

Reasons to consider R in digital analytics

A flavored presentation with **R**

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About me

R-Ladies Bucharest Chapter Lead | Data Analytics Professional

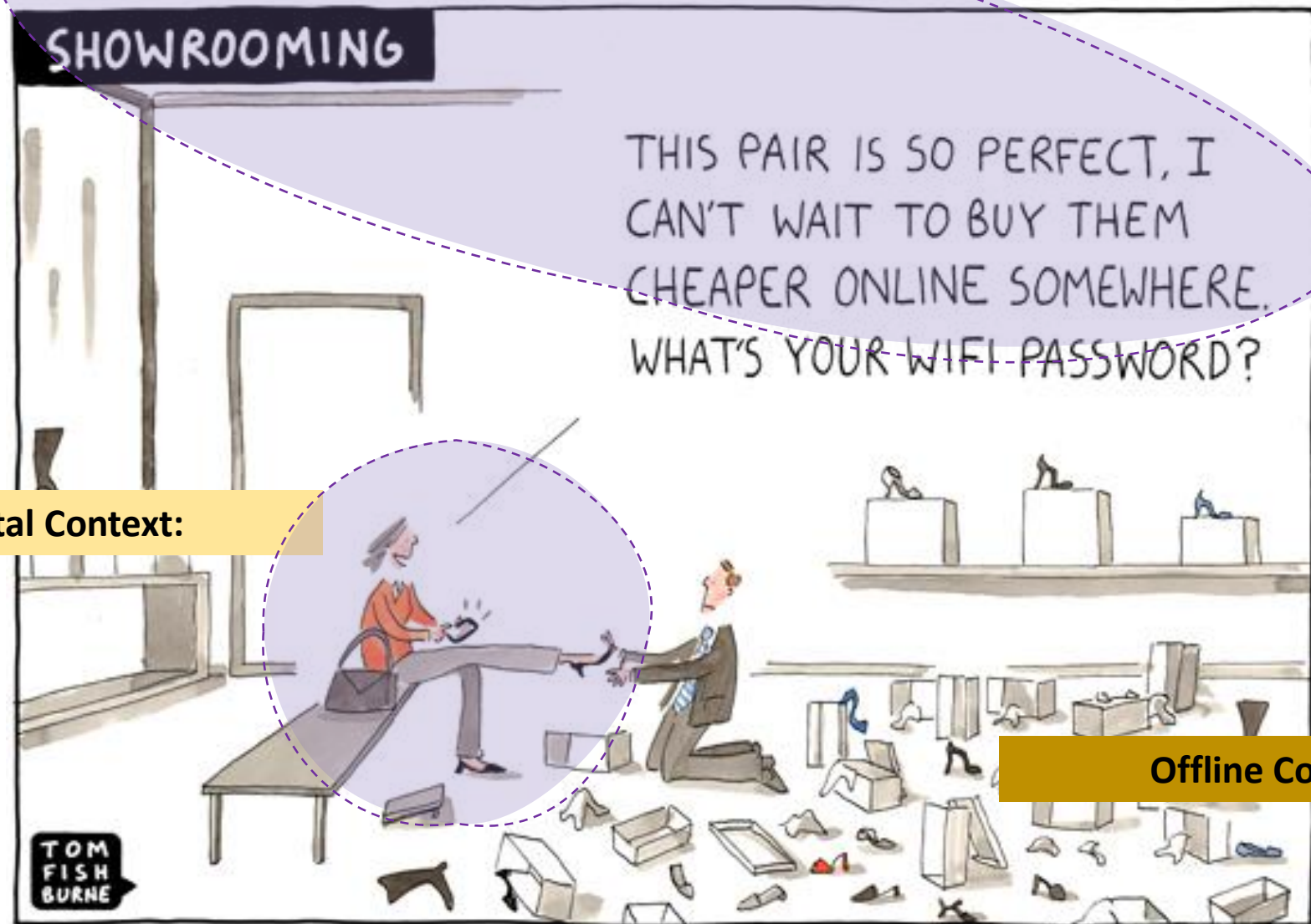
Data & Technology Enthusiast | Fast Learner | Positive
Experience in Telecom industry, Direct marketing & ONGs

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Setting Expectations

- This is a presentation meant to give you a flavor of R
- This is a presentation of options 😊

