

Teaching Case

Ethics and Data Manipulation

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Abstract

According to the cliché, it's not what one says so much as how one says it. In the business world, those words ring particularly true. How one presents information can influence all forms of business decisions, from level of investment to expansion to downsizing and everything in between. This brings up significant questions relating to the manipulation of data and data integrity in general – particularly since the presentation of data is, in effect, the creation of knowledge. It is therefore vital to be able to look at data, its analysis, and its presentation, using an ethical framework. This article presents the students with two scenarios, one focusing on how data is presented and the other focusing on the credibility of the data. In both cases, the “clear” answer is to present the information honestly, but the looming question is “how?” Due to extenuating factors in both cases, students are forced to think about how a seemingly simple decision can have a significant impact on not only a business and its employees, but also the clients, customers, suppliers, and other stakeholders.

Keywords: Ethical Dilemmas, Ethics, Decision-Making, Research, Data

1. SITUATION 1: GOOD DATA, BAD NEWS

On Monday morning, Lark Lawson, barged into her boss's office without knocking. Edie DeLuca glanced up, saw the stress on Lark's face, and motioned for her to sit down.

“Just tell me what's going on,” Edie said. Lark shook her head.

“I keep running the numbers and nothing is coming out the way that it should. Sales are down but customer satisfaction is up, and production costs are up... it's all wrong.”

Edie held up a hand. “Let's start over again. What do you mean that everything is wrong?”

As Lark explained, Edie began to understand the new hire's panic.

Lark was looking at everything over the last four quarters, which were less than impressive (figures 1-3). If owners saw these numbers, Edie thought, things could get ugly – layoffs, canceled bonuses, smaller raises. Worse, if investors knew... she smiled at Lark.

“Let me think about this. Did you tell anyone else about the data?” Lark shook her head no. “Good. Keep it that way. If anyone asks, you're still crunching numbers. Got it? Email me everything that you have. I want to look at it.”

Eddie got to work the minute she received the email. Quarter 2 showed a definite loss in sales, but Quarter 3 had a small uptick, and Quarter 4 had another small improvement. The problem was that the losses outweighed the gains significantly.

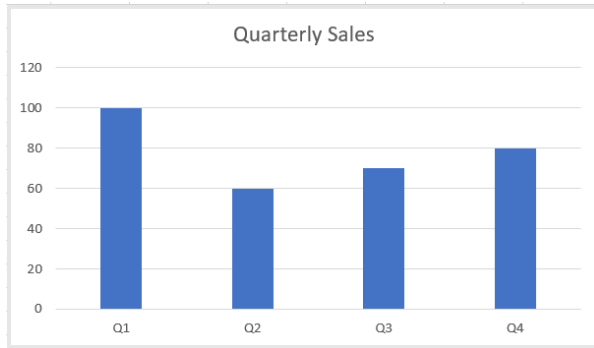


Figure 1: Quarterly Sales

Customer satisfaction, meanwhile, was slowly and steadily increasing. That was definitely a plus because it meant that they were doing something right. It was just a matter of pinpointing what it was and keeping on that track.



Figure 2: Quarterly Customer Satisfaction

Thanks to tariffs that were put in place during Quarter 1, production costs went up significantly. It wasn't pretty, but Eddie was relieved to see that they dropped and leveled out by Quarter 3.

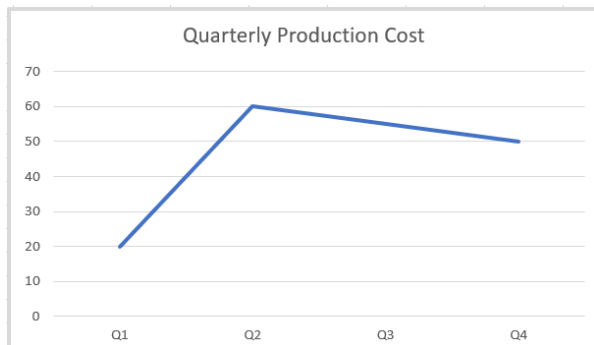


Figure 3: Quarterly Production Costs

If one took the time to think about the data, the numbers really weren't *that* bad, but at first glance, it did appear that the company could be in trouble.

