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Ethical Implications of RFID and
Internet of Things seen from a
Christian Perspective

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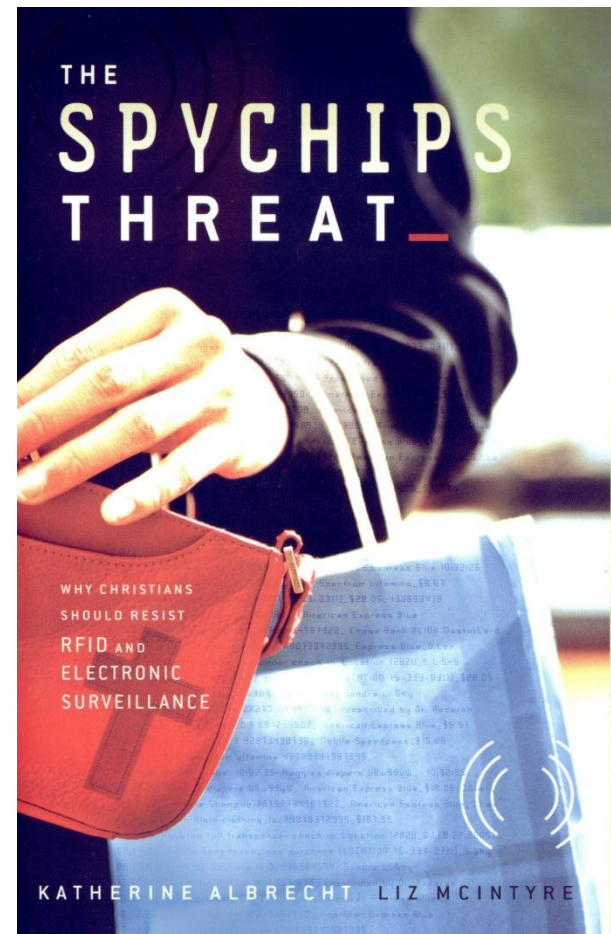
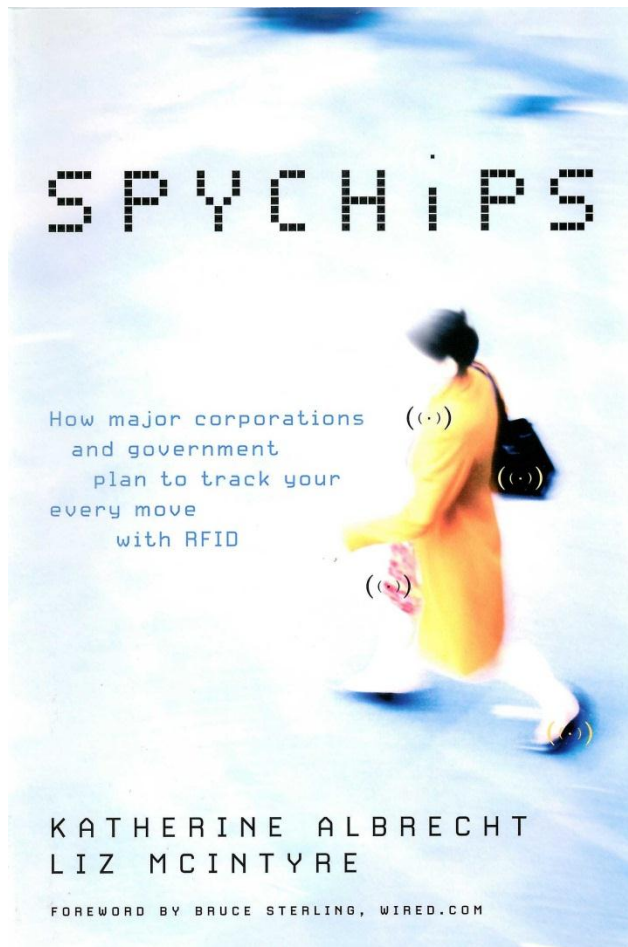
Motivation

- Finkenzeller: RFID Handbook

“[T]he protection of the individual's private sphere is an important debate issue. It mainly refers to the fear that the new RFID technology could be used for the unnoticed and undesired collection of personal data, which means that the active party can spy out the private sphere. In recent years, civil rights initiatives and consumer protection organizations have tried to inform the public opinion about the potential risks related to the broad usage of RFID systems.”