Customer 360⁰

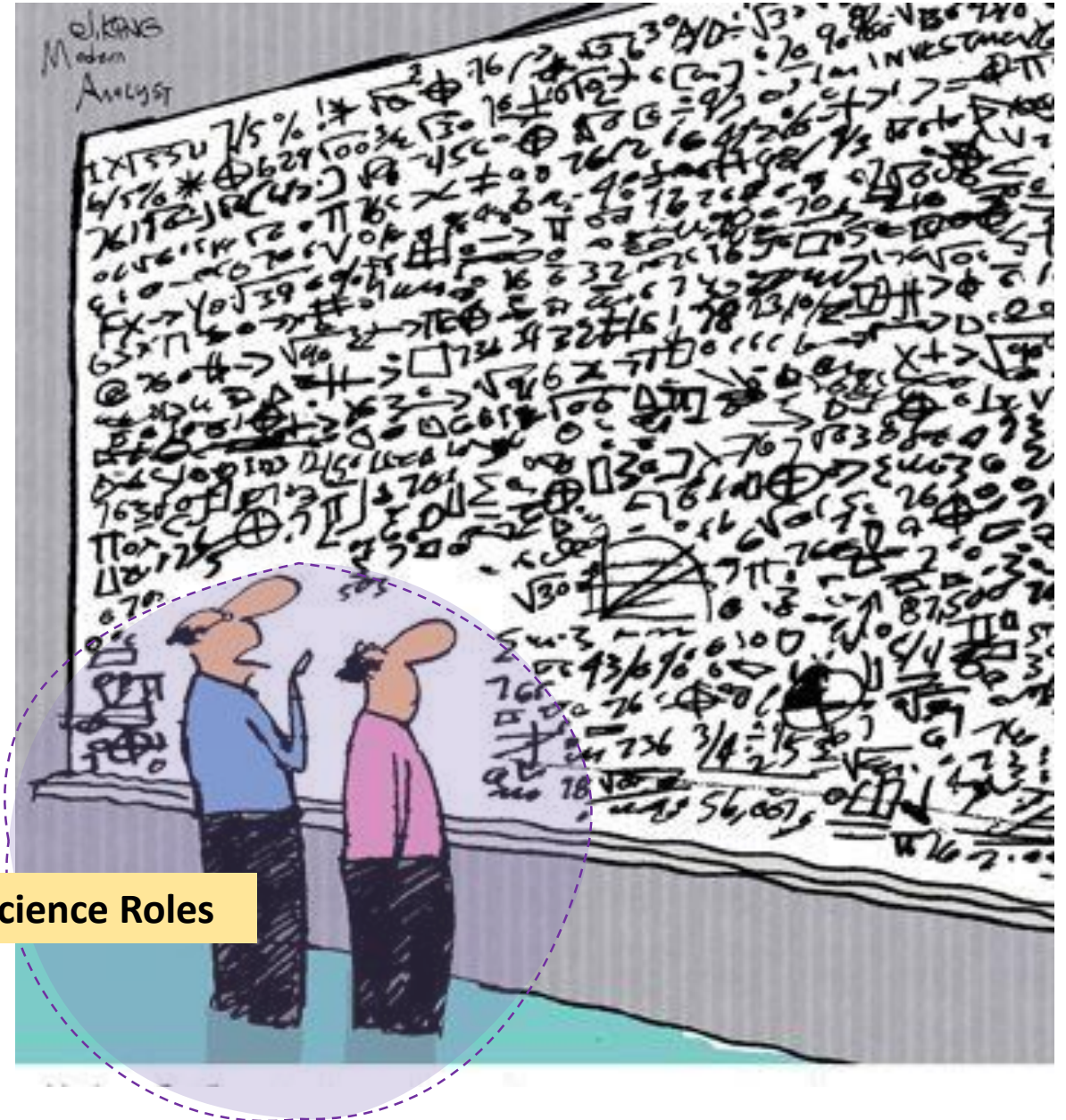


Digital Context:

Offline Context

Data enthusiasts

Let's make some sense of this data



Data Science Roles

Reality. Let's R now



googlesheets4 – read and write data from google sheets

Maintainer, Author Jenny Bryan

```
install.packages("googlesheets")  
library("googlesheets")
```

