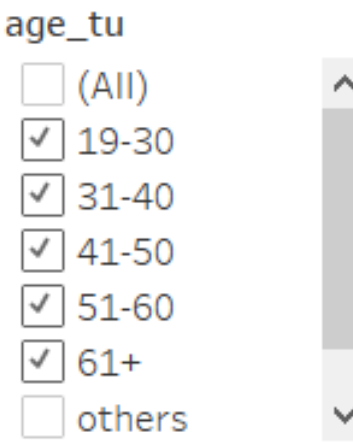
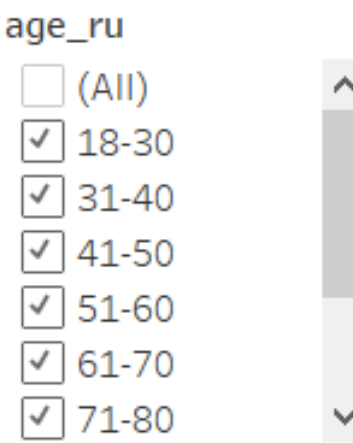
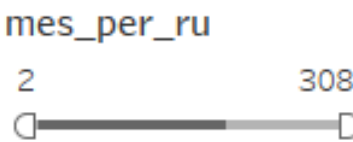
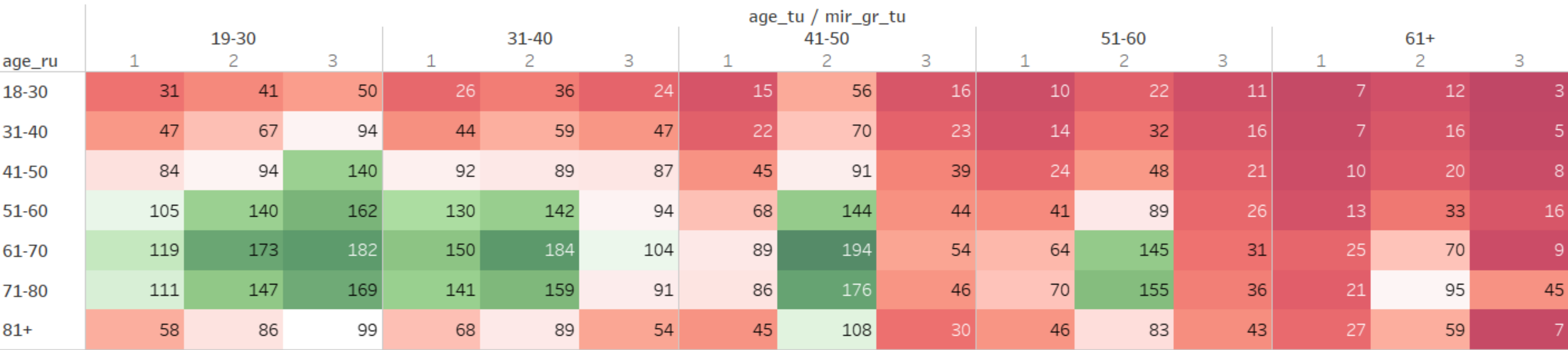
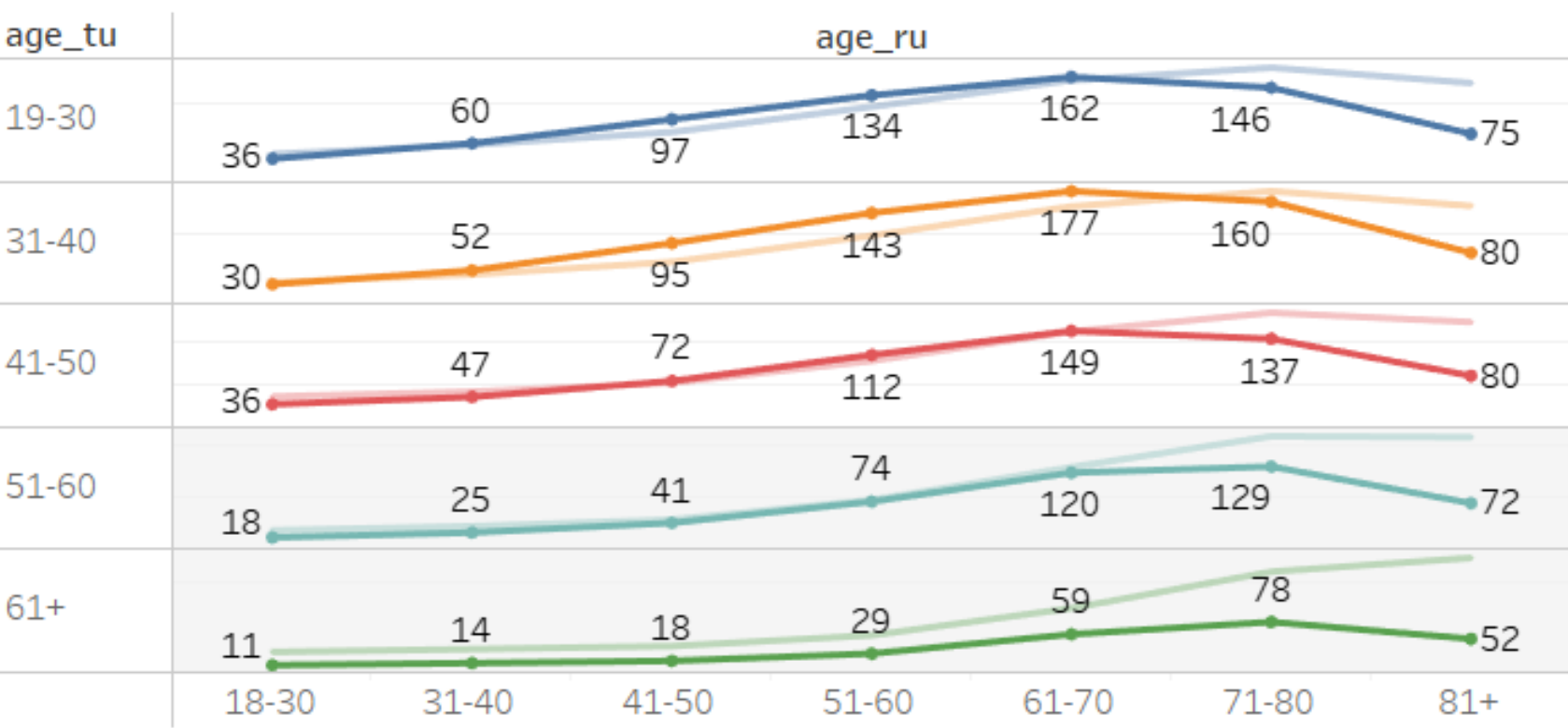


