

Auto-ID and Location-Based Services in National Security: Social Implications

Holly Tootell
School of Information Systems and Technology
Faculty of Informatics
University of Wollongong

What is addressed

- Auto-ID and LBS
 - Social Issues
 - Privacy
 - Liberty
 - Security
 - Media Perception
 - Alignment or Trade-off
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Smart Cards

Industry	Application
Financial	Electronic Purse, Credit/Debit cards and Secure Electronic payments
Transport	Electronic Toll collection, public transport fares and Drivers Licence
Communication	Mobile Phone accounts and Access to Pay TV
Healthcare	Medical Information cards and Government health insurance eligibility
Education	Identification, library access, security access
Government	Non-repudiation voting device and Government benefit payments National Identification schemes
Retail	Discount/VIP/membership cards

Biometric Identification

Forensic	Civilian	Commercial
Criminal investigation Corpse identification Parenthood determination Prison security	National ID Driver's license Welfare disbursement Border crossing Customs and immigration Protecting critical infrastructure	ATM security Credit card security Cellular phone Access control Ecommerce/ebanking transactions

RFID

Application
Baggage tracking in airports
Supply chain management and supply chain theft reduction
Automobiles
Animal tracking
Highway toll collection
Passport security
Museum exhibits
Automatic product tamper detection
Harmful agent detection

GPS

Application	Commercial Example
Mapping	Asset management for utility companies and airborne topographic mapping.
Resource Management	Forestry and natural resources: fire prevention, harvesting, aerial spraying.
Farming	Harvest yield monitoring, chemical applications control and property management.
Civil Engineering	Road construction, earth moving and equipment tracking.
Surveying	For both land and marine seismic surveying.
Navigation	In-vehicle street directory systems.
Transit	Mass transport: position determination, fleet management and timetabling.
Retail	Delivery fleet monitoring and dispatch assistance.

