



Scenarios

A - ALGORITHM BIAS

Your team is tasked with working with a search algorithm team to better understand how bias shows up in its algorithms and to suggest ways it can improve and correct that bias. Most of the engineers rely heavily on what they consider to be objective measures and assert that this means their work is neutral, and that some other cause is making the search results appear biased.

How do you address individuals' abnegation of responsibility for their contribution to bias? What is the role of the information professional in combating systemic information issues like this? ¹

B - PERSONAL DATA

A firm has a policy of allowing employees to use their computers, which were the property of the company, for personal purposes, including e-mail and web access. When a possible acquisition of the company by another one was announced, a rising employee unrest was suspected. The president of the company ordered the data department to monitor all the computer activities of the employees, including gathering and organizing the contents of their memos, e-mail messages, budgets in preparation, and so forth. Information professionals in the data department constructed a dashboard and report that detailed employees' activity both during work and during private use of their computers. The monitoring and reporting was done without employees' knowledge.

Was the action of the company management ethical or unethical in allowing personal use of company computers by employees? How about the president's monitoring decision?

¹ Written by Sarah A. Rice, 2018.



What role did the information professionals play in the ethical implications of these decisions? ²

C - RISK AND RESPONSIBILITY

A project leader in the corporate IT division was assigned to develop a new internet-based billing system. When the work was being assigned, the project leader believed the allocated time and hours were adequate. However, due to an unexpected turnover of computing specialists, it became clear that the system could not be completed as designed within the available budget and time frame. The project leader warned her superior about risk. She was, however, required to deliver a basic system that lacked adequate error detection, exception handling, security safeguards, and audit trail. When the system was fielded, it became a source of customer service problems. Many customers were billed incorrectly and, following heated exchanges, switched suppliers. Cases of fraud were discovered, but proved impossible to trace. Business losses resulted, and the project leader was blamed.

Was the action of the project leader ethical in knowingly implementing an inadequate system? How would you evaluate the actions of her superior in ordering an inadequate system into production? ³

D - ONLINE EDUCATIONAL PLATFORM

You are the information architect for an online educational research platform. Mr. Mehmet, a long time university faculty member, uses the platform to gather many electronic resources to use in his courses. He finds course content that he uses but it does not include an author's name. He decided to use it for his lessons without specifying a reference, and then later posts his presentation on the university's open course platform for his students. The same platform is used by Ms. Ayse, who also works at the

² Taken from article and edited for use. Zwass, Vladimir. "Ethical Issues in Information Systems." Encyclopedia of Library and Information Sciences, Third Edition, 2010, pp. 1758–1767., doi:10.1081/E-ELIS3-120043917.

³ Taken from article and edited for use. Zwass, Vladimir. "Ethical Issues in Information Systems." Encyclopedia of Library and Information Sciences, Third Edition, 2010, pp. 1758–1767., doi:10.1081/E-ELIS3-120043917.



same university. She sees Mr. Mehmet using her work without her permission, so she files a complaint with the university. Mr. Mehmet blames your platform. ⁴

What are the different roles involved in this situation? What are their ethical obligations? What ethical principles come into play here?

E - AIRLINE MAINTENANCE AND SAFETY

A union of airline maintenance workers charges that a new airline computer program performs functions which should require interactive human judgment if safety is to be ensured. The program was created to schedule maintenance by reassigning aircraft when emergencies arise because airplanes unexpectedly become unusable.

The information architect was tasked with the program's underlying logic and data framework, and it was made clear that not all operational factors have been taken into consideration in the program, but he had been assured by management that the decision rules used in the program conform to all the requirements of the IATA (International Air Transport Association). In the IA's opinion the program should have been an interactive one, where a person is involved in some of the final decision making, but the company was not prepared to go to the additional expense of an interactive system. When testing the program, the IA could not devise an example where the existing program produced an action which failed to meet a safety condition. Because the IA could not document reasons for their doubts, and also in part because they were inclined to be defensive about their own work, when the information architect was asked to testify in an inquiry dealing with the union's complaint, they did not volunteer an opinion on how the system should have been designed.⁵

⁴ Taken from article and edited for use. Kert, Serhat Bahadir, et al. "Scenarios for Computer Ethics Education." *Procedia - Social and Behavioral Sciences*, vol. 46, 2012, pp. 2706–2710., doi:10.1016/j.sbspro.2012.05.551.

⁵ Taken from article and edited for use. Liffick, Blaise. (1995). *Analyzing Ethical Scenarios*. Proceedings of ETHICOMP95 International Conference.