# COMMUNICATION DASHBOARD

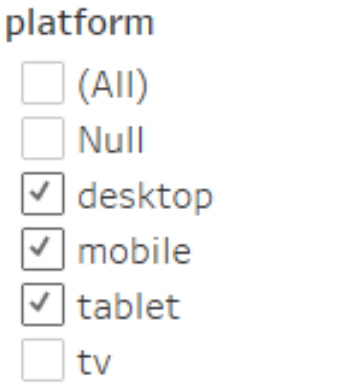
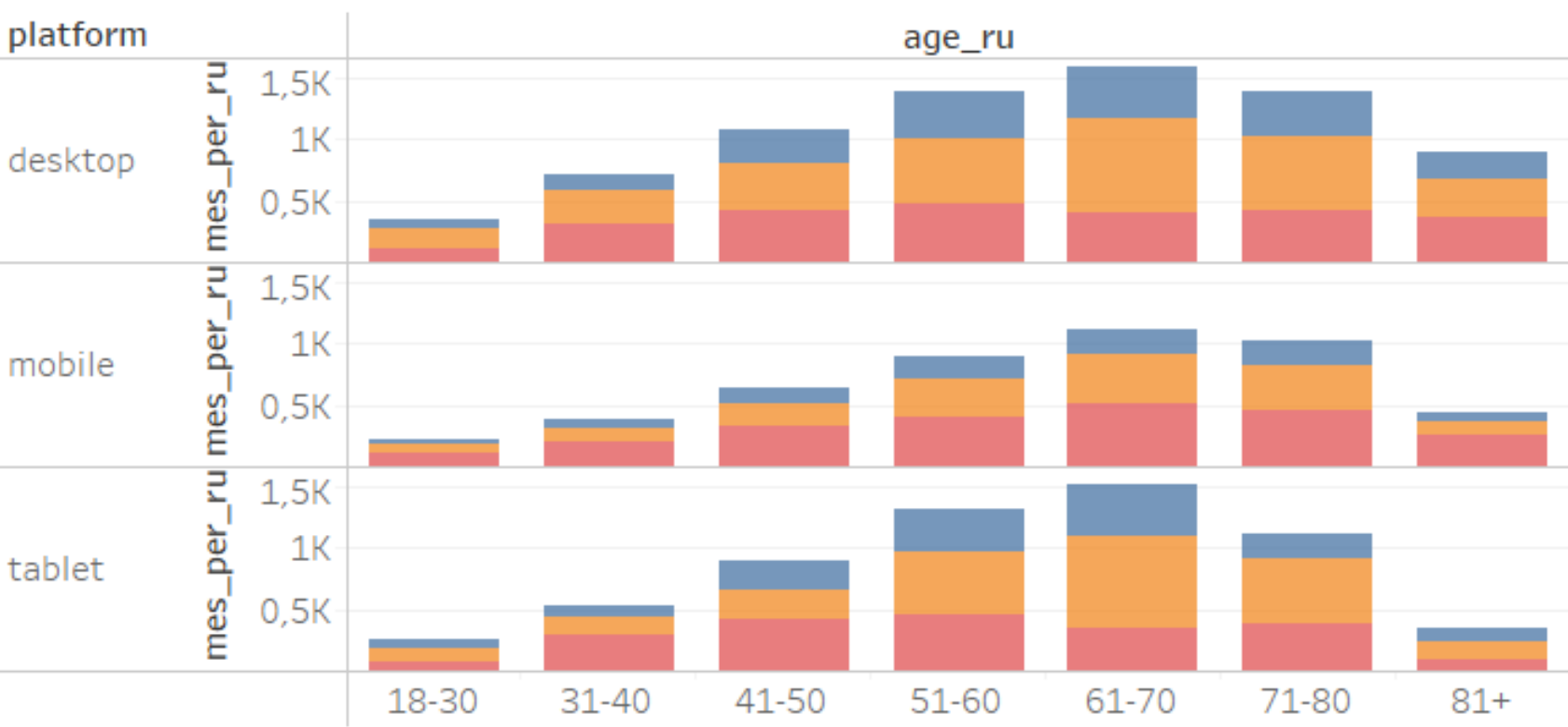
avg(mes) for age groups per region + devision by platforms

