

Consultancy - practical and ethical concerns upon research on the influence of motivation factors on tasks duration estimation in project management – is Goldratt always correct?

Research topic, work conducted and some results

One of the major factors in successful Project Management is to achieve the project delivery date. In the concept of Critical Chain, Dr. M. Goldratt assimilated the time buffers method to ensure the project due date can be achieved on time (Leach, 2000:118). Buffers represent the inflation or exaggeration of the tasks duration estimation, and are identified and derived from the tasks themselves and are allocated mainly at the end of the critical paths, in order to protect the delivery date. According to Goldratt, one of the mechanisms supporting inflation is that “the time estimates are based on a pessimistic experience” (Goldratt, 1997: 50). This pessimistic experience could be of course part of the hidden motivation system. For instance, could it be that someone by overestimating would like to secure himself against the effects of missing the deadline and being punished/ “motivated” by his supervisor? Likewise, could it be caused by the subsequent task duration reduction - so called “global cut”? The problem with looking for the answer to those questions is that, in terms of the Goldratt concept, “papers that seek to study the good and the bad together-exactly what we need! -are rare.” (Trietsch, 2005: 28).

To shed some light on the above mentioned research topic it was necessary to make a decision on the research method. An ethnographic approach was not undertaken because it would require to be embedded in the work environment of the researched companies and societies. In an ethnographic approach “people are studied for a long period of time in their own natural

environment.” (Robson, 2002: 186). In general, so called mini-ethnographies are criticized (Robson, 2002: 187).

Nevertheless sponsored and contractually regulated research was based in two companies, each represented by a team of eight people; consisting of team members, project managers and a department director. One company was representing the international automotive industry and will be called here for reasons of anonymity ‘Company T’. The other was representing a telecommunications business and will be called in this essay for the same reason ‘Company P’. Since the author of this research is more oriented toward the objective answer to the problem - philosophical realism was chosen as an approach and in some parts with a flavour of critical realism.

The sequence of the research has been applied in the less popular (Robson, 2002: 87) manner, at first the fixed design followed by the flexible design. The fixed design was organised as non-experimental, done by survey (Robson, 2002: 232). It was managed individually with the group from Company P and afterwards with Company T. Collected from sixteen persons quantitative data was analysed statistically by the use of common software - Microsoft Excel. Analysis was done from many perspectives to find any correlation between variables. Unfortunately the quantitative data did not prove any “visible” correlation between the factors of the hidden motivation system and the inflation of the tasks duration estimation. It would also be very problematic to talk about causality. So is Goldratt wrong or maybe his assumptions are too simplified?

