

Case Study 1: "Suppressed Data"

(Fictional case study developed by Dr. Michael S. Pritchard at Western Michigan University)

You're a recent engineering graduate, you have been employed in the R & D Chemical Engineering Division of Larom, Inc. for the past several months. You were hired because of the promising research you did with catalysts as a student at Engineering Tech. A meeting of your division is called by your supervisor, Alex Smith. He announces that your unit must make a recommendation within the next two days on what catalyst should be used by Larom in processing a major product. The overwhelming consensus of the engineers in your unit, based on many years of experience, is that catalyst A is best for the job. But the research you have been conducting at Larom provides preliminary evidence that catalyst B might be more reliable, more efficient, and considerably less costly.

So, you ask if the recommendation can be delayed another month to see if firmer evidence can be found. Alex replies, "We don't have a month. We have two days." He then asks you to write up the report, leaving out the preliminary data you have gathered about catalyst B. He says, "It might be nice to do some more research on B, but we've already taken too much time on this project. This is one of those times we must be decisive. Management is really getting impatient with us on this one. Besides, we've had a lot of experience in this area."

You like working for Larom, and you feel fortunate to have landed such a good job right out of college. You have no desire to challenge your colleagues. Besides you don't necessarily disagree with them about which catalyst is best. Still, you wish you had been given more time to work on catalyst B, and you feel uncomfortable about leaving the preliminary data out of the report.

What should you do?

1. Write up and sign the report as instructed.
2. Write up the report as instructed but refuse to sign it.

3. Refuse to write up the report, threatening to go around Alex to the next level of management if a fully accurate report is not made.

4. Other.

Commentary from the Author:

Engineering students may respond to cases like this in a variety of ways. A rather large percentage of students select the first option, indicating that they really have no choice if they are to keep their jobs. Some insist that, since they would only be following orders, they would not really be responsible if something goes wrong.

A few immediately select the third option, adding that they might make sure they have another job offer first.

What is surprising is how few select "Other." Yet, a sensible alternative seems to be to suggest that catalyst A be recommended, but that the data about B be included. After all, it might be argued, if the data about B has not engendered serious doubts among the experienced engineers in the unit, why should they fear that management would counter their recommendation of A?

For those students who favour suppressing the data, there is a second scenario,

"The Suppressed Data Strike Back."

You write the report as instructed, and Larom proceeds with catalyst A. Two months later Charles Trent, Vice-President for Research at Larom, learns that a major competitor has just begun using catalyst B in a similar process. Its engineers discovered that B is ideal for this process. It is more reliable, more efficient, and much less expensive. Vice-President Trent is very upset that Alex Smith's unit "missed the boat," and he personally meets with the entire unit to make his irritation known. He complains, "Larom has invested a lot of money in this process--only to find out that it's now falling behind a major competitor. It's going to cost us time and money to convert the process--and it's probably going to cost us a few customers as well."

