Ethics in Computer Science
Technologists and Value-free Technology

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Ethics: The right thing to do...
- Ethics concerns decisions that introduce harms and benefits to individuals and society.
- Consider the unequal distribution of harms and benefits among separate groups.

Privacy Case Study

Case Study: Mary Boris
- Kentucky resident Mary Boris suffers damage to her home caused by hail and a broken washing machine.
- Ms. Boris files four water damage claims with her home owner’s insurance company all in the same year.
- In February of 2000, Ms. Boris loses her home owner’s insurance...

Case Study: Boris v. ChoicePoint (1)
- Ms. Boris is suspected of possible insurance fraud because ChoicePoint (a data broker) reports she filed four claims for fire damage in a short period.
- Ms. Boris informs the Kentucky Department of Insurance and ChoicePoint that the data is incorrect.
- ChoicePoint corrects the data.
Case Study: Boris v. ChoicePoint (2)

- Months later, ChoicePoint reports that Ms. Boris has now filed four water damage claims, four fire damage claims and one "excess damage" claim.

Case Study: Boris v. ChoicePoint (3)

- The Fair Credit Reporting Act (FCRA) governs the maintenance and disclosure of consumer reports.
- In 2003, Ms. Boris files suit against ChoicePoint in U.S. District Court and wins an award of $447,000 for damages.
- Judge John Heyburn II wrote, "[ChoicePoint] repeatedly denied making any mistakes and instead seemed to blame all defective data on others..."

Case Study: Boris v. ChoicePoint (4)

- ... The problem was only fixed after the incorrect data expired from the system, automatically.

What caused the problem?

- ChoicePoint never reveals the details...

What caused the problem? (1)

- Insurance records are commonly maintained in two database systems: CLUE and A-PLUS.
- The CLUE\(^3\) record includes the date, **type of loss** and amount paid by the insurance company.
- The fire damage claims may have been:
  - A data-entry error created by a human; or
  - A data conversion error created by program?

What caused the problem? (2)

- A company called FirstLogic sells software that identifies related data records in order to merge them into a consolidated record.
- ChoicePoint is a FirstLogic customer.
- The recurring fire damage claims may be due to:
  - An upstream data source that received the incorrect data but was never corrected.
  - The incorrect data was then merged with the correct data.
Who is responsible?

- Obvious suspects...
  - Ms. Boris
  - The insurance company
  - ChoicePoint

- Hidden actors...
  - Business Managers and Analysts
  - IT Managers
  - Software engineers
  - System and Database Administrators

You are not average

![Graph showing Increase in IT Workers vs. Fraction of U.S. Population]

What you can do...

- As employees, protect ourselves (and our employers!) by identifying downstream liability due to harms.
- As citizens, recognize when technology is used in a value-laden manner and educate others to possible harms!