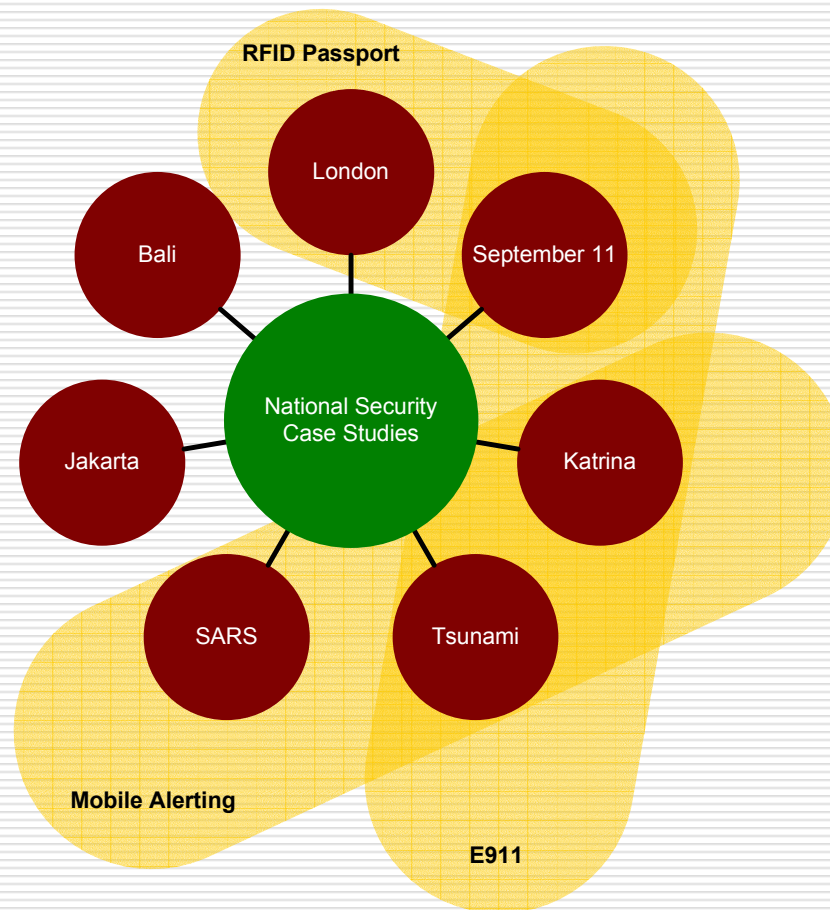
Privacy, Liberty and Security

- Defined in specific context
 - Shaped by media
 - One definition?
 - Neutrality of technology
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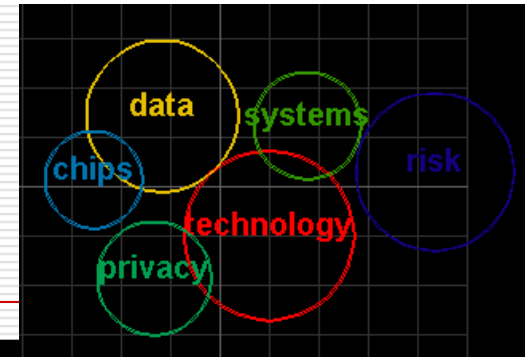
Importance of Media

- As an opinion shaper
 - Coverage of national security events
 - Power inherent in media communications
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Events and Technology

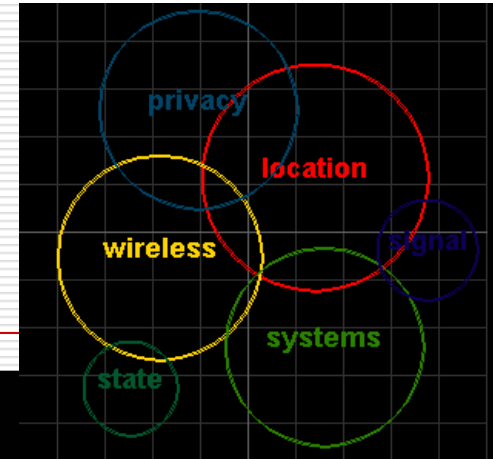


ePassport Themes



Concept	Discussion themes
<i>technology</i>	Considers the impact of the RFID chips, from their potential to impact on the public and achieve security.
<i>data</i>	The collection of information and the potential of tracking, and identification through the use of RFID chips.
<i>risk</i>	This theme represents the context (war and terrorist) within which this technology solution has been offered.
<i>privacy</i>	Privacy is of particular interest in respect to government use of information.
<i>systems</i>	This theme represents the players in this technology: business, people, and world.
<i>chips</i>	RFID-enabled passports will have a chip. In this context the idea of personal application, digital technology, and the ability to read the data are a focus.