Motivation

- Katherine Albrecht, Liz McIntyre



Motivation

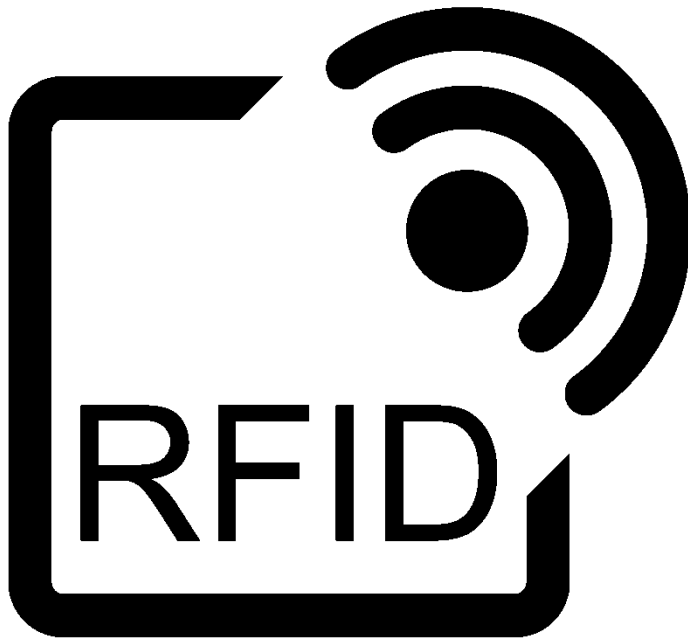
- Mark of the beast

“He required everyone [...] to be given a **mark** on the right hand or on the forehead. And no one could buy or sell anything without that **mark**, which was either the name of the beast or the number representing his name.”

(Rev 13:16-17).

Motivation

RFID Mark → RFID Emblem



Methodology

There are

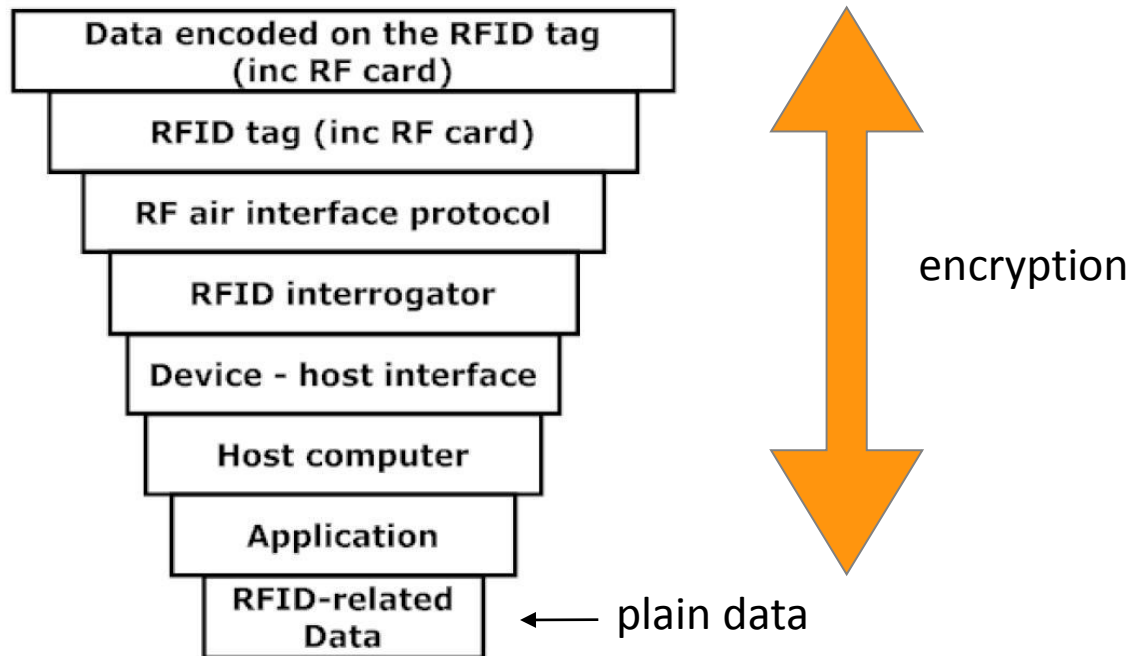
philosophical,
religious,
ethical,
cultural,
social,
economic,
political,
legal,
juridical aspects.