Until Mar 2020

```
# install.packages("devtools")  
devtools::install_github("tidyverse/googlesheets4")
```

Needed as it's not yet on CRAN

```
library(dplyr)  
top_cars <- top_cars %>%  
  gs_edit_cells(ws = 'Tab 1', input = data)
```

RMySQL - Read and write data to databases

Maintainer Jeroen Ooms



```
install.packages(" RMySQL")
```

```
library(RMySQL)
```

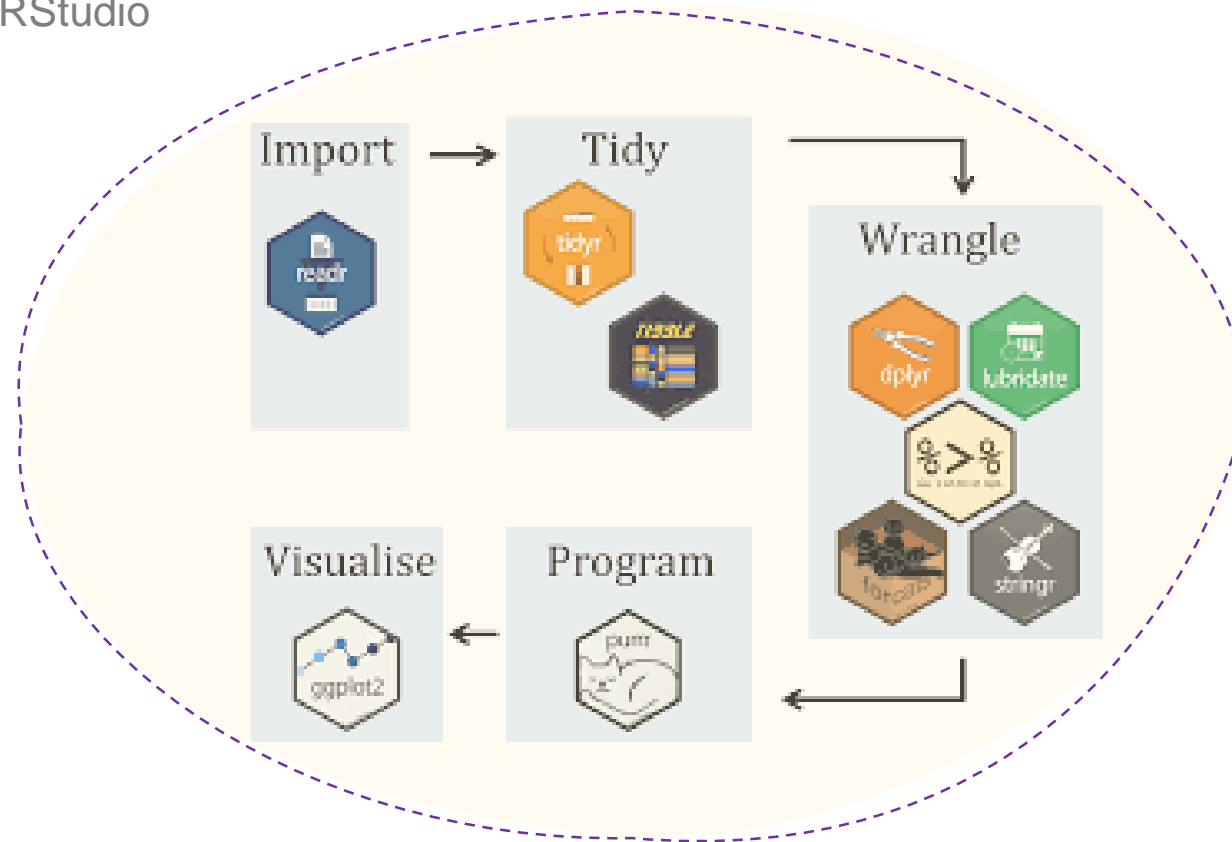
```
mydb = dbConnect(MySQL(),  
user='user', password='password',  
dbname='database_name', host='host')
```


tidyverse – a complete ecosystem for data science

the tidyverse is proudly supported by RStudio



```
install.packages("tidyverse")
```