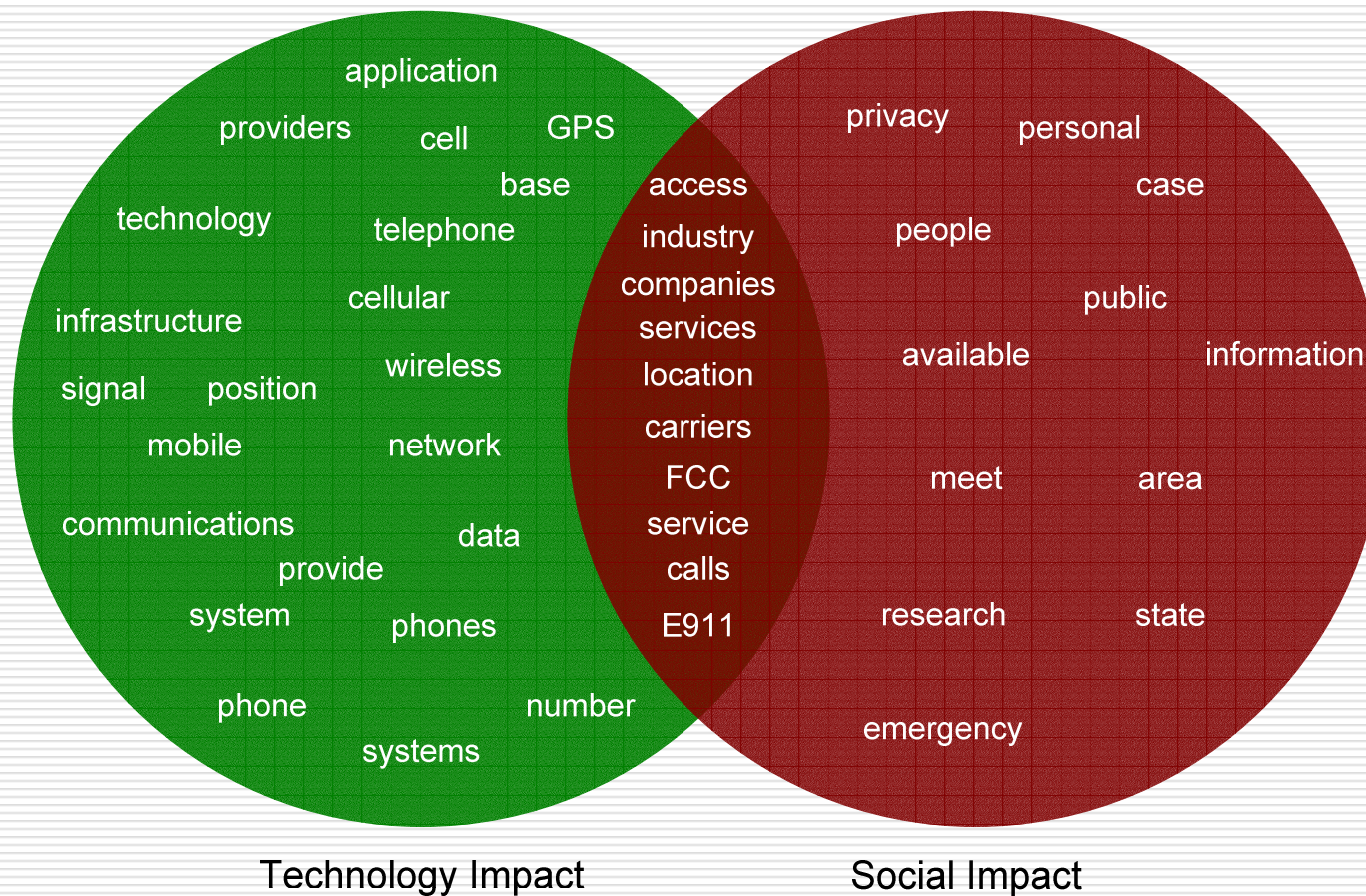
E911 Themes



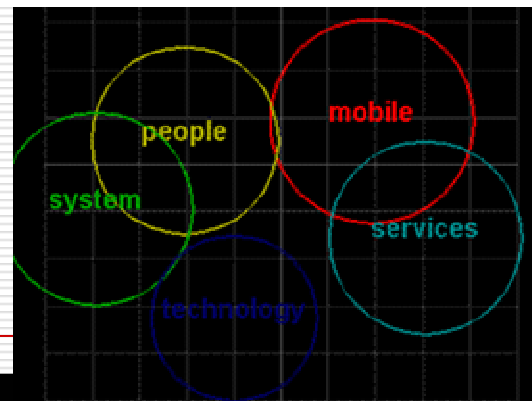
Concept Discussion Issues

<i>location</i>	Considers the technology in terms of determining location through signals, and bases. It also considers the impact of application and the role of phone providers.
<i>wireless</i>	This theme is concerned with the emergency communications process through calls and carriers.
<i>privacy</i>	Although a larger issue, this theme is specifically focused on privacy in relation to the companies participating in the E911 scheme.
<i>systems</i>	This theme brings together considerations of data and reliability.
<i>signal</i>	Technology focused theme centres on position, strength in relation to signals.
<i>state</i>	The concern of this theme is on the role of the states in effectively supporting and implementing the E911 initiative.