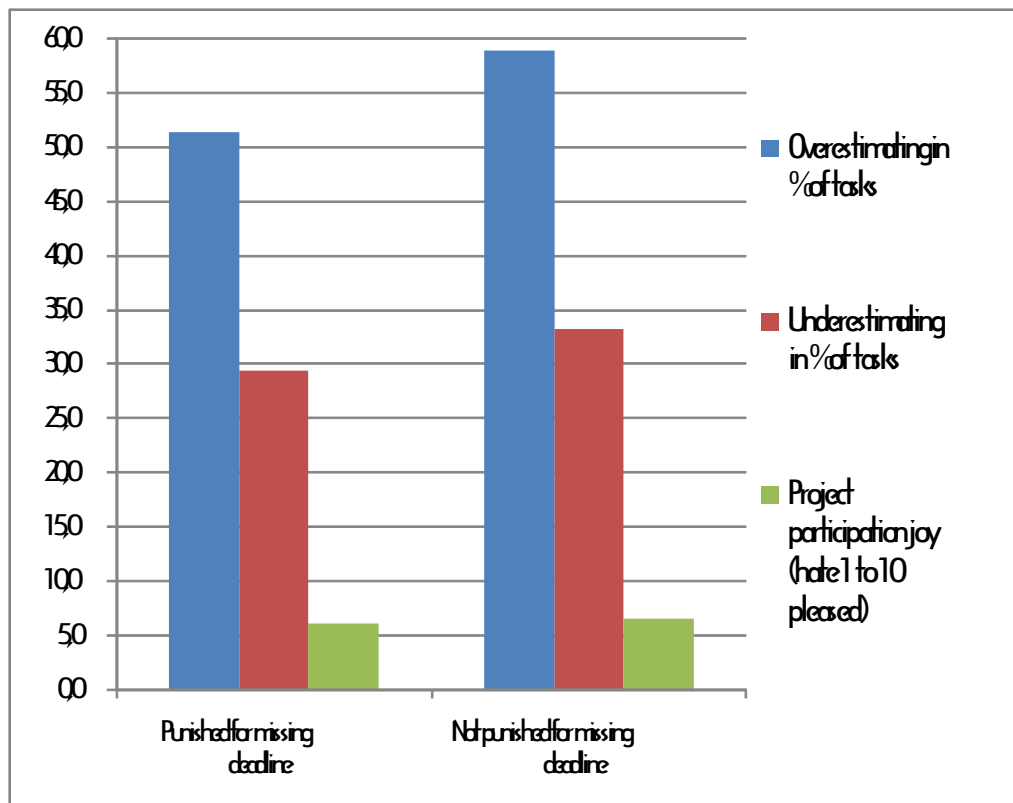


Table 1 Quantitative data correlation; together - Company T and Company P

Taking a look at the Table 1 there is no evident correlation between task duration overestimating and the hidden motivation system understood here as being under threat of potential penalties for missing the project deadline. Regardless of the Goldratt assumptions and very surprisingly - employees also very often tend to underestimate! So not only inflation and pessimism designate the problem. This issue was clarified later.

In the next step, flexible design technique has been chosen to qualitatively discuss the results with the two heterogeneous (Robson, 2002: 286) focus groups. Interview was used to identify “what they think, feel and/or believe” (Robson, 2002: 224) in terms of the research subject. The interview was unstructured to let “the conversation develop within this area” (Robson, 2002: 270) freely in order to uncover the real underlying mechanism (Robson, 2002: 31). The results were almost overwhelming. Upon qualitative interviews, it was shown that a lack of control over the hidden motivation system is something what causes destabilization of the

estimating process and in fact most often leads not only to overestimation and inflation, but also very often to underestimation. Therefore the current finding is that without control of the motivation system the number of faulty duration estimations tends to increase. It will be observed as increasing number of inflated or deflated tasks. It seems that so often presented during project management coaching programs explanations to Goldratt's critical chain and buffers management are too simple or sometimes even naive ...

Practical and ethical problems encountered

In both companies during accomplishment of the survey and subsequent interviewing process departments directors were present. The level of anonymity was defined on the cover page of the survey, in which full anonymity and voluntary participation was provided. In the case of the interviews, the anonymity of the focus group was unfortunately not achieved because directors were present during the discussion. The focus group discussion took place in the conference rooms with a whole group of people at once. Individuals' anonymity could be discussed in case of such an organised interviewing process (Robson, 2002: 285). The author of this consulting service suggested that it would be best if at least during the interviews discussion could be maintained with the team members individually. Unfortunately, in both companies sponsors did not accept this proposition and so it could be considered as a breach of anonymity. Open and free conversation about pessimism and inflation or destabilisation of the tasks duration estimations could imply a certain threat to the team members. They of course would expose themselves to the department directors and so could be punished for such estimation practises, which create in effect project delivery dates less likely to be met. The situation could be discussed ethically because team members were to "be faced with situation that cause stress or anxiety" (Robson, 2002: 65).

Another practical issue would be that the directors' presence could also cause a lack of openness during the interviewing process. This introduces another ethical concern; because some interesting qualitative data has been gathered outside the unstructured interview, during off-the-record discussions done out of the conference rooms. Should it be used in the business report since it could not be proved where exactly it was taken from? It is necessary to remember that consultancy was contractually regulated.

