Motivation for participating in an online open source software community

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Results of the questionnaire

Especially people who filled in the questionnaire earlier this year (746 people in total), want to know the results, I think. So this section pays attention to those results. First I asked you questions about yourself:
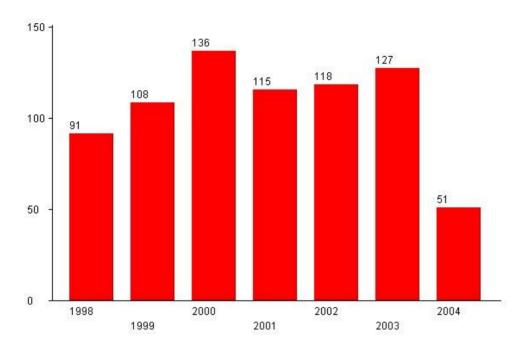
- What's your gender?
    - 99 % of the respondents are male; 1 % female.

- What's your age?
    - Far most of the people (85 %) are between 15 and 35 years.

- Where do you live?
    - The Netherlands   6 %
    - Another country in Europe   44 %
    - Africa   1 %
    - North America   35 %
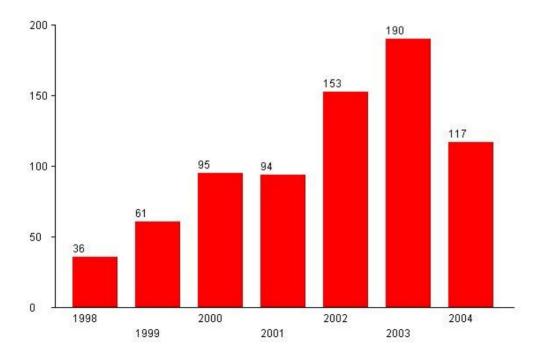   - South America   5 %
    - Asia   4 %
    - Australia   5 %

- In general; in relationship to Blender I'm involved with:

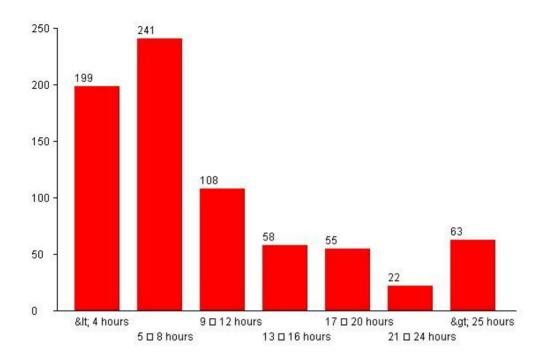|	YES	NEUTRAL	NO
Software development	21 %	13 %	66 %
Creating art, movies and/or games	91 %	6 %	3 %
Making websites	37 %	17 %	46 %
Writing documentation and/or tutorials	27 %	15 %	58 %

- I'm using and/or developing Blender since:

  o For this question and the next question, keep in mind that the year 2004 wasn't even halfway (the questionnaire was online in May).

- I'm participating in a Blender community since:

- I spend, on average, …. hours per week on activities related to Blender:

- I have …. years of programming experience:
  - None   29 %
  - 1 – 2 years   25 %
  - 3 – 4 years   15 %
  - 5 or more years   32 %

- My role in Blender.org is:
  - Project administrator   1 %
  - Committer   3 %
  - Member of mailinglists   15 %
  - Using discussionforums   50 %
  - None of these   31 %

- Do you participate in Blender related activities at work?
  - Yes – supervisor knows – but it's non-core to my job   17 %
  - Yes – supervisor knows – it's core to my job   30 %
  - Yes – but my supervisor doesn't know   11 %
  - No   60 %

Second, I asked questions about your motivation for taking part in an online open source software community (the Blender.org community and/or another Blender related community). The questions were about your motivation for (scale from 1 to 5 [1 = low and 5 = high]):

- Enjoyment   4,10   (participate for the fun)
- Altruism   3,76   (want to help people, without getting something in return)
- Care for community   3,73   (participate because you're committed to the community)
- Reciprocity   3,53   (want to help people and expect to get something in return)
- Reputation   2,96   (participate to build up a reputation)
- Software improvements   2,87   (participate because want to make / need software improvements)
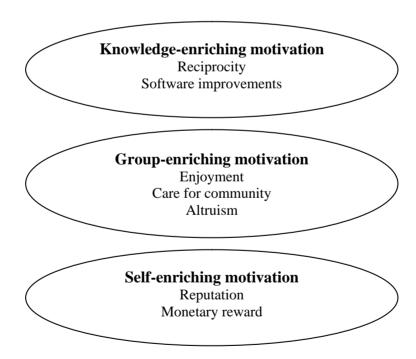- Monetary reward   2,86   (participate to earn money with it)

I asked about your opinion of feeling free when taking part in a Blender community. The mean score was 2,97 which implicates that the feeling is usually not present. I asked a special question to the people who participate in a Blender.org project. They don't want a more democratic decision making process (2,90), don't want to see a stricter vision (2,73) and don't want to see more leadership (2,90). The respondents don't agree with the sentence "I feel completely not in control" (2,67) and they don't mind when most of the actions are only taken when a supervisor has given his/her approval (2,93).

Finally I wanted to know if you were satisfied with the community and with Ton. The satisfaction with the community was 2,82. For this question 1,00 meant "satisfied" and 5,00 meant "not satisfied", so the score is positive. The satisfaction with Ton's leadership was high (3,97).

Summary of the research

The research I did was primarily focused on the motivation of people to participate in an online open source software community. The research can be divided into three parts. One part is a case study about Blender; the part that you already know about of course.

The second part is about the seven motivational factors I mentioned. I compared my results from practice to existing motivational theories. The order of those seven motivations is consistent with the order given in the existing theories. Only altruism is more present than expected. Most of the time motivational factors are classified in intrinsic and extrinsic motivation. Intrinsic motivation satisfies direct needs, whereas extrinsic motivation causes an indirect satisfaction. The intrinsic motivations in this research are: enjoyment, altruism, care for community, reciprocity and software improvements. The extrinsic motivations are reputation and monetary reward. There are however lots of other classifications. Partly based on those classifications and based on my statistic analysis, I discovered a new and better classification (in my opinion) for the seven motivations:

Knowledge-enriching motivation
Reciprocity
Software improvements

Group-enriching motivation
Enjoyment
Care for community
Altruism

Self-enriching motivation
Reputation
Monetary reward

The most remarkable change is the change of enjoyment from an individual motivation to a group based motivation. That's because I think participating in a community, which is a group, is only fun if there are other people to share the fun with. To take part in an community all by your own, where no one is there to interact with you, isn't fun. Sounds logically, doesn't it?

The last part of the research combines the motivations with the characteristics of the respondents and the answer they gave on the remaining questions (about the opinion of feeling free, democratic decision making, vision, leadership, control and satisfaction with the community and with Ton. This is examined because with those outcomes I can advise Ton about the way he should manage the community and the Blender Foundation. Although manage is probably not the right word! Based on existing theories my advise is not to have a too strict vision and strategy. It's better to look at the short term, instead of the long term. There is a possibility to change the structure to a more hierarchical one; one in which more tasks can be allocated to certain people. To reward people with money isn't impossible, but a lot of caution is needed because of the great presence of intrinsic motivation. When you reward intrinsic motivated people with money, their intrinsic motivation often reduces and also their total motivation decreases, which is a negative event of course. This phenomenon is called "crowding out". In general changes are possible, but attention is needed and the changes should be implemented slowly and with little steps at a time.