Technology and Social Impact of e911

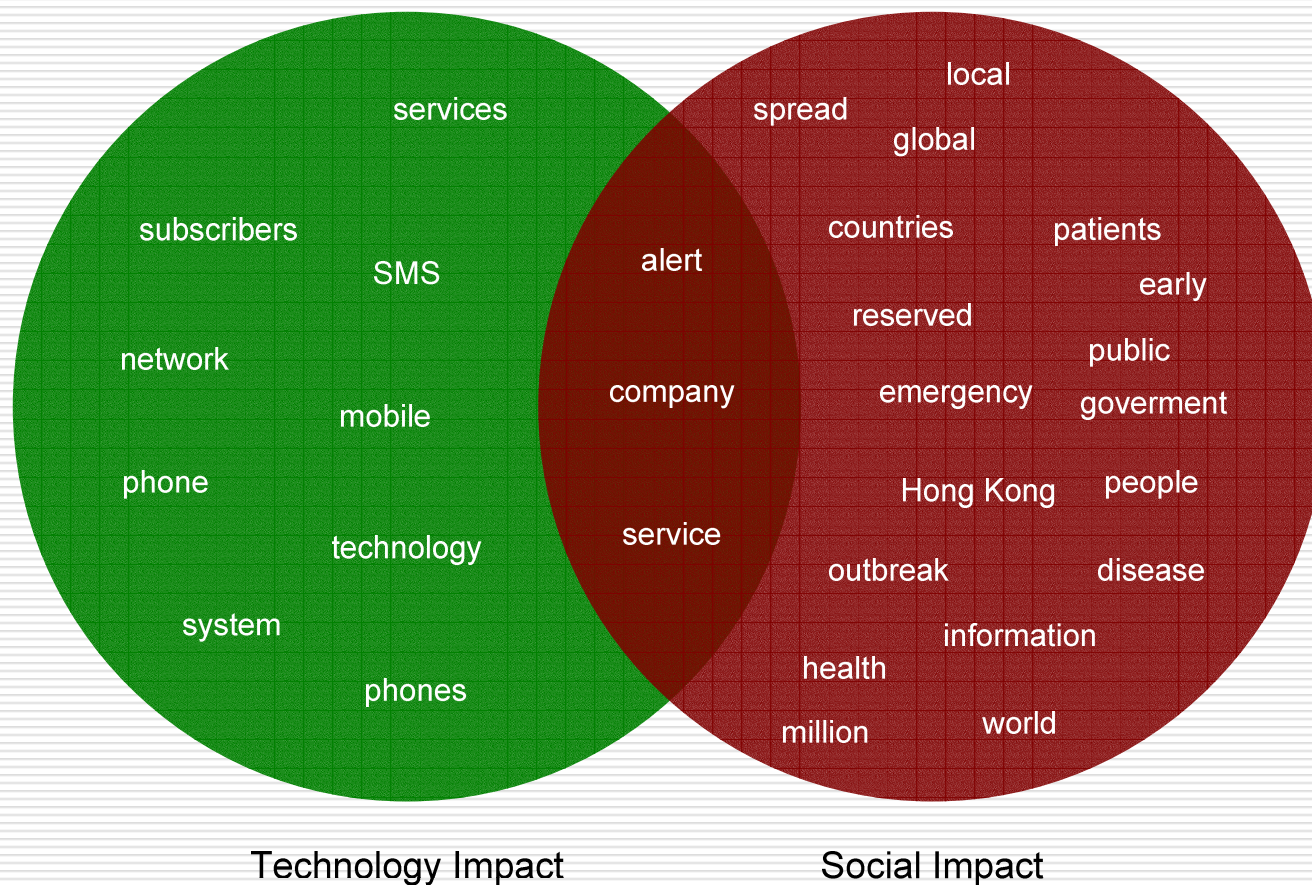


Mobile Alerting Themes



Concept	Discussion issues
<i>people</i>	This theme represents the impact that the SARS outbreak has had on the world. It includes information regarding the spread of the disease.
<i>mobile</i>	The role of companies, services and subscribers is covered in this theme.
<i>services</i>	This concept represents the SMS alerts from a network and patient perspective.
<i>system</i>	It is important to recognise the role of the public health system in managing the global outbreak.
<i>technology</i>	This theme identifies the development of the early warning emergency notification systems.

Technology and Social Impact of Mobile Alerting



Implications

- Balancing the interests
 - Are Privacy, Liberty and Security useful concepts?
 - Trade-off or price?
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Westin: Security vs. Liberty

Security First Position

If we do not modify some of our traditional constitutional norms limiting government powers, we will not be able to fight terrorism, function as a reasonably safe society and enjoy our liberties.

Liberty First Position

If we reduce our liberties by granting the government sweeping and uncontrolled investigative and surveillance powers, we will weaken the constitutional system that has made our nation great.

Trade-off or price

...we would be willing to sacrifice a lot of liberty to prevent September 11...what sacrifice of our rights would we be willing to undergo to reduce the already-small probability of another September 11 by a factor of, say, one in ten? (Luban 2005, p.243).

Questions

- Holly Tootell
 - holly@uow.edu.au
 - School of Information Systems and Technology
 - University of Wollongong
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