

## **D3.js charts vs Shiny vs ggplot2**

### **D3 – Data-Driven Documents**

- D3 relies completely on the developer to specify exactly what they want to see and produces anything and everything.
- It is a little complicated and it takes times to understand the basics of D3. Learning how D3 creates, selects and manipulates SVG objects takes time.
- It is easy to do server hosting on D3.
- D3 is an open-source library so it is free for everyone to use.
- Even the most basic dashboard in D3 can take hundreds of lines of code. It takes a bit longer development time.

### **R Shiny**

- R Shiny does have some built-in visualizations like ggplot2 library which makes it a little flexible tool than D3.
- If you know R, R shiny is an easy to deal with tool.
- Server hosting on R is a little restricted because of only one free open source.
- R Shiny is completely free except the server hosting cost.
- The development time of R visualization is quite lesser than that of D3.

### **Ggplot2**

- Ggplot has default colors and aesthetics which are more pleasing than the other two. Like axis titles, tick marks etc.
- GGplot2 is easy to use for beginners.
- There is no cost involved in using ggplot2. It is a function of R and R is free to use.
- The development time of ggplot2 is very less. There are many one-liner codes that can produce great output.