

Test of Edgesense on the CHEST Online Crowd

Online communities have been playing an increasingly important role in supporting grassroots initiatives in the area of social innovation and sustainability. It is crucial for almost all Digital Social Innovations to build a vibrant community. Many of the CHEST beneficiaries, however, did not have an existing user community of substantial size at the time of applying to the CHEST open calls. Consequently, one important goal of CHEST was to set up a user crowd and community that the projects could use and activate in order to grow their own community and to increase their outreach. This is especially important as many of the projects apply crowdsourcing methodologies.

In order to carry out the CHEST Call 1 with the online idea submission, commenting and voting, we have managed to set up the CHEST online crowd with 4,983 users active in the CHEST Call for Ideas: 956 different users gave 1,141 comments and 4,886 users submitted 28,718 votes. And with CHEST following an experimental approach, one important goal was to gain deeper insights into the question how online crowds and communities can be engaged and involved in innovative funding schemes. The CHEST online crowd has largely been involved in the evaluation of ideas submitted to Call 1. The collaboration with CATALYST and the test of Edgesense enabled us to have a closer look at the role of our crowd and their dynamics. Edgesense is a social network analytics tool augmenting online conversations (such as the commenting on and the voting of ideas on the CHEST platform) with network analytics aiming to foster collective intelligence processes. It allows network managers to take a step back from their networks and assess the overall structure of the interactions going on between the users of the community as well as the evolution of these interactions over time.

Through Edgesense we were able to assess the underlying structure of the CHEST online crowd and the relations between single members or groups as well as their communications (in form of comments and voting). What we see in Figure 1 are the interactions taking place between CHEST users in form of comments on ideas and replies to other comments. Not surprisingly for a network like CHEST, the structure of the interactions largely mirrors the ideas posted with some of them receiving a high number of comments and these comments then attracting an also high number of replies. What we see is a network with different focuses resulting from 1030 comments given by 956 different users. This high share of 19 % of the users actively commenting shows that the CHEST crowd is very engaged in the topics because in similar settings their share is more likely to range between 1 and 10 % only. The flower-like artefacts seen in Figure 1 reflect ideas of users that attracted a huge amount of activity in form of many comments by other users. What we also see are connections between different dots showing that these users commented on several ideas. This shows that users did not only give feedback on those ideas for which they had been mobilized in the first place, but rather that initial community building with real interaction has taken place as users commented on different ideas and also on different comments given by other users. Furthermore, the fact that 171 of the 1030 comments were given by users who had also submitted an idea shows, that the crowd-based process of idea generation and improvement applied by CHEST has worked: A large share of ideators reacted on the feedback they received from the crowd. The network shows that some users were able to mobilize more activity than others, and these users are also potential multipliers for the further expansion of the CHEST community. Overall, the online crowd begins to transform into a community, which can be built by the beneficiaries for the development of their projects.

