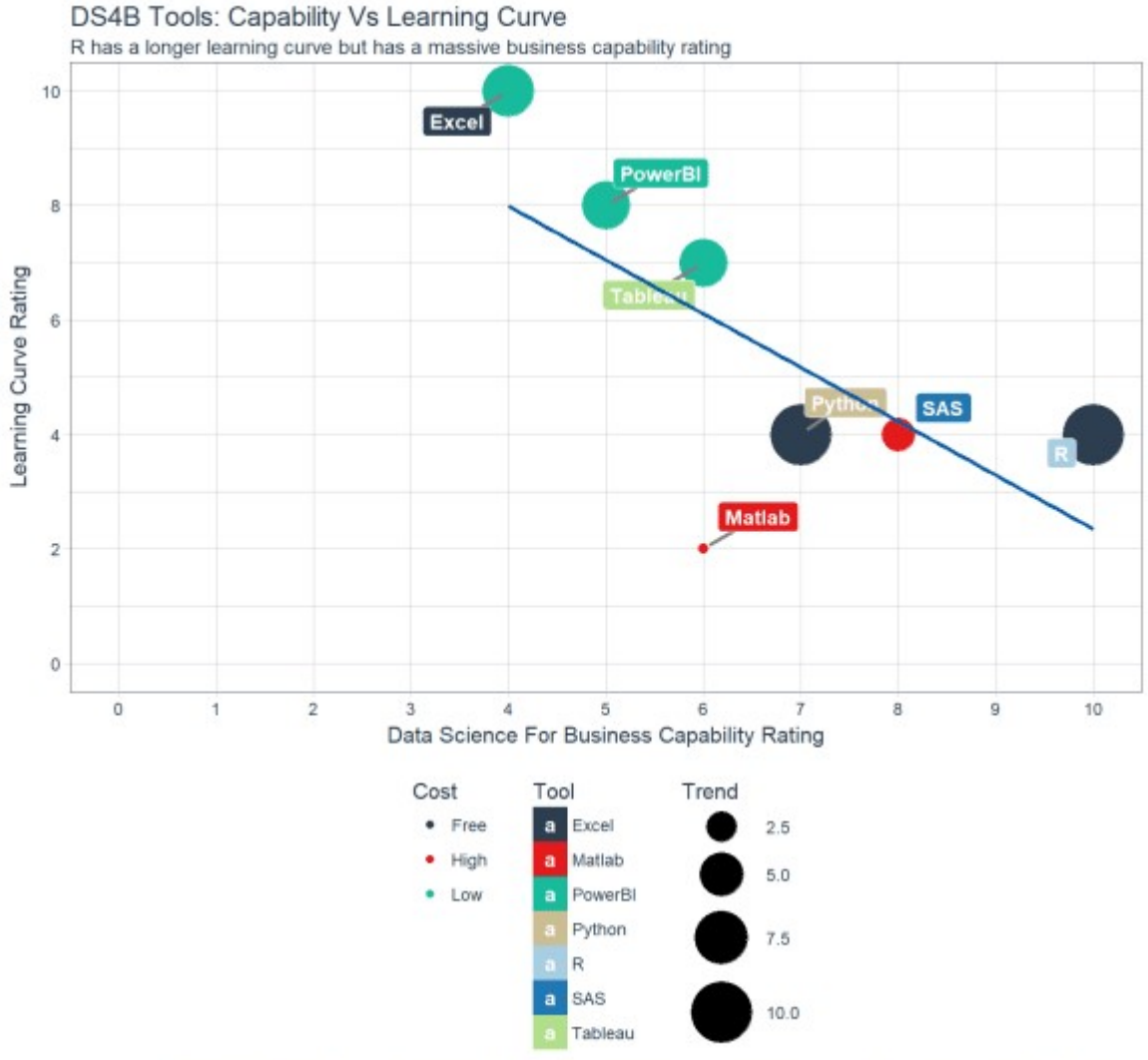
```
library(tidyquant)
library(ggrepel)

data_apps <- tribble(
  ~application, ~business_capability, ~ease_of_learning,
~trend, ~cost,
  "R",          10,                   4,                  10,
"Free",
  "Python",     7,                    4,                  10,
"Free",
  "Excel",      4,                    10,                 7,
"Low",
  "Tableau",    6,                    7,                  6,
"Low",
  "PowerBI",    5,                    8,                  6,
"Low",
  "Matlab",     6,                    2,                  1,
"High",
  "SAS",        8,                    4,                  3,
"High"
)

cap <- paste0(
  "Why R? Tools like Excel, Tableau, PowerBI are easier to
learn, but have lower ",
  "Business Capability. Tools like Python, SAS, and Matlab
have high ",
  "Data Science Capability, but lack the visualization and
interactive ",
  "application tools needed for business. R has the best data
science, visualization, ",
  " and interactive tools plus it's free!"
  )

data_apps %>%
  ggplot(aes(x = business_capability, y = ease_of_learning,
             color = cost, size = trend)) +
  geom_point() +
  geom_label_repel(aes(label = application, fill =
application),
                   size = 3.5,
                   fontface = 'bold', color = 'white',
                   box.padding = 0.1, point.padding = 0.5,
                   segment.color = 'grey50', segment.size =
1) +
  geom_smooth(color = palette_dark()[[1]], method = "lm", se
= FALSE, show.legend = F) +
  expand_limits(x = c(0, 10), y = c(0, 10)) +
  theme_tq() +
  theme(legend.direction = "vertical") +
```

```
  scale_fill_tq() +
  scale_color_tq() +
  scale_y_continuous(breaks = seq(0, 10, 2)) +
  scale_x_continuous(breaks = 0:10) +
  scale_size_continuous(range = c(2, 14)) +
  labs(title = "DS4B Tools: Capability Vs Learning Curve",
       subtitle = "R has a longer learning curve but has a
massive business capability rating",
       caption = label_wrap_gen(115)(cap),
       x     = "Data Science For Business Capability Rating",
       y     = "Learning Curve Rating",
       color = "Cost",
       size  = "Trend",
       fill  = "Tool")
```



Why R? Tools like Excel, Tableau, PowerBI are easier to learn, but have lower Business Capability. Tools like Python, SAS, and Matlab have high Data Science Capability, but lack the visualization and interactive application tools needed for business. R has the best data science, visualization, and interactive tools plus it's free!