphics with AJAX interactivity (or Java or .NET applets) from any data on any platform
- One app travels from desktop to tablet to touch surface with no code changes
- In-memory features allow for large queries, algorithms, advanced analytics, low-latency real-time visualization

Use Cases

- Advanced/next-generation dashboards
- Analytic applications
- Live infographics
- Multi-platform mobile apps
- Real-time network visualization
- Demanding ISV solution strategies
- Internal enterprise analytics programs

Reference clients

- Leading business intelligence platform
- Cutting-edge social analytics startup
- Top financial services platform
- Pharma/life sciences innovator
- Fortune 500 energy company
- Preeminent engineering ISV
- Global advertising agency

Licensing

- Single annual fee, no user count
- Includes support and special services
- Designed for any sized ISV or OEM

More information

- www.openviz.com
- (781) 890-4300 Ext. 2192
- Offices in Boston and London

AVS has a two-decade reputation of creating innovative data visualization software products that have been used by over 2,000 ISVs, enterprises and research organizations to accelerate and improve decisions for nearly 10 million end-users.