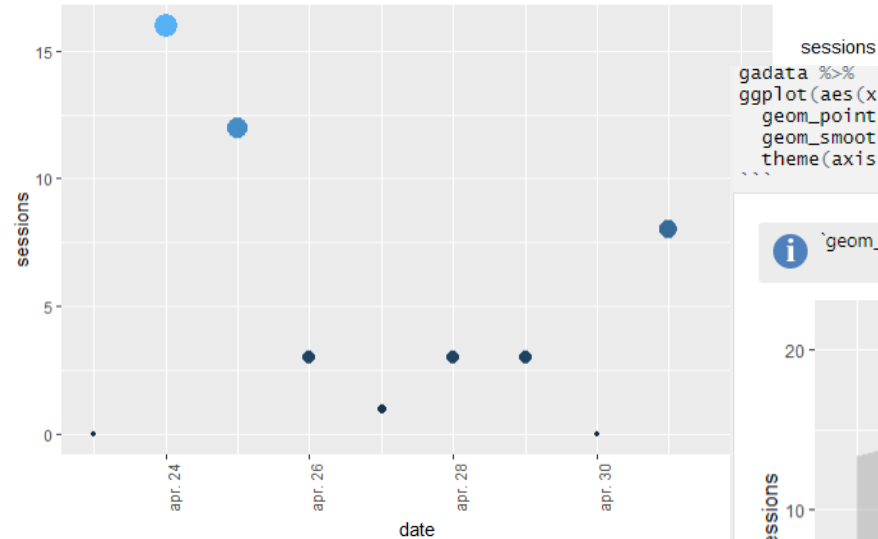


ggplot2 and plotly to build nice visualisations



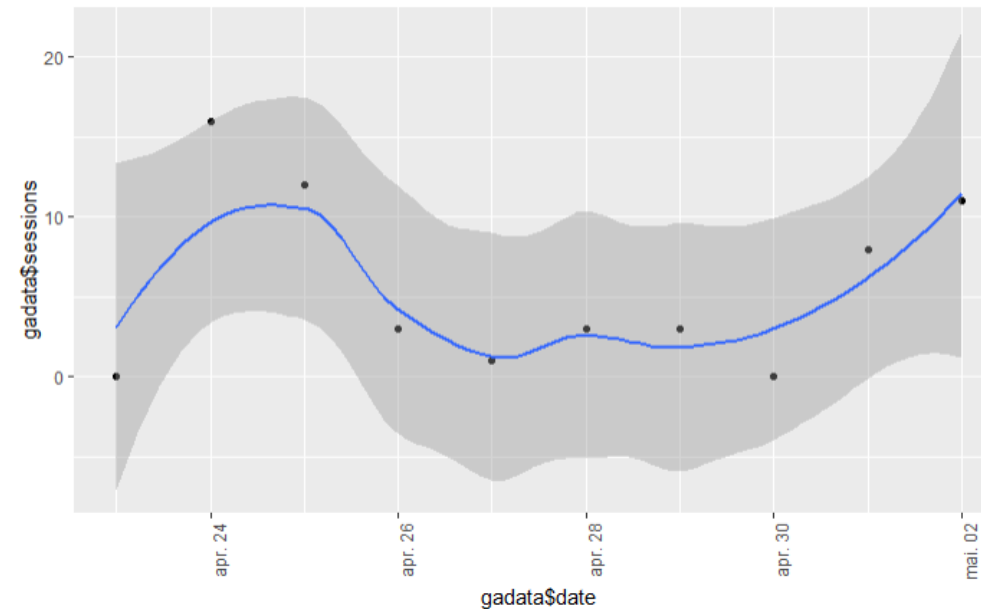
```
install.packages("ggplot2")
```

```
##{r}
# First Graph
gadata %>%
  ggplot(aes(x=date, y=sessions, size = sessions, color =sessions)) +
  geom_point()+
  theme(axis.text.x = element_text(angle = 90, hjust = 1))
##
```



```
gadata %>%
  ggplot(aes(x = gadata$date, y= gadata$sessions) ) +
  geom_point() +
  geom_smooth() +
  theme(axis.text.x = element_text(angle = 90, hjust = 1))
##
```

i 'geom_smooth()' using method = 'loess' and formula 'y ~ x'

