FRESNO STATE
Ethics Center

Case Study: Engineering Ethics in a Technology Startup

Applying the Institute of Electrical and Electronics Engineers code of ethics

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Resources

IEEE Code of Ethics: https://www.ieee.org/about/corporate/governance/p7-8.html

Introduction

Today, in analyzing the behavior of organizations it is necessary to pay attention to ethics and ethical issues and obligations. The external symbol and reputation of an organization is comprised of their various ethical behavior and ethical values appearing and evolving in those organizations. For example, the strategic role of professional ethics in an organization, has led to the allocation of a separate entity under the name of ethics management in some organizations. Ethics management of an organization is related to social responsiveness of that organization. Consequently the ethics management governs the moral principles ensuring that organization is externally perceived as fair, just with positive reputation for their business conducts.

Engineers must confront ethical challenges for entrepreneurs such as engineering design reliability, salespeople's ethical standards, making ethical decision in selling, intentionally misrepresenting a fault product, economic tradeoffs (short-term gain), company's beliefs and values, business conduct and representation of facts, customers, and investment.

This case study attempts to track down and specify the ethical issues and obligations of entrepreneurs in entrepreneurial decision-making in a startup company.

The Case

Tina is a new hire at a startup company that produces very expensive security camera for large organizations. Tina is hired to engineer and troubleshoot malfunctioning cameras.

One day, one of their fortune five hundred customers reported to Tina that number of the cameras out of their last big ordered they recently received is not functioning properly. The customer also informed Tina that the serial and revision numbers on these units were different from the rest of the units.

Tina's technicians inspected the cameras and realized her company had sold units that were from a bad batch (i.e. group of displays that did not have over 65% yield during manufacturing). Tina wanted to tell the customer why the units failed, but recognized that if she disclosed this information, the customer would be eligible to receive replacement at no additional cost. On the other hand, if she blamed the failing units on a weaker cause, such as improper care, her company would be able to charge the site for replacement units.

As a recent hire, Tina decided to discuss the case with David the owner of the startup. David told her that she should minimize the company's losses. In the past we had similar situation in which new replacement were shipped to them for improper use. However, she thought about her job well being while she wanted to be honest with the customer as they were one of the company's best customers.

Questions:

1. What are the ethical issues in this case?

2. Who are the actors and what is their deontology obligation in this case?

3. Would the issue in the case have occurred if the actors followed the IEEE Code of Ethics: https://www.ieee.org/about/corporate/governance/p7-8.html?

4. What sections of the Code of Ethics would have been relevant in this case?

5. Challenging the role and position of Tina and owner (personal belief and standard/owner belief and standard)?

6. What should Tina do? Disobedience from owner?