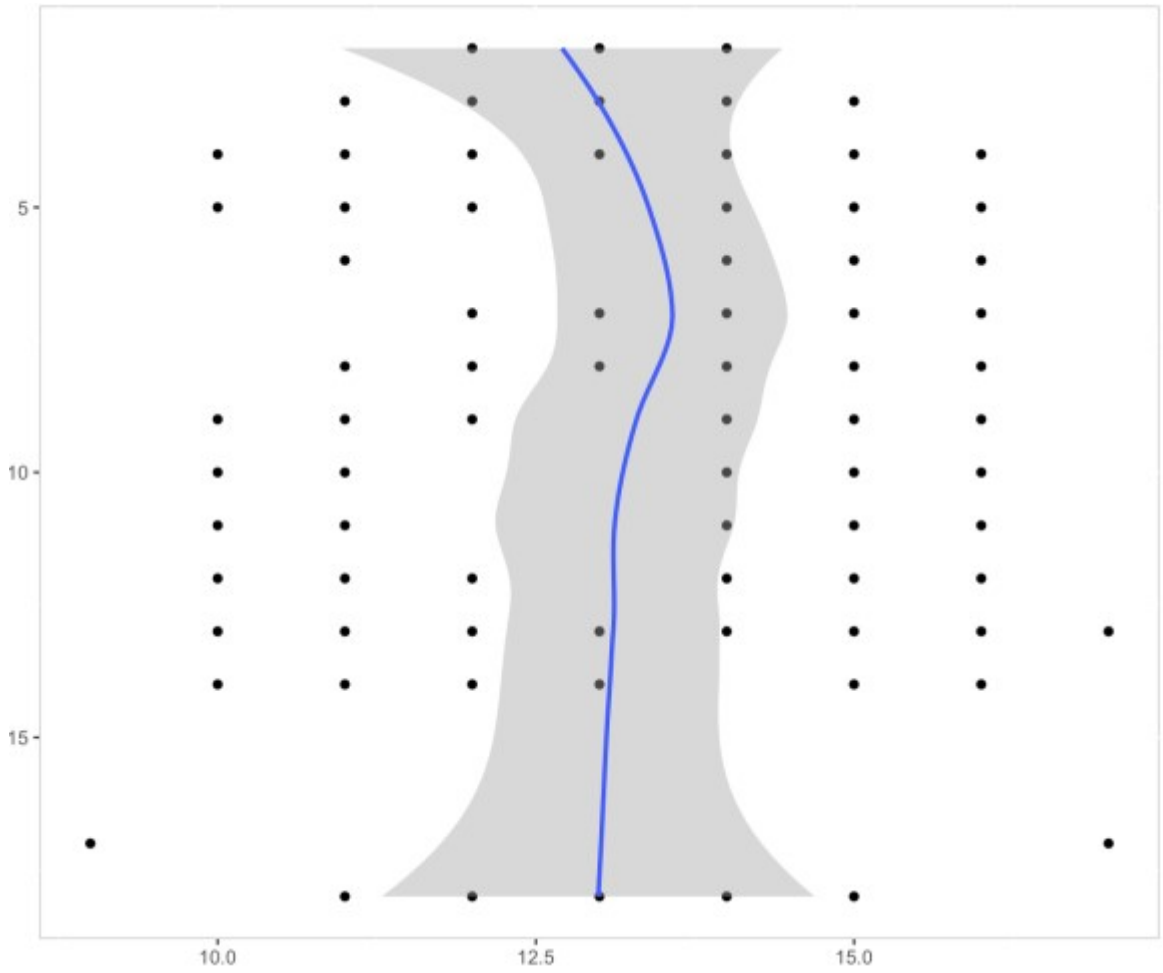
Taking a jpg image and converting it to raster, getting pixelized data manipulation of the image and plot a scatter image.

Sound like another useless R function, that can produce a scatter plot in a shape of a logo with a smooth curve.



