Usability study tasks

Context. You are having a conversation with a colleague about some data, but at the moment you don't have access to it. You would like to very quickly sketch how the data looks like.

Task 1. Create a visualisation for the traffic load of a broadband line from the beginning of 2014 until the end of 2015. The traffic load is constant for the first half of 2014, but afterwards it slowly increases linearly. Also, in the repair period January - April 2015 there was almost no traffic load.

Task 2. Create a visualisation for the network performance in two regions, AS2 and NT1, for the year 2014. The general performance for the AS2 region is slightly higher than the performance of region NT1. The main characteristics of the performances are:

The performance for area AS2 linearly decreased between May and August, but afterwards it started going up again until the end of December.

The performance in area NT1 has been slowly decreasing throughout the year, with a more accelerated decline starting in September.

The performance in both regions suffered a negative spike in the middle of February.

Task 3. Create a visualisation for the network fault rates in 2015. We know there are increased fault rates during the winter months, so January and February have high values. The number of fault rates goes down during March, slowing down and then stabilising in early April. At the end of the year we have the opposite behaviour: it's increasing during October, with higher rates in November and December. There are also some small monthly spikes throughout the entire year.

Task 4. Create a visualisation for the network performance in region CT2 and SD1, for the past year (2015). At the beginning of the year, CT2 had better performance than SD1. In region CT2 the performance was overall stable, but with short negative spikes in March and November.

In area SD1, there was a negative performance spike in March as well, but there was a permanent performance improvement in June and then another one in August. These improvements led to better performance results for SD1 than CT2 at the end of the year.