

## **Software Comparison**

### **ArcGIS**

Better known as ArcGIS, is a geographic approach that uses geographic science supported by geographic information system (GIS) technology as a framework for understanding our world and applying geographic knowledge to solve problems and guide human behavior. GIS extends the power of geography by providing a digital tool that can abstract and organize geospatial data, model geographic processes, visualize such data and models with advanced computer techniques. The ease of use is considered to be intermediate and there's more of a learning curve compared to Tableau and SAS, the software does provide an abundance of assistance, guides and flexibility.

### **Highcharts**

Highcharts is a charting library written in pure JavaScript, offering an easy way of adding interactive charts to your website or web application. Highcharts currently supports line, spline, area, areaspline, column, bar, pie, scatter, angular gauges, area range, areasplinerange, column range, bubble, box plot, error bars, funnel, waterfall and polar chart types. Setting the Highcharts configuration options requires no special programming skills. The options are given in a JavaScript object notation structure, which is basically a set of keys and values connected by colons, separated by commas and grouped by curly brackets. Highcharts takes the data in a JavaScript array, which can be defined in the local configuration object, in a separate file or even on a different site. Furthermore, the data can be handled over to Highcharts in any form, and a callback function used to parse the data into an array.

### **Qlikview**

Qlikview similar to Tableau, focuses on excel forms and simple VB programming. Each object in Qlikview has numerous options and properties that enable the manipulation of objects in every imaginable concept. The software offers an amazing amount of flexibility in how you can set up properties. Unlike Tableau, in order to modify Qlikview objects, you must launch a property window that at times can obscure the object which you are working with. Because of these characteristics, Qlikview is more of a developer mindset better known as UI.. If you are a programmer, UI mind set, or focused on reporting, Qlikview is generally the right type of software to satisfy your needs.

### **SAS**

SAS (pronounced "sass") once stood for "statistical analysis system," and began at North Carolina State University as a project to analyze agricultural research. Contrary to Tableau, SAS functions provide data mining and managing to fetch important information from a variety of sources. Supplying the most sophisticated analytics platform, it is not particularly easy to use.

Suited for larger organizations with complex needs. SAS software provides a distribution of reports through web, mobile devices and integration through microsoft applications.

### **Tableau**

Tableau has the ability to chart, graph and compile data analysis as well as its unique appeals. It features attractive visualizations and has a relatively easy to use interface. The nature of its function is firmly based with that of visual exploration of data using every format imaginable. It is considered to be a “Rapid Fire Intelligence” tool rather than have the ability to focus on data mining or text analytics. One of the downsides of the software, is that it is not considered much in the way of computational analytics.

### **Pricing**

#### **ArcGIS for Desktop Basic**

- Single License: \$1,500
- Concurrent License: \$3,500

#### **ArcGIS for Desktop Standard**

- Single License: \$7,000
- Concurrent License: \$7,000

### **Highcharts**

- [Free for non-commercial use](#)

### **Qlikview**

- [Desktop and Personal Edition Free Versions](#)

### **SAS**

- For Students, Professors and Independent Learners
  - [SAS University Edition](#) and [SAS OnDemand for Academics](#) make SAS software available at no cost for teaching and learning purposes.
  - Through a partnership between [Teradata University Network](#) and SAS, college professors and students can access SAS Visual Analytics via a broadband Internet connection for teaching and learning purposes – at no cost. Teaching materials are included.
- For K-12 and Higher Education Institutions
  - SAS offers several free solutions, as well as special pricing on other products, to [K-12](#) and [higher education](#) customers.

### **Tableau**

- **Free Desktop version called “Public”** that makes data available to all.

- Private versions come with fixed fee \$999 or \$1,999 depending on data access.