


CSE312/ISE312
A Gift of Fire, Fourth edition by Sara Baase

Read Chapter 5: Sections 5.3-5.4

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What We Will Cover

- Identity Theft
- Credit Card Fraud
- Whose Laws Rule the Web

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Stealing Identities

- Identity Theft –various crimes in which criminals use the identity of an unknowing, innocent person
 - Use credit/debit card numbers, personal information, and social security numbers
- Techniques Requests for personal and financial information disguised as legitimate business communication
 - Phishing – e-mail
 - Spear phishing – targeted e-mail
 - Pharming – false Web sites accessed through false URLs in Domain Name Servers
 - Online resume and job hunting sites

Have you ever been fooled by an identity theft attack?

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Responses to Identity Theft

- Authentication of email and Web sites
- Use of encryption to securely store data
- Authenticating customers to prevent use of stolen numbers, may trade convenience for security
- In the event information is stolen, a fraud alert can flag your credit report; some businesses will cover the cost of a credit report if your information has been stolen
- Authenticating customers and preventing use of stolen numbers
 - Activation for new credit cards
 - Retailers use of limited data (4 digits of #) on receipts
 - Software to detect unusual spending activities
 - More secure transactions (e.g., Apple Pay)

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Biometrics

- Biological characteristics unique to an individual
- No external item (card, keys, etc.) to be stolen
- Used in areas where security needs to be high, such as identifying airport personnel
- Biometrics can be fooled, but more difficult to do so, especially as more sophisticated systems are developed


Very difficult to reset after a
biometric identity theft

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When Digital Actions Cross Borders

- Laws vary from country to country
- Corporations that do business in multiple countries must comply with the laws of all the countries involved
- Someone whose actions are legal in their own country may face prosecution in another country where their actions are illegal

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Yahoo and French Censorship

- Display and sale of Nazi memorabilia illegal in France and Germany
- Yahoo was sued in French court because French citizens could view Nazi memorabilia offered on Yahoo's U.S.-based auction sites
- Legal issue is whether the French law should apply to Yahoo auction sites on Yahoo's computers located outside of France

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Example: Copyright Law

- Russian company sold a computer program that circumvents controls embedded in electronic books to prevent copyright infringement.
- Program was legal in Russia, but illegal in U.S.
- Program's author, Dmitry Sklyarov, arrested when arrived in U.S. to present a talk on the weaknesses in control software used in ebooks.
- After protests in U.S. and other countries, he was allowed to return to Russia.


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Example: Online Gambling

- An executive of a British online gambling site was arrested as he transferred planes in Dallas. (Online sports betting not illegal in UK)
- Unlawful Internet Gambling Enforcement Act prohibits credit card and online-payment companies from processing transactions between bettors and gambling sites.

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Libel, Speech, and Commercial Law

- Even if something is illegal in both countries, the exact law and associated penalties may vary
- In libel, the burden of proof differs in different countries
- Libel tourism
 - Traveling to places with strict libel laws in order to sue
 - SPEECH Act of 2010 makes foreign libel judgments unenforceable in U.S. if they violate the 1st Amendment.
 - Foreign governments can still seize assets
- Where a trial is held is important
 - differences in the law,
 - costs associated with travel between the countries
- Freedom of speech suffers if businesses follow laws of the most restrictive countries

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Whose Laws Rule the Web

Discussion Question

Is it feasible to work towards a common set of laws relating to global commerce?

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Culture, Law, and Ethics

- Respecting cultural differences is not the same as respecting laws
- Where a large majority of people in a country support prohibitions on certain content, is it ethically proper to abandon the basic human rights of free expression and freedom of religion for minorities?

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Potential Solutions

International agreements

- Countries of the World Trade Organization (WTO) agree not to prevent their citizens from buying certain services from other countries if those services are legal in their own.
- The WTO agreement does not help when a product, service, or information is legal in one country and not another.

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Potential Solutions

Alternative principles

- Responsibility-to-prevent-access
 - Publishers must prevent material or services from being accessed in countries where they are illegal.
- Authority-to-prevent entry
 - Government of Country A can act within Country A to try to block the entrance of material that is illegal there, but may not apply its laws to the people who create and publish the material, or provide a service, in Country B if it is legal there.

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Geolocation

- Client geolocation is becoming more feasible
- W3C Geolocation API
 - ECMAScript
 - The most common sources of location information are: IP address, Wi-Fi address, Bluetooth MAC address, RFID, Wi-Fi connection location, or device GPS and GSM/CDMA cell IDs

Is a geolocation effort sufficient to reduce the likelihood of legal prosecution?

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