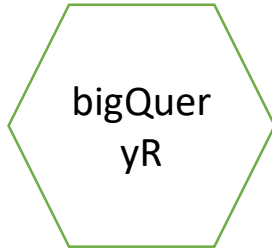
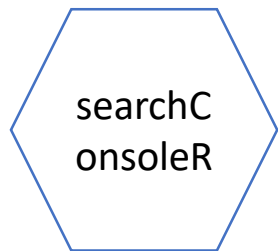


googleAnalyticsR and the 4 magic commands

Maintainer, Author Mark Edmondson



```
install.packages("googleAnalyticsR")
```



1. load libraries

```
library("googleAnalyticsR")
```

2. authorize connection with Google Analytics servers

```
ga_auth()
```

3. pick a profile with data to query

```
ga_id <- account_list[4,'viewId']
```

4. get data from Google Analytics account

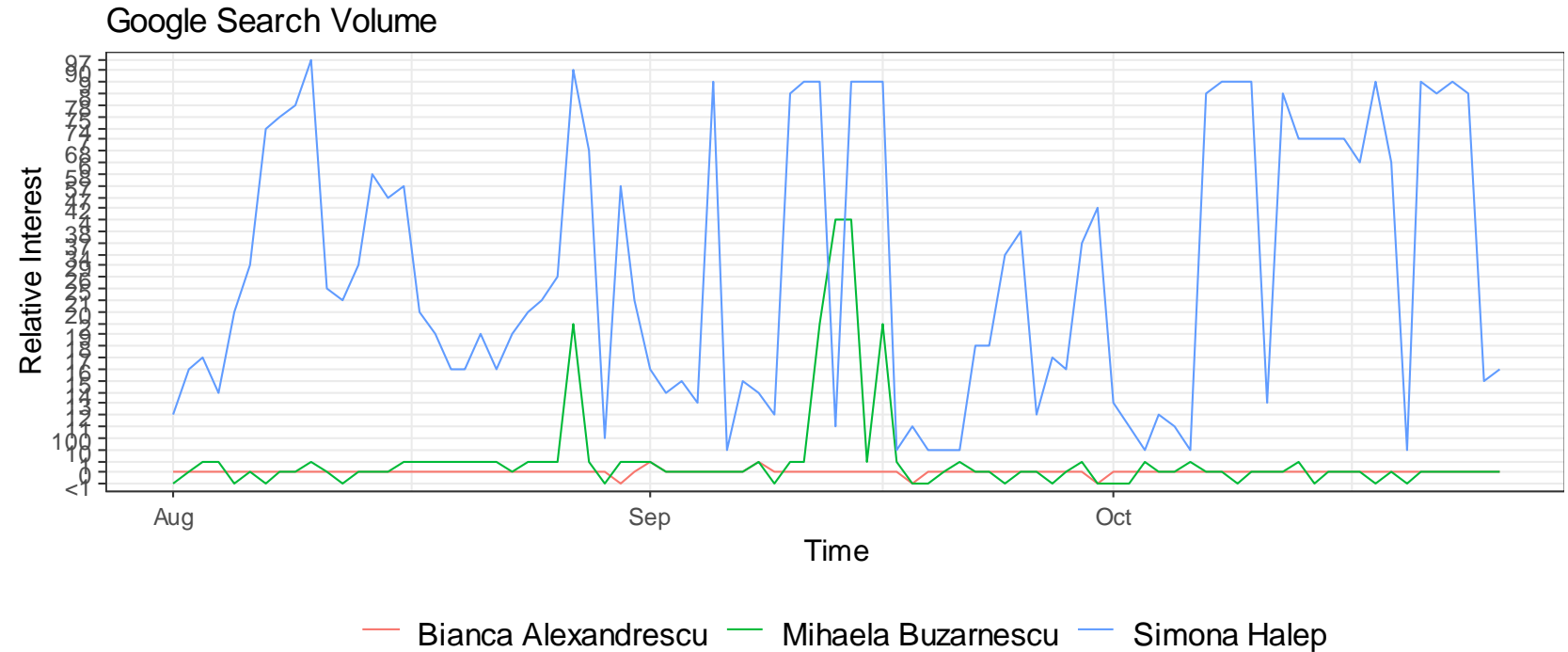
```
gadata <- google_analytics(ga_id,  
                           date_range = c("2019-04-23", "2019-05-02"),  
                           metrics = c("users","sessions"),  
                           dimensions = "date",  
                           max = 100)
```