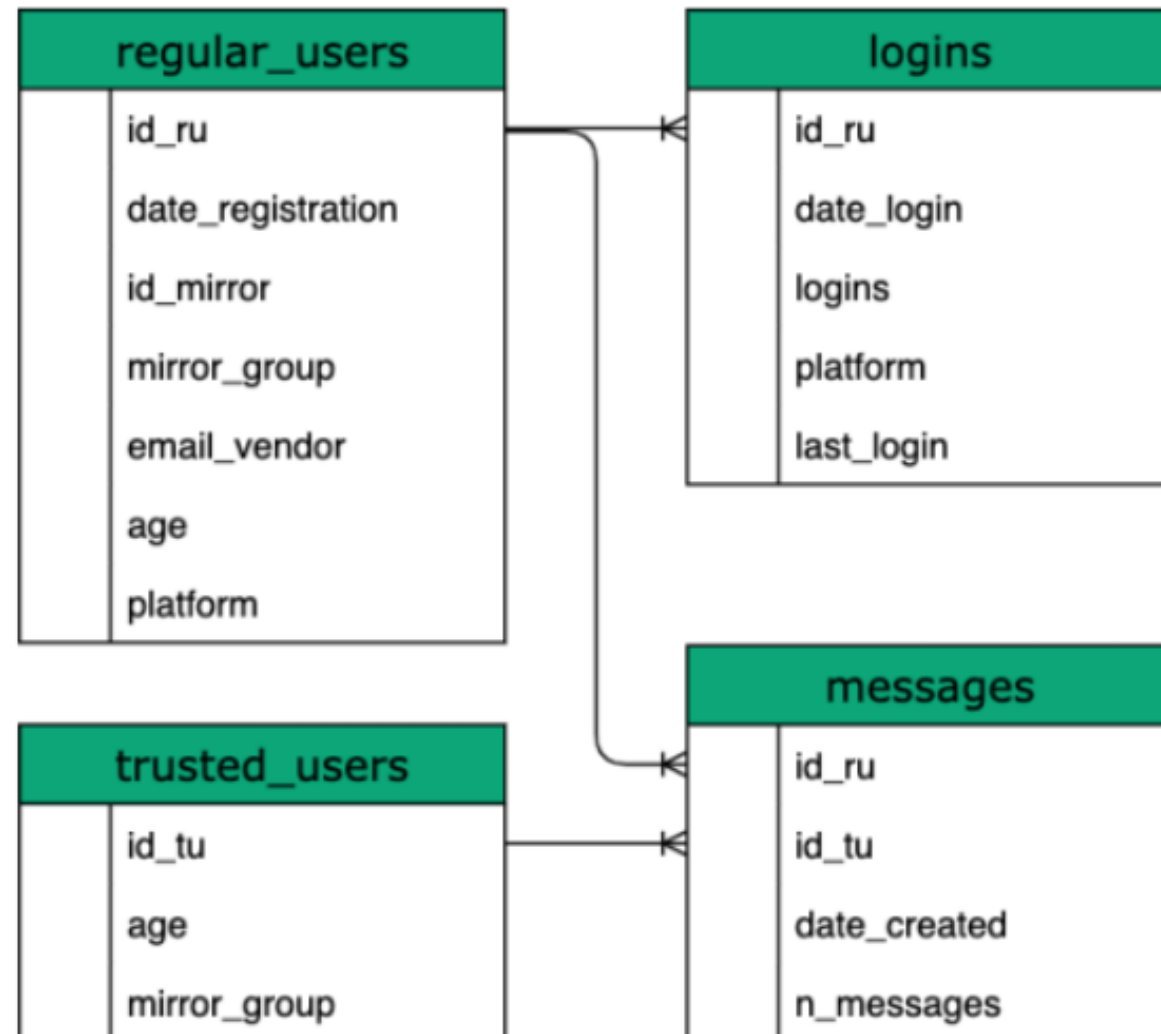


avg(mes) for age groups for all the time + week\_diff & day\_diff



avg(mes) for ru per platforms depending on region and age





## DESCRIPTION OF DATABASE AND PRODUCT

- On the picture on the left you can see a database which was used for this task. It consists of 4 different tables.

1.regular\_users - users who came to our social platform to get valuable