

Chapter 9

How to Obtain Overoptimistic Time Predictions from Others



Below is a list of elements describing how to get low time predictions, ranked by what we believe is their magnitude of impact. The elements are likely additive, where combinations of more elements may further lower the time predictions. However, the effect of adding biases has not been studied much, so we do not know how bad things can get in such combinations. The list is meant to be a *warning* about how the person requesting a time prediction can easily contribute to overoptimism. That person could be you, for example, in the role of the client or project manager or when asking a carpenter about the time needed to remove an interior wall in your home. If, in spite of our warning, you include one or more of the elements described here to manipulate other people's time predictions, you have only yourself to blame for low work quality, frustrated coworkers, increased coordination costs, and missed deadlines.

Optimism-inducing time prediction request elements:

1. Exploit the use of *prediction anchors*. Anchoring effects are extremely robust and the moment a person is exposed to an anchoring value, that person will have a hard time avoiding being affected. There are many ways to introduce low time prediction anchors. One way is to ask questions such as 'do you think it will take more than _____?' (a number representing a low use of time). Another way is to indicate an initial low budget or little time available, such as 'I have only _____ (a number representing a low use of time or a low cost). Do you think that will be enough?'
2. Exploit the *selection bias* (winner's curse) effect by inviting several people to predict the time required and selecting among those with the lowest time prediction or the lowest price in a bidding round. You find the strongest selection bias when the number of time predictions to select from is high, when there is a large difference between the lowest and highest time predictions, when the expected prediction accuracy is low, and when the actual time to complete the work does not vary much across different workers.
3. Exploit the *sequence effect*. An initial time prediction will typically influence, as a reference, the next time predictions through the so-called assimilation effect.

Requesting the time prediction of a small task before that of a larger task will consequently lower the prediction time of the larger task. The sequence effect may also be present if you select people who recently (or mainly, in the past) predicted time usages for smaller tasks.

4. Exploit the effects of *motivation*. The addition of incentives for a task's fast and efficient completion lowers time predictions more than the actual time usage. For instance, you could make it clear that a low time usage will lead to future opportunities or other benefits. You may also inform people that it is very important to complete the work within a short time period.
5. Exploit the effect of *updating time predictions*. A strategy to obtain lower time predictions is to first ask for the time prediction of a task with extra features (bells and whistles), that is, with many things you do not really need. Then ask for an update of the time prediction for a reduced version of the task, which will include only the features you actually need. The revised time prediction is likely to be too low.
6. Exploit the *framing and format effects*. How a time prediction is requested clearly matters and there are several ways to exploit request formats to lower a time prediction. One way is to frame the time prediction request using words associated with smaller or simpler tasks, for example, 'how much time do you need to complete this *simple* task?' Another way is to change the prediction request into a format such as 'how much can you complete in ____ hours?', where the number of hours is only a small proportion of the total time needed. A third alternative is to request the time prediction in a time unit that implicitly indicates that the task is small, for instance, request the time prediction in minutes when the task takes several hours or in hours when a task takes several months.

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