Math CEO (of AI)

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Imagine you are the most intelligent person on Earth. You have infallible memory, you have a perfect sense of judgment, your reasoning is logical and impeccable. And still … there are misunderstandings because people don't communicate with you as they should; you may make mistakes while taking action because you have not received all due information.

AI responses are, in part, the mere *consequence* of what one writes in the prompts. An example from real life: if you go around saying how much you like football (just for boasting), maybe your colleagues will give you a birthday present related to football. It's your fault.

When communicating with AI we should act like a CEO delegating work to their staff. One can expect easy and clear tasks to be executed efficiently and without any error (like solving a quadratic equation). Other tasks need easy decision-making (like how to present the solution to a mathematical problem). If you believe this choice to be irrelevant (or if you think that the delegated intelligence will choose better than you), you can safely delegate.

Further tasks need to discern between appropriate and reasonable and customary, and there may be no fixed rules as guidance. In this case, you should not completely trust your delegated intelligence. For example, you would not merely ask "Please choose a gift for our Singapore partners". Indeed, more information is required, even *background information* that seems barely relevant but it is indeed used in a holistic instinctive judgement.

Are we not simply *delegating* work to AI? Then we can apply the basic principle of delegation:

THE TRIPLE CHECK.

- *Check* that the delegated intelligence is able to perform the task.
- *Check* that the instructions are clear *and* they have been understood.
- *Check* the output of the work.

By lack of time, you can only do samples of testing or detailed reading. In any case, always ponder the global structure, and always rethink from scratch the plausibility of the outcome. Act as a prosecuting attorney.

Probably no artificial intelligence will be absolutely perfect if the information they base their work upon relies on human communication which, like every human matter, is not infallible.

In a nutshell: For a long while, keep checking AI responses to mathematical queries. The deeper the mathematical problem, the deeper should be the investigation of the output *prior to* final acceptance.

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