information from influencers, watch their videos or streams, talk to them. Most fields are intuitively clear, but others might not be, so:

- mirror\_group - region of user
- email\_vendor - which email user uses (gmail, yahoo...)

2.trusted\_users - influencers, who share their content on platform.

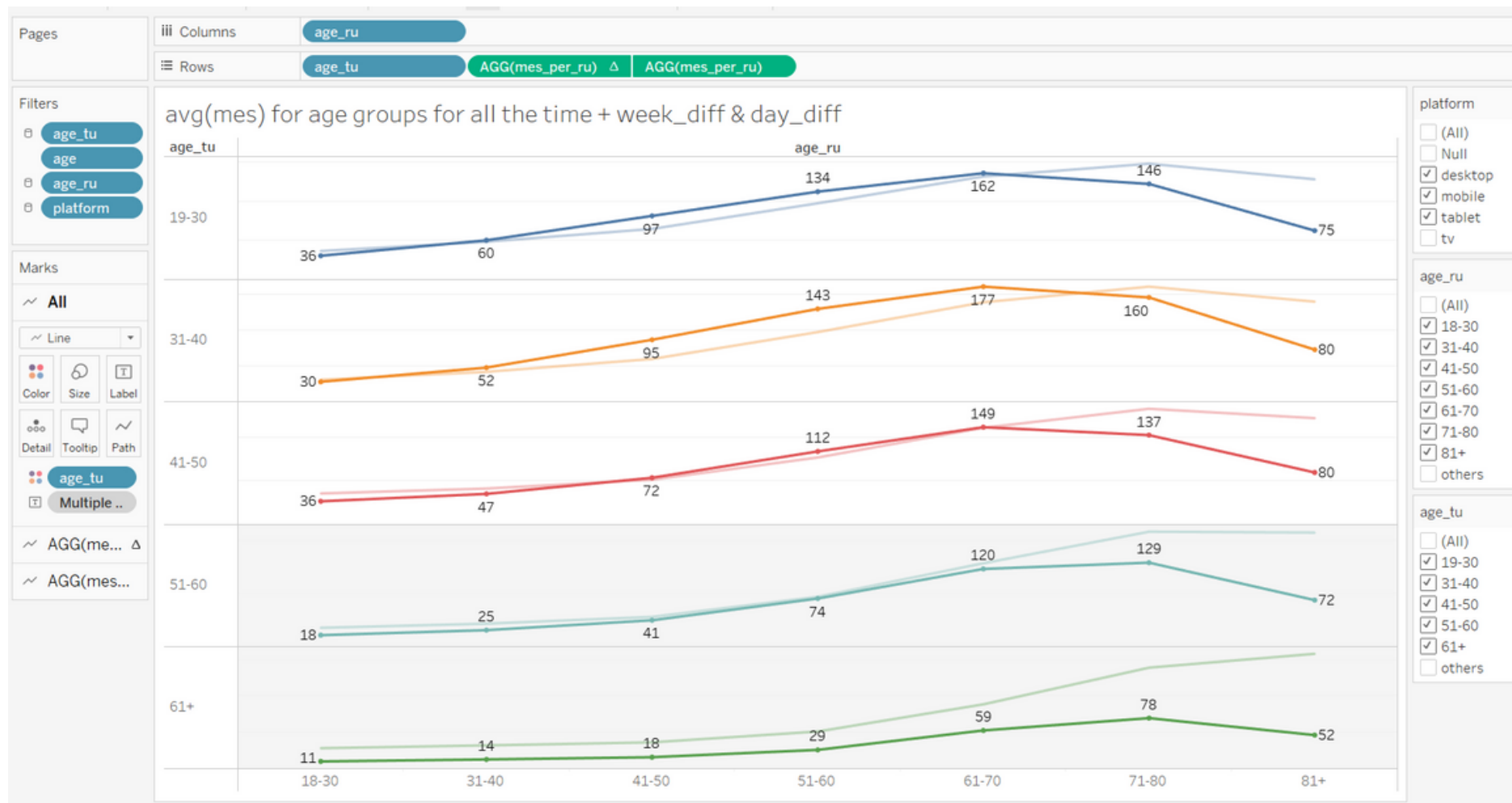
3.logins - when, from which platform, how many times user came.