gTrendsR

Maintainer, Author Philippe Massicotte

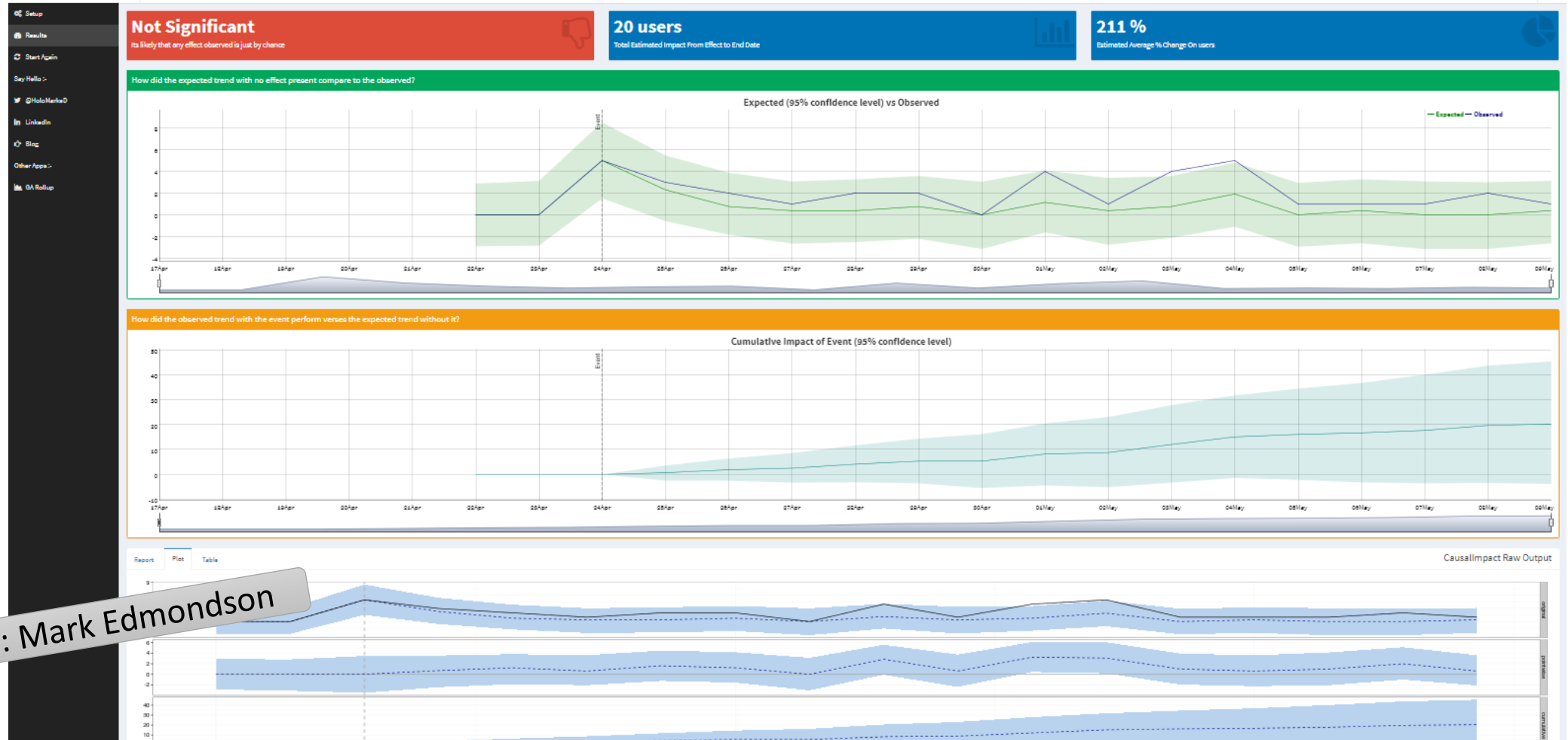
```
install.packages("gTrendsR")
```

```
## load library  
library(gtrendsR)  
?gtrends
```



shiny – next level

Maintainer Winston Chang



Author : Mark Edmondson

<https://gallery.shinyapps.io/ga-effect/>



Thank you