

Case Study

Virus Research

This case study presents a picture of an infectious disease researcher. Consider the ethical dilemma it presents and answer the questions at the conclusion. .

Background

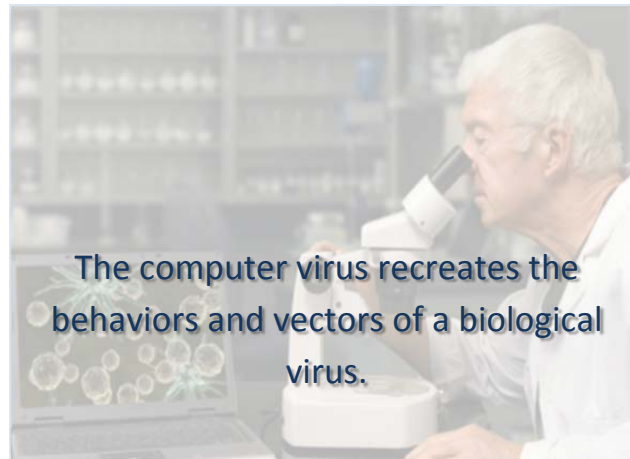
Dr. Dave researches infectious diseases and the vectors through which they travel. Being an industrious computer programmer as well as a medical researcher, he creates a program which recreates the behaviors he wishes to research. This 'computer virus' does the following:

- Once launched on a target computer, it creates an event log on that computer to record everything that it does.
- It generates a pop-up message indicating to the user that the computer is being infected.
- It launches a web page that explains all of the details of the experiment, including Dr. Dave's contact information.
- It provides the user with the option to either delete the virus immediately or to continue with the experiment.

If permitted to remain on the computer, the virus will

- Attempt to modify random, non-critical files on the hard disk.
- Generate a series of email messages intended to distribute itself to other computers.
- Provides the user with a survey application which can be used to provide feedback to Dr. Dave.

If Dr. Dave's project is permitted to continue the project may gather valuable information regarding naturally-occurring viruses and their attack vectors.



Approaching the Ethical Dilemma

A common technique used by systems management professional for approaching ethical dilemmas is remembered using the acronym CATWOE:

- C** = customers or clients affected by the decision
- A** = actors who carry out the decision
- T** = transformation process
- W** = the world view commonly held on the subject
- O** = owners of the organization
- E** = environmental factors affecting the decision

Keep in mind that ethical dilemmas exist because there is a mismatch in the perspectives held by the various people involved in the situation. Use CATWOE to drill through every group of individuals affected by the dilemma in order to carefully assess the impact of the decision.

Questions

1. Will Dr. Dave be in trouble with the law if he follows through on this research project?
2. Describe the stakeholders in this scenario as broken down by the CATWOE method.
3. Would your opinions regarding the ethics of this case change if Dr. Dave's research related to automobile sales instead of medicine?
4. What role does the choice given to the users play in your opinion on this case?
5. If you were Dr. Dave's supervisor, how would you respond to his proposal to conduct this experiment?