4.messages - how many, when and to who regular user was writing messages.

## TASK

Build a visualization on one dashboard for the Product Manager of the team that is responsible for working with user-influencers.

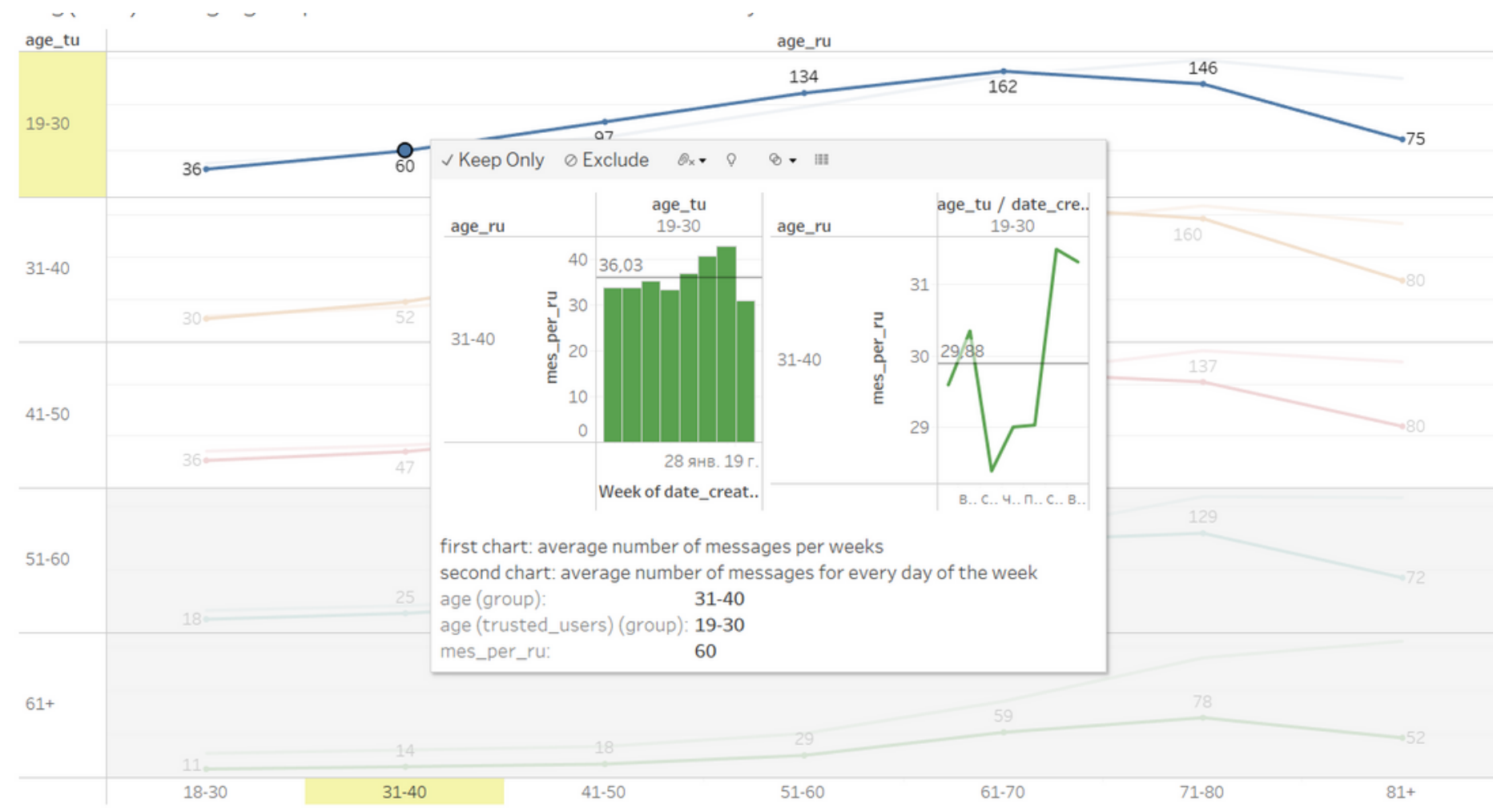
# CHART 1 PART 1



## DESCRIPTION

- At first glance at this chart, you can see that ru & tu are divided into age groups.
- Values on the main graph (brighter lines) correspond to the average number of messages between users for the entire time (05/12/2018-31/01/2019).
- The side (less bright) line is responsible for the moving average, which is built on the basis of the two previous days.
- This graph was built for a better understanding of the influencer's audience and what age users spend more time communicating with (more messages - more time spent).
- The average number of messages was chosen, and not the number of id\_ru, because while working on the graph it was noticed that despite the fact that many users are quite young, they write fewer messages than older people.
- Also filters are added for analysts to be able to be able to explore different combinations.