To be self-critical - the author of this research has recognised that some participants did develop a hope for change in discussions about the hidden motivation system. The target of the research was not to create a change but to find a link between the hidden motivation system and the tasks duration estimation practices. Even though the target was well communicated, it somehow evolved into a hope for a change. During the unstructured interviewing process comments that the motivation system in fact does not exist, is not controlled or is unclear, were very common. The author unfortunately followed that pattern, tempted by a situation that intensified involvement of the group in the discussion. It could be recognised as in this particular moment of the consultancy as "Not treating participants fairly" (Robson, 2002: 69). Participants thought that the moderator was moving towards change.

Subsequent ethical problems have appeared during work with the focus group. Participation in the focus group was voluntary and as already mentioned with the presence of the department director. The issue was created by the different personalities of the participants. During the discussion the more extravert team members almost caused the more introvert participants to be unable to present their own opinions. Maybe the whole situation was exaggerated by the presence of the department director? Maybe a team member wished to present himself as a very productive employee? It is very hard to judge. Nevertheless the

whole situation escalated into a conflict (Robson, 2002: 285) within focus group of Company P and to a lesser extent in Company T as well. Heterogeneous group somehow resulted in showing a lack of respect for other project team members. The author's reflection is that this could be caused mainly by other hidden conflicts or more simply by different positions within the organisational structure.

How to overcome problems in the future cases?

Because "ethical problems start at the very beginning" (Robson, 2002: 67) and since the author's research in project management is quite often regulated by a sponsor's requirements and a contract, it is useful to ensure the best ethical conditions at the very beginning. For instance lack of the presence of the supervisor during interviews could be ensured much earlier.

Another point is that in a real world inquiry, emphasis is on "topic initiated by sponsor" (Robson, 2002: 12) what has already presented positive aspects. But since the author of this dissertation is very much consultancy oriented, it is necessary to avoid the risk defined by the statement that "Scientists are seen as providing information potentially biased to suit their sponsors." (Robson, 2002: 17). In fact this issue was not considered here and so must be in the future.

The work would require a more individual approach, understood here as for instance individual interviewing. Such an organisation of would solve some ethical concerns and also would bring better results. Team members would not be afraid of saying something that could later cause them harm. At the same time a high level of anonymity could be achieved. Also different personalities would not affect the openness of the discussion since the consultant could try to adjust his behaviour to suit each individual. But when the role of the moderator "calls for considerable skills and experience" (Robson, 2002: 287) it is potentially possible to

have more than one facilitator to maintain the interviewing, in order to fit better to the personal or professional character of the interviewees. Subsequently through individual interviewing, the risk of the conflict would also be decreased. There would be no need for team members to build up their position in front of the department director.

By maintaining interviewing individually another ethical issue would also be solved. Many of the best results have been collected off-the-record, outside the conference room. Individual interviewing would be face to face, and most probably would result in the decrease of the ethical and contractual problems caused from making use of the off-the-record information.

The solution presented above would also help to overcome problems associated with heterogeneous and homogeneous focus groups (Robson, 2002: 286). Heterogeneous is most often better to improve the discussion results quality because it avoids “groupthink” but introduces the threat of a conflict situation. The solution is to start interviewing individually and make use of the openness received as an award for better anonymity offered. Afterwards, being enriched with ideas, the moderator could run a formal heterogeneous group discussion. This approach will be tested in the following consultancy.

Another major practical concern was the sequence of application of the adopted research tools. It could be an advantage to adopt the principle that “those following flexible design begin much more generally. They explore.” (Robson, 2002: 46). It will in fact help to achieve a better focus before involvement in fixed design and the more quantitative techniques. It will also help to avoid the pitfalls of “pre-decision on method or technique” (Robson, 2002: 57). Also after exploratory work “pilot” before fixed design research must be improved (Robson, 2002: 97). Especially if it would be considered in distinction to the present in this essay, bigger - wider scale research.