Historical Review

- Industrial Revolution
- Discovery of nuclear power
- Environmental protection
- Computer, information and communication technology

Historical Review

Technology is not an ethical solution.



(EN 16571, Privacy in Depth Model)

Ethical principles from ancient Hebrew culture

- Human dignity, Imago Dei
- Commandments (Golden Rule, Great Commandment, Decalogue)
- Narratives
- Abuse of governmental power (examples: King David, King Ahab)
- Prophetical corrections
- Protection of privacy

Imago Dei

“Then God said, ‘Let us make man in our **image**, after our **likeness**’ ...

So God created man in his own **image**, in the **image** of God he created him; male and female he created them” (Gen 1:26...27).

Golden Rule

Do to others whatever you would like them to do to you. This is the essence of all that is taught in the law and the prophets (Mt 7:12).

Keiner von Euch ist ein Gläubiger, solange er nicht ein Zuseher ist, was er selbst von einem andern wünscht, was er selbst von einem andern will. Tue nicht, was du nicht willst, dass sie dir tun. So soll es auch mit euch sein. Ein Zuseher ist, wie kann ich ihn einem anderen zumuten?

Was du selbst rätst, das tue auch nicht den Menschen an. Alles was du den Menschen antun, das tut auch dir. Konfuzius, Gespräche, 12.1. ebenso.

Matthäus 7,12; Lukas 6,31

Samyutta Nikaya V, 353.35–354.2

Man sollte sich gegenüber anderen nicht in einer Weise benehmen, die für einen selbst unangenehm ist; das ist das Wesen der Moral.

Mahabharata XIII. 114.8

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The Great Commandment

- You shall **love** the Lord your God with all your heart and with all your soul and with all your might (Deut 6:5).
- You shall **love** your neighbor as yourself (Lev 19:18).

The Ten Commandments

- 2 “I am the Lord your God, who brought you out of the land of Egypt, out of the house of slavery.
- 3 “You shall have no other gods before me.
- 4 “You shall not make for yourself a carved image, or any likeness of anything that is in heaven above, or that is in the earth beneath, or that is in the water under the earth.
- 5 You shall not bow down to them or serve them, for I the Lord your God am a jealous God, visiting the iniquity of the fathers on the children to the third and the fourth generation of those who hate me,
- 6 but showing steadfast love to thousands of those who love me and keep my commandments.
- 7 “You shall not take the name of the Lord your God in vain, for the Lord will not hold him guiltless who takes his name in vain.
- 8 “Remember the Sabbath day, to keep it holy.
- 9 Six days you shall labor, and do all your work,
- 10 but the seventh day is a Sabbath to the Lord your God. On it you shall not do any work, you, or your son, or your daughter, your male servant, or your female servant, or your livestock, or the sojourner who is within your gates.
- 11 For in six days the Lord made heaven and earth, the sea, and all that is in them, and rested on the seventh day. Therefore the Lord blessed the Sabbath day and made it holy.
- 12 “Honor your father and your mother, that your days may be long in the land that the Lord your God is giving you.
- 13 “You shall not murder.
- 14 “You shall not commit adultery.
- 15 “You shall not steal.
- 16 “You shall not bear false witness against your neighbor.
- 17 “You shall not covet your neighbor’s house; you shall not covet your neighbor’s wife, or his male servant, or his female servant, or his ox, or his donkey, or anything that is your neighbor’s.”
- (Ex 20:2-17 English Standard Version).