# CHART 1 PART 2



## DESCRIPTION

- When hovering over a certain point of the main graph, 2 more subgraphs are displayed. The first is responsible for the average number of messages by week, and the second by days of the week for all time. There is also a legend that indicates what each graph is responsible for.
- The first graph gives an understanding of how user activity changed throughout time, by week. You can see that almost everyone has a slump for the New Year holidays, after which the number of messages increases again.
- With the help of the second graph, the weekly trend is better visible. The zero was truncated because even a small change (1-2 messages on average) for one user would mean a change of thousands of messages for the total number of users.
- The average is also added to see how large the deviation is.



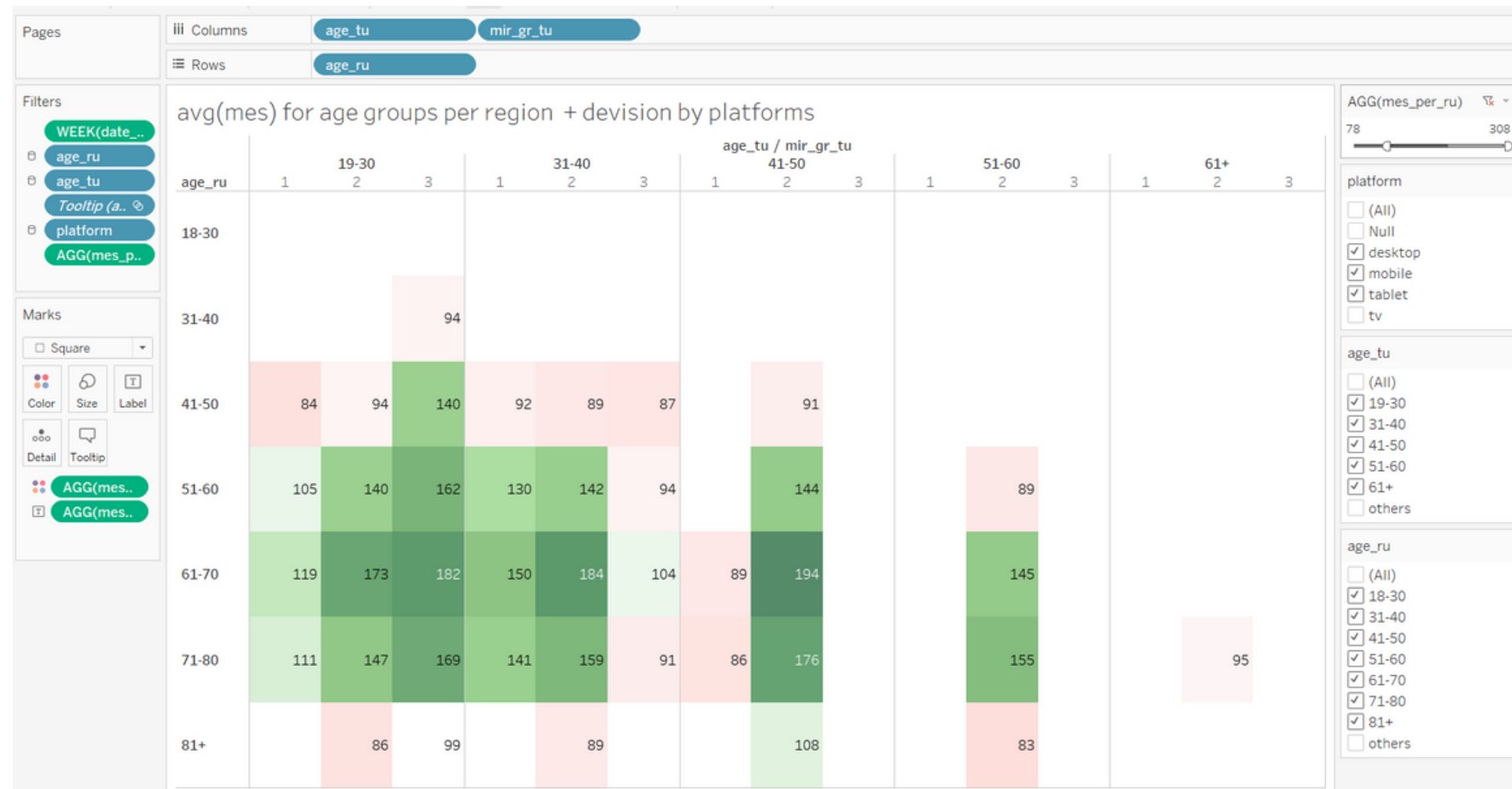


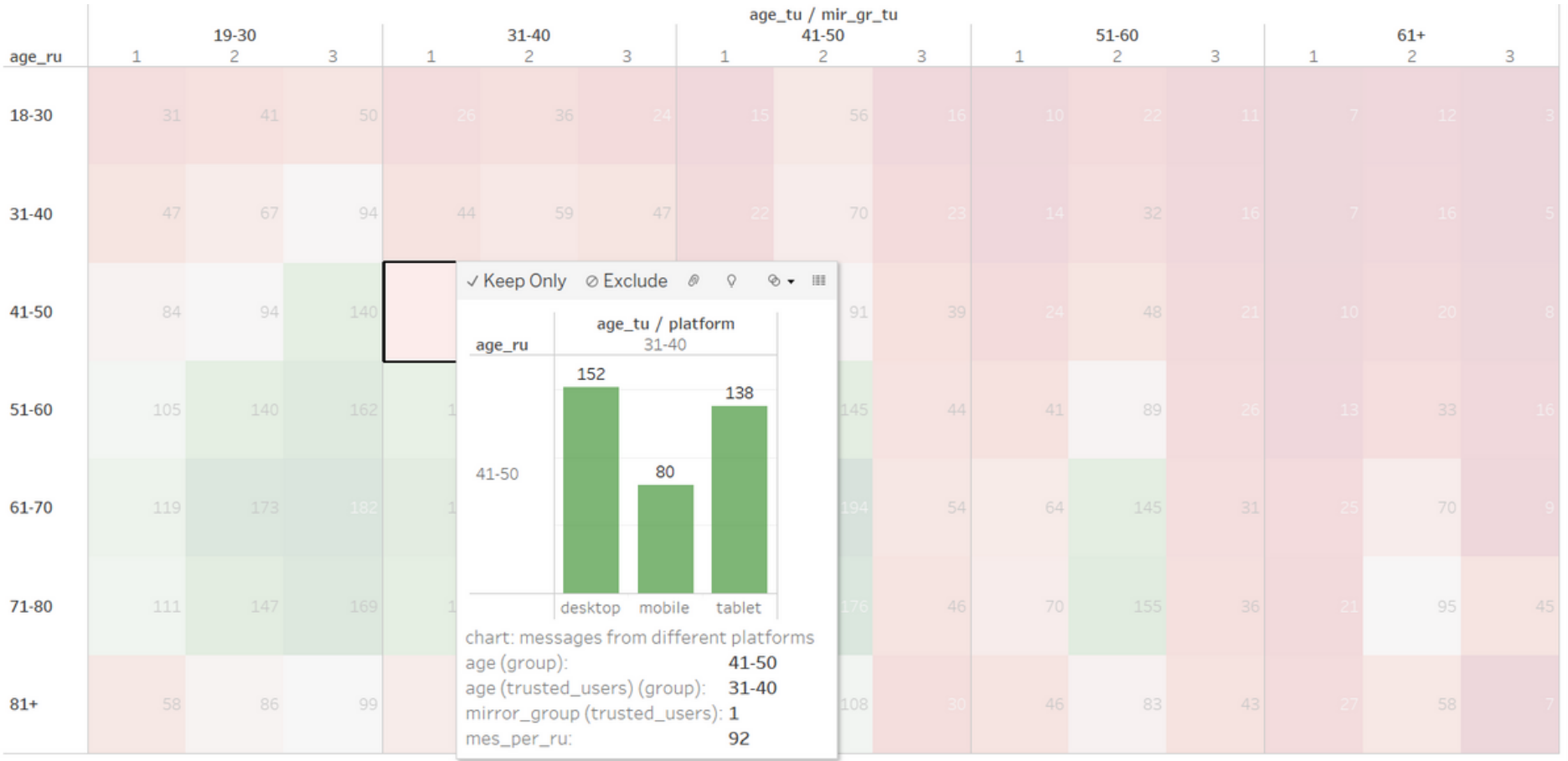
# CHART 2 PART 1



## DESCRIPTION

- Here, users are also divided by age groups, but mirror\_group, which is responsible for the user's region, is also added, so the values correspond to the average number of messages between users of different ages by region.
- The intensity of the color and the color itself correspond to the number of messages. Green is the most in the entire graph, white is the average amount, red is the least.
- Among filters there is filter by number of messages, so while working with this graph you can easily find the biggest number of messages, as it is shown on the second photo.
- This graph was also built to better understand the influencer's audience and which regions people interact with him the most.