Consultant – being self reflective

Consultant working within project management field is expected to provide a solution to the problem, truly the best solution. This is what he is paid for. In most cases, the research is unfortunately quite often very complicated and the scientific attitude that “the research is carried out systematically, sceptically and ethically” (Robson, 2002: 18) is hard to be maintained. Since due to his previous experience the author does not have major problems with acting systematically or ethically - there is big room for improvement in the area of scepticism. This refers directly to philosophical approach towards research. The author’s epistemology is oriented more toward knowledge creation through realism, which fits his personal characteristic better than relativism. Therefore it is necessary to avoid the risk of being captured by the ultimate answer (obvious, final results) given by the positivist side (Jankowicz, 2005: 106) of being realist. It is necessary to realise that there are other paradigms outside of the author’s one. This could help to act more sceptically and find more alternatives. Application of critical realism approach could be suggested. Of course, in terms of the service provided “The selection of method should be driven by the kind of research questions you are seeking to answer.” (Robson, 2002: 385). Therefore, logically thinking personal preference will unfortunately narrow down the number of potentially applicable research questions.

Within the author’s ontology, the focus must be strongly shifted toward the world of “ideas”, since consultancy in management refers to the social sciences. It is important to reanalyse the author’s ontological position and to clearly answer the question “what do you notice and what do you ignore, because it’s less important?” (Jankowicz, 2005: 106). Therefore within necessary undertakings in terms of own scientific approach style conversion it is important to start to question one’s own experience. Otherwise the risk will always be present that “the

world will have become a habit.” (Gaarder, 2007: 18). Such an approach most probably would ruin any management research and provided biased results.

And last but not least, the author of this research mainly because of the international project management research environment must develop more diplomatic language skills in order not to harm anyone by potential valuation and to take more care to use gender neutral language (Jankowicz, 2005: 378).

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Appendix 1: Survey

References

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Survey

Dear respondents.

This survey is a part of consultancy service on Project Management carried in your company. The results of this questionnaire are assimilated for business and scientific purposes. Attendance in this survey is conditioned by your independent and free decision.

After collecting valuable information and analysis - it is planned to organize focus group discussion. Attendance in this will be also upon to your free will. It will have a form of an unstructured interview.

Please note:

- By filling in this questionnaire you admit to attend the survey upon to your free will.
- You fill in the survey anonymously, so you are not asked to provide your name or surname or any other personal data.
- All individual data will be treated till 01.12.2009 as anonymous and so confidential – surveys layouts will be scanned and kept digitally under 256-bit AES encryption with the password used only for that purpose.

I do appreciate your help.

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What is your gender? (W / M)

- What is your formal position in the Company?
- Are you involved in directing projects as project manager? (Yes / No)
- Are you involved in participating in projects as a team member? (Yes / No)
- Have you been ever working in Project Management Office regardless of that being acting there as a team member, project manager, project office coordinator? (Yes / No)
- Are you in any way awarded for accomplishing your projects/tasks before due dates? (Yes / No)
- Are you in any way punished for crossing in your projects/tasks the deadlines? (Yes/No)
- What factors in the first place are influencing your tasks duration estimations?
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-
- If you would be asked to change something in your motivation system what would it be?
-
-
- How would you at best characterize your current motivation system? (give a short description i.e. keywords describing it)
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- In what percent of your tasks duration estimations you have this feeling that you tend to overestimate? (0-100%)
- In what percent of your tasks duration estimations you have this feeling that you tend to underestimate? (0-100%)
- What percent of your tasks is questioned by your supervisor in order to cut its duration? (0-100%)
-
- What do you afraid of when you are involved in the project?
-
-
-
- On the scale from 1 (I hate it) to 10 (excitement) what number would you chose to characterize your enjoyment of being involved in the project in your Company?

- Would you like to participate in a short focus group (group interview) discussion referring to the above raised questions? (Yes/No)