Eddie worried that presenting data from all four quarters would make upper management nervous about the current and coming year. Hiding it wasn't an option, that would be illegal, but perhaps there was a way to spin it that would make things look better than they actually did.

Presenting the data

Using the data that Lark had provided, Eddie created new graphs for the report. She knew that upper management had some initiatives to boost sales in place, and current data from the current quarter suggested that those initiatives were working. She also knew that they were negotiating with new suppliers in effort to bring production costs back down.

She decided that she would present the data in a way that focused on the positive, which would – ideally – keep the owners and the investors happy.

The next day, she sent Lark her changes with a note:

Present all of the data in writing, add the attached information on initiatives to boost sales and reduce production costs that I attached. Be sure to use these new charts in your final report.

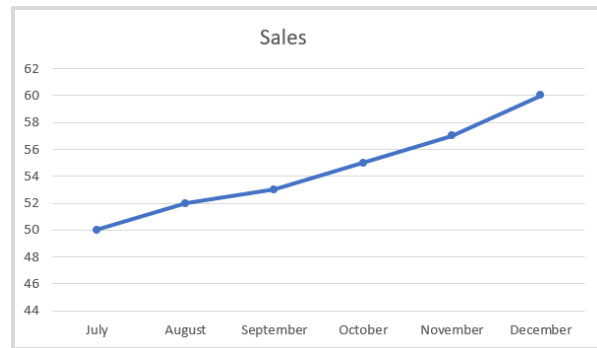


Figure 4: July-August Sales



Figure 5: Q1-Q4 Customer Satisfaction

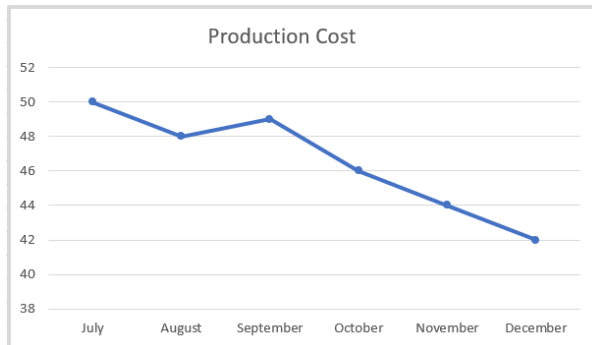


Figure 6: July -August Production Costs

When Lark reviewed Edie's charts (figures 4-6), she saw data that presented a moderately successful company that was growing, gaining points in terms of consumer confidence, continually increasing sales, and cleverly reducing production costs.

But when she looked at how Edie manipulated the data, she got more than a little nervous. While the numbers were accurate, they played to the short term and failed to provide a complete story.

In addition, the only visuals that would be used were ones that painted a rosy picture. Lark knew that most people would look at the charts and graphs and just skim over the written explanation.

She ran up to Edie's office. "We can't use these. The data isn't complete," she blurted out.

"Lark, have a seat and relax. It's not like we're lying about anything. We're providing them with everything they need to know. It's not our responsibility to make sure that they read it."

Lark shook her head. It had been a while since her intro to management class as an undergrad, but she remembered the chapter on ethics and doing what was right. One didn't have to lie about something to be unethical. To her, these charts

omitted significant historical information that management and investors had the right to know.

"I know that the onus is ultimately on the reader, but you have to remember that the reader trusts us to provide all of the pertinent information..."

"I am providing pertinent information," Edie replied, more than a little annoyed at being questioned by someone who was just hired a few months ago. How could someone so new to the company understand what this data meant?

The managers in the C-suite wanted to know that they would make money. They didn't care about the details. If she sent Lark's graphs upstairs, everyone would focus on the first two quarters and how profits were down. No one would read them and say "yes, but things are looking up." No one would ask what was already being done to remedy the downturn. Nope. They would just ask how to cut expenses further – and that usually translated to cutting wages, bonuses, overtime, and jobs.

"We are creating knowledge here, Edie," Lark said. "We are responsible for how people understand these numbers."

Edie shook her head. "Nonsense. We present it. They interpret it. Nothing more. I've been here for fifteen years and, trust me, upper management doesn't want to know what's going wrong. All they want is what's going right. It's our job down here to solve the problems – and we are. As you know, we're changing suppliers, so production costs will continue to go down. We have a few new promotions to boost sales, and even though it's slow, we're going to be fine.