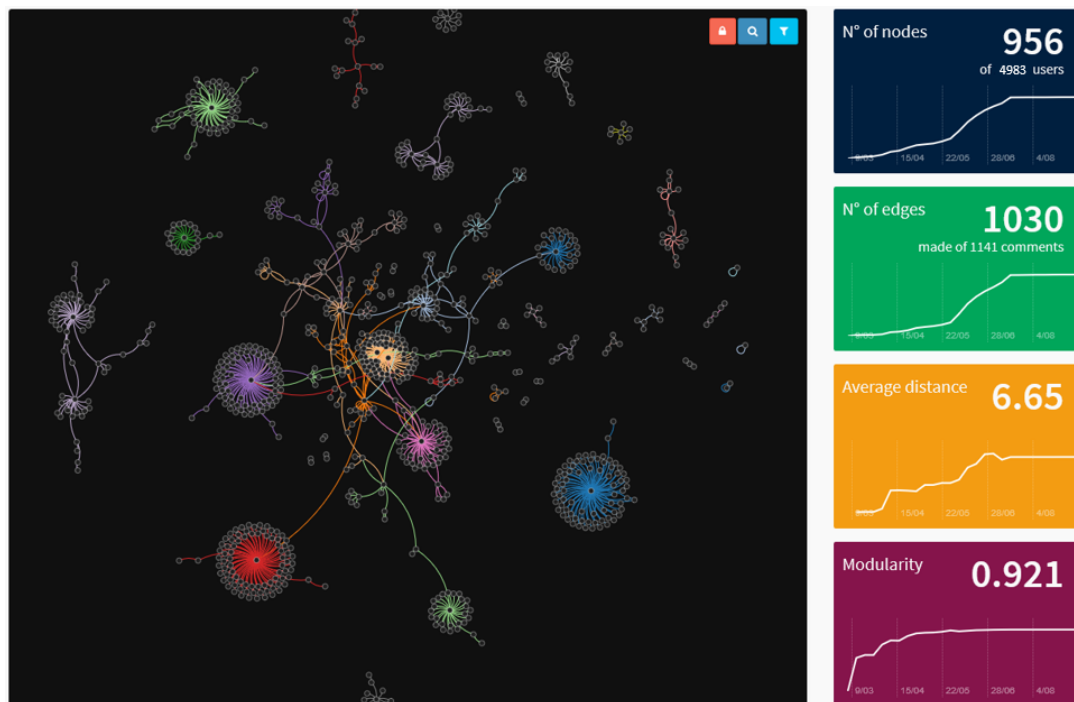


Figure 1: Edgesense view of the commenting activity of users within the CHEST online crowd

While Figure 1 shows the structure of the network based on the users' comments, Figure 2 visualizes the voting activity of CHEST Call 1. 4,886 out of 4,983 users voted on different ideas, giving a total of 28,851 votes. The picture shows a very dense network with many linkages between different dots resembling the high voting activity reached in CHEST. Each dot resembles a user that has posted one or more ideas himself (the more "central" dots of the network) or voted on an idea by a certain user (the more "peripheral" dots surrounding the central dots). Similar as in the network of comments (Figure 1) the lines between the dots show the activity that links two different users through a voting. Taking a closer look at some key users of the community we see that many users that have voted on many different ideas rather than supporting only one project for which they might have been mobilized by the submitter. Figure 3 shows one example of such a key user of the CHEST online crowd who has not submitted an idea himself but has voted on many different ideas.