# CHART 2 PART 2

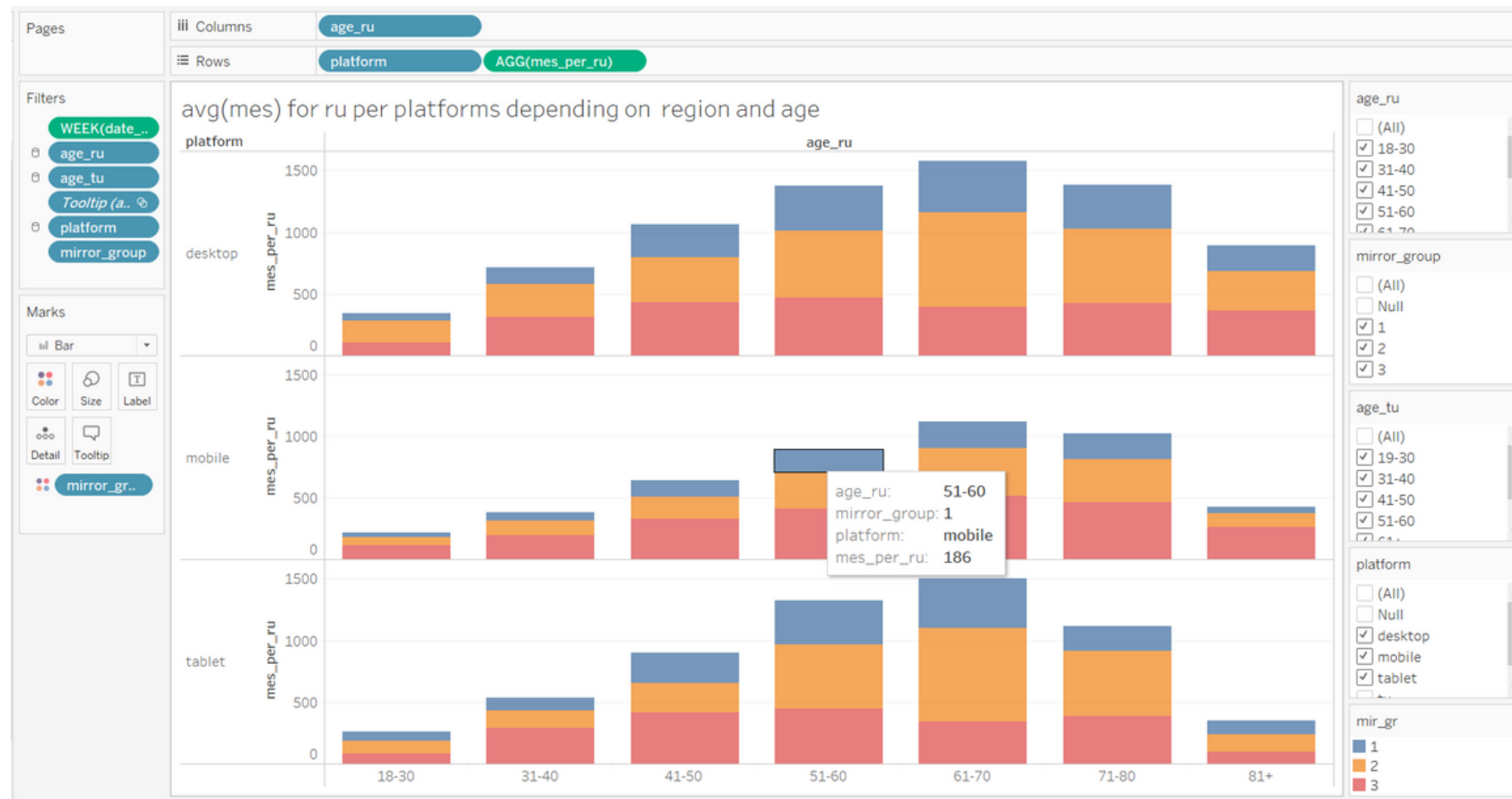
## DESCRIPTION

- When hovering over a certain point of the main graph, a graph showing the division into platforms (desktop, mobile, tablet) is displayed, but in filters you can choose which platforms you want to see, when clicking on point.
- While creating the graph, I noticed that even though most users registered from a phone, they prefer to communicate from a laptop or tablet.
- Also the scale with the number of messagesre was moved in order not to clutter the chart, since the number is displayed on each bar





# CHART 3



## DESCRIPTION

- This graph shows how many users write messages on average, depending on their age and platform. The values are broken down by region so that you can understand in which of the regions different age groups use phones or tablets more.
- It is immediately clear that few users from the first region use phones, while from the third their number is the largest.

## CONCLUSIONS

- In all graphs, age groups were created and the average number of messages was considered depending on various factors.
- The average number of messages was chosen, and not the number of users, since a lot of influencers' precious time is spent on communication.
- In many cases, the number of records (id) by platform/region is very different from the number of messages written from the same platforms.
- Also, despite the fact that the majority of users are young people, it is the older groups who like to communicate.