"But," she said, leveling her gaze on the young woman before her, "we will *not* be fine if you send them your version of the data. They will want to cut costs – that means jobs, raises, everything. We are on track to get a cost-of-living increase this year, which is the first one in two years. But we might not if they think we can't afford it. If you want to be responsible for that, just let me know."

Lark just sat there, letting Edie's words sink in. She hadn't thought about what the repercussions might be. "Would they really do that?"

"It's hard to say. From my experience, they aren't the type of managers who ask questions and have open dialogues with us. They just make decisions based on what they read."

“So we don’t really know what they’ll do.”

Edie had to concede that point. “We don’t. It’s wholly possible that they will be okay with the data. But, at the same time, it’s impossible to tell.”

The decision

That evening, Lark pondered the situation as a whole. She had agreed to use Edie’s graphs, but mostly because she was new, and Edie had seniority. The other reason, if she wanted to be honest with herself, was that she was still new and did not want to lose her job due to a bad review when they did her 90-day evaluation. The thought of finding a new job, again, was more than a little disheartening. This was her first “real” job since graduating with her bachelor’s degree a year ago, and she was determined to keep it.

Edie’s argument made sense – for Lark, the thought of being responsible for cutbacks of any sort was awful. She had made a few friends and knew from some of their remarks that raises had been either minuscule or non-existent these last few years. The fact that everyone was slated to receive at least 3% was welcome news.

What was nagging at Lark was the question as to whether or not the company could afford the raises. What if the low sales and high production costs made raises fiscally irresponsible? Surely Edie took that into consideration. Right?

The questions kept coming. What if the company couldn’t afford the raises? While it would be horrible, wouldn’t it be better in the long run? Or what if they kept the raises and laid people off instead? But Edie admitted that she didn’t know what might happen. What if their worries were for nothing?

Then, just when Lark thought that she had enough to worry about, another idea popped to mind: what if she got in trouble for using Edie’s graphs? What if she was blamed for manipulating the data, and they thought that she was trying to cover something up?

The whole thing was a mess, and if she didn’t figure out what she believed and act on it, she would end up letting other people make decisions for her.

2. SITUATION 2: BAD DATA, GOOD NEWS

Meanwhile, across town at Research, Inc., Julie Hamilton was dealing with her own issues.

Six months ago, MultiCorp contracted with Research, Inc., to conduct extensive studies that would be used to guide a massive re-imaging starting next year. It was the largest undertaking the small research company had ever attempted, meaning that the pressure was on to not only succeed but to surpass all expectations.

The owner, Gil Hart, put Julie in charge and gave her more freedom than ever. “You’re the expert when it comes to surveys,” he said. “You have that knack for asking just the right questions, and your analysis is always spot on. Get a team of two or three together and work directly with Pat from MultiCorp. I’m going to step back and let you run with it. Just keep me in the loop.”

And now it was Monday and MultiCorp expected a presentation on Wednesday, but thanks to this morning, it was wholly possible that the presentation would be the worst moment of her career.

For whatever reason, as she gave everything a final review, Julie decided to check the survey one last time. Rather than log in through her desktop, where she had several windows open already, she grabbed her phone and opened the survey.

It opened with no problem, but as Julie clicked through the questions, she realized that half of the images were missing from the options the respondents were to choose from. Trying not to panic, she pulled the survey up on her desktop, where it opened without issue. Relieved, she decided that it was her phone and that the issue was probably slow load time. Sighing in relief, she returned to the presentation. When she reached a discussion on methodology, it clicked. Her phone defaulted to Chrome. Her desktop used Firefox. Hoping that she was wrong, she opened Chrome on her desktop. Then she opened the survey.

Half of the images were missing.

An hour later, Julie was sure that her career was over. Though she wasn’t sure how, she’d certainly never forgotten before, she had neglected to verify the survey’s compatibility with Chrome. As a result, she had no idea how many of the 4,573 responses were valid because she had no idea how many respondents had taken the survey using Chrome.

While she was tried to figure out how to manage the situation, Gil came in. “Working on the final presentation?”

Julie nodded. "Just making sure everything is in order." She would have to tell him, but right now wasn't the time. She needed to come up with solutions first.

"You said that the last survey just reinforced everything we already knew, right?"

