

# Invited Rant – The Ethics of Technology

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## Introduction

Co-founder of a “green” technology company. Provides free carbon footprint analysis for companies.

Previously worked for a company with motto “don’t be evil”.

## With great power comes great responsibility

Nobody will give you the answers. Management tends to be focused on financial results, not ethics.

Your decisions could impact millions of people! The effects could be quite a long way off.

## Unintentional Evils

1. Use of resources
2. Dirty use of data
3. Unethical businesses – enabling them to function

## Use of Resources

Big data is fun and for some businesses, very productive. But big server farms consume huge amounts of energy. Huge opportunity to cut emissions. Carbon emissions are increasing. IT’s contribution has grown from 2% to 4% of the growing total between 2007 and 2020 (projected).

Are Cloud Services really more “green” than in-house data centres? The truth is, the biggest contributor to data centre carbon footprint is the source of the power. Geothermal: almost carbon footprint.

Jevons’ Paradox (William Stanley Jevons): “the more efficient a business process becomes, the more it will be used” – leading to higher usage. You can envisage more complex economic models being run by an enterprise, just because the opportunity exists.

What can you do?

- Ask your providers about their carbon footprint (and don’t accept a brush-off answer)
- Change your power provider

## **Dirty Use of Data**

Hard to solve. Analytically interesting things are possible with data. But some of it may not be totally above board. Data mining can reveal all sorts of things the data subject may not want to reveal.

Tesco uses data mining to extract very useful information from customer data (loyalty cards in particular). An MIT paper showed that Facebook's Friends list can predict with 78% accuracy whether a man is gay.

Usually, the applications of these analyses are used in a benign way – e.g. to market a product to those who really want it. But the programmers need to decide whether the applications they are developing are invading someone's privacy.

## **Enabling Unethical Businesses**

In a technology business, it is really easy to get involved in businesses that in the bricks-and-mortar business you would not touch with a barge-pole (e.g. pornography, gambling). A good test is "would you be prepared to tell your mother what you're working on?"

Stanley Milgram showed in his classic psychology experiment that test subjects would be prepared to administer "fatal" electric shocks if told to do so by an authority figure (researcher).

The level of contact between "teacher" and "student" made a big difference to the level of shock that the "teacher" was prepared to apply. Developers of Web applications (e.g. for gambling, pornography etc.) are very far removed from the victims, so it doesn't seem like your actions have real consequences.

## **Conclusion**

Don't be Gerry Maguire – but be aware of your responsibilities and ask yourselves and colleagues what you're doing and whether it is right.