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The Ten Commandments

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Narratives

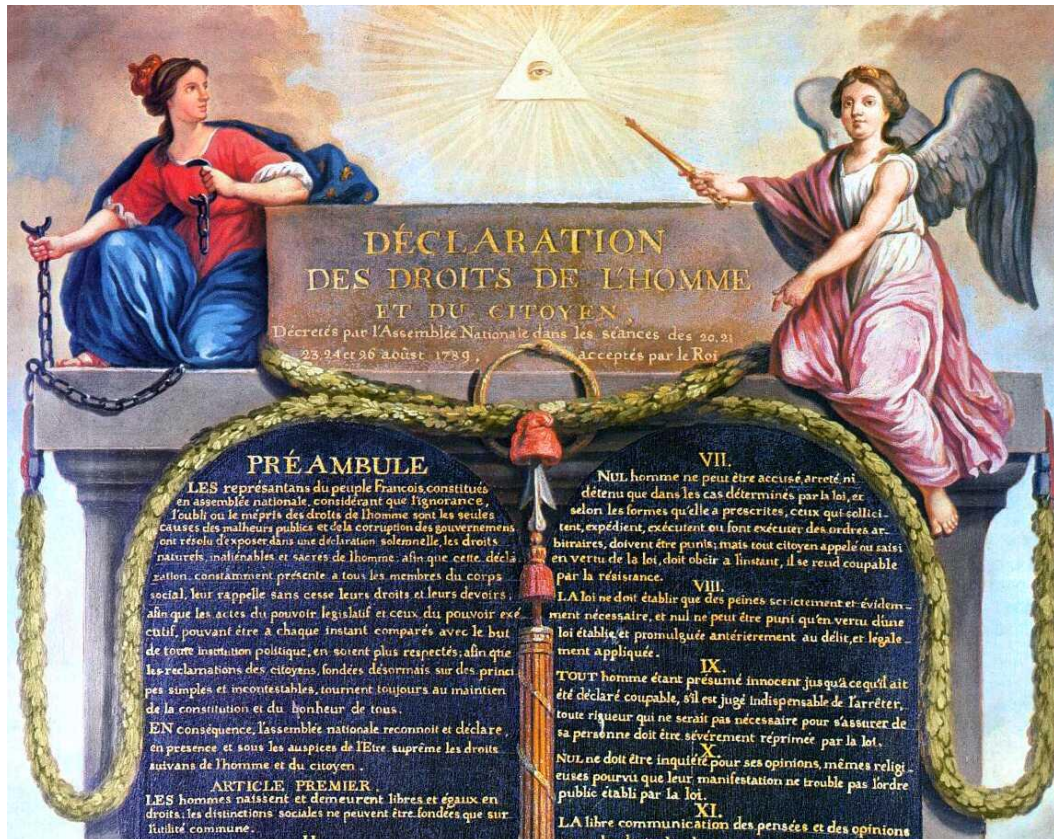
- Abuse of governmental power
 - Example: King David and Bathsheba (2Sam 11)
 - Example: King Ahab and Naboth's Vineyard (1Kng 21)
- Prophetical corrections

Ethical principles from ancient Hebrew culture

- Imago Dei
- Human dignity
- Human Rights
- Freedom, right to privacy

Ethical principles from ancient Hebrew culture

- Example: Déclaration des droits de l'homme et du citoyen (1789)



Ethical principles from ancient Hebrew culture

- Example: German constitution (Grundgesetz)
- Population census judgement (Volkszählungsurteil 1983)

Article 1

(1) Human dignity shall be inviolable. To respect and protect it shall be the duty of all state authority.

Conclusions

- **Human rights**

(Magna Carta, Habeas Corpus Act,
human rights declarations, constitutions ...)

- **Data protection legislation**

(examples: European Commission Mandate M/436 to CEN, CENELEC and
ETSI (December 2008)

Privacy and Data Protection Impact Assessment Framework for RFID
Applications (April 2011))

- **Ethical/moral values**

Thank you for your attention!

Questions?