She nodded again, wishing he'd leave so that she wouldn't have to discuss what she'd said or how fantastic the response rates were. She just wanted to close the door and hide from the world while she figured a way out of this debacle. Perhaps if she looked busy... Julie began shuffling papers on her desk. "I need to make sure that everything is, um, perfect."

Gil took the hint. "I'll let you get back to work."

She flashed him a smile that, she hoped, radiated confidence. "Okay. Hey, can you shut the door on your way out? Thanks!"

As soon as the door clicked shut, she buried her head in her hands, dreading the moment where she would have to tell him the truth – the last survey didn't reinforce anything. All it did was prove that his trust in her was misplaced and that the last three months had been a complete waste of time. She didn't even want to think about how much money had been spent developing and deploying the now-useless study. Then again, who said he needed to know? She studied the numbers again. The results were overwhelmingly in support of everything that they already knew. It was possible, she reasoned as she flipped through the other studies and their results, that the glitch didn't have a significant impact on the results at all.

Perhaps the participants would have answered the same way regardless. If that was the case, why bother telling Gil or Pat or anyone? After all, she was the only person who knew. No one on her team had discovered the problem, and had it not been for her using her phone this morning, she would never know either.

Then again, what if the missing images did skew the results and people chose answers that they would not have chosen otherwise?

Julie remembered how one of her colleagues would always stress dependability and validity. "We need to make sure that our methods are consistent. We need to make sure that we get the truth. You can't get good data if you have sloppy methods."

There was nothing dependable or valid about a survey that was missing questions. But, again, Julie reasoned, if the results are the same, it doesn't matter. The client wanted results, not methods.

Gil wanted results, too. He wanted a satisfied customer. More specifically, he wanted MultiCorp as a permanent customer. A company that large would need studies done on a regular basis, which would make it far easier for Gil to continue to keep Research, Inc., out of the red. This contract, he had said more than once, was the company's golden ticket. Once other companies knew that MultiCorp used Research, Inc., it wouldn't be long until they, too, signed on.

Then again, things were just fine before MultiCorp. Gil was showing a steady profit. It wasn't like they were on the verge of closing down.

Maybe this would be easier if Gil wasn't such a nice guy. He didn't deserve to be lied to or let down. She wanted to talk to him, to get his perspective, but still wasn't quite ready to actually talk about the problem. Besides, she wasn't sure what would be worse – his firing her or his telling her to do something unethical.

If she didn't admit to anything, and presented everything as legitimate, she would be lying. That didn't sit well with her. But given the consequences of telling the truth, would it be worth it in the long run?

3. DISCUSSION QUESTIONS

1. When it comes to ethical dilemmas, one of the first steps we need to take is to identify the actual dilemma. What is the ethical dilemma faced Lark? By Julie? Why are these dilemmas?
2. The most logical response to both cases would be "just tell the truth." The problem is that neither case is black and white. What new problems will be created by telling the truth?
3. When making a decision, you want to keep stakeholders in mind. Who are the stakeholders in each case? Who will be affected by the decisions that each person makes and how does that affect your decision-making process?
4. When it comes to making decisions, one of the final steps is the "gut check," where you ask yourself exactly how you feel about the decision you are about to

make. What does your gut tell you for each case?

5. Consider the theory of utilitarianism.
 - a. How would a utilitarian, which looks at maximizing benefits for the whole, approach the situation from Lark's point of view? What about from Edie's point of view?
 - b. In Julie's case, what is the greater good and would not mentioning the glitch ever be an option? Why or why not?
6. Deontology is the ethical theory that looks at universal rights such as *justice*, *fairness*, and *honesty*. Is Edie violating these rights when she provides visuals that highlight the company's successes and downplays its setbacks?
7. Part of deontology is Kant's *Categorical Imperative* which advises that we should act as if our actions were to become law, meaning that if we can do something, so can everyone else. How would this imperative affect Lark's and Julie's decisions? Why?
8. Consider the field that you are studying to enter. When might you find yourself facing situations such as these? What would you do? What are the possible consequences of such a decision?
9. For this last question, consider the opposite point of view – why might it be a *good* idea to manipulate data or hide the fact that the results may be corrupt?

4. FURTHER READING

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Teaching Notes are available for this case, contact the authors for more information.