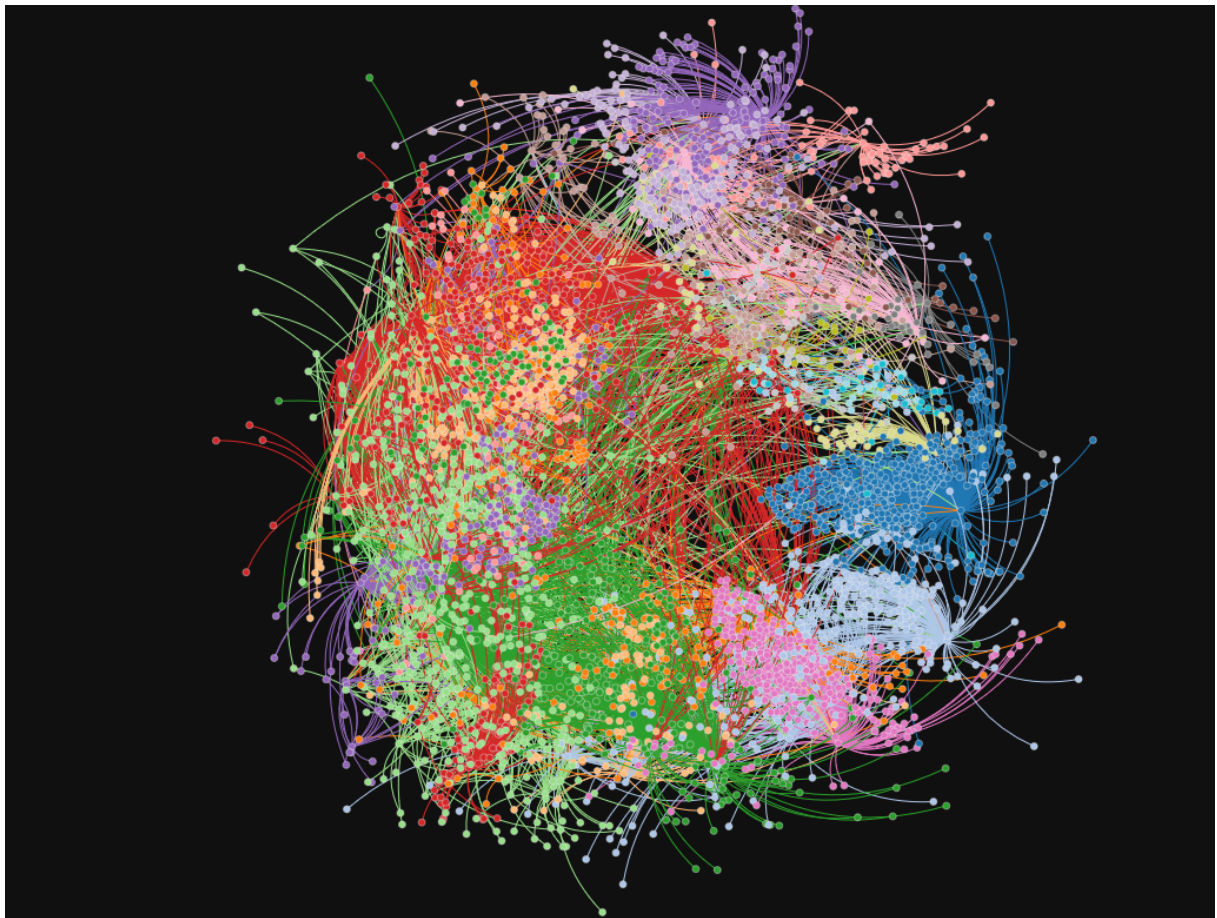


Figure 2: Visualization of the CHEST voting activity



Figure 3: High voting activity by one key user of the CHEST online crowd

Not surprisingly, many submissions (especially the winning ideas) gathered a strong community of supporters around their ideas. However, the example of such an idea with a strong supporting community visualized in Figure 4 shows also many connections reaching out and connecting different users, that have many links to other users, i.e. they voted on many different ideas. This means that the winners did not win because only of their supporters which they mobilized through their personal networks. In order to win they also needed to collect positive votes from other members of the CHEST online crowd.

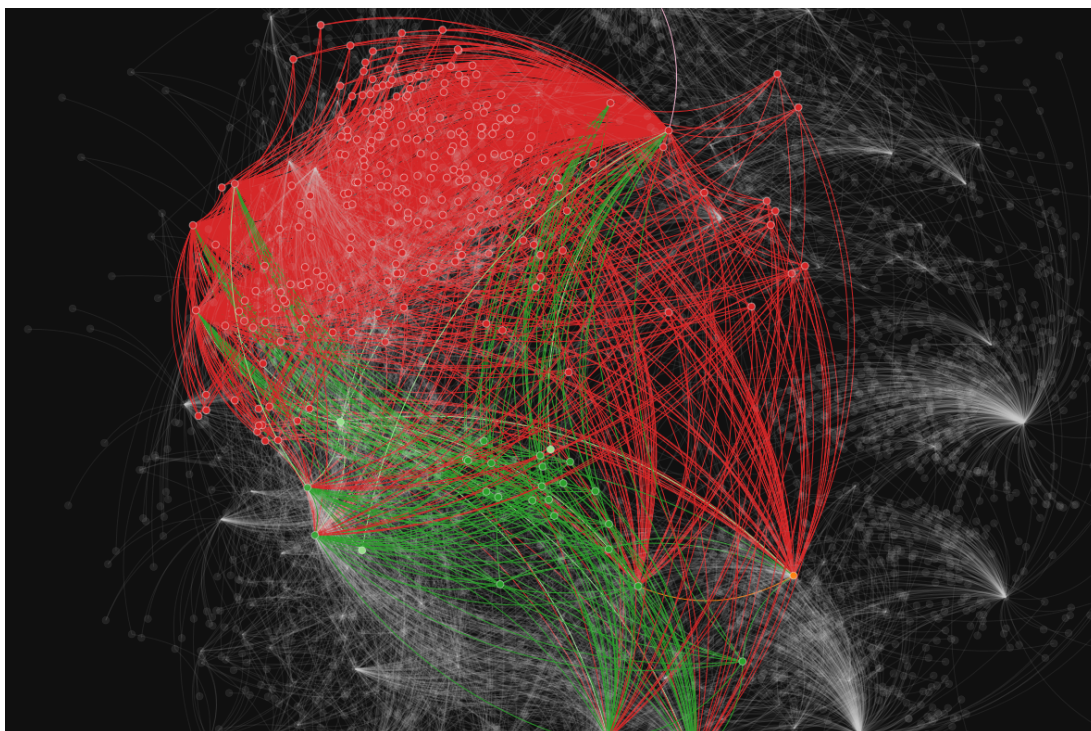


Figure 4: View of an idea submitted, which received extensive support from all over the CHEST online crowd

Beyond the commenting and voting activity described above, Figure 5 visualizes the evolvement of the

interactions over time. On the left side we see a very high peak of activity towards the end of the idea submission phase, caused by a large number of last-minute submissions just before the deadline (which in the case of CHEST Call 1 has been May 31st 2014). On the right side we see two peaks of comments, the first one corresponding with the peak near the idea submission deadline (May 31st 2014) and a second peak at the end of the voting phase (which has been July 7th 2014).