Example with Amazon logo

So the function is using the image manipulation part:

```
img <- magick::image_read("image/amazonLogo.jpg")
img <- img %>%
  image_quantize(max=2, colorspace = 'gray', dither=TRUE) %>%
  image_scale(geometry = geometry_size_pixels(width=25, height=20,
preserve_aspect=FALSE))


# Image manipulation
mat <- t(1L - 1L * (img[[1]][1,,] > 180))
mat_df <-data.frame(mat)
```

Second part consists of data transformation to dataframe:

```
# Melt data
dff <- data.frame(x = NULL, y = NULL)
for (i in 1:nrow(mat_df)) {
```

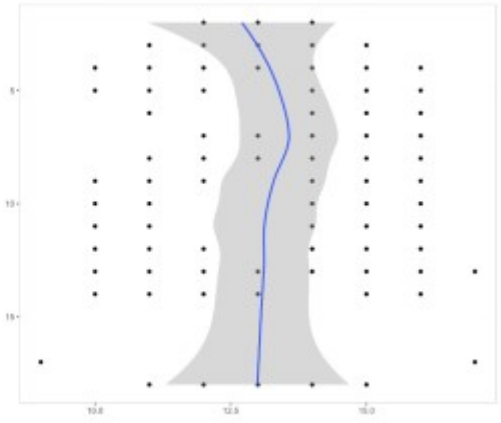
```
  for (j in 1:ncol(mat_df)){
    if (mat_df[i,j] == 1){
      d <- data.frame(x=i, y=j)
      dff <<- rbind(dff, d)
    }
  }
}
```

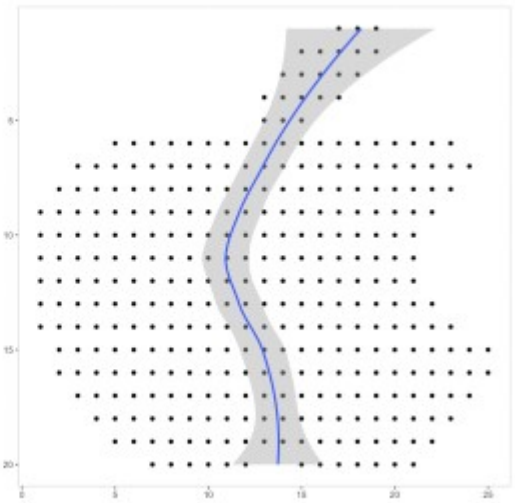
and last part is a simple ggplot scatter plot:

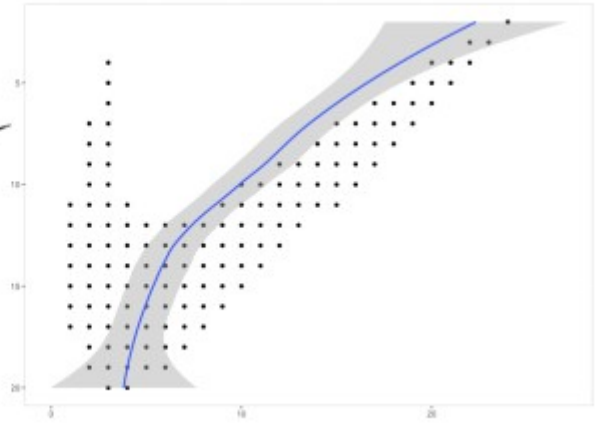
```
# draw scatter
g <- ggplot(dff, aes(x = x, y = y)) + geom_point()  + scale_x_reverse() +
coord_flip()
g + theme(panel.background = element_rect(fill = "white", colour = "grey"))

#draw scatter with jitter
g <- ggplot(dff, aes(x = x, y = y)) + geom_point() + geom_jitter() +
scale_x_reverse() +  coord_flip()
g + theme(panel.background = element_rect(fill = "white", colour = "grey"))

# draw scatter with smooth and CI
g <- ggplot(dff, aes(x = x, y = y)) + geom_point()  + scale_x_reverse() +
coord_flip() +  geom_smooth()
g + theme(panel.background = element_rect(fill = "white", colour = "grey"))
```

As always, complete code is available at Github.

And some examples with famous logos:







And you can see the pattern