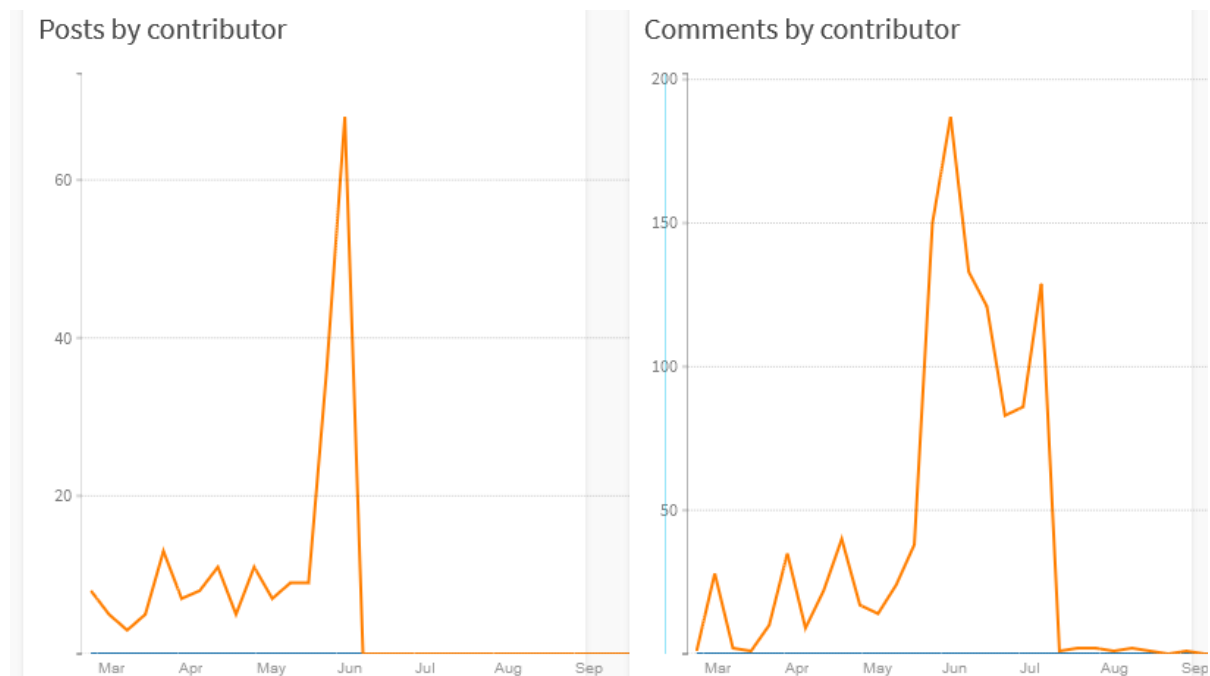


Figure 5: Activity per user over time

Challenges:

- One of our biggest challenges has been the setting up of the Edgesense tool on our idea platform, which is based on Drupal 6 whereas Edgesense was developed for Drupal 7. *The particular layout on different servers of the CHEST platform also made the integration of the CATALYST tool more challenging.*
- On CHEST, we have two different types of user interaction: people commenting on other peoples' posts (ideas or other posts) and the voting of posts (only for ideas). Insights would have been even more valuable with the possibility to build a network of both, commenting and voting activity, in order to assess the relationships between the two.
- Helpful for us would also be a functionality to filter the network by "usage intensity", ie. showing only the nodes of users with a certain amount of community activity (votes, comments).
- Also the possibility to access more information on the users apart from the username would be good.
- The visual complexity of the network is challenging, especially with the large network of votes. The usage of the colors used in the network is not immediately clear.
- The performance of the dashboard